

Recent Research on Tax Administration and Compliance

*Selected Papers Given at the
2010 IRS Research Conference*

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Foreword

This edition of the IRS Research Bulletin (Publication 1500) features selected papers from the latest IRS Research Conference, held at the Liaison Capitol Hill in Washington, DC, on June 29-30, 2010. As in prior years, conference presenters and attendees included researchers from all areas of the IRS, officials from other government agencies, and academic and private sector experts on tax policy, tax administration, and tax compliance.

The conference began with a keynote address by Mark Ernst, Deputy IRS Commissioner for Operations Support. Mr. Ernst stated that the IRS has made great strides toward modernizing its systems and offering taxpayers excellent service, with research continuing to play an important role in that progress. He said that one example of our success is that the IRS is increasingly asked to administer nontax government initiatives, and it does so quickly and well. After his prepared remarks, Mr. Ernst answered a few questions from the audience.

Rosemary Marcuss, the Director of Research, Analysis, and Statistics, then led a panel discussion on the impact of globalization on tax administration. Panelists from Her Majesty's Revenue and Customs (United Kingdom), the Mexican Tax Administration Service, and the IRS discussed several growing trends and efforts being made to address the challenges. The remainder of the conference included sessions on the tax compliance of large business entities, influencing individual taxpayer behavior, drivers of noncompliance, tax code complexity and compliance burden, and enforcement strategies. The conference also included an after-hours poster session that highlighted additional IRS research.

We trust that this volume will enable IRS executives, managers, employees, stakeholders, and tax administrators elsewhere to stay abreast of the latest trends and research findings affecting Federal tax administration. We also hope that the research featured here will stimulate improved tax administration and additional helpful research.

Acknowledgments

The IRS Research Conference was the result of substantial effort and preparation over a number of months by many people. The conference program was assembled by a committee representing research organizations throughout the IRS. Members of the program committee included Janice Hedemann (National Headquarters Office of Research); Melissa Kovalick (Research, Analysis, and Statistics); Alan Plumley, John Guyton, Kara Leibel, Sandy Lin, Larry May, Rahul Tikekar, and Leann Weyl (National Headquarters Office of Research); Elizabeth Kruse (Office of Program Evaluation and Risk Analysis); Barry Johnson and Tamara Rib (Statistics of Income); Anne Parker and Katherine Fox (Small Business and Self-Employed); Scott Leary (Tax Exempt and Government Entities); Patti Davis (Wage and Investment); Tom Beers (Taxpayer Advocate); Davy Sparkman (Criminal Investigation); and Lois Petzing (Large and Midsize Business). Melissa Kovalick, Elizabeth Kruse, Marcella Garland, Craig Swinford, Barbara Vaira, Michelle Chu, Gregory Baldwin, Leann Weyl, Linda Addison, Daniel Wagner, and Ruth Schwartz oversaw numerous details to ensure that the conference ran smoothly.

This volume was prepared by Lisa Smith, Paul Bastuscheck, Clay Moulton, and Camille Swick (layout and graphics) and Martha Eller Gangi (editor), all of the Statistics of Income Division. The authors of the papers are responsible for their content and views expressed in these papers do not necessarily represent the views of the Department of the Treasury or the Internal Revenue Service.

We appreciate the contributions of everyone who helped make the IRS Research Conference a success.

Janice M. Hedemann
Director, National Headquarters Office of Research
Chair, 2010 IRS Research Conference

2010 IRS Research Conference

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Compliance of Large Business Entities

Boynton ♦ Livingston

Blouin ♦ Sikes

Partnerships with Reportable Entity Partners¹

Charles E. Boynton and Barbara A. Livingston, Internal Revenue Service

Partnerships offer incredible flexibility as building blocks in complex organizations. Partnerships can be arranged in tiers and used as substitutes for corporate subsidiaries. Each partnership within an organization requires its own tax return. Multiple partnerships, and thus multiple tax returns, within an organization create the possibility that the details of a given transaction may be distributed across several tax returns. Multiple tax returns within a single economic organization potentially decrease transparency to tax authorities as to the true nature of the economic transactions.

Partnerships are an important and growing component of the U.S. tax system. For example, in 2005, just over 2.7 million partnerships filed tax returns, steadily increasing in 2006 to 2.9 million, then in 2007 to almost 3.1 million. Empirical research on structures employing partnerships is limited.²

We focus on partnerships effectively controlled by other partnerships or by corporations as an interesting sub-sample of the partnership population. We ask whether partnerships effectively controlled by a corporation are different from partnerships effectively controlled by another partnership. We look at the relation between the asset size of the controlling entity and the asset size of the effectively controlled partnership. Furthermore, we look at the relation between the industry of the controlling entity and the industry of the controlled partnerships.

To do so, this report uses Tax Year 2007 partnership data made available by the Statistics of Income (SOI) Division of the IRS. We believe this report is the first publicly available descriptive study using tax data of partnerships effectively controlled by other entities.

This report is organized as follows. We first provide technical background on the U.S. tax reporting requirements for partnerships during Tax Year 2007. Next, we outline the steps in identifying reportable entity partners in the SOI data. Third, we give a descriptive overview of the partnership population, followed by an analysis of reportable entity partners. The last section of the report provides concluding observations.

Schedule M-3 and Partnerships with REPs

The IRS introduced the Form 1120 Schedule M-3 in 2004 to reconcile corporation financial statement income with corporation taxable income for corporations with

assets of \$10 million or more at the end of the tax year.³ In 2006, the IRS introduced Form 1065 Schedule M-3 to reconcile partnership financial statement income with partnership taxable income. The Form 1065 Schedule M-3 is required of all partnerships with assets of \$10 million or more at the end of the tax year.

The Form 1065 Schedule M-3 is also required of any smaller partnership if the partnership had any of the following: adjusted total assets of \$10 million or more for the tax year, total receipts of \$35 million or more for the tax year, or a reportable entity partner on any day of the tax year.⁴

As of 2006, the instructions for the Form 1065 and Form 1120 Schedules M-3 define a reportable entity partner. A reportable entity partner (REP) with respect to a partnership is a corporation or partnership that owns, directly or, under the Schedule M-3 instructions, indirectly, 50 percent or more of the partnership's profit, loss, or capital on any day of the tax year, and itself was required to file Schedule M-3 on its most recently filed U.S. tax return filed prior to that day.

A corporation or partnership that becomes a REP with respect to a partnership must inform the partnership within 30 days of its name, employer identification number (EIN), and maximum (direct or indirect) ownership interest.

A partnership with a REP must file Schedule M-3 even if it is not otherwise required to do so and must report the REP name, EIN, and maximum ownership interest on the partnership's own Schedule M-3. If the partnership has two or more REPs for the year, it reports the two with the maximum ownership interest.

The indirect ownership provisions for REPs follow an effective control model testing for 50 percent or more ownership at each link.⁵ In general, an entity owning 50 percent or more of another entity is deemed to own all the corporate and partnership interests of the owned entity.⁶

In particular, the parent corporation of a tax consolidated corporate group is deemed to own all the corporate and partnership interests owned by any subsidiary. For example, if two subsidiaries each own 50 percent of a partnership, the parent corporation is deemed to own 100 percent of the partnership.

Steps in Identifying REP Data

This section outlines the steps we took to identify the reportable entity partners within the SOI data. The 2007 SOI partnership file is a weighted sample research file statistically designed to describe the population of all partnerships filing a Form 1065 in Tax Year 2007 (Processing Year 2008). We assume that the tax characteristics of a REP reported in the 2007 partnership file for a record weighted to represent more than one partnership in the population represent the tax characteristics of a REP for each of the partnerships in the population represented by that weighted record.

- We extract all REP EINs reported in the 2007 SOI partnership file.
- We treat an EIN of 000000000 or 999999999, as well as names listed without EINs, as reported but not identifiable.
- We search for the REP EIN in the IRS corporation and partnership files for forms subject to M-3 (and therefore subject to REP reporting).
- The order of the files searched within a year was 1065, 1065-B, 1120-S, 1120, 1120-PC, 1120-L, 1120-C, and 1120-F.
- Searching stopped when an EIN was identified.
- The Form 851 file of tax consolidated corporate subsidiaries and parents was searched if the general search did not identify the REP tax return to determine if the reported REP EIN is that of a corporate subsidiary.
- If the Form 851 file identified the reported EIN for a REP as that of a subsidiary, the EIN and name of the parent of the subsidiary were substituted as the actual REP for this research.
- We extract the REP income-tax-return form type, tax period, total assets, and industry NAICS code for the identified REP after any Form 851 file substitutions.
- We replace the REP's NAICS code as extracted from the IRS file with the SOI NAICS code from the 2007 SOI corporation and partnership files if different. The SOI NAICS code is edited for consistency across years. The IRS NAICS code is as-filed and is not subject to any consistency check.
- If two REPs are reported and identified, we choose the REP with the largest total assets as the REP for this research.
- REPs reported but not identified (6,226 cases) include:
 - ▶ REPs reported with no EIN or an EIN of 000000000 or 999999999 (955 or about 15 percent of the not identified cases), or
 - ▶ REPs reported with a plausible EIN (5,271 or about 85 percent of the not identified cases) not identified for this report either because
 - » The EIN is reported with error (we estimate in perhaps 5 percent of the not identified cases) or
 - » The EIN based on name inspection is the EIN of an entity not required to file Schedule M-3, and therefore,

not subject to the REP provisions of Schedule M-3 (we estimate in about 80 percent of the not identified cases). These entities include regulated investment companies, real estate investment trusts, personal trusts, and governmental units. We do not extract or analyze data for these entities for this report because voluntary reporting is inherently incomplete.

The 2007 Partnership Population: Tables 1–3

In Tables 1 through 3, we report partnership assets, tax income, and book-tax difference for the entire population of 2007 partnerships (3,096,334 partnerships) and subdivide by whether or not Schedule M-3, is or is not required and is or is not present. We subdivide partnerships with Schedule M-3 both required and present (190,711 partnerships), by whether a REP is reported or not, and if reported, by whether we are able to identify the REP by EIN in the IRS return files for return forms subject to Schedule M-3. We are particularly interested in the 63,847 partnerships with a REP reported and identified.

In Table 1, the 190,711 partnerships with Schedule M-3 required and present (6.2 percent of 3,096,334) report \$18.1 trillion in assets (88.6 percent of \$20.4 trillion in assets reported by all partnerships). The 63,847 partnerships with a REP identified (2.1 percent of all partnerships) report \$4.6 trillion in total partnership assets (22.7 percent of \$20.4 trillion for all partnerships). Stated differently, partnerships with a REP represent one-third of the partnerships with Schedule M-3 required and present, and report a quarter of the Schedule M-3 partnership population's assets.

Table 1 indicates that 16,536 partnerships not required to file Schedule M-3 in fact do so *voluntarily* rather than file the older Schedule M-1. These voluntary filers are smaller, less complex partnerships with total assets and adjusted total assets of less than \$10 million, total receipts of less than \$35 million, and no REP. Such a large number of voluntary filers among smaller partnerships suggests:

- Schedule M-3 is not a burden for smaller partnerships;
- Smaller partnerships or their tax practitioners have access to accounting computer software packages featuring Schedule M-3; and
- An amendment to IRS section 6011(e) to expand mandated electronic filing by partnerships with \$10 million or more in assets and by certain smaller partnerships filing Schedule M-3 would probably not impose a burden on the smaller partnerships because, in general, those smaller partnerships and their tax practitioners have access to accounting software packages to facilitate electronic filing.⁷

TABLE 1. All Partnerships: Total Returns and Assets by Schedule M-3 Status, 2007
(dollar amounts in millions)

M-3 Status	Returns	Assets \$	Returns %	Assets %
Not Required Not Present	2,882,188	1,942,739	93.1%	9.5%
Not Required but Present	16,536	29,828	0.5%	0.1%
Required but Not Present	6,900	354,084	0.2%	1.7%
Subtotal Not Required or Not Present	2,905,623	2,326,651	93.8%	11.4%
No REP	120,637	12,231,250	3.9%	60.0%
REP Identified	63,847	4,626,270	2.1%	22.7%
REP Not Identified	6,226	1,201,964	0.2%	5.9%
Subtotal Required and Present	190,711	18,059,483	6.2%	88.6%
Total All Returns	3,096,334	20,386,134	100.0%	100.0%

Note: M-3 is treated as "Not Present" if both book income and tax income are zero.

TABLE 2. All Partnerships: Total Returns and Tax Income by Schedule M-3 Status, 2007
(dollar amounts in millions)

M-3 Status	Negative Tax Income			
	Returns	Sum	Returns %	Sum %
Not Required Not Present	1,257,279	(98,444)	92.8%	28.5%
Not Required but Present	9,262	(4,955)	0.7%	1.4%
Required but Not Present	3,164	(2,535)	0.2%	0.7%
Subtotal Not Required or Not Present	1,269,705	(105,934)	93.7%	30.7%
No REP	45,245	(142,073)	3.3%	41.1%
REP Identified	37,104	(90,435)	2.7%	26.2%
REP Not Identified	2,517	(7,073)	0.2%	2.0%
Subtotal Required and Present	84,865	(239,581)	6.3%	69.3%
Total All Returns	1,354,570	(345,515)	100.0%	100.0%
M-3 Status	Positive Tax Income			
	Returns	Sum	Returns %	Sum %
Not Required Not Present	1,624,909	326,976	93.3%	17.6%
Not Required but Present	7,274	8,064	0.4%	0.4%
Required but Not Present	3,736	22,166	0.2%	1.2%
Subtotal Not Required or Not Present	1,635,919	357,206	93.9%	19.2%
No REP	75,392	1,115,849	4.3%	60.1%
REP Identified	26,744	311,756	1.5%	16.8%
REP Not Identified	3,709	72,308	0.2%	3.9%
Subtotal Required and Present	105,845	1,499,913	6.1%	80.8%
Total All Returns	1,741,764	1,857,119	100.0%	100.0%

Note: M-3 is treated as "Not Present" if both book income and tax income are zero.

Zero tax income returns reported in negative tax income column.

Add return row totals for negative and positive amounts to obtain return row totals in Table 1 (subject to rounding).

TABLE 3. All Partnerships: Total Returns and Book Tax Difference by Schedule M-3 Status, 2007

(dollar amounts in millions)

M-3 Status	Negative Book Tax Difference			
	Returns	Sum	Returns %	Sum %
Not Required Not Present	2,882,188	*	95.5%	*
Not Required but Present	9,083	(1,195)	0.3%	0.3%
Required but Not Present	6,900	*	0.2%	*
Subtotal				
Not Required or Not Present	2,898,170	(1,195)	96.1%	0.3%
No REP	73,135	(301,112)	2.4%	73.9%
REP Identified	41,733	(89,924)	1.4%	22.1%
REP Not Identified	3,517	(15,241)	0.1%	3.7%
Subtotal				
Required and Present	118,385	(406,277)	3.9%	99.7%
Total All Returns	3,016,555	(407,472)	100.0%	100.0%
M-3 Status	Positive Book Tax Difference			
	Returns	Sum	Returns %	Sum %
Not Required Not Present	0	*	0.0%	*
Not Required but Present	7,453	2,717	9.3%	0.8%
Required but Not Present	0	*	0.0%	*
Subtotal				
Not Required or Not Present	7,453	2,717	9.3%	0.8%
No REP	47,502	266,643	59.5%	74.9%
REP Identified	22,114	72,790	27.7%	20.5%
REP Not Identified	2,709	13,654	3.4%	3.8%
Subtotal				
Required and Present	72,325	353,087	90.7%	99.2%
Total All Returns	79,779	355,805	100.0%	100.0%

Note: M-3 is treated as "Not Present" if both book income and tax income are zero.

Zero Book Tax Difference (BTD) returns reported in negative BTD column.

Add return row totals for negative and positive amounts to obtain return row totals in Table 1 (subject to rounding).

Asterisk (*) in "Sum" column indicates M-3 data not present.

Table 1 also indicates that the 6,900 partnerships required to file Schedule M-3 either did not have a Schedule M-3 present or anomalously filed the form but reported zero for both total book income and for total tax income. We treat any such anomalous Schedule M-3 as in fact not present. Tax Year 2007 was the second year for the partnership Form 1065 Schedule M-3. Based on experience with the corporate Form 1120 Schedule M-3, introduced in 2004, we expect better partnership compliance with the partnership Schedule M-3 in its third and later years (Tax Years 2008 and later).

Tables 2 and 3 separately tabulate returns by negative and positive tax income amounts and book-tax differences amounts. Returns with a zero amount are tabulated with the returns with negative amounts. In Tables 2 and 3, the sum of the row totals for the number of returns with negative amounts and the number with positive amounts equal the returns totals for the row in Table 1 (subject to rounding).

Table 2 indicates that partnerships with Schedule M-3 required and present report 69.3 percent of the negative tax income and 80.8 percent of the positive tax income of all partnerships. Positive tax income of approximately \$1.5 trillion is about six times negative tax income of approximately -\$240 billion for these partnerships.

The 63,847 partnerships with a REP identified report 26.2 percent of the negative tax income and 16.8 percent of the positive tax income of all partnerships. Positive tax income of approximately \$312 billion is about three and one-half times negative tax income of approximately -\$90 billion. Proportionately, partnerships with a REP have more negative tax income than the Schedule M-3 partnership population in general.

Table 3 reports Schedule M-3 book-tax difference (BTD) for partnerships. For Schedule M-3, BTD is tax income minus book income. Negative BTD means book income exceeds tax income. Only Schedule M-3 BTD is reported in Table 3. BTD reported on Schedule M-1 by partnerships not filing Schedule M-3 is not included in Table 3. Total negative BTD is -\$407 billion and total positive BTD is \$356 billion. These BTD amounts are the same order of magnitude as the BTD amounts for the corporate population filing the 2005 Form 1120 Schedule M-3 (total negative BTD of -\$436 billion and total positive BTD of \$421 billion).⁸ The partnership BTD amounts are substantial. The 63,847 with a REP identified report 22.1 percent of the negative BTD and 20.5 percent of the positive BTD.

Analysis of the REP Population: Tables 4–9

In discussing Tables 4 through 9, we often refer to partnerships with a REP simply as controlled partnerships. We identify how the distribution of the number of partnerships and the distribution of partnerships' assets are affected, as we use characteristics of the controlling REP to define the columns and the characteristics of the controlled partnership to define the rows. In all cases, the total number of partnerships is 63,847, and the total asset amount is \$4.6 trillion. In other words, both the number of partnerships and the amount of assets are fixed in Tables 4 through 9, but we change the criteria along which we partition the data.

The first row of Table 4 reports that 73.0 percent of all controlled partnerships report less than \$10 million in assets and collectively report only 2.3 percent of the assets reported by controlled partnerships. Reading down the third column we see that REPs reporting \$5 billion or more in assets effectively control 19.5

TABLE 4. Partnerships with REP: Partnership Asset Size by REP Asset Size
Panel A: 2007 Total Returns (% All) and Assets (% All)

Partnership Assets Size	REP Asset Size							
	Under \$10M		\$10M < \$5B		\$5B and up		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	14.5%	0.4%	44.7%	1.6%	13.8%	0.3%	73.0%	2.3%
\$10M < \$250M	3.2%	1.6%	16.6%	10.8%	4.5%	3.7%	24.3%	16.0%
\$250M and up	0.2%	3.3%	1.4%	21.3%	1.2%	57.1%	2.8%	81.7%
Total	17.8%	5.2%	62.7%	33.7%	19.5%	61.1%	100.0%	100.0%

Panel B: 2007 Total Returns and Assets
(dollar amounts in millions)

Partnership Assets Size	REP Asset Size							
	Under \$10M		\$10M < \$5B		\$5B and up		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	9,251	17,957	28,524	75,744	8,817	12,382	46,591	106,083
\$10M < \$250M	2,018	73,063	10,581	498,585	2,895	169,875	15,494	741,523
\$250M and up	119	150,539	902	985,989	742	2,642,136	1,762	3,778,664
Total	11,387	241,559	40,006	1,560,318	12,453	2,824,393	63,847	4,626,270

percent of controlled partnerships that collectively report 61.1 percent of the assets of controlled partnerships. REPs reporting \$5 billion or more in assets effectively control many partnerships with less than \$10 million in assets (13.8 percent), but the smaller number of controlled partnerships with \$250 million or more in assets (1.2 percent) and a REP with \$5 billion or more in assets collectively report 57.1 percent of the assets reported by controlled partnerships.

Interestingly, as reported in the first column third row of Table 4, a small number of REPs (119) reporting less than \$10 million in assets effectively control partnerships with \$250 million or more in assets. Many of these REPs report zero or negative assets. The IRS is well aware that many corporations and partnerships, both large and purportedly small, fail to present a proper balance sheet as part of the tax return.⁹ Since 2006, the IRS has been working to correct balance sheet reporting through changes to the tax return instructions.

In Table 5, we group together as “Form 1120” all corporate return types requiring Schedule M-3 other than Form 1120-S for S corporations. Specifically “Form 1120” includes Forms 1120, 1120-C, 1120-F, 1120-L, and 1120-PC. In Table 5, the bottom line of the second column indicates that REPs filing a corporate Form 1120 effectively control 34.0 percent of controlled partnerships and these partnerships collectively report 53.7 percent of the assets reported by controlled partnerships. The first column of Table 5 indicates that 58.3 percent of controlled partnerships are effectively controlled by partnerships filing Form 1065. In other words, a

TABLE 5. Partnerships with REP: Partnership Asset Size by REP Return Type
Panel A: 2007 Total Returns (% All) and Assets (% All)

Partnership Asset Size	REP Return Type							
	Form 1065		Form 1120		Form 1120S		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	41.7%	1.5%	24.9%	0.6%	6.4%	0.2%	73.0%	2.3%
\$10M < \$250M	15.3%	9.5%	7.7%	5.8%	1.3%	0.8%	24.3%	16.0%
\$250M and up	1.3%	32.8%	1.4%	47.3%	0.1%	1.6%	2.8%	81.7%
Total	58.3%	43.7%	34.0%	53.7%	7.8%	2.6%	100.0%	100.0%

Panel B: 2007 Total Returns and Assets

(dollar amounts in millions)

Partnership Asset Size	REP Return Type							
	Form 1065		Form 1120		Form 1120S		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	26,607	67,490	15,907	27,908	4,076	10,684	46,591	106,083
\$10M < \$250M	9,760	437,277	4,893	267,709	841	36,537	15,494	741,523
\$250M and up	831	1,517,927	879	2,187,891	52	72,846	1,762	3,778,664
Total	37,198	2,022,694	21,680	2,483,508	4,969	120,067	63,847	4,626,270

majority of controlled partnerships are controlled by partnerships, but a majority of controlled partnership assets are controlled by 1120 corporations.

In Table 6, the first column indicates that REPs in the Finance/Holding industry effectively control 29.8 percent of controlled partnerships, and they collectively report 55.8 percent of the assets reported by controlled partnerships. In Table 6, the third row of the first column indicates that partnerships with \$250 million or more in assets and a REP in Finance/Holding are only 1.2 percent of controlled partnerships but report 49.3 percent of all assets reported by controlled partnerships.

Table 6 indicates that REPs in Real-Estate/Rental effectively control 44.9 percent of controlled partnerships, but these partnerships collectively only report 11.7 percent of assets reported by controlled partnerships. Stated differently, at the REP level, Real Estate REPs dominate in terms of numbers of partnerships controlled, but Finance REPs dominate in terms of dollars of partnership assets controlled.

The assets effectively controlled by REPs in Manufacturing (10.6 percent), Information (10.4 percent), and other industries (11.5 percent) are comparable to those effectively controlled by Real-Estate/Rental REPs (11.7 percent). Note that small controlled partnerships (less than \$10 million in assets) with a REP in the information industry anomalously report collective negative total assets of -\$9,304 million. Since 2006, Forms 1065 and 1120 instructions have stated that negative total assets may not be reported.

TABLE 6. Partnerships with REP: Partnership Asset Size by REP Industry**Panel A. 2007 Total Returns (% All) and Assets (% All)**

Partnership Asset Size	REP Industry					
	Finance/Holding		Real Estate/Rental		Manufacturing	
	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	21.3%	0.8%	33.8%	1.2%	2.2%	0.1%
\$10M < \$250M	7.3%	5.8%	10.6%	5.7%	1.3%	1.1%
\$250M and up	1.2%	49.3%	0.4%	4.8%	0.4%	9.4%
Total	29.8%	55.8%	44.9%	11.7%	3.9%	10.6%

Partnership Asset Size	REP Industry					
	Information		Other		Total	
	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	1.1%	-0.2%	14.6%	0.4%	73.0%	2.3%
\$10M < \$250M	0.7%	0.4%	4.3%	3.0%	24.3%	16.0%
\$250M and up	0.2%	10.2%	0.5%	8.1%	2.8%	81.7%
Total	1.9%	10.4%	19.5%	11.5%	100.0%	100.0%

Panel B. 2007 Total Returns and Assets

(dollar amounts in millions)

Partnership Asset Size	REP Industry					
	Finance/Holding		Real Estate/Rental		Manufacturing	
	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	13,576	35,747	21,598	55,939	1,423	3,713
\$10M < \$250M	4,692	266,628	6,768	264,590	828	50,336
\$250M and up	776	2,279,007	286	220,118	240	436,112
Total	19,044	2,581,382	28,652	540,648	2,491	490,161

Partnership Asset Size	REP Industry					
	Information		Other		Total	
	Returns	Assets	Returns	Assets	Returns	Assets
Under \$10M	676	(9,304)	9,318	19,987	46,591	106,083
\$10M < \$250M	444	20,114	2,763	139,854	15,494	741,523
\$250M and up	122	470,127	338	373,301	1,762	3,778,664
Total	1,242	480,936	12,418	533,143	63,847	4,626,270

In Table 7, the first row indicates that partnerships in the Finance/Holding industry that have a REP are 15.1 percent of all controlled partnerships with a REP but collectively report 57.1 percent of assets reported by controlled partnerships. In particular, the partnerships in the Finance/Holding industry that have a REP

TABLE 7. Partnerships with REP: Partnership Industry by REP Asset Size**Panel A: 2007 Total Returns (% All) and Assets (% All)**

Partnership Industry	REP Asset Size							
	Under \$10M		\$10M < \$5B		\$5B and up		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	2.1%	3.2%	8.1%	16.0%	5.0%	37.9%	15.1%	57.1%
Real Estate/Rental	12.0%	1.2%	36.7%	9.5%	10.3%	4.2%	58.9%	14.9%
Manufacturing	0.1%	0.2%	1.3%	2.1%	0.3%	3.9%	1.8%	6.1%
Information	0.8%	0.1%	0.4%	0.4%	1.2%	9.3%	2.4%	9.8%
Construction	0.6%	0.1%	5.1%	0.8%	0.3%	0.7%	6.0%	1.5%
Retail/Wholesale	0.2%	0.1%	1.5%	0.8%	0.2%	0.9%	2.0%	1.8%
All Other	2.0%	0.4%	9.6%	4.1%	2.3%	4.2%	13.9%	8.7%
Total	17.8%	5.2%	62.7%	33.7%	19.5%	61.1%	100.0%	100.0%

Panel B: 2007 Total returns and Assets

(dollar amounts in millions)

Partnership Industry	REP Asset Size							
	Under \$10M		\$10M < \$5B		\$5B and up		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	1,329	146,969	5,149	741,385	3,162	1,753,389	9,639	2,641,743
Real Estate/Rental	7,631	56,161	23,428	439,398	6,548	192,090	37,607	687,649
Manufacturing	91	7,413	820	96,884	210	179,435	1,121	283,733
Information	508	4,107	264	18,879	752	431,325	1,524	454,311
Construction	370	4,470	3,245	36,083	205	30,210	3,820	70,763
Retail/Wholesale	155	2,994	958	38,588	138	42,838	1,251	84,420
All Other	1,304	19,444	6,142	189,100	1,439	195,106	8,885	403,650
Total	11,388	241,559	40,006	1,560,318	12,453	2,824,393	63,847	4,626,270

with \$5 billion or more in assets (5.0 percent) collectively report 37.9 percent of assets reported by controlled partnerships. In Table 7, the second row indicates that partnership in the Real-Estate/Rental industry that have a REP are 58.9 percent of all partnerships with a REP but collectively report only 14.9 percent of assets reported by partnerships with a REP. At the controlled-partnership level, just as at the controlling-REP level, Real Estate dominates in terms of numbers, but Finance dominates in terms of dollars.

Partnerships in the Real-Estate industry with a REP generally have a REP with \$10 million to \$5 billion in assets. Such partnerships (36.7 percent) report 9.5 percent of assets reported by partnerships with a REP. Partnerships in the Real-Estate industry account for about two-thirds of the controlled partnerships with a REP reporting under \$10 million in assets (12.0 percent compared to 17.8 percent).

TABLE 8. Partnerships with REP: Partnership Industry by REP Return Type
Panel A: 2007 Total Returns (% All) and Assets (% All)

Partnership Industry	REP Return Type							
	Form 1065		Form 1120		Form 1120S		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	9.2%	28.7%	5.6%	27.1%	0.3%	1.3%	15.1%	57.1%
Real Estate/Rental	39.7%	10.2%	15.5%	4.3%	3.7%	0.3%	58.9%	14.9%
Manufacturing	0.4%	1.0%	0.9%	4.9%	0.4%	0.2%	1.8%	6.1%
Information	0.8%	0.2%	1.5%	9.5%	0.1%	0.1%	2.4%	9.8%
Construction	3.3%	0.4%	1.6%	0.9%	1.0%	0.2%	6.0%	1.5%
Retail/Wholesale	0.4%	0.6%	0.9%	1.0%	0.6%	0.2%	2.0%	1.8%
All Other	4.4%	2.6%	8.0%	5.9%	1.5%	0.2%	13.9%	8.7%
Total	58.3%	43.7%	34.0%	53.7%	7.8%	2.6%	100.0%	100.0%

Panel B: 2007 Total Returns and Assets
(dollar amounts in millions)

Partnership Industry	REP Return Type							
	Form 1065		Form 1120		Form 1120S		Total	
	Returns	Assets	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	5,856	1,326,763	3,572	1,253,396	212	61,584	9,639	2,641,743
Real Estate/Rental	25,371	473,097	9,878	199,871	2,358	14,681	37,607	687,649
Manufacturing	254	45,578	590	228,480	277	9,675	1,121	283,733
Information	497	10,796	949	438,518	78	4,997	1,524	454,311
Construction	2,137	20,232	1,019	41,794	664	8,736	3,820	70,763
Retail/Wholesale	286	28,211	571	46,610	393	9,599	1,251	84,420
All Other	2,799	118,017	5,100	274,839	986	10,795	8,885	403,650
Total	37,198	2,022,694	21,680	2,483,508	4,969	120,067	63,847	4,626,270

Controlled partnerships in the Information industry generally have a REP with \$5 billion or more in assets. Such partnerships (1.2 percent) report 9.3 percent of assets reported by controlled partnerships.

In Table 8, the first row shows that partnerships in the Finance/Holding industry that have a REP that is a Form 1065 partnership (9.2 percent) report 28.7 percent of assets reported by controlled partnerships, while those with a Form 1120 corporation as a REP (5.6 percent) report 27.1 percent.

In Table 9, we see that REPs, in general, stay close to their own industry in terms of the industries of the partnerships they control. The exception is Finance/Holding, which seems to be comfortable in controlling partnerships in

TABLE 9. Partnerships with REP: Partnership Industry by REP Industry
Panel A: 2007 Total Returns (% All) and Assets (% All)

Partnership Industry	REP Industry					
	Finance/Holding		Real Estate/Rental		Manufacturing	
	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	12.7%	50.9%	0.7%	0.4%	0.4%	2.9%
Real Estate/Rental	13.4%	2.3%	40.0%	10.6%	1.1%	0.7%
Manufacturing	0.2%	0.8%	*	*	1.1%	4.6%
Information	0.8%	0.2%	*	*	*	*
Construction	0.7%	0.1%	2.0%	0.3%	*	*
Retail/Wholesale	0.4%	0.2%	0.1%	0.0%	0.4%	0.3%
All Other	1.6%	1.4%	2.1%	0.4%	0.8%	1.7%
Total	29.8%	55.8%	44.9%	11.7%	3.9%	10.6%

Partnership Industry	REP Industry					
	Information		Other		Total	
	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	0.0%	0.5%	1.4%	2.3%	15.1%	57.1%
Real Estate/Rental	0.1%	0.3%	4.3%	0.9%	58.9%	14.9%
Manufacturing	*	*	0.3%	0.7%	1.8%	6.1%
Information	1.6%	9.2%	0.0%	0.2%	2.4%	9.8%
Construction	*	*	3.3%	1.2%	6.0%	1.5%
Retail/Wholesale	0.0%	0.0%	1.0%	1.3%	2.0%	1.8%
All Other	0.2%	0.3%	9.2%	5.0%	13.9%	8.7%
Total	1.9%	10.4%	19.5%	11.5%	100.0%	100.0%

Note: Asterisk (*) indicates data suppressed to preserve taxpayer confidentiality. One or more of the suppressed cells involves a return count of 1 or 2. Table 9 Panel B appears on the next page.

all industries with a preference for controlling Finance and Real Estate partnerships. Partnerships in the Finance/Holding industry with a REP in the Finance/Holding industry (12.7 percent) report 50.9 percent of assets reported by controlled partnerships. Partnerships in the Real-Estate/Rental industry with a REP in the Real-Estate/Rental industry (40.0 percent) report 10.6 percent of assets reported by controlled partnerships.

Paraphrasing our comment on Table 6, in Table 9, Real Estate REPs controlling Real Estate partnerships dominate in terms of numbers of partnerships controlled, but Finance REPs controlling Finance partnerships dominate in terms of dollars of partnership assets controlled.

TABLE 9. Partnerships with REP: Partnership Industry by REP Industry—*CONTINUED*
Panel B: 2007 Total Returns and Assets
(dollar amounts in millions)

Partnership Industry	REP Industry					
	Finance/Holding		Real Estate/Rental		Manufacturing	
	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	8,091	2,355,080	419	17,748	224	135,990
Real Estate/Rental	8,533	107,545	25,531	490,433	709	31,210
Manufacturing	152	37,479	*	*	717	214,722
Information	493	7,015	*	*	*	*
Construction	449	2,969	1,265	12,183	*	*
Retail/Wholesale	275	7,830	43	343	286	16,117
All Other	1,050	63,464	1,343	18,252	521	78,129
Total	19,044	2,581,382	28,652	540,648	2,491	490,161

Partnership Industry	REP Industry					
	Information		Other		Total	
	Returns	Assets	Returns	Assets	Returns	Assets
Finance/Holding	26	25,074	880	107,851	9,639	2,641,743
Real Estate/Rental	89	14,860	2,745	43,601	37,607	687,649
Manufacturing	*	*	200	30,426	1,121	283,733
Information	991	425,921	18	7,890	1,524	454,311
Construction	*	*	2,087	53,525	3,820	70,763
Retail/Wholesale	7	834	640	59,296	1,251	84,420
All Other	121	13,251	5,850	230,555	8,885	403,650
Total	1,242	480,936	12,418	533,143	63,847	4,626,270

Note: Asterisk (*) indicates data suppressed to preserve taxpayer confidentiality. One or more of the suppressed cells involves a return count of 1 or 2. Table 9 Panel A appears on the prior page.

Closing Observations

At the level of the REP, the general story about effective control of controlled partnership assets is the importance of:

- Large REPs (\$5 billion or more in assets),
- REPs that are 1120 corporations, and
- REPs that are in Finance/Holding.

At the controlled partnership level, the story about controlled partnership assets is the importance of:

- Large controlled partnerships (\$250 million or more in assets), and
- Controlled partnerships that are in Finance/Holding.

We look forward to doing further research into effectively controlled partnerships. When we move forward to Tax Year 2008 data, we will have a broad set of ownership data added to the Form 1065 and Form 1120 tax returns including information on entity owners that are U.S. or foreign partnerships, corporations, or trusts. That set of controlling entity owners is far broader than the Schedule M-3 REP population.

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Endnotes

- ¹ This paper was first published by *Tax Notes* 128 No. 9 (August 30, 2010):949–958. It is reprinted with permission. It was prepared for the 2010 IRS Research Conference. The opinions expressed are those of the authors and do not necessarily reflect positions of the IRS or U.S. Department of the Treasury.
- ² For an excellent review of the 2007 partnership population, see Wheeler and Shumofsky (2009). For a study of the growth in partnership business receipts from 1980 to 2002, see Petska, Parisi, Luttrell, Davitian, and Scoffice (2005). For a recent study of bankruptcy risks for individual and corporate partners selecting to do business in the increasingly popular limited liability company (LLC) form, see Levy and Hofheimer (2010).
- ³ For discussions relating to the development of Schedule M-3, see Mills and Plesko (2003), Boynton and Mills (2004), Boynton and Wilson (2006), and Boynton, DeFilippes, and Legel (2006 and 2008). For a summary of research on book-tax differences and Schedules M-1 and M-3 through 2007, see Weiner (2007). For a discussion of the relationship between financial accounting current Federal income tax expense on SEC Form 10K (and now on Schedule M-3) and Form 1120 tax liability, see Lisowsky (2009). Research using

Schedule M-3 data has developed further as data have become available. For example, Lisowsky, Robinson, and Schmidt (2010) discuss the relation between uncertain tax positions, tax shelters, and reportable transaction amounts reported on Schedule M-3; Dunbar, Phillips, and Plesko (2009) examine public versus private firms' book-tax reporting and tax planning before and after rules were passed for more public disclosures of tax reserves; and Blouin, DeBacker, and Sikes (2010) examine the relation between temporary and permanent book-tax differences on Schedule M-3 for public versus private firms.

- ⁴ For technical details on Schedule M-3 filing requirements, including the definition of adjusted total assets and Reportable Entity Partner, see the current instructions for Forms 1065 and 1120 Schedules M-3. Go to www.irs.gov, click on Forms and Publications, click on Form and instruction number (PDF), insert 1065 or 1120, and click on Schedule M-3 instructions.
- ⁵ For comments strongly opposing the Schedule M-3 Reportable Entity Partner indirect ownership attribution rules, see Hennig, Everett, and Raabe (2009). For an earlier discussion, see Everett, Hennig and Raabe (2007), Questions 32 through 36.
- ⁶ IRC section 267(c) provides an alternative attribution model for corporate stock ownership based on proportional allocation. IRC section 707(b) makes section 267(c) applicable to attribution of interest in partnership profits, loss, and capital. In 2008, partnership tax return Form 1065 Schedule B ownership questions 3 and 4 and corporation tax return Form 1120 Schedule K ownership questions 4 and 5 were added and use section 267(c) attribution but with a limit on family attribution among individuals. See the current instructions for Form 1065 Schedule B and Form 1120 Schedule K. For Frequently Asked Questions (FAQs) on the 2008 ownership questions, go to www.irs.gov, click on businesses, click on partnerships, click on 2008 Changes to Form 1065—Frequently Asked Questions. For comments on the 2008 ownership questions and the web-based FAQs, see Banoff (2009a, 2009b). Banoff (2009b) in text before and following his footnote 64 comments on Hennig, Everett, and Raabe (2009) cited in our prior note.
- ⁷ For a proposal to require electronic tax return filing of all corporations and partnerships filing Schedule M-3, see U.S. Department of the Treasury (2010) page 103.
- ⁸ See Boynton, DeFilippes, and Legel (2008).
- ⁹ For a discussion of balance sheet and other consolidation anomalies of large corporations, see Boynton, DeFilippes, Lisowsky, and Mills (2004).

Temporary and Permanent Book-Tax Differences: Complements or Substitutes?

Jennifer Blouin, University of Pennsylvania; Jason DeBacker, U.S. Department of Treasury; Stephanie Sikes, University of Pennsylvania

Taxable income reported to the tax authorities almost always differs from book income reported to the capital markets. Such differences arise from tax legislation that mandates departures from Generally Accepted Accounting Principles (GAAP) for various economic, political, and administrative reasons. There are two types of book-tax differences: permanent and temporary. Permanent book-tax differences arise when an item (1) affects taxable income, but never affects book income, or (2) affects book income, but never affects taxable income. Examples include municipal bond income, fines, and meals and entertainment. Temporary book-tax differences arise when book and tax treatment for a transaction differ in a particular year but have the same cumulative effect over the life of the firm (ignoring issues related to the time value of money). Depreciation, bad debt expenses, and loss contingencies are some of the more common temporary book-tax differences.

In recent years, researchers have exerted considerable effort to determining the cause of book-tax differences (e.g., are they caused by aggressive reporting of book income, aggressive reporting of taxable income, or both).¹ Using data from firms' Schedule M-3 for years 2005–2007, we examine whether firms treat permanent and temporary book-tax differences as complements or as substitutes, and whether capital markets incentives affect this trade-off. Our study has two advantages over prior studies of book-tax differences that rely on publicly available information. First, rather than estimating a firm's temporary and permanent book-tax differences, we incorporate the actual amounts of a firm's temporary and permanent book-tax differences as reported on its Schedule M-3. Second, there are no publicly available data for private firms. Although all companies have incentives to reduce taxable income, public firms face much greater capital markets pressure to report high book income. Therefore, the non-tax costs of tax planning could lead public companies to have different preferences for permanent and timing book-tax differences. Incorporating private firms into our analysis allows us to attribute any differences in the use of permanent and temporary book-tax differences between public and private firms to the capital markets pressures faced by public firms.

We cannot predict *ex ante* whether public firms will view temporary and permanent differences as substitutes or as complements. Some (e.g., Weisbach 2002; Plesko 2004; Neubig 2006) conjecture that public companies facing pressure to report high GAAP earnings prefer tax planning that creates permanent book-tax differences because permanent book-tax differences decrease taxable income without reducing book income. Larger firms also have more resources available for tax planning (e.g., Rego 2003). For both of these reasons, we expect that public firms might view the two as substitutes and only rely on temporary differences when they have exhausted available permanent book-tax differences.

Permanent differences could create financial statement risk. Only permanent book-tax differences have an impact on a firm's effective tax rate and thus on reported net income. However, if tax authorities later overturn a permanent book-tax difference, then income tax expense will increase, and GAAP net income will decrease. Because of this financial statement risk, public firms facing heightened capital market pressure (i.e., to maintain a series of increasing earnings (Barth et al. 1999)) might prefer temporary differences over permanent differences.

Our paper contributes to prior literature that compares and contrasts aggressive financial reporting and aggressive tax reporting between public and private firms (Cloyd et al. 1996; among others). Based on the results of Cloyd et al. (1996), we predict that private firms will have smaller book-tax differences (scaled by assets) than public firms because private firms are more likely to choose conforming transactions that reduce taxable income and book income. Cloyd et al. (1996) find that executives of private firms choose conforming transactions that decrease both taxable income and reported book income in order to save on taxes and to increase the probability of successfully defending the transaction if challenged by the Internal Revenue Service (IRS) (see Mills 1998). To the extent that private firms have book-tax differences, we have little expectation that they would prefer permanent to temporary differences, because private firms are likely less sensitive than public firms to the financial statement benefits associated with permanent book-tax differences. Since private firms rely on debt for their external financing needs, private firms may be more focused on cash flows (generated by both temporary and permanent differences) than net income. However, if private firm managers are compensated based on net income, then private firms may prefer permanent to temporary differences.

We also incorporate a set of firms that are a public-private hybrid: quasi-public firms. We define quasi-public firms as those firms with public debt and private equity. Using a similar sample, Badertscher et al. (2010) finds that private firms owned by private equity firms ("PE-backed firms") pay 14.2 percent less income tax per dollar of pre-tax income than private firms without private equity firm ownership and that PE-backed firms have lower marginal tax rates and participate in more non-conforming transactions than do non-PE-backed private firms. Based

on these findings, we anticipate that quasi-public firms have levels of permanent book-tax differences similar to those of public firms.

The results of univariate analysis are largely consistent with our expectations. We find that public firms have significantly more total book-tax differences scaled by total assets, temporary differences scaled by total assets, and permanent differences scaled by total assets than do private firms. These results suggest that public firms are either a) more aggressive tax planners or b) undergo relatively less conforming tax planning. Surprisingly, the quasi-public sample appears to have income increasing book-tax differences. However, we are hesitant to draw inferences from this analysis, since there are so few quasi-public firms in our sample.

Next, we examine whether firms treat permanent and temporary book-tax differences as substitutes or as complements and if the treatment varies between public and private firms.² We do not have any *ex ante* predictions for this analysis. Overall, we find that firms treat temporary and permanent book-tax differences as substitutes. When a firm decreases (increases) its temporary book-tax differences from one year to the next, it increases (decreases) its permanent book-tax differences. However, when we investigate whether the substitution effect varies by ownership type, we find little evidence that public firms have a different rate of substitution than private firms.

The remainder of the paper proceeds as follows. Section 2 discusses the motivation for the Schedule M-3 and prior literature related to tax reporting practices of public, private, and quasi-public firms. Section 3 outlines our empirical design. Section 4 summarizes the results. Section 5 concludes.

Background and Hypothesis Development

During the 1990s, the growing disparity between income reported for financial statements and income reported to tax authorities caught the attention of legislators and regulators. The growing divide between financial income and taxable income may have reinforced instances of outrageous corporate misbehavior to help motivate regulatory legislation including Sarbanes-Oxley and tax-shelter restrictions. A Treasury report in 1999, as well as testimony in 2000 by then Treasury Assistant Secretary for Tax Policy Jonathan Talisman, highlighted the growing divide between pre-tax book income and taxable income and expressed concerns that tax-sheltering activity could be responsible for the divide (*see* Treasury (1999) and Talisman (2000)). At the time, the Schedule M-1 on a corporation's tax return reconciled the firm's pre-tax book income with its taxable income. Many felt that the information provided on the Schedule M-1 was inadequate to address whether the growing divide was due to tax planning or financial reporting aggressiveness. As a result, the Treasury created a new schedule for large corporate filers. For tax

years 2004 forward, Schedule M-3 replaces Schedule M-1 for corporate tax returns reporting total assets of \$10 million or more.³

Recent research in accounting has focused on corporate tax avoidance and earnings management as potential sources for the book-tax gap (Plesko 2002; Manzon and Plesko 2002; Desai 2003; McGill and Outslay 2004; Seidman 2010). Some link the growing divide between tax and financial reporting to aggressive tax planning and/or tax shelter use (Mills 1998; Desai 2003), while others link differences between tax and financial reporting to more aggressive earnings management (Phillips et al. 2003; Phillips et al. 2004; Hanlon 2005). Of course, some firms are aggressive with their financial reporting as well as their tax reporting (Frank et al. 2009). For instance, Wilson (2009) finds that firms that are actively engaged in tax shelters have larger *ex post* book-tax differences and are more aggressive in their financial reporting. Although a consensus has not been reached as to whether the growth in the book-tax gap is primarily driven by tax planning or earnings management, there is strong evidence to suggest that the divide between pre-tax book income and taxable income is due to both tax sheltering and aggressive financial reporting.

The goal of the Schedule M-3 is greater transparency, and, as such, it provides much more granular information related to book-tax differences than does the Schedule M-1. Moreover, unlike the Schedule M-1, the Schedule M-3 separates total book-tax differences into temporary book-tax differences and permanent book-tax differences. Permanent book-tax differences arise when an item (1) affects taxable income, but never affects book income, or (2) affects book income, but never affects taxable income. Temporary book-tax differences arise when book and tax treatment for a transaction differ in a particular year but have the same cumulative effect over the life of the firm (ignoring issues related to the time value of money). In this paper, we examine whether firms treat permanent and temporary book-tax differences as substitutes or as complements and whether this varies according to a firm's ownership structure. In particular, we examine the variation between publicly traded firms, quasi-public firms (i.e., firms with publicly held debt), and private firms.

We have no *ex ante* prediction about whether firms will view timing and permanent book-tax differences as complements or as substitutes. If firms tax plan to the fullest extent possible, then they might have high levels of permanent and temporary book-tax differences. However, if firms are constrained from undertaking all tax planning opportunities because a) they view extreme tax planning as too risky or b) they have limited firm resources to invest in tax planning, then they might have to choose between permanent and temporary planning opportunities. All else equal, we expect firms to prefer permanent book-tax difference because of the potential financial statement benefits. However, temporary differences provide cash flow benefits with little financial statement risk.

Because of the lack of publicly available data on private firms, we know little about the tax reporting behaviors of private firms with the exception of the findings in a handful of papers. In one of the earliest studies of book-tax differences, Mills (1998) finds that IRS audit adjustments increase as book-tax differences increase. Her results support the notion that firms face a tradeoff between book and tax incentives for earnings management. Moreover, using data from firms' tax returns, she predicts that public firms will be less aggressive in transactions where book and tax treatment conform because it is more costly for public firms than for private firms to report lower book income for tax savings purposes. Thus, she predicts that as long as IRS detection is equivalent for public and private firms, then public firms should have smaller IRS adjustments. However, she only finds evidence that this is so in one of the eight years of her 1982-1989 sample period. She also finds that audit adjustments as a percentage of book-tax differences are smaller for public firms than for private firms, and this difference is significant for three of the years of her sample period.

Cloyd et al. (1996) conducts a survey of public and private firms. The authors study whether public firms are less likely than private firms to partake in conforming tax planning transactions (i.e., transactions that reduce both book income and taxable income) as a result of public firms facing greater non-tax costs associated with income-decreasing tax planning. Of the 1,920 surveys that they mailed, they received a 32-percent response rate for public and private firms (423 public firms responded, and 172 private firms responded). They find that conformity is more likely when it increases the probability of successfully defending the aggressive tax position upon audit and that managers of public firms are less likely to conform than are private firm managers. Moreover, they find that public firm managers perceive conformity to have higher non-tax costs. Examples of non-tax costs associated with downward conforming transactions are debt covenant violations, lower management compensation, and lost promotions when compensation and performance are tied to reported income. In addition, managers could perceive that lower reported income could lead to lower market value if investors are fixated on earnings (Dietrich 1984; Hand 1990; Chen and Schoderbek 2000).⁴

Several recent papers examine the relation between the incentives of managers of public firms to increase reported book income and a firm's tax planning behavior. In the 1990s, some firms began to evaluate their tax departments as profit centers, or "contributors to the bottom line." Using confidential survey taken in 1999 of Chief Financial Officers of Fortune 500 companies, Robinson et al. (2010) find that firms that evaluate their tax departments as profit centers have significantly lower effective tax rates than do firms that evaluate their tax departments as cost centers. Similarly, using a proprietary data set with detailed executive compensation, Blouin et al. (2010) find a significant negative relation between the incentives of tax directors and firms' effective tax rates. Dyreng et al. (2010) find that individual executives play a significant role in determining the level of tax avoidance that

their firms undertake and can have a significant impact on their firms' effective tax rates. Consistent with findings in these papers, in particular the incentives given to tax departments examined in Robinson et al. (2010) and Blouin et al. (2010), we expect for public firms to have large amounts of permanent book-tax differences since only permanent book-tax differences can reduce a firm's effective tax rate, thereby increasing its net income.

We include quasi-public firms in our analysis because a recent paper (Badertscher et al. 2010) finds that private firms that are owned by private equity firms ("PE-backed firms") are more tax aggressive than are private firms that are not owned by private equity firms. Badertscher et al. (2010) find that PE-backed firms pay 14.2 percent less income tax per dollar of pre-tax income than non-PE backed firms. They also find that PE-backed firms have lower marginal tax rates and participate in more non-conforming transactions than do other private firms. The fact that PE-backed firms participate in more non-conforming transactions suggests that PE-backed firms have larger book-tax differences than do non-PE backed private firms. We will examine whether this is indeed true. Badertscher et al. (2010) conclude that private equity firms view tax avoidance as a source of economic value, the benefits of which exceed any potential reputational costs associated with corporate tax avoidance.

Based on the findings in the literature above, we expect public firms to have larger book-tax differences than private firms. Public firms and private firms both have an incentive to report lower taxable income; however, there are more non-tax costs associated with downward conforming transactions for public firms than for private firms. Based on the results in Robinson et al. (2010) and Blouin et al. (2010), we expect that public firms will want to engage in permanent book-tax differences because only permanent book-tax differences can reduce a firm's effective tax rate. However, if we find that public firms actually have more temporary differences than permanent differences, we will attribute such a finding to the fact that there is some financial statement risk associated with permanent book-tax differences (i.e., if the IRS later overturns permanent book-tax differences, a firm has to increase income tax expense, thereby increasing its effective tax rate and decreasing reported net income). Based on the finding in Badertscher et al. (2010) that PE-backed private firms engage in more nonconforming transactions than do non-PE-backed private firms, we expect our sample of quasi-public firms to have larger amounts of book-tax differences than our sample of private firms.

Sample and Research Design

Sample

Our sample consists of 2,799 public firms, 21,445 private firms, and 23 quasi-public firms from 2005–2007. For a firm to be included in our sample, it must

be a C corporation, report total assets of at least \$10 million, and have positive book income. We also exclude firms whose foreign net income is more than 25 percent of their worldwide net income.⁵ Although multinational tax planning is an interesting topic, it is difficult to disentangle whether the deferral of foreign income from taxation until repatriation represents a permanent or temporary difference for the purposes of our study. Note that Louie (2005) describes that deferral of foreign income is reported as a timing book-tax difference on the Schedule M-3. However, under APB 23, the deferral of foreign income does not create a deferred tax liability for reporting purposes, which would decrease firms' GAAP effective tax rates.

Unlike Badertscher et al. (2010), we do not know which private firms in our sample have a private equity firm as either a majority or minority owner. Thus, we identify our public and quasi-public samples by merging the IRS and Compustat data using the employer identification number (EIN). If a firm is found in both datasets, we then look to see whether the firm has reported a stock price (Compustat variable *prcc_f*) in any of the past 5 years. If price (no price) information is available, then we designate the firm as public (quasi-public). Like the PE-backed firms in Badertscher et al's (2010) sample, the quasi-public firms in our sample have publicly-traded debt. Our sample of private firms consists of firms for which we have a tax return but that are not included in Compustat.⁶

Table 1 outlines the sample derivation. As expected, there are far more private firms than public and quasi-public firms in our sample. However, the representation across industries is similar. The elimination of firms with less than \$10 millions of assets disproportionately affects the private sample. Also, the public firms included in our analysis constitute approximately 15 percent of the assets of all Compustat firms in our sample period.

Research Design

For each of the three groups (public, quasi-public, and private), we estimate their total book-tax differences, permanent book-tax differences, and temporary book-tax differences using information from the Schedule M-3. We then divide their book-tax differences into quintiles with quintile 5 representing the most aggressive book-tax differences (i.e., greatest difference between pre-tax book income and taxable income, where pre-tax book income exceeds taxable income). Quintile 1 represents the least aggressive differences. In univariate analyses, we test whether there are significant differences in the mean scaled total, permanent, and temporary book-tax differences across the public, quasi-public, and private firms. We also test whether the means for quintiles 1 and 5 are significantly different across the three groups.

For each of the three ownership groups, we also examine the percentage of total, permanent, and temporary book-tax differences that are associated with "reportable transactions" under Treasury Regulation Section 1.6011-4(b). There

are six categories of reportable transactions over our sample period. They are listed transactions, confidential transactions, transactions with contractual protection, loss transactions, transactions with a significant book-tax difference, and transactions involving a brief asset holding period.⁷ Treasury Regulation Section 1.6011-4(b)(2) defines a listed transaction as “a transaction that is the same as or substantially similar to one of the types of transactions that the Internal Revenue Service (IRS) has determined to be a tax avoidance transaction and identified by notice, regulation, or other form of published guidance as a listed transaction.” Ideally, we would like to identify those reportable transactions that are listed transactions; however, we do not have access to such detailed information. Thus, the percentage of book-tax differences related to reportable transactions that we report are at best a noisy indication of the degree of tax avoidance related to the book-tax differences.

To investigate whether public firms have more or less total, temporary and permanent book-tax differences than do private firms, we undertake a multivariate analysis where we control for other variables related to book-tax differences. Unfortunately, we do not have enough observations for quasi-public firms to include them in this analysis. We begin by estimating the following Ordinary Least Squares (OLS) regression:

$$BTD_{it} = \beta_0 + \beta_1 PUBLIC_i + \beta_2 ROA_{it} + \beta_3 PPE_{it} + \beta_4 LEV_{it} + \beta_5 INTAN_{it} + \beta_6 GROW_{it} + IndustryDummies_i + YearDummies_t + \varepsilon \quad (1)$$

The dependent variable, *BTD*, is either total book-tax difference, *SCBTD* (lines 26(b)(c) and 27(b)(c) on Part II of Schedule M-3 plus lines 1(b)(c)–7(b)(c) on Part III of Schedule M-3, divided by total assets at the end of the year (box D at top of Form 1120)); permanent book-tax differences, *PERM_SCBTD* (lines 26(c) and 27(c) on Part II of Schedule M-3 plus lines 1(c)–7(c) on Part III of Schedule M-3, divided by total assets at the end of the year (box D at top of Form 1120)); or temporary book-tax differences, *TEMP_SCBTD* (lines 26(b) and 27(b) on Part II of Schedule M-3 plus lines 1(b)–7(b) on Part III of Schedule M-3, divided by total assets at the end of the year (box D at top of Form 1120)). To study differences between public and private firms’ book-tax differences, we include *PUBLIC*, which equals 1 if the firm is a public firm and 0 if it is a private firm.

Equation (1) also includes several control variables. *ROA*, included as a control for profitability, is defined as net book income (line 11 on Schedule M-3) divided by total assets at the end of the year (box D at top of Form 1120). Presumably, less profitable firms will have relatively less incentive to tax plan, yielding a positive association with book-tax differences.

PPE is net property, plant, and equipment (sum of lines 10(a)(c) and 10(b)(c) on Schedule L of Form 1120) divided by total assets at the end of the year (box D at top of Form 1120). We control for property, plant, and equipment because prior

research finds that differences in book and tax depreciation is one of the determinants of book-tax differences (Seidman 2010). Depending on where a firm's long-term assets are in their life cycle, *PPE* could be negatively or positively related to total and temporary book-tax differences. *LEV*, the sum of lines 17(d), 20(d), and 21(d) on Schedule L of Form 1120 divided by total assets at the end of the year (box D at top of Form 1120), is included to control for the fact that firms with more debt-related tax shields may have less of a need to be aggressive with other tax planning. Consistent with Chen et al. (2010) and Robinson et al. (2010), we include the variable *INTAN*, sum of lines 13(a)(c) and 13(b)(c) on Schedule L of Form 1120, at the end of the year divided by total assets at the end of the year (box D at top of Form 1120), to control for differing book and tax treatments of intangible assets. Opportunities to shift income could also be represented by *INTAN* (Grubert and Slemrod 1998). *GROW*, one year percentage growth in sales (line 1c on Form 1120), is our proxy for growth. Bankman (1994) finds that high-growth firms generally place less emphasis on tax planning. We also include *Industry Dummies* using Barth et al. (2001) industry classifications and *Year Dummies*.

Next, we examine whether firms treat temporary and permanent book-tax differences as substitutes or as complements. As discussed in Section 2 above, we do not have an *ex ante* prediction regarding whether firms trade off one form of tax planning for another. In addition, it is not clear whether firms have some order in their preferences for different types of book-tax differences. Said another way, firms may first choose their permanent differences and then choose their timing differences (or vice versa). Alternatively, they might jointly determine the two types of tax planning.⁸ To test whether firms view the different types of book-tax differences as complements or as substitutes, we estimate the following regressions:

$$TEMP_SCBTD = \beta_0 + \beta_1 PERM_SCBTD + \beta_2 ROA + \beta_3 PPE + \beta_4 LEV + \beta_5 INTAN + \beta_6 GROW + IndustryDummies + YearDummies + \varepsilon \quad (2a)$$

$$PERM_SCBTD = \gamma_0 + \gamma_1 TEMP_SCBTD + \gamma_2 ROA + \gamma_3 PPE + \gamma_4 LEV + \gamma_5 INTAN + \gamma_6 GROW + IndustryDummies + YearDummies + \varepsilon \quad (2b)$$

If firms choose to maximize both timing and permanent differences, then we expect a positive β_1 and γ_1 . If firms tax plan to some firm-specific optimal level, then we expect firms to trade off one type of tax planning for the other leading to a negative β_1 and γ_1 .

We also estimate a changes specification. If firms are actively trading off planning opportunities, then changes in the book-tax differences should also be correlated. Therefore, we estimate the following regressions:

$$\Delta TEMP_SCBTD = \alpha_0 + \alpha_1 \Delta PERM_SCBTD + \alpha_2 \Delta ROA + \alpha_3 \Delta PPE + \alpha_4 \Delta LEV + \alpha_5 \Delta INTAN + \alpha_6 \Delta GROW + IndustryDummies + YearDummies + \varepsilon \quad (3a)$$

$$\Delta PERM_SCBTD = \phi_0 + \phi_1 \Delta TEMP_SCBTD + \phi_2 \Delta ROA + \phi_3 \Delta PPE + \phi_4 \Delta LEV + \phi_5 \Delta INTAN + \phi_6 \Delta GROW + IndustryDummies + YearDummies + \varepsilon \quad (3b)$$

Finally, we investigate whether firms' treatment of book-tax differences varies by ownership structure. Because public firms presumably face more earnings pressure from the capital markets, they may have a stronger preference for permanent differences. However, if public firms are concerned with financial statement risk, then they may prefer temporary differences. Yet, if the capital markets are focused on the firms' cash outflows for taxes, then these firms may be extreme tax planners leading to public firms treating timing and permanent book-tax differences as complements. To investigate whether ownership structure affects the association between the types of book-tax differences, we estimate the following regressions:

$$TEMP_SCBTD = \beta_0 + \beta_1 PERM_SCBTD + \beta_2 PUBLIC * PERM_SCBTD + \beta_3 ROA + \beta_4 PPE + \beta_5 LEV + \beta_6 INTAN + \beta_7 GROW + IndustryDummies + YearDummies + \varepsilon \quad (2a')$$

$$PERM_SCBTD = \gamma_0 + \gamma_1 TEMP_SCBTD + \gamma_2 PUBLIC * TEMP_SCBTD + \gamma_3 ROA + \gamma_4 PPE + \gamma_5 LEV + \gamma_6 INTAN + \gamma_7 GROW + IndustryDummies + YearDummies + \varepsilon \quad (2b')$$

$$\Delta TEMP_SCBTD = \alpha_0 + \alpha_1 \Delta PERM_SCBTD + \alpha_2 PUBLIC * \Delta PERM_SCBTD + \alpha_3 \Delta ROA + \alpha_4 \Delta PPE + \alpha_5 \Delta LEV + \alpha_6 \Delta INTAN + \alpha_7 \Delta GROW + IndustryDummies + YearDummies + \varepsilon \quad (3a')$$

$$\Delta PERM_SCBTD = \phi_0 + \phi_1 \Delta TEMP_SCBTD + \phi_2 PUBLIC * \Delta TEMP_SCBTD + \phi_3 \Delta ROA + \phi_4 \Delta PPE + \phi_5 \Delta LEV + \phi_6 \Delta INTAN + \phi_7 \Delta GROW + IndustryDummies + YearDummies + \varepsilon \quad (3b')$$

If substitution between temporary and permanent book-tax differences varies between public and private firms, then we expect β_2 , γ_2 , α_2 , and ϕ_2 to be significant.

Note that we winsorize all continuous variables by year at the 1st and 99th percentiles throughout all of our analyses. In addition, all significance levels are reported using robust standard errors.

Results

Univariate

Table 2 presents descriptive statistics for our sample of firms by ownership type. The mean Total Assets of public and quasi-public firms is larger (\$1.42 billion and \$2.24 billion, respectively) than that of private firms. However, untabulated statistics reveal that private firms comprise more of the total economy (\$12.3 trillion in total assets as compared to \$8.9 trillion and \$0.09 trillion for public and quasi-public firms, respectively). *ROA*, net book income over assets, is greatest for public firms (mean of 0.063). However, mean *TI ROA*, taxable income (line 30 on Form 1120) over total assets at the end of the year, is actually greater for private firms than for public firms. But median *TI ROA* is identical between public and private firms.

Quasi-public have the greatest growth opportunities (mean *GROW* equal to 0.23, mean *INTAN* equal to 0.10). Public firms appear to have greater growth opportunities relative to private firms as evidenced by their mean and median values for *GROW* and *INTAN*. Private firms have more debt (mean value of *LEV* equal to 0.264) than public firms (mean value of *LEV* equal to 0.241), consistent with private firms' need to replace equity capital with debt capital. Quasi-public firms' mean *LEV* of 0.498 double that of the private and the public firms, which suggests that many of these firms have undergone a leveraged buyout (LBO) or have private equity ownership. Also, the high level of tangible assets of the quasi-public (mean *PPE* equal to 0.327 firms) is consistent with the LBO model as assets provide security for the debt. Notice that all three categories of firms are reasonably mature with an average number of years since incorporation of approximately a quarter of a century. Finally, public and private firms have a similar number of firms reporting small levels of income, defined as taxable income (line 30 on Form 1120) less than one percent of total assets (box D at top of Form 1120).

In Table 3, we present descriptive statistics of the book-tax differences, by ownership category. Consistent with public firms undertaking less conforming tax planning, we find that total (*SCBTD*), temporary (*TEMP_SCBTD*) and permanent (*PERM_SCBTD*) scaled book-tax differences are greater for public firms than for private firms.⁹

Notice that the difference between public and private firms is not being driven by differences in the extreme book-tax difference quintile (Quintile 5), as mean *SCBTD*, *TEMP_SCBTD* and *PERM_SCBTD* for Quintile 5 are very similar across the public and private ownership groups. Also, note that the Quintile 1 book-tax differences, i.e., the book-tax differences that increase taxable income relative to book income, are much smaller in magnitude than the Quintile 5 book-tax differences. Consistent with public firms being relatively more concerned with the financial statement implications of tax planning, public firms have larger

PERM_SCBTD than do private firms. Finally, public firms have more reportable transactions than do private firms. However, because any book-tax difference greater than \$10 million must be included as a reportable transaction, we hesitate to draw any inference about whether this item captures aggressive tax planning.

Surprisingly, we find that mean *SCBTD*, *TEMP_SCBTD*, and *PERM_SCBTD* for the quasi-public group is actually income increasing. Note that the (untabulated) medians are also negative suggesting that the mean scaled book-tax differences are not driven by extreme observations in the tails. As there are often pass-through entities involved in an LBO and/or private equity backed transaction, it may be that some of the negative book-tax differences stem from including the firms' proportional interest in those entities in their taxable income.

In Table 4, we report *SCBTD*, *TEMP_SCBTD*, and *PERM_SCBTD* by ownership type and by industry. Consistent with tax incentives varying across industries, we find significant variation in the book-tax differences. Notice that Mining and Extractive Industries, where depreciation and percentage depletion are sizeable, have the largest book-tax differences.

Multivariate

In Table 5, we report the result of estimating Equation (1) across each of scaled measures of book-tax differences. The positive coefficient on *PUBLIC* in each of the three models suggests that public firms have relatively more book-tax differences than private companies. Since the univariate statistics suggest that public and private firms ultimately have similar taxable incomes, our results are consistent with public firms undertaking less conforming tax planning. This result is consistent with those in Cloyd et al. (1996).

Many of the control variables load consistent with expectations. *ROA* is significant and positive, which suggests that profitable firms engage in more tax planning. *PPE* loads positively (negatively) in the *PERM_SCBTD* (*TEMP_SCBTD*) model. The negative relation between *PPE* and *TEMP_SCBTD* could be consistent with long-term assets nearing the end of their depreciable lives such that book depreciation exceeds tax depreciation, and with firms not replacing the assets with new assets. Moreover, the positive relation between *PPE* and *PERM_SCBTD* could be consistent with firms substituting the former tax shields from depreciation with permanent book-tax differences. The positive association between *LEV* and *PERM_SCBTD* suggests that firms manage their effective tax rate to prevent debt covenant violation. The negative association between *LEV* and *TEMP_SCBTD* could be explained by the fact that debt is a natural tax shield. Hence, firms with high levels of debt need relatively less incremental tax planning (Mackie-Mason 1990). The positive association between *PERM_SCBTD* and *INTAN* could be due to the fact that intangible assets often give rise to creditable research and development expenses. Finally, the negative association between

GROW and *PERM_SCBTD* is consistent with Bankman's (1994) argument that high growth firms generally place less emphasis on tax planning.

In Table 6, we investigate whether firms treat permanent and temporary book-tax differences as substitutes or as complements. In Panel A, we report the results of the estimation of Equations (2a), (2b), (3a), and (3b). Consistent with firms treating permanent and temporary book-tax differences as substitutes, in columns (1) and (2) we find a significant negative association between *PERM_SCBTD* and *TEMP_SCBTD*. Notice that the negative association is independent of the dependent variable. These results suggest that firms have some "optimal" tax planning level that they reach using a mixture of temporary and permanent differences. The results from columns (3) and (4) suggest that as one category of book-tax differences increases, the other decreases. Hence, these findings imply that firms recognize that there are some costs to tax planning either due to an increase in the likelihood of an audit (Mills 1998) or an increase in the likelihood of being assessed a penalty if they are overly aggressive tax planners.

In Panel B of Table 6, we report the results of estimating Equations (2a'), (2b'), (3a'), and (3b'). By incorporating the interaction term between *PUBLIC* and the relevant book-tax difference measure, we are able to determine whether capital market pressure alters the rate of substitution between temporary and permanent book-tax differences documented in Table 6, Panel A. The results in columns (1) and (2) suggest that public and private firms do not have a significantly different rate of substitution between their types of book-tax differences (i.e., the coefficients on *PUBLIC*PERM_SCBTD* and *PUBLIC*TEMP_SCBTD* are not statistically significant). When we move to the changes analysis, we find no evidence that changes in temporary difference have a significant difference impact on changes in permanent differences for public firms (see column (3)).

In column (4), we find that changes in permanent differences have less influence on changes in temporary differences (*PUBLIC*ΔPERM_SCBTD* 0.176, p-value < 0.01). One explanation for this result could be that capital markets incentives lead to some weakening of the substitution between the types of book-tax differences.

Conclusion

We use confidential data from the Schedule M-3 that all C corporations with assets over \$10 million must attach to their corporate tax return to examine the use of total, permanent, and temporary book-tax differences among a sample of public, private, and quasi-public firms over the years 2005-2007. The Treasury created the Schedule M-3 in response to concern among legislators and regulators regarding the growing divide between net income that firms report to the public and taxable income that they report to tax authorities. Beginning in 2004, the Schedule M-3

replaced the Schedule M-1 for all firms with total assets of \$10 million or more. The Schedule M-3 contains much more detail about firms' book-tax differences than does the Schedule M-1. This paper is one of the first academic studies to utilize the data on the Schedule M-3. In addition to allowing us to accurately measure firms' book-tax differences and to separate them between permanent and temporary differences, the Schedule M-3 data allows us to examine the financial and tax reporting behavior of private firms.

We expect that both public and private firms engage in tax planning. However, because private firms face less pressure from capital markets to report higher earnings, we expect that private firms engage in more conforming transactions (i.e., transactions that reduce book income and taxable income) and, as a result, have smaller book-tax differences than public firms. Consistent with our expectation, we find that public firms have greater total book-tax differences, greater permanent book-tax differences, and greater temporary book-tax differences (all scaled by total assets) than do private firms.

A recent study (Badertscher et al. 2010) finds that private firms that have a private equity firm as either a majority or minority owner are more aggressive in their tax reporting than are private firms that are not owned by a private equity firm. We extend Badertscher et al. (2010) by collecting a sample of firms that have private equity and public debt. We label these firms "quasi-public" firms. Although we do not know if the quasi-public firms in our sample are owned by a private equity firm, they exhibit traits that are common to firms that are owned by private equity firms (e.g., high growth opportunities and high levels of debt and tangible assets). Based on the findings in Badertscher et al. (2010), we expect that the quasi-public firms in our sample have greater book-tax differences than the private firms in our sample. Inconsistent with this expectation, we find that the quasi-public firms in our sample actually have income-decreasing book-tax differences. We do not place much weight on this result, however, due to the very low number of quasi-public firms in our sample.

Next, we use multivariate analysis to examine whether public and private firms treat temporary and permanent book-tax differences as substitutes or as complements. We find that firms treat permanent and temporary book-tax differences as substitutes. However, the substitution effect does not appear to vary by ownership type.

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Endnotes

- ¹ See Graham et al. (2009) for a review of the literature on book-tax differences and accounting for income taxes and Seidman (2010) for an interpretation of whether book-tax differences are due to earnings management or tax sheltering.
- ² We do not have enough quasi-public firm observations to include them in this analysis.
- ³ The composition of the Schedule M-3 heavily reflects recommendations in Mills and Plesko (2003). We refer readers to Boynton et al. (2008) for an excellent summary of the details of Schedule M-3.

- ⁴ Other papers that analyze public and private firms include Beatty and Harris (1998), Mikhail (1999), and Penno and Simon (1986). Beatty and Harris (1998) analyzes 297 public and 553 private bank year observations during 1991 and 1992. They find that public banks partake in earnings management significantly more than do private banks. They conclude that information asymmetry in public banks motivates the earnings management. Mikhail (1999) finds that tax management is more prevalent among private insurance companies than among public insurance companies. Mikhail (1999) provides evidence suggesting that the differences in incentive compensation contracts, designed to control agency costs, are partially responsible for the difference. Penno and Simon (1986) finds that publicly-traded firms are more likely to use income-increasing accounting methods (i.e., inventory choice and depreciation) than are privately-held firms.
- ⁵ If the absolute value of $((\text{Schedule M-3 line 5a} + \text{Schedule M-3 line b5}) / \text{Schedule M-3 line 4}) > 0.25$, then we remove the firm-year from our analysis.
- ⁶ Note that we will likely incorrectly designate some public firms as private because the EIN that firms report on their tax return is different than the EIN they include in their Form 10-K. However, this misclassification should bias against us finding results.
- ⁷ Note that transactions with significant book-tax differences were eliminated from the list of reportable transactions as of January 6, 2006.
- ⁸ In an untabulated test, we replace PERM_SCBTD in equations (2a) and (2a') with its one-period lagged value and replace TEMP_SCBTD in equations (2b) and (2b') with its one-period lagged value. We do so to ensure that the potential endogenous relation between a firm's level of permanent and temporary book-tax differences is not responsible for our results. Using lagged values does not change the results reported in columns (1) and (2) of Tables 6 and 7, which confirms that the reported results are not attributable to endogeneity.
- ⁹ On the Schedule M-3, a positive pre-tax difference means that taxable income is greater than book income. As explained in the previous section, in the 1990s, regulators and academics became concerned that firms' reported pre-tax book income began to exceed reported taxable income. The concern relates to the fact that the growing divide could be due to firms over-stating their pre-tax book income to shareholders, debt holders, and other interested parties, and/or firms engaging in tax shelters that reduce their taxable income. In order to be consistent with this idea and with the direction of the difference used in prior studies, we flip the sign on the pre-tax difference reported on the Schedule M-3. Thus, in our paper, a positive pre-tax difference suggests that pre-tax book income exceeds taxable income.

TABLE 1. Sample Derivation**Panel A: Firm and Firm-year Reconciliation**

	Firms	Firm-years
In IRS data	135,406	304,806
Less: non C Corporations	65,772	146,851
Less: total assets less than \$10 million	34,463	77,446
Less: no Schedule M-3 attached	977	2,805
Less: large foreign operations	2,140	7,271
Less: negative book income	7,681	20,300
Total in Sample	24,373	50,133

Panel B: Sample reconciliation by Ownership Type

	Public	Quasi-Public	Private
Firms	2,799	23	21,445
Firm Years	6,255	40	43,838

Panel C: Firm-Year Industry Representation

Industry	Public	Quasi-Public	Private
1. Mining	1.63%	0.00%	0.86%
2. Food	1.95%	0.00%	2.10%
3. Textiles, printing, publishing	3.23%	2.50%	2.66%
4. Chemicals	1.14%	0.00%	1.43%
5. Pharmaceuticals	2.41%	0.00%	0.40%
6. Extractive Industries	3.93%	7.50%	1.34%
7. Durable Manufacturing	14.00%	5.00%	11.28%
8. Computers	8.36%	5.00%	2.40%
9. Transport	4.94%	2.50%	4.66%
10. Utilities	4.43%	10.00%	0.94%
11. Retail	11.45%	42.50%	18.76%
12. Finance and Insurance	31.35%	15.00%	15.29%
13. Real Estate, trusts, bank holding co	1.81%	0.00%	23.22%
14. Services	9.24%	10.00%	8.57%
15. Other	0.13%	0.00%	6.10%

TABLE 2. Descriptive Statistics

Variable	Public			Quasi-Public			Private		
	Sum	Mean	Median	Sum	Mean	Median	Sum	Mean	Median
Total Assets (in \$ Millions)	8,887,838	1,422.52	526.78	89,412	2,235.29	1,055.94	12,248,235	279.40	66.88
ROA		0.063	0.038		0.034	0.023		0.054	0.026
TI ROA		0.059	0.018		0.035	0.012		0.062	0.018
NI ROA		0.070	0.038		0.048	0.023		0.072	0.030
PPE		0.183	0.070		0.327	0.233		0.166	0.050
LEV		0.241	0.159		0.498	0.488		0.264	0.148
INTAN		0.102	0.016		0.100	0.018		0.043	0.000
GROW		0.210	0.105		0.229	0.075		0.167	0.075
# Small Inc. Firms	2,310	0.369		18	0.450		16,769	0.383	
Number Years Incorporated		22.569	17.000		23.925	14.500		26.612	20.000

NOTES: Total Assets equals total assets at the end of the year (box D at top of Form 1120). ROA equals net book income (line 11 on Schedule M-3) divided by total assets at the end of the year (box D at top of Form 1120). TI ROA equals taxable income (line 30 on Form 1120) divided by total assets at the end of the year (box D at top of Form 1120). NI ROA equals taxable income before net operating loss deduction and special deductions (line 28 on Form 1120) divided by total assets (box D at top of Form 1120). PPE equals net property, plant and equipment (sum of lines 10(a)(c) and 10(b)(c) on Schedule L) divided by total assets at the end of the year (box D at top of Form 1120). LEV equals the sum of lines 17(d), 20(d), and 21(d) on Schedule L of Form 1120, divided by total assets at the end of the year (box D at top of Form 1120). INTAN equals the sum of lines 13(a)(c) and 13(b)(c) on Schedule L at the end of the year divided by total assets at the end of the year (box D at top of Form 1120). GROW equals one year percentage growth in sales (line 1c on Form 1120). Small Income Firms are defined as firms whose taxable income (line 30 on Form 1120) are less than one percent of total assets at the end of the year (box D at top of Form 1120). # Yrs. Incorporated denotes the number of years that a firm has been incorporated. All continuous variables are winsorized at the 1st and 99th percentiles.

TABLE 3. Descriptive Statistics on Book-Tax Difference

Variable (Means)	Public	Private	Quasi-Public	T-Statistic for Differences Between	
				Public-Private	Public-Qpub
Total book-tax Differences					
BTD	8,762.823	1,054.234	4,361.277	19.98	11.41
SCBTD	0.014	0.004	-0.010	14.61	36.34
Quintile 1 SCBTD	-0.006	-0.009	-0.026	5.19	31.27
Quintile 5 SCBTD	0.185	0.185	0.117	0.00	105.00
% Reportable Transactions	0.024	0.004	0.050	10.36	-13.30
Temporary book-tax Differences					
TEMP_BTD	2,678.956	469.558	965.002	7.24	5.62
TEMP_SCBTD	0.005	0.002	-0.007	5.65	22.84
Quintile 1 TEMP_SCBTD	-0.012	-0.009	-0.019	-6.52	12.59
Quintile 5 TEMP_SCBTD	0.156	0.156	0.117	0.00	72.70
% Reportable Transactions	0.018	0.003	0.050	9.03	-18.40
Permanent book-tax Differences					
PERM_BTD	5,362.793	473.885	1,763.064	27.94	20.57
PERM_SCBTD	0.006	0.001	-0.003	20.14	34.12
Quintile 1 PERM_SCBTD	-0.001	-0.002	-0.004	3.23	10.88
Quintile 5 PERM_SCBTD	0.068	0.064	0.028	16.61	152.25
% Reportable Transactions	0.011	0.001	0.000	7.08	8.15

NOTES: BTD equals sum of permanent and temporary book-tax differences (lines 26(b)(c) and 27(b)(c) on Part II of Schedule M-3 plus lines 1(b)(c)-7(b)(c) on Part III of Schedule M-3). SCBTD equals the sum of permanent and temporary book-tax differences (lines 26(b)(c) and 27(b)(c) on Part II of Schedule M-3 plus lines 1(b)(c)-7(b)(c) on Part III of Schedule M-3), divided by total assets at the end of the year (box D at top of Form 1120). TEMP_BTD equals temporary book-tax differences (lines 26(b) and 27(b) on Part II of Schedule M-3 plus lines 1(b)-7(b) on Part III of Schedule M-3). TEMP_SCBTD equals temporary book-tax differences (lines 26(b) and 27(b) on Part II of Schedule M-3 plus lines 1(b)-7(b) on Part III of Schedule M-3), divided by total assets at the end of the year (box D at top of Form 1120). PERM_BTD equals permanent book-tax differences (lines 26(c) and 27(c) on Part II of Schedule M-3 plus lines 1(c)-7(c) on Part III of Schedule M-3). PERM_SCBTD equals permanent book-tax differences (lines 26(c) and 27(c) on Part II of Schedule M-3 plus lines 1(c)-7(c) on Part III of Schedule M-3), divided by total assets at the end of the year (box D at top of Form 1120). Firms are divided into five quintiles based on the amounts of their SCBTD, TEMP_SCBTD, and PERM_SCBTD, with Quintile 1 (5) including the firms with the smallest (largest) amounts of these variables. % Reportable Transactions are the percent of the total, temporary, or permanent book-tax differences that are associated with "reportable transactions" under Treasury Regulation Section 1.6011-4(b). All continuous variables are winsorized at the 1st and 99th percentiles.

TABLE 4. Variation in Book-Tax Differences across Industries

Industry (Means)	Public			Private			Quasi-Public		
	SCBTD	TEMP_ SCBTD	PERM_ SCBTD	SCBTD	TEMP_ SCBTD	PERM_ SCBTD	SCBTD	TEMP_ SCBTD	PERM_ SCBTD
1. Mining	0.015	-0.003	0.014	0.034	0.016	0.013	0.000	0.000	0.000
2. Food	0.006	0.000	0.008	0.010	0.006	0.003	0.000	0.000	0.000
3. Textiles, printing, publishing	0.010	0.003	0.006	0.002	0.001	0.001	0.001	0.003	-0.002
4. Chemicals	0.016	0.006	0.007	0.006	0.002	0.002	0.000	0.000	0.000
5. Pharmaceuticals	0.016	-0.002	0.011	0.002	-0.010	0.007	0.000	0.000	0.000
6. Extractive Industries	0.066	0.057	0.005	0.042	0.031	0.006	0.068	0.068	0.000
7. Durable Manufacturing	0.017	0.003	0.012	0.003	0.000	0.002	-0.040	-0.044	0.004
8. Computers	0.022	0.007	0.011	0.002	0.000	0.000	-0.098	-0.043	-0.054
9. Transport	0.024	0.019	0.003	0.013	0.008	0.003	0.007	0.011	-0.004
10. Utilities	0.016	0.012	0.003	0.008	0.003	0.003	0.005	-0.008	0.013
11. Retail	0.008	-0.001	0.007	-0.001	0.000	-0.001	-0.010	-0.007	-0.003
12. Finance and Insurance	0.002	0.000	0.002	0.003	0.002	0.001	-0.002	-0.002	0.000
13. Real Estate, trusts, bank holding co	0.025	0.008	0.013	0.006	0.003	0.002	0.000	0.000	0.000
14. Services	0.018	0.008	0.006	0.003	0.004	-0.002	-0.039	-0.036	-0.003
15. Other	0.000	-0.012	0.003	0.004	0.003	0.001	0.000	0.000	0.000

NOTES: Industry groups based on Barth et al. (2001). See Table 3 for variable definitions.

TABLE 5. Total, Temporary, and Permanent Book-Tax Differences as a Function of Public vs. Private Organizational Form

Dependent Variable	SCBTD (1)	PERM_SCBTD (2)	TEMP_SCBTD (3)
PUBLIC	0.008*** (0.001)	0.002*** (0.001)	0.005*** (0.000)
ROA	0.126*** (0.007)	0.064*** (0.006)	0.030*** (0.002)
PPE	0.002 (0.001)	0.004*** (0.001)	-0.001*** (0.000)
LEV	0.009*** (0.001)	0.010*** (0.001)	-0.002*** (0.000)
INTAN	0.011*** (0.002)	0.012*** (0.002)	-0.001 (0.001)
GROW	-0.001*** (0.000)	-0.001*** (0.000)	0.000 (0.000)
Industry Fixed Effects Included	YES	YES	YES
Year Fixed Effects Included	YES	YES	YES
R-squared	0.081	0.047	0.060
N	41,900	41,900	41,900

*p<0.10, **p<0.05, ***p<0.01.

NOTES: See Tables 2 and 3 for variable definitions. Heteroskedasticity-robust standard errors are reported in parentheses below the coefficient point estimates.

TABLE 6. Treatment of Temporary and Permanent Book-Tax Differences as Complements or Substitutes as a Function of Public or Private Status**Panel A: Basic Complement or Substitution**

Dependent Variable	PERM_SCBTD (1)	TEMP_SCBTD (2)	Δ PERM_SCBTD (3)	Δ TEMP_SCBTD (4)
TEMP_SCBTD	-0.063*** (0.004)			
PERM_SCBTD		-0.326*** (0.021)		
Δ TEMP_SCBTD			-0.071*** (0.006)	
Δ PERM_SCBTD				-0.423*** (0.031)
ROA or Δ ROA	0.035*** (0.002)	0.075*** (0.006)	0.046*** (0.005)	0.146*** (0.012)
PPE or Δ PPE	-0.001 (0.000)	0.004*** (0.001)	0.004 (0.003)	0.037*** (0.009)
LEV or Δ LEV	-0.002*** (0.000)	0.009*** (0.001)	0.001 (0.002)	0.011** (0.005)
INTAN or Δ INTAN	0.002*** (0.001)	0.013*** (0.002)	0.004 (0.005)	0.008 (0.008)
GROW	0.000 (0.000)	-0.001*** (0.000)	0.046*** (0.005)	0.146*** (0.012)
Industry Fixed Effects Included	YES	YES	YES	YES
Year Fixed Effects Included	YES	YES	YES	YES
R-squared	0.067	0.066	0.042	0.057
N	41,900	41,900	23,421	23,421

*p<0.10, **p<0.05, ***p<0.01.

NOTES: See Tables 2 and 3 for variable definitions. Heteroskedasticity-robust standard errors are reported in parentheses below the coefficient point estimates.

TABLE 6. Treatment of Temporary and Permanent Book-Tax Differences as Complements or Substitutes as a Function of Public or Private Status (Continued)

Panel B: Complements or Substitution by Ownership

Dependent Variable	PERM_SCBTD (1)	TEMP_SCBTD (2)	ΔPERM_SCBTD (3)	ΔTEMP_SCBTD (4)
TEMP_SCBTD	-0.061*** (0.005)			
PUBLIC*TEMP_SCBTD	-0.018 (0.012)			
PERM_SCBTD		-0.340*** (0.025)		
PUBLIC*PERM_SCBTD		0.058 (0.043)		
ΔTEMP_SCBTD			-0.069*** -0.006	
PUBLIC*ΔTEMP_SCBTD			-0.009 -0.015	
ΔPERM_SCBTD				-0.467*** (0.037)
PUBLIC*ΔPERM_SCBTD				0.176*** (0.063)
ROA or ΔROA	0.035*** (0.002)	0.074*** (0.006)	0.046*** -0.005	0.146*** (0.012)
PPE or ΔPPE	-0.001 0.000	0.004*** (0.001)	0.004 -0.003	0.037*** (0.009)
LEV or ΔLEV	-0.002*** 0.000	0.009*** (0.001)	0.001 -0.002	0.011** (0.005)
INTAN or ΔINTAN	0.002*** (0.001)	0.013*** (0.002)	0.005 -0.005	0.008 (0.008)
GROW	0.000 0.000	-0.001*** 0.000	0.000 0.000	-0.001*** -0.001
Industry Fixed Effects Included	YES	YES	YES	YES
Year Fixed Effects Included	YES	YES	YES	YES
R-squared	0.068	0.067	0.042	0.058
N	41,900	41,900	23,421	23,421

*p<0.10, **p<0.05, ***p<0.01.

NOTES: See Tables 2 and 3 for variable definitions. Heteroskedasticity-robust standard errors are reported in parentheses below the coefficient point estimates.

2



Influencing Individual Taxpayer Behavior

Morse

An Analysis of the FBAR High-Penalty Regime

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How can the U.S. government find wealthy Americans with assets in off-shore financial accounts and make sure they pay their taxes? One tool is the Report of Foreign Bank and Financial Accounts, or FBAR, rules that the U.S. government has begun to systematically enforce. The FBAR regime requires individual taxpayers to submit statements disclosing their holdings in off-shore accounts or face enormous penalties based on the account asset value. Will the regime work? Maybe.

The first part of this paper describes how a high-penalty regime can successfully push taxpayers to comply and self-identify as compliers through the mechanisms of deterrence, separation, and/or signaling. These mechanisms can succeed if (1) taxpayers perceive that penalties for noncompliers and rewards offered to compliers are credible; (2) taxpayers lack close-substitute, penalty-free choices; and (3) taxpayers perceive that the government will detect noncompliers trying to masquerade as compliers. The second part contends that it is possible for the U.S. to achieve all of these elements in the FBAR case, although it would require changes to the current administration of the rules and sustained litigation and publicity.

Framework for Analyzing High-Penalty Regimes

Penalties and Rewards

High penalties can increase compliance in several ways. One mechanism is deterrence. The hypothetical fully rational taxpayer decides whether to evade tax by comparing the amount of saved tax to the penalties for cheating weighted by the chance that they will be detected.¹ Risk aversion modifies this analysis, adding a compliance bias to the fully rational model.²

Another mechanism is separation. If some taxpayers are willing to comply, they may be more inclined to self-identify as compliant if they know that failing to do so subjects them to the possibility of high penalties. Moreover, complier self-identification can permit the application of a more understanding enforcement approach for compliers and reduce the risk that compliant behavior will be crowded out by threats of severe penalties.³

High penalties can also serve as signals that may change compliance norms. Compliance behavior is not only the product of inherent individual preference.

The identification of an illegal behavior by the government—including through the announcement and implementation of high penalties applicable to the behavior—can act as a norm signal that may cause some significant number of taxpayers to adopt compliance behavior.⁴ Peer-to-peer influences, in turn, may induce still others to comply.⁵ Some empirical and experimental research supports the conclusion that compliance norms can evolve over time depending on the compliance decisions of other taxpayers with whom the taxpayer identifies or communicates.⁶ And, once an individual starts to act in a more compliant fashion, the change can become an entrenched part of the way the individual views his or her personality and values.⁷

Yet high penalties have the potential to crowd out compliant behavior as well as serving the compliance-enhancing functions of deterrence, separation, and signaling.⁸ They may commoditize and thereby undermine previous social norms of compliance.⁹ Or they may be interpreted by a compliant taxpayer as a defecting move in the previously reciprocal tit-for-tat compliance relationship the taxpayer had built with the government.¹⁰

One solution to the problem of crowding out is to apply and articulate different penalties proportional to the severity of different offenses, and to also publicize rewards, such as better taxpayer service, offered to compliers.¹¹ This is part of the reason why rewards for compliance are also important. Rewards may also comprise an important part of a high-penalty strategy because taxpayers who self-identify as compliers may be more likely to remain compliers if rewards engage the government with the taxpayer in a mutually reinforcing tit-for-tat reciprocity cycle.¹²

Sometimes rewards can be specific to a certain set of rules. But it is also true that a framework that rewards compliers is already built into existing tax administration practice. The two-pronged service and enforcement mission of the Internal Revenue Service (IRS), increasingly emphasized over the last 10 years or so, reflects the government's view that "good" and "bad" taxpayers should be treated differently.¹³ In the IRS audit and appeals processes, there is every reason to believe that taxpayers with records of compliance receive better treatment than taxpayers with records of noncompliance. In some cases, the idea of better service for more compliant taxpayers has been formalized into specific initiatives, such as the Compliance Assurance Program, or CAP, which is available to certain large corporate taxpayers.¹⁴

Penalty and Reward Credibility

The ability of penalties and rewards to achieve deterrence, separation, and/or signaling goals without falling into a crowding-out trap depends on more than the penalties and rewards as stated in the statute books. A gap often exists between a de jure penalty or reward and a de facto penalty or reward policy. Several causes

can produce this gap between an on-the-books penalty or reward and its enforcement in practice. These may include litigation risk management;¹⁵ internal agency politics, such as a desire to stick to prior practice or avoid adversarial relationships with regulatees;¹⁶ national politics, including the goal of avoiding backlash legislation that could curb the agency's power or resources in response to an excessively tough public image;¹⁷ and international politics, including a reluctance to upset foreign governments with U.S. policies that appear harsh and unilateral.¹⁸

A conceptually distinct—and more important¹⁹—gap also often exists between a de jure penalty or reward and taxpayers' perception of a de facto penalty or reward policy. Taxpayers' internal perception of the likelihood of penalty imposition or reward enjoyment drives their compliance decisions and hence this perception is the real key to the success of a regulatory default strategy. Elements that influence this perception include how the agency actually imposes penalties; whether it says it will impose penalties; and how information about penalty imposition and rhetoric is made public and, separately, publicized.

Close Substitutes

Like any other kind of rule, the operation of a high-penalty regime will also be affected by the ability of taxpayers to avoid the whole scheme by making choices that are sufficiently close substitutes for the penalized behavior.²⁰ David Weisbach has conceptualized the idea of minimizing close substitutes for a taxed activity as the goal of minimizing the “marginal efficiency cost function,” which is lower if fewer behavioral distortions result from the imposition of a tax.²¹ David Schizer has categorized the factors that may determine whether a particular “friction” prevents taxpayers from planning around a particular rule. Schizer notes that strong and not-malleable frictions, which may come in the form of business choice preferences, technology limitations, and legal and accounting costs, can hinder or prevent the development of close substitutes.²² The absence of close substitutes or, similarly, the existence of strong and inflexible frictions, is thus key to the success of a high penalty strategy.

The problem with close substitutes is fairly clear for the deterrence and separation goals. To the extent that taxpayers can avoid a penalty, it will neither deter their noncompliance behavior nor incent them to self-identify as compliers. The problem with close substitutes for a signaling goal is somewhat different.

It is possible that the simple enactment of a new rule will serve to signal the advent of a new norm, even if the rule is not enforced. This expressive theory suggests that the key to compliance is the persuasion of a material portion of the population to voluntarily obey the law. Once a voluntarily obedient group reaches a tipping point, others will follow suit. Enforcement can play a role by raising the salience of the new law and helping to achieve a tipping-point amount of compli-

ance by persuading rational actors who are susceptible to deterrence strategies to comply, but the mere existence of the rule can also act as a signal.²³

So if enforcement is not essential to the success of a signaling penalty, what is the problem with close substitutes? The problem is that a close substitute can function as a competing signal that undermines the signaling power of the enacted law, so long as the close substitute is sufficiently well known. Regulatees may gather around the workaround rather than around the law as enacted, just as motorists informally agree that driving several miles above the speed limit is close enough. The process of gathering around a close substitute is expressive and peer-enforced just as it could be for an enacted law.

Detection and Information Strategies

As Alex Raskolnikov has persuasively argued, a key task in tax administration is to identify noncompliers who masquerade as compliers.²⁴ This point is highly relevant to a high-penalty regime, whether the high penalty is intended to serve only the separation purpose that Raskolnikov identified in the context of menu-based regulatory penalty default structures in tax administration or whether the high penalty also functions as a deterrent and/or signal. The deterrence function will also be frustrated if it is possible for noncompliers to hide behind the mask of compliance as compliers. Signaling will be weaker, as well, if masked noncompliance is a known workaround, for the workaround can serve as a competing signal.

In tax administration, a high-penalty regime will typically include an information filing requirement that can serve to identify the compliers as those taxpayers not subject to the high penalty. This information filing requirement presents a key opportunity to increase the government's ability to detect noncompliers who masquerade as compliers. In the case of the FBAR rules considered here, it takes the form of a specifically crafted information return.

In focusing here in this detection and information strategies point on the identification of noncompliers masquerading as compliers, I do not mean to dismiss the importance of discovering and penalizing noncompliers. But the place for that goal within this conceptual framework is in the consideration of whether taxpayers perceive penalties and rewards as credible possibilities. Assuming that they do, and that they self-identify as compliers, the necessity of detection and information strategies to determine whether they are telling the truth is a separate and important component of an effective high-penalty strategy.

The issue of detection is also separate from the question of whether the very fact of self-identifying to the government as compliant, including through actions as simple as signing one's name to a regulatory filing, improves the chance that a regulatee will comply. It probably does—commitment consistency is a powerful heuristic.²⁵ However, this detection point means to leave that to the side, and fo-

cus on ways to improve the government's ability to detect noncompliers amid the compliance group.

One way that information filing can improve detection is through its interaction with audit strategies. In simplest form, regulatees who identify themselves as compliers may be subject to more frequent or more thorough audit. This may be a sufficient strategy for a small population of regulatees, if it is possible to craft the audit approach in a way that does not interfere with the goal of rewarding compliant taxpayers with better service.

Larger populations of regulatees require an audit selection strategy that sorts out compliance filers who are more likely to be in fact noncompliant. Part of this can be based solely on the compliance information provided by regulatees, as they can be sorted based on statistical information about the likelihood of compliance by regulatees who meet certain descriptive characteristics. This works only if those characteristics are available in information provided to the regulating agency, and it works best if they are provided in a form that allows for the performance of automatic information search functions.

A different audit-selection strategy may be available if there are alternative sources of information about regulatees. Third-party reporting is the most prevalent in tax administration, but other "non-tax documentation" sources²⁶—book-tax balance sheet differences provide one example—might also be used. Strategies here go beyond sorting based on a statistical model built from taxpayer-provided data. Instead, the regulator may analyze different sources of data to check whether they match and/or to feed a richer statistical model of the likelihood of compliance. Because of the importance of interactions between alternative sources of data and the taxpayer-provided information that signals compliance, careful design of the compliance report to maximize its usefulness in combination with other data sources will increase the chance of success for a high-penalty regime.

Especially under an assumption of limited administrative resources, efforts to improve detection of noncompliers who masquerade as compliers may appear to be at odds with the goal of increasing taxpayers' perception of the credibility of penalties and rewards. One is directed at vetting taxpayers inside the system, and the other is targeted at finding taxpayers who are outside the system. Yet it is not clear that the two enforcement efforts are diametrically opposed. In each case, the truly important metric is taxpayers' perception—in one case of the likelihood of penalty imposition for noncompliers, and in the other case of the likelihood of being found out if a noncomplier tries to masquerade as a complier. Publicity of successful government enforcement efforts could, depending on how they are absorbed by the taxpayer population, enhance both perceptions at the same time. Or they could enhance only one and be neutral as to the other, or they could enhance one at the expense of the other. A clever publicity strategy would seek the first option.

Applying the Framework to the Problem of Offshore Account Information Asymmetry

A 2002 Treasury report estimated that there were about 1 million offshore accounts held by U.S. persons and that less than 20 percent of foreign bank account reports, or FBARs, were duly filed as required annually.²⁷ A separate recent estimate suggests that these accounts might contain in the neighborhood of \$1.5 trillion. The tax collection shortfall resulting from the failure to pay tax on the income from funds placed in unreported offshore accounts might amount to as much as \$50 billion annually.²⁸

The IRS has said that account holders come from “all walks” of (relatively wealthy) life.²⁹ One official has been reported as saying that of 50,000 accounts targeted by a subpoena discussed below—which requested all accounts with U.S. connections at a certain bank, without any filtering mechanism as to size or otherwise—a few thousand were enormous accounts of tens or hundreds of millions of dollars, and the vast majority smaller, less than ten million dollars.

Offshore account holders include heirs, immigrants, and expatriates with some personal connection to the location of their offshore account.³⁰ Account holders who lack any non-U.S. connection may have various reasons for forming the account, including misguided acceptance of an unscrupulous planner’s advice,³¹ or nontax asset protection, as well as determined and conscious tax evasion. And determined tax evaders may have legal or illegal sources for their deposited funds, tax-paid or not.

Offshore account noncompliance presents a problem of information asymmetry, rather than an issue of legal uncertainty. It is perfectly clear that U.S. citizens and residents must pay U.S. tax on their worldwide income, including income that accrues to an offshore account.³² The challenge is to make offshore account holders disclose the relevant information. The FBAR rules attempt to do just that, in a framework that threatens high penalties for nondisclosure. In the second part of this paper, I apply the analytical framework developed above to evaluate whether the FBAR regime can succeed, asking whether (1) taxpayers perceive that penalties and rewards are credible, (2) close substitutes are absent, and (3) taxpayers perceive that the government can detect noncompliers masquerading as compliers.³³

FBAR Reporting Could Succeed as a High Penalty Regime

The FBAR

U.S. owners of offshore accounts must annually file Reports of Foreign Banks and Financial Accounts, or FBARs, with respect to their non-U.S. holdings. This

requirement links to the individual income tax return through Line 7 of Form 1040, Schedule B, which requires a taxpayer to specify whether he or she “had an interest in or a signature or other authority over a financial account in a foreign country.”³⁴ The FBAR requirement is separate from recently enacted I.R.C. § 6038D—a “shadow FBAR” provision—which imposes similar self-reporting requirements.³⁵

A regulation³⁶ authorized by a provision of the Bank Secrecy Act³⁷ requires the filing of FBARs. A central purpose of the Bank Secrecy Act is to collect information on financial transactions in order to track down money laundering related to drug and other crimes.³⁸ A neighboring statutory section requires banks to file currency transaction reports, or CTRs, with respect to nonexempt bank transactions in excess of \$10,000.³⁹ The statute also contains other bank reporting⁴⁰ and self-reporting⁴¹ requirements.⁴²

Despite the characterization of the Bank Secrecy Act as an anti-money-laundering statute, there are at least three partially overlapping concerns with offshore accounts. First, the depositor may have illegally obtained the funds that go into an account. Second, the depositor, whether or not he or she has obtained the funds illegally, may not have properly paid taxes with respect to them. Third, the depositor may fail to pay taxes on the income from the accounts.⁴³ The second and third issues are tax enforcement concerns.

The FBAR regulations are broad. They require “every person subject to the jurisdiction of the United States ... having a financial interest in, or signature or other authority over, a bank, securities or other financial account” to file a report.⁴⁴ Under a *de minimis* rule, a report is required if the aggregate value of the financial accounts exceeds \$10,000 at any time during the calendar year. The form instructions give more specifics, but retain the broad character of the regulatory requirements, both with respect to the definition of persons required to report⁴⁵ and with respect to the definition of accounts required to be reported.⁴⁶ Filings are required of entities such as corporations, partnerships, and trusts⁴⁷ and with respect to holdings in or through corporations, partnerships, trusts, or other entities.⁴⁸ Taxpayers must report information that should be readily available to them: the existence and size of an offshore account.⁴⁹ This paper considers the core requirement to report bank accounts financially owned by individual U.S. taxpayers directly or through a corporation or other entity over which the U.S. owner has signatory authority.⁵⁰

There are several civil and criminal statutory penalties specified for FBAR violations.⁵¹ This paper focuses on the civil willful violation penalty, which equals the greater of \$100,000 or 50 percent of the balance in the account “at the time of the violation.”⁵² This is a huge potential penalty, and significantly more than before the statute was amended in 2004.⁵³

The Financial Crimes Enforcement Network, or FinCEN, division of the Treasury had enforcement responsibility for FBAR compliance until 2003,

when enforcement authority was transferred to the IRS under a Memorandum of Understanding that did not explicitly anticipate the issuance of regulations.⁵⁴ Perhaps in part for this reason, and certainly in part because other elements necessary for effective enforcement—such as a way to access information from foreign banks—were not in place, FBAR enforcement activity did not immediately ramp up.⁵⁵ Greater attention began to be paid to the FBAR requirement, including the submission of Treasury reports on the widespread noncompliance with the requirement under a 2001 statute.⁵⁶ But a voluntary disclosure offer made in 2003, which followed efforts to investigate offshore credit card issuers and encompassed FBAR filing requirements, did not result in a big enforcement success.⁵⁷

For taxable years beginning after March 18, 2010, new § 6038D of the code imposes a similar annual reporting requirement for “specified foreign assets” if the total value of such assets is in excess of \$50,000.⁵⁸ This requirement is in addition to the banking-law-based FBAR reporting requirement.⁵⁹ This paper focuses mainly on the banking-law-based FBAR requirement rather than the § 6038D requirement, because FBAR reporting more clearly fits the high-penalty model that I am concerned with in this paper, at least as long as a willfulness-based penalty is perceived as a credible possibility.⁶⁰

Applying the High-Penalty Analytical Framework to the FBAR

PENALTY AND REWARD CREDIBILITY

The first part of this paper argued that penalty and reward credibility is one factor necessary to support the success of a high-penalty regime as a deterrence, separation, and/or signaling mechanism. In the case of the FBAR, the government has done a good job so far of establishing the credibility of penalties and rewards in the minds of taxpayers. Government efforts to articulate and publicize applicable penalties crystallized in litigation relating to accounts at Swiss bank UBS and in the administration of the 2009 FBAR voluntary disclosure program.

UBS publicity leverages availability bias. Starting in 2007, a U.S. native and UBS banker named Bradley Birkenfeld channeled evidence to the government of serious misconduct at the Swiss bank. He informed on the elaborate James-Bond-worthy secrecy practices in the cross-border private banking division at UBS, for example, “say[ing] he once transported diamonds, bought with client money abroad, into the United States in a tube of toothpaste.”⁶¹ Birkenfeld pled guilty in June 2008 to conspiring to help wealthy American Igor Olenicoff evade taxes⁶² and, in August 2009, received a 40-month prison sentence.⁶³

There ensued a criminal fraud case against UBS. The key to the case was the deliberately designed UBS process for working around the “qualified intermediary,” or QI, agreement that UBS had entered into with the U.S. government.⁶⁴ The

main thrust of the QI agreement was to permit UBS to forward non-U.S. client information to U.S. withholding agents in summary form and still obtain statutory withholding exemptions or lower treaty-based withholding rates on the payments of U.S.-source investment income to non-U.S. persons.⁶⁵ But the QI agreement also included a less-than-airtight provision that required UBS to disclose U.S. account holders to the U.S. government,⁶⁶ and it was this provision that UBS helped clients to deliberately plan around.⁶⁷ The criminal case ended with a \$780 million fine and a deferred prosecution agreement in February 2009.⁶⁸

The IRS then submitted a request for enforcement of a broad subpoena to disclose the names of more than 50,000 U.S. clients of UBS. In August 2009, after the intervention of the Swiss government as amicus in the case and top-level negotiations, the civil case settled under an agreement requiring UBS to disclose more than 4,000 names through the information exchange provisions of the U.S.-Switzerland treaty.⁶⁹ After considerable debate, the Swiss parliament approved the agreement in the June 2010.⁷⁰ As of August 2010, the IRS had received information about 2,000 clients.⁷¹

The Justice Department used the UBS case to support the criminal prosecution of a number of offshore account holders, and it obtained a number of plea bargains, which then supported well-executed availability-bias-based publicity.⁷² The UBS case also helped the cause of the 2009 voluntary disclosure program targeted at delinquent FBAR filers. The volume of publicity of the 2009 disclosure program in contrast to the 2003 program is striking. One rough measure derives from the indispensable Tax Notes database, a touchstone for tax practitioners. Before 2008, only nine Tax Notes articles mentioned “FBARs.” Between September 2008 and October 11, 2009, 58 articles did so—partly because the earlier settlement did not focus as intensively on the FBAR as the central disclosure tool, but also because practitioners had less to say about their clients’ compliance experience in 2003. Other data is instructive as well. In a similar 2003 program targeting offshore credit and debit card accounts, a total of about 1300 applications were filed.⁷³ In the 2009 program, almost 15,000 applications were received.⁷⁴ This is far fewer than the estimated hundreds of thousands of unreported offshore accounts, and also fewer than the 50,000 or so UBS accounts initially targeted by the U.S. subpoena, but several times more than the 4,000 or so accounts expected to be disclosed in the UBS settlement.

It remains to be seen whether there will be an enormous difference in the resulting number of criminal prosecutions. Contemporaneous with the 2003 program, reportedly a total of 10 individuals were prosecuted.⁷⁵ As of April 2010, about 15 taxpayers had been charged and most of those had pled guilty;⁷⁶ the IRS had reported several months earlier that it was investigating “dozens” of taxpayers in the aftermath of the voluntary disclosure program.⁷⁷

A large wave of prosecutions would increase the persuasiveness of the FBAR high-penalty regime, but the fact of a large number of cases is not dispositive, in

part because taxpayers' estimation of the likelihood of being caught is a perception. A central purpose of audit and compliance publicity is to increase taxpayers' or tax preparers' perception of the risk of detection.⁷⁸ These efforts should leverage the well-established cognitive availability bias, which prompts us to estimate the "likelihood of an event on the basis of how quickly instances or other associations come to mind."⁷⁹ Studies support the existence of an "indirect" audit effect related to taxpayers' decisions to comply because they hear news of others getting caught.⁸⁰ Estimates of the ratio between the dollars brought in because of other taxpayers' compliance compared to the additional collections resulting from the audit itself are in the range of 11 or 15:1.⁸¹

Associations come more quickly to mind if the stories are familiar.⁸² Publicizing famous and/or egregious taxpayers may produce some indirect audit effect, but it should not be expected to maximize the possible effect, because many taxpayers whom the government seeks to influence are neither famous nor egregious. To take advantage of the powerful tool of availability bias, a publicity strategy should effectively communicate to taxpayers that people like them get caught by the IRS or settle with the IRS because of a fear of being caught.⁸³

The 2008–2010 plea bargain publicity does a nice job of leveraging availability bias. Historically, the IRS has managed to attract publicity mainly for the most famous or egregious offenders (such as Leona Helmsley or tax protestors like Ed Brown, who barricaded himself in his New Hampshire home against a Federal agent siege). But in the UBS case, the media has run stories on plea bargains entered into by offshore account holders whose stories are somewhat egregious, but not the worst or largest stories out there. This average-rich-person storyline maximizes the availability bias power of the plea bargain publicity.

Some of the taxpayers in the news for tax evasion through offshore accounts are Forbes-400 rich.⁸⁴ But featured taxpayers also include Steven Michael Rubinstein, a Florida accountant with a UBS account allegedly worth "at least \$6 million,"⁸⁵ and Robert Moran, Florida resident whose company builds and rents yachts and the alleged owner of an account containing "at least \$3.7 million,"⁸⁶ and Jeffrey Chernick, a New York resident who runs a toy company and concealed "more than \$8 million."⁸⁷ They include Juergen Homann of Saddle River, New Jersey, who runs a chemical company and allegedly concealed "about \$6.1 million in assets,"⁸⁸ John McCarthy, a Malibu businessman whose account allegedly held "more than \$1 million,"⁸⁹ and Roberto Cittadini, a retired Boeing sales manager who pled guilty to "hiding nearly \$2 million."⁹⁰

These are not small numbers, but they are also not among the largest accounts out there. Of the 52,000 UBS clients on the original summons list, one description put the number of "ultrawealthy" taxpayers with accounts worth "tens to hundreds of millions of dollars" at several thousand and suggested that the government would focus its attention there.⁹¹ Yet that is not where all the action has been. Smaller UBS clients were reportedly included on the list selected for

disclosure.⁹² For a typical offshore account holder, the news about indictments and plea bargains of the merely very wealthy, rather than the Forbes 400, has more salience and taps more effectively into availability bias. The IRS should publicize different kinds of taxpayers that have gotten caught to the extent it legally can.⁹³ The government's apparent focus on marshaling simple and easily decided (or plea bargained) charges makes sense, as does its emphasis on continuing its prosecution, plea bargain and publicity program⁹⁴ and in covering banks other than UBS,⁹⁵ particularly in light of reports that Swiss bank clients may be moving their accounts to other banks, for example in Singapore and Hong Kong.⁹⁶ The government appears aware of the need to broaden the net beyond UBS and has instituted criminal proceedings against another large bank, HSBC, and at least two of its clients.⁹⁷

The IRS is fortunate in this case that various media outlets are following this story closely, because Section 6103 of the Code, which prohibits the IRS from disclosing confidential taxpayer "return information,"⁹⁸ limits the government's direct publicity efforts.⁹⁹ The enumerated exceptions in the statute do not even include explicit permission for the IRS to publicize return information that has already been disclosed publicly, whether through a posted lien, civil or criminal litigation, taxpayer discussion of the case in a public forum, or otherwise,¹⁰⁰ although in light of the case law¹⁰¹ the IRS has gotten comfortable with the strategy of posting basic press releases, or links to such releases, on its website.¹⁰²

Voluntary disclosure penalty transcends legal uncertainty. The IRS approach to its FBAR voluntary disclosure program also supported taxpayer perception of credible penalties—subject to the close substitutes issue discussed below. In general, a valid voluntary disclosure is a full disclosure of unpaid tax, made before the IRS has begun an investigation of the taxpayer and including a good faith undertaking by the taxpayer to pay all tax, interest and penalties determined by the IRS to be due. The IRS will take such a disclosure into account in determining whether to recommend criminal prosecution to the Justice Department.¹⁰³

The government chose a high monetary penalty benchmark for this program. In particular, it took the civil willfulness penalty equal to 50 percent of the account balance for each annual failure to file,¹⁰⁴ as its starting point. In addition to requiring taxpayers to file returns going back 6 years and pay all back taxes, interest, and either accuracy or delinquency penalties,¹⁰⁵ participants in the FBAR voluntary disclosure program faced a maximum penalty of 20 percent of the account balance for the year (of the six years covered) with the highest balance.¹⁰⁶

The IRS stated unequivocally, and repeatedly, that in its view all taxpayers who have failed to pay tax on income related to the offshore accounts—no matter whether they are among the super-rich—are intentionally concealing income and assets from the government rather than negligently remaining unaware of filing and taxpaying obligations. The government declined to recognize a distinction between business accounts and savings and investment accounts for purposes of

applying the 20-percent penalty in the voluntary disclosure program.¹⁰⁷ Some reports suggest that an anticipated reduction to a 5-percent penalty apparently meant to apply to inherited accounts would be rarely, if ever, granted.¹⁰⁸

The IRS wanted to “draw a clear line between those individual taxpayers with offshore accounts who voluntarily come forward to get right with the government and those who continue to fail to meet their tax obligations.”¹⁰⁹ But it certainly did not suggest that those who came forward would be let off scot-free. The government indicated that taxpayers who voluntarily disclosed would not be recommended for criminal prosecution,¹¹⁰ but the 20-percent-of-account-value monetary fine, derived from the benchmark of the statutory willfulness penalty, is a substantial amount.¹¹¹

Remarkably, the government managed to establish 20 percent of the account value as a credible penalty—in other words, it successfully publicized that penalty level in its program, and voluntarily disclosing taxpayers appear to have accepted it as a benchmark—despite legal uncertainty about how a court would apply the willfulness standard in the offshore account situation. Under the Supreme Court’s *Cheek* case, “willful” violation of a legal duty to file a tax form generally requires that the defendant know of the legal duty.¹¹² It is conceivable, given the historic lack of publicity and enforcement about the FBAR filing requirements, that a defendant might be able to show a lack of willfulness.¹¹³ There is one circuit case decided under the *Cheek* standard that rejected an “ostrich” defense theory in an FBAR filing case, but it involved egregious facts.¹¹⁴

FBAR compliance rewards. As argued above in the description of the analytic framework, perceived rewards for compliant taxpayers reduce the risks of crowding out compliant behavior and complement perceived penalties for noncompliant taxpayers, thus supporting the deterrence, separation and signaling goals of a high-penalty regime. Existing features of U.S. tax administration, such as its articulated service/enforcement goal and the tendency to treat historically compliant taxpayers more gently in the audit and Appeals process, serve as rewards for all compliant taxpayers.¹¹⁵ Specific elements of the FBAR regime aimed at shaping or explaining the compliance option could do an even better job in this specific case. In particular, the government should keep FBARs confidential from third parties and publicize more effectively the benefits of the compliance option.

The FBAR does not receive the confidentiality protection extended to most tax filings. This is because it is not denominated a tax return for purposes of Section 6103, as it is not required by Title 26 of the U.S. Code, but rather by Title 31.¹¹⁶ It is not clear whether an FBAR attached to a tax return would count as return information.¹¹⁷ The FBAR instructions direct that taxpayers not file FBARs with their tax returns, but the voluntary disclosure guidance is less clear.¹¹⁸

In any case, carving FBARs out of Section 6103 is apparently intentional. Although the taxpayer confidentiality provisions include some exceptions for sharing information with other Federal agencies, the concept of the FBAR was

to provide a more generally available database.¹¹⁹ A banking statute requires the Secretary of the Treasury to develop “standards and guidelines” relating to who has access to information administered by the FinCEN division of Treasury.¹²⁰ In 2009, Senator Max Baucus considered proposing the classification of FBAR filings as confidential tax return information.¹²¹

But even though increased FBAR confidentiality might conceivably act as a compliance-inducing reward, it is not clear how the government could go about ensuring this for taxpayers. Making FBARs tax return information by statute has the disadvantage of undermining the access of other agencies to FBAR information, in contravention of the original law’s intention. But without a statutory amendment, the government presumably cannot promise that it will keep FBARs secret against, say, Freedom of Information Act requests or court orders emerging from civil litigation to the same extent tax return information is kept secret under I.R.C. § 6103.¹²² The FBAR form warns of possible information sharing with other “state, local and foreign” government entities but is silent on the question of sharing with other third parties.¹²³ The advantage of extending rewards to compliant taxpayers suggests that Treasury should strongly resist any non-government third party information requests, and, of course, publicize any wins.

A better-publicized explanation of what happens to taxpayers who choose the compliance option would also increase the power of compliance rewards to shape compliance behavior. The main available pieces of information are the penalty limit of 20 percent of account value indicated in the 2009 voluntary disclosure program and the 25 percent penalty benchmark put forth in the follow-on 2011 program. Compliant taxpayers presumably enjoy other benefits, such as the peace of mind that comes from getting right with the government and (hopefully) cordial and competent handling of the FBAR filings and related matters. However, clarifications of the rewards for compliance face two central challenges: taxpayer confidentiality and menu complexity.

Taxpayer confidentiality concerns limit the government’s ability to tell salient stories about taxpayers who choose to comply. Even the broadest view regarding the ability of the IRS to disclose information also available in public records would not permit the IRS to publicize taxpayers whose cases are not litigated or otherwise publicized, such as through liens. Public discussion by the taxpayer, for example, does not waive the confidentiality protection.¹²⁴ The statute does permit disclosure to persons designated in writing by the taxpayer.¹²⁵ Accordingly, an explicit waiver of taxpayer confidentiality and permission to publicize might work to permit the IRS to disclose specific taxpayer information. But getting the waiver and connecting it to a publicity strategy would be a time-consuming and often futile case-by-case exercise.¹²⁶

Publicity of different categories of taxpayers who, for example, settled with the IRS would likely be permitted under the flush language of Section 6103(b)(2), which excludes from the definition of protected return information “data in a form

which cannot be associated with, or otherwise identify, directly or indirectly, a particular taxpayer.”¹²⁷ Typically this rule—the Haskell amendment—is used to permit “statistical studies or other compilations of data,” as Senator Haskell explained when proposing it on the floor.¹²⁸ The Supreme Court has held that it cannot support the disclosure of return information from which identifying details have merely been redacted.¹²⁹

However, several courts have concluded that information assembled in a more granular way than the macro-level IRS statistics on income tables might fit within the Haskell amendment’s description of data that falls outside the return information definition. For example, the Ninth Circuit held that Section 6103 did not block a FOIA request from logging companies for a report the IRS had prepared on tax preparation in their business.¹³⁰ In another case, the Court of Federal Claims, in response to a discovery request from an oil company seeking information about production methods of other companies claiming a Section 43 credit, concluded that “[a] list of the various production methods could be compiled. If only this list, and no other information, were delivered to plaintiff, then Section 6103 would not be violated.”¹³¹

The IRS can describe compiled data in a more engaging way than in tabular statistical form without violating Section 6103. In particular, it should be able to describe general types of offshore account taxpayers with the goal of more effectively communicating the possibility of audit and prosecution and the benefits of disclosure and settlement. It need not stick to dry categorical descriptions.¹³² More creative and salient tactics are needed. The government should consider fictional portrayals, taxpayer testimonials, or more abstract, but salient, messages about the different results produced by the compliance and penalty regimes.¹³³

THE CLOSE SUBSTITUTE OF QUIET DISCLOSURE

As the first part of this paper discussed, the problem of close substitutes can also bar a high-penalty regime from achieving its deterrence, separation, and/or signaling goals. This is an issue for the FBAR filing requirement. The possibility of a “quiet disclosure” option may exist as a close substitute alternative to voluntary disclosure.

“Quiet disclosure” is the practice of simply filing amended tax returns for the years in question.¹³⁴ It is not endorsed by any government guidance, in contrast to official “voluntary disclosure,” which is described in the Internal Revenue Manual.¹³⁵ Voluntary disclosure includes a list of conditions—and features an undertaking by the IRS to consider the fact of disclosure when deciding whether to forward a case to the Justice Department for criminal prosecution, such as for tax evasion. In practice, it is generally thought that voluntary disclosure bars criminal prosecution.¹³⁶

Even though quiet disclosure is not officially endorsed,¹³⁷ it is a fairly well-established practice,¹³⁸ and taxpayers’ expectation that quiet disclosure offers at least

some protection against criminal prosecution is also well entrenched.¹³⁹ This presents a problem for the integrity of the high-penalty FBAR rules, because the quiet disclosure option probably will not subject the taxpayer to the significant willful-failure-to-file-derived penalties that the IRS has applied to voluntarily disclosing taxpayers. The quiet disclosure option weakens the ability of the high-penalty FBAR regime to serve its deterrence, separation and signaling functions.

The deterrence power of the FBAR, grounded in taxpayers' comparison of the risks and rewards of filing and not filing, depends on taxpayers' belief that failure to file the FBAR will lead to the government imposing penalties and withholding rewards. A no-penalty quiet disclosure option would suggest that there is little cost to failing to file the form initially, and that the taxpayer may wait to see whether the government seems to have the ability to discover his or her offshore accounts by other means. If the government does, then quiet disclosure is an easy solution.¹⁴⁰

The separation goal of a high-penalty system is similarly undermined by the quiet disclosure option. Compliant taxpayers might choose up-front compliance, by filing the FBAR, or delayed compliance, through quiet disclosure. The quiet disclosure option does not clearly identify compliant taxpayers in the way that filing an FBAR does, and therefore makes it more difficult for the government to target taxpayer service or tailored detection strategies to the compliance group. The signaling potential of the high-penalty FBAR system is also muffled by the availability of quiet disclosure, because quiet disclosure constitutes a competing signal around which taxpayers may gather instead.

To permit FBAR reporting to function as a high-penalty regime that promotes deterrence, separation and signaling, this quiet disclosure close substitute should be removed. The government has taken the first step toward doing so, by providing that it will not respect quiet disclosure—in contrast to voluntary disclosure—as a reason to refrain from criminal prosecution in the offshore account context.¹⁴¹ But taxpayers' perception is what counts. So the plan for eliminating a quiet disclosure option should include appropriate, availability-bias-motivated publicity, such as publicity of taxpayers subject to civil and/or criminal penalties despite efforts at quiet disclosure.

DETECTION AND INFORMATION STRATEGIES

A key possible weakness in a high-penalty regime is the possibility that taxpayers who wish to game the system may pretend to be compliers.¹⁴² Excellent audit of FBAR filers is therefore essential, as is publicity of successful audit. The availability of data and the nature of the FBAR filing group as a small population with established publicity avenues can shape the audit strategy in the case of the FBAR.

In the short term, until third-party data can be used to cross-check the accuracy of FBAR filing, audit filters must derive from statistical models containing the

information on FBAR filings themselves, together with other predictive variables such as reported Form 1040 income level and demographic characteristics. The shadow FBAR tax return filing mandated for taxable years starting after March 18, 2010 by § 6038D is therefore important to the audit project. This is because taxpayer confidentiality limitations restrict the IRS's ability to use tax return information to enforce FBAR requirements. The shadow FBAR filing required under § 6038D is intended to solve this problem and permit the IRS to develop a program to automatically match § 6038D data with other tax return information.¹⁴³

Fortunately, the taxpayers targeted by the FBAR filing requirement are not an enormous group—perhaps one million or so. The actual audit rate for wealthier taxpayers—6.42 percent for Fiscal Year 2009 for taxpayers with income in excess of \$1 million—exceeds substantially the 1.03 percent rate for individual taxpayers on average.¹⁴⁴ And the IRS has formed a special group to coordinate offshore account examinations for high-net-worth individuals.¹⁴⁵ The small size and high net worth characteristics of the target population also facilitate effective publicity. In fact, the government has a proven publicity strategy: the distribution of press releases that national and international newspapers then report on. It is likely that this publicity and newspaper coverage reaches some significant portion of the taxpayers required to file FBARs.

The possible future availability of third-party data, perhaps from non-U.S. banks or governments, should shape the way in which the government collects FBAR and shadow FBAR data now. In particular, data fields should be simplified in anticipation of establishing a standardized global format for third-party reports in the future. The essential contents of an FBAR or shadow FBAR form filed on behalf of an individual usually can be reduced to four information fields: taxpayer identity, which should often reduce to a TIN; the identity of the financial institution at which the account is held; the maximum value of the account for the year; and the account number.¹⁴⁶ Even if electronic filing—which would require statutory authorization¹⁴⁷—is not yet feasible, assigning numeric codes for these fields would facilitate data entry and sorting based on paper source documents. For example, foreign financial institutions should have identification numbers to be used on FBAR and other filings.¹⁴⁸ Without these simplification and automation measures, the government may face a situation where it has gobs of paper FBAR information about taxpayers and does not know what to do with it.¹⁴⁹ And it may also find it more difficult than necessary to crosscheck FBAR filings against information provided through a global reporting system, if and when such a system ultimately develops.

Conclusion

The FBAR rules have the necessary ingredients to support the high-penalty compliance mechanisms of deterrence, separation, and signaling. But to maximize

their effectiveness, the government should adjust several aspects of its administration of the rules. Tax administrators should continue to work to increase taxpayers' perception of the credibility of the penalties and rewards specified under the FBAR system, by expanding the reach of their criminal and civil investigations to other banks and by publicizing both cases where taxpayers failed to file FBARs and got caught and also the advantages of compliance. They should defend third-party confidentiality to FBAR filers. They should also eliminate the close substitute option of quiet disclosure as a remedy for the failure to file an FBAR.

Finally, the government should pursue the goal of increasing taxpayers' perception of the likelihood that noncompliers who masquerade as compliers will be detected. This last goal should involve good audit coverage of FBAR and shadow FBAR filers, publicity of successful audits to the extent consistent with taxpayer confidentiality limitations, and the development of a limited number of standardized, numerically coded data fields for FBAR and shadow FBAR reports which may ultimately be cross-checked against global information reports about U.S. account holders.

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Endnotes

- ¹ See Michael G. Allingham & Agnar Sandmo, *Income Tax Evasion: A Theoretical Analysis*, 1 J. PUB. ECON. 323 (1972).
- ² See *id.*
- ³ See Alex Raskolnikov, *Revealing Choices: Using Taxpayer Choice to Target Tax Enforcement*, 109 COLUM. L. REV. 689, 704–05 (2009) (describing the separation function of penalties and noting the targeting benefit of avoiding crowding out); see also Dan M. Kahan, *The Logic of Reciprocity: Trust, Collective Action, and Law*, 102 MICH. L. REV. 71, 83–84 (2003) (suggesting that emphasizing the possibility of audit will not encourage reciprocal compliance behavior); Marjorie Kornhauser, *Normative and Cognitive Aspects of Tax Compliance: Literature Review and Recommendations for the IRS Regarding Individual Taxpayers*, in 2 NAT'L TAXPAYER ADVOCATE,

2007 Annual Report to Congress 151 (2008) (noting that “commoditization of a behavior” can “crow[d] out positive normative influences on that behavior”).

- ⁴ See Robert Cooter, Expressive Law and Economics, 27 J. LEG. STUD. 585, 607 (1998) (“Law provides an instrument for changing social norms by expressing commitments.”); Eric A. Posner, Law and Social Norms: The Case of Tax Compliance, 86 VA. L. REV. 1781, 1798–99 (2000) (observing that the government is a player in the norm creation game and can send signals that affect taxpayer behavior); Cass Sunstein, Legal Interference with Private Preferences, 53 U. CHI. L. REV. 1129, 1137–38 (1986) (explaining that law helps to determine preferences and exploring related democratic theory problems).
- ⁵ See Dan M. Kahan, Social Influence, Social Meaning and Deterrence, 83 VA. L. REV. 349, 365 (1997) (arguing that individuals decide whether or not to commit crimes in large part based on their perception of others’ criminal behavior).
- ⁶ See James Alm, Gary H. McClelland and William D. Schulze, Changing the Social Norm of Tax Compliance by Voting, 52 KYKLOS 141, 153, 161 (reporting increased compliance if experimental subjects were permitted to communicate about their compliance decisions); Michael Wenzel, Motivation or Rationalisation? Causal Relations Between Ethics, Norms and Tax Compliance, 46 J. ECON. PSYCHOL. 491, 504–05 (2005) (reporting longitudinal study results showing that group norms affect personal ethics when a taxpayer identifies with the group).
- ⁷ See ROBERT CIALDINI, INFLUENCE: SCIENCE AND PRACTICE 61–90 (4th ed. 2001) (detailing results of commitment consistency studies).
- ⁸ See, e.g., Eric Fleisig-Greene, Law’s War With Conscience: The Psychological Limits of Enforcement, 2007 B.Y.U. L. REV. 1203, 1222, 1233–1235 (2007) (arguing that law can have an adverse impact on previously existing positive norms and citing one empirical study suggesting that taxpayers who received letters notifying them of a likely audit reported less income than other taxpayers).
- ⁹ See, e.g., Marjorie Kornhauser, *supra* note 3, at 164 (arguing that a commodified exchange view of taxation can undermine voluntary compliance and prompt taxpayers to believe that the government is not fair); Marjorie Kornhauser, Tax Compliance and the Education of John (and) Jane Q. Taxpayer, TAX NOTES 737, 739 & n.21 (Nov. 10, 2008) (noting the importance of procedural fairness and reciprocal trust for compliant taxpayers).
- ¹⁰ See Kahan, *supra* note 3, at 83–84 (noting the inconsistency of audit threats with a tit-for-tat relationship).

- 11 See Susan Cleary Morse, Using Salience and Influence to Narrow the Tax Gap, 40 *LOY. U. CHI. L. J.* 483, 510–512 (2009) (arguing for penalties and rewards commensurate with taxpayer behavior).
- 12 This idea of government-taxpayer reciprocity is distinguishable from the idea of taxpayer-taxpayer reciprocity connected to the common provision of public goods. See Sagit Leviner, An Overview: A New Era of Tax Enforcement—From “Big Stick” to Responsive Regulation, 2 *REG. & GOVERNANCE* 360, 365 (2008); Dennis J. Ventry, Jr., Cooperative Tax Regulation, 41 *CONN. L. REV.* 431, 436 (2009).
- 13 The IRS website, for example, plainly states its service and enforcement mission. See IRS, THE IRS MISSION, available at <http://www.irs.gov/irs/article/0,,id=98141,00.html>.
- 14 See IRS Announcement 2005-87, 2005-50 I.R.B. 1144 (anticipating government-taxpayer cooperation in the CAP early issue resolution program); CLIFF JERNIGAN, CORPORATE TAX AUDIT SURVIVAL: A VIEW OF THE IRS THROUGH CORPORATE INSIDER EYES 76-77 (2005) (explaining that the IRS invited taxpayers with a “history of honest dealings” to participate in CAP).
- 15 See, e.g., IAN AYRES & JOHN BRAITHWAITE, RESPONSIVE REGULATION 44-47 (1992) (arguing that an agency that threatens serious punishments may be “vulnerable to a litigious firm determined to shatter its myth of invincibility”).
- 16 For example, although the IRS has broad statutory powers to summon documents, see I.R.C. § 7602; and the Supreme Court has vindicated its authority to use these powers to summon tax accrual workpapers prepared by accountants, see *United States v. Arthur Young*, 465 U.S. 805, 816 (1984), the IRS has historically followed a “policy of restraint” under which it will only seek workpapers “to obtain collateral sources of data, not to fish for new issues.” Thomas J. Monks, *Your Papers, Please: Requests for FIN 48 Workpapers*, 125 *TAX NOTES* 901, at nn. 72–75 (Oct. 28, 2009). This restraint may stem from habit as well as from a desire to dodge litigation risks, limit exposure to restrictive statutory changes, and/or avoid souring relationships with taxpayers. For a summary of recent developments in the area of tax accrual workpapers and a view that they can never constitute protected work product, see Dennis J. Ventry Jr., *A Primer on Tax Work Product for Federal Courts*, 123 *TAX NOTES* 875 (May 18, 2009).
- 17 See Bryan T. Camp, *Tax Administration as Inquisitorial Process and the Partial Paradigm Shift in the IRS Restructuring and Reform Act of 1998*, 56 *FLA. L. REV.* 1, 79 (2004) (describing the public perception of an overzealous IRS that led to the passage of a statute curtailing the agency’s power).

- ¹⁸ Cf. JOSEPH S. NYE, JR., *SOFT POWER* 63–65 (2004) (connecting “unilateral” approach to American foreign policy and “decline of America’s attractiveness abroad”).
- ¹⁹ See, e.g., AYRES & BRAITHWAITE, *supra* note 15, at 44–47 (identifying that regulatees’ perception of an agency’s “invincibility” as a key factor).
- ²⁰ See, e.g., Leandra Lederman, *Reducing Information Gaps to Reduce the Tax Gap: When Is Information Reporting Warranted?*, 78 *FORD. L. REV.* 1733, 1740–41 (2010) (arguing that the absence of alternative arrangements increases the likelihood of success of an information reporting provision).
- ²¹ See David Weisbach, *Line Drawing, Doctrine and Efficiency in the Tax Law*, 84 *CORN. L. REV.* 1627, 1665–1668 (1999) (defining marginal efficiency cost of funds as the ratio between the revenue from a tax change with no behavioral distortion and the actual (presumably lower but still positive) revenue including the impact of behavioral effects).
- ²² See David Schizer, *Frictions as a Constraint on Tax Planning*, 101 *COLUM. L. REV.* 1312, 1323–34 (2001) (noting the strength and malleability properties of frictions and listing different possible sources of frictions including business, technology, and legal constraints).
- ²³ See Cooter, *supra* note 4, at 595 (explaining an expressive theory of enactment and enforcement of law).
- ²⁴ See Raskolnikov, *supra* note 3, at 724–728 (exploring several ways to increase the likelihood of detection in the compliance group).
- ²⁵ See, e.g., Kahan, *supra* note 5, at 358–59 (noting that the desire to avoid cognitive dissonance motivates individuals to conform their behavior).
- ²⁶ Joshua D. Blank, *Overcoming Overdisclosure: Toward Tax Shelter Detection*, 56 *U.C.L.A. L. REV.* 1629, 1685–86 (2009).
- ²⁷ See SEC’Y OF TREAS., *A REPORT TO CONGRESS IN ACCORDANCE WITH § 361(b) OF THE UNITING AND STRENGTHENING AMERICA BY PROVIDING APPROPRIATE TOOLS REQUIRED TO INTERCEPT AND OBSTRUCT TERRORISM ACT OF 2001* 6 (noting that the IRS estimated the number of foreign bank accounts at 1 million and the number of annual FBAR filings at about 180,000). The IRS reported that 322,414 FBARs were filed in 2007. See IR 2008–79. Without more information about the number of offshore accounts, which may have increased, the frequency with which one FBAR filer listed more than one account or more than one FBAR filer reported one account and so forth, better estimates are difficult to produce.
- ²⁸ See Martin Sullivan, *U.S. Citizens Hide Hundreds of Billions in Cayman Accounts*, 103 *TAX NOTES* 956 (May 24, 2004) (citing \$70 billion estimate); *Hearing on Issues Involving Banking Secrecy Practices and Wealthy American*

Taxpayers, 111th Cong., 1st Sess. (Mar. 31, 2009) (statement of Reuven S. Avi-Yonah) [hereinafter Avi-Yonah Statement] (assembling various estimates of cash and securities deposits offshore and translating those figures into an estimate of approximately \$50 billion in unpaid U.S. Federal income tax annually). The Avi-Yonah calculation includes the assumption that the accounts earn a 10% return. *See id.*

The overall 2001 tax gap estimates were based on National Research Program (NRP) audit studies. *See* Eric Toder, *What is the Tax Gap?*, 117 *Tax Notes* 367, 370–74 (Oct. 22, 2007) (describing NRP estimation methodology). The cited estimates of offshore account noncompliance derive from independent estimates of the size of offshore accounts held by U.S. individual taxpayers, and according to one report “it is doubtful that the \$345 billion estimate includes the entire international tax gap.” TREAS. INSPECTOR GEN’L FOR TAX ADMIN., A COMBINATION OF LEGISLATIVE ACTIONS AND INCREASED IRS CAPABILITY AND CAPACITY ARE REQUIRED TO REDUCE THE MULTI-BILLION DOLLAR U.S. INTERNATIONAL TAX GAP (Jan. 27, 2009), available at <http://www.treas.gov/tigta/iereports/2009reports/2009IER001fr.html>. Despite the different methodology and incomplete overlap, comparing the \$350 billion measure of overall noncompliance to the \$50 billion estimate of offshore account noncompliance should give an idea of the general size of the tax gap problem and relative importance of its components, as intended.

- ²⁹ *See* IR 2003-95 (July 30, 2003) (“People from all walks of life applied for the [2003 voluntary disclosure] program, including lawyers, dentists, business executives, estate heirs, and numerous other occupations.”).
- ³⁰ *See* Jeremiah Coder, *IRS Extends Offshore Voluntary Disclosure Deadline*, 124 *TAX NOTES* 1297 (Sept. 28, 2009) (reporting practitioner report of inquiries from “immigrants or their children who created accounts before coming to the United States”). *Cf.* Fred Feingold, *Further Guidance Needed on Who Must Report Foreign Accounts*, 123 *TAX NOTES* 1023 (May 25, 2009) (arguing that many FBAR nonfilers fail to file due to ignorance of the requirement).
- ³¹ At a Senate committee hearing in 2002, for example, lawmakers heard testimony from an orthopedic surgeon and Federal inmate. He had gotten into financial trouble, refused the offers of several tax protestor promoters, and then entered into a offshore “business trust” arrangement supported by “legal opinions and letters from several attorneys.” He thought things were legal, he claimed, until he discovered that the trust routed funds from Utah to the Isle of Man and then to Austria and provided false receipts for the funds. He stated that he was attempting to extricate himself from the situation when he was found out. *Transcript of Hearing on Schemes, Scams and Cons, Part II: The IRS Strikes Back*, 107th Cong., 2d Sess. (Apr. 11, 2002) 16–22 (statement of Dr. Daniel Bullock).

- ³² A U.S. citizen or resident alien may exclude certain income earned abroad from the performance of services, but this foreign earned income exclusion does not exempt investment income from U.S. tax. See I.R.C. § 911. One of the requirements for the foreign earned income exclusion is that the individual demonstrate his or her substantial foreign presence abroad by meeting either the bona fide residence test or the 330-day test. See I.R.C. § 911(d). Such a taxpayer may also be able to reduce his or her U.S. tax by the amount of foreign taxes paid, but must record the foreign tax credit claim on the tax forms submitted to the U.S. government. See I.R.C. § 901 (providing for foreign tax credit election); IRS, FORM 1116 (enabling foreign tax credit election); IRS, FORM 1116 INSTRUCTIONS at 1 (explaining that in certain circumstances a taxpayer with “passive category income” only may claim a foreign tax credit on line 47 of Form 1040 without filing Form 1116). In most offshore account situations, in any case, there is no foreign tax to credit.
- ³³ Another law, the Foreign Account Tax Compliance Act, or FATCA, also attempts to solve the problem of offshore account information asymmetry. FATCA was enacted as part of a larger jobs-oriented tax package in March 2010. See P.L. 111–147 § 501 (codified at I.R.C. §§ 1471–1474). It requires non-U.S. financial institutions to tell the U.S. government about their U.S. account holders and includes very high penalties for noncompliance. In future work, I hope to analyze FATCA using the framework developed here.
- ³⁴ IRS Form 1040, Schedule B, Line 7.
- ³⁵ See I.R.C. § 6038D. The provision is effective for tax years beginning after the date of enactment, March 18, 2010. See P.L. 111–147 § 511(c). See also *infra* text accompanying notes 58–60 (contrasting § 6038D and FBAR requirements).
- ³⁶ See 31 C.F.R. § 103.24.
- ³⁷ See 31 U.S.C. § 5314. Section 5314 was enacted in 1982. See Pub. L. 97–258, Sept. 13, 1982, 96 Stat. 997. See generally Bank Secrecy Act of 1970 (“BSA”), Pub. L. No. 91–508, 84 Stat. 114 (1970) (codified as amended at 12 U.S.C. §§ 1829b & 1951–59 and 31 U.S.C. 5311–5332; STEVEN MARK LEVY, FEDERAL MONEY LAUNDERING REGULATION: BANKING, CORPORATE AND SECURITIES COMPLIANCE § 3.02[B] (2003 & Supp. 2009) (explaining that Title I of the BSA, codified in the 12 U.S.C. sections, requires banks to maintain certain records and that Title II, codified in the 31 U.S.C. sections, requires certain reporting of “secret foreign bank transactions”).
- ³⁸ See LEVY, *supra* note 37, at § 3.02 (“The grande dame of money laundering regulation is the statute commonly known as the Bank Secrecy Act of 1970.”).
- ³⁹ See 31 U.S.C. § 5313(a); 31 C.F.R. § 103.22.

- ⁴⁰ See, e.g., 31 U.S.C. § 5318(g) (regarding “Suspicious Activity Reports,” or SARs).
- ⁴¹ See 31 U.S.C. § 5316(a) (requiring persons who physically transport more than \$10,000 cross border to make a “Currency and Monetary Instrument Report,” or CMIR).
- ⁴² See generally LEVY, *supra* note 37, at § 6.02 (providing an overview of reporting requirements).
- ⁴³ The legislative history of the 1970 enactment of the Bank Secrecy Act includes a concern for these tax evasion issues. Swiss bank accounts are not a recent phenomenon. “One of the most damaging effects of an American’s use of secret foreign financial facilities is its undermining of the fairness of our tax laws. Secret foreign financial facilities, particularly in Switzerland, are available only to the wealthy. To open a secret Swiss account normally requires a substantial deposit, but such an account offers a convenient means of evading U.S. taxes. ... [I]t is grossly unfair to leave the secret foreign bank account open as a convenient avenue of tax evasion.” H.R.Rep. No. 91-975, *reprinted in* 1970 U.S.C.C.A.N. 4394, 4397-98 (1970).
- ⁴⁴ 31 C.F.R. § 103.24.
- ⁴⁵ The definition of a person subject to the jurisdiction of the United States is narrowed in the form instructions to “a citizen or resident of the United States, or a person in or doing business in the United States.” Instructions to TD F 90-22.1 [hereinafter FBAR Instructions] at 6. See BORIS I. BITTKER & LAWRENCE LOKKEN, FEDERAL TAXATION OF INCOME, ESTATE & GIFTS ¶ 65.5.8, available at Lawrence Lokken, *The Big, Bad FBAR: Reporting Foreign Bank Accounts to the U.S. IRS 2-4* (2009), available at <http://ssrn.com/abstract=1429744> (describing persons required to report and interpretation of “doing business” language). Proposed regulations and other guidance also narrow FBAR filing requirements somewhat. See *infra* notes 48 and 50.
- ⁴⁶ See FBAR Instructions, at 6 (defining financial account).
- ⁴⁷ An entity account may be required to be reported because of a U.S. person’s financial interest in or signatory authority over such account. See FBAR Instructions at 6-7 (describing financial interest and signatory authority rules); BITTKER & LOKKEN, *supra* note 45, at ¶¶ 65.5.8.4 and 65.5.8.5 (same). Various other requirements to report ownership in and transactions with foreign entities also exist. See IRS Forms 5471, 5472, 3520-A, 8865.
- ⁴⁸ Recent government comments and guidance have expanded practitioners’ previous understanding of the breadth of the financial account definition. See FBAR Instructions at 6 (providing that financial accounts “generally also encompass any accounts in which the assets are held in commingled funds”); see also Letter from New York State Bar Association to Neal S.

Wolin, Deputy Secretary, Department of the Treasury, et al. (July 17, 2009), available at LEXIS, TNT library, 2009 TNT 137–13, [hereinafter NYSBA July 17, 2009 Letter] at text accompanying notes 13–22 (charging that a “flurry” of informal guidance and media comments indicating that holders of accounts in commingled funds such as non-U.S. hedge funds or private equity funds presented a “tension” with earlier guidance and took practitioners by surprise). Proposed regulations, however, “reserve the treatment of investment companies other than mutual funds or similar pooled funds” despite some concerns about the possible use of entities such as hedge funds for tax evasion. See Financial Crimes Enforcement Network: Amendment to the Bank Secrecy Act Regulations—Reports of Foreign Financial Accounts, 75 Fed. Reg. 8844, 8846 (proposed Feb. 26, 2010) (to be codified at 31 C.F.R. Part 103). See also Notice 2009–62, 2009–35 I.R.B. 260 (requesting comments on various FBAR filing requirements).

- ⁴⁹ The FBAR form requires the reporting of the maximum amount in the account during the year reported. See Treasury Department Form TD F 90.22–1.
- ⁵⁰ Proposed regulations and other guidance would not disturb the FBAR filing requirement in this paradigm case. See Financial Crimes Enforcement Network: Amendment to the Bank Secrecy Act Regulations—Reports of Foreign Financial Accounts, 75 Fed. Reg. 8844 (proposed Feb. 26, 2010) (to be codified at 31 C.F.R. Part 103); Notice 2010–23 (providing administrative relief for FBAR filing requirements such as for certain signatories without financial interest in the account); Announcement 2010–16 (suspending FBAR filing requirement for certain non-U.S. persons).
- ⁵¹ There is also a voluminous list of possible penalties for tax evasion and other offenses that may be linked to failure to file an FBAR. See IRS, Voluntary Disclosure Questions and Answers, available at www.irs.gov/newsroom/article/0,,id=210027,00.html, Q&A 14 and 15 (listing possible civil and criminal penalties).
- ⁵² See 31 U.S.C. § 5321(a)(5) (specifying willful civil penalty). See also 31 U.S.C. § 5321(a)(5)(B) (specifying \$10,000 civil penalty with reasonable cause exception); 31 U.S.C. § 5322(a) and (b) (specifying criminal penalties including imprisonment). See generally BITTKER & LOKKEN, *supra* note 45, at ¶ 65.5.8.7 (summarizing penalties).
- ⁵³ The legislative history indicates that the increased penalty responded to Treasury’s reporting of widespread disregard for the FBAR filing requirement. See JOINT COMMITTEE ON TAXATION, GENERAL EXPLANATION OF TAX LEGISLATION ENACTED IN THE 108TH CONGRESS 377–38 (2005) (providing explanation for § 821 of the Act, codified at 31 U.S.C. § 5321 of the Code).

- ⁵⁴ See IRS News Release 2003–48; 31 C.F.R. § 103.56(g). See also NYSBA July 17, 2009 Letter, *supra* note 48, at text accompanying notes 6–7 (describing delegation of authority).
- ⁵⁵ One 2008 Tax Court case, based on tax years 1993–2000, is notable for the imposition of FBAR penalties in the presence of particularly egregious facts and for the Tax Court’s lack of jurisdiction to review the propriety of the imposition of FBAR penalties by the IRS. See *Williams v. Comm’r*, 131 T.C. 54, 58–59 (2008) (finding no jurisdiction in the absence of a notice of deficiency, lien or levy); T.C. Memo 2009–81 (concluding on summary judgment that Williams’ criminal tax fraud guilty plea collaterally estopped him from contesting civil fraud charges).
- ⁵⁶ The reports were filed under section 361(b) of the USA Patriot Act of 2001, which “requires the Secretary of the Treasury to (1) study ways to improve compliance with the reporting requirements set forth in Section 5314, and (2) submit an annual report on the study to Congress.” LEVY, *supra* note 37, at § 10.02.
- ⁵⁷ The offshore credit card initiative of 2000–2003 sought information about credit card holders from MasterCard, Visa and other payment processors. See, e.g., John Hembera, *IRS Targets AmEX, MasterCard in Offshore Fishing Expedition*, TAX NOTES (Oct. 26, 2000). In general that initiative did not face a bank secrecy obstacle, since it targeted U.S. payment processors. See, e.g., *Dorsey v. United States*, 2004–1 U.S.T.C. ¶ 50,164 (D. Md. 2004) (refusing to quash summons under § 7602; bank secrecy issue not raised). However, it culminated in only 10 or so prosecuted cases, plus settled cases that did not get publicized; it is reportedly considered not a great success. See Rev. Proc. 2003–11, 2003–1 C.B. 311 (announcing offshore initiative directed in part at credit cards); Lee Sheppard, *Now What? Dealing With UBS Account Disclosures*, 124 TAX NOTES 847, 851–52 (Aug. 31, 2009) (recalling results of credit card initiative); Heather Bennett, *IRS Offshore Compliance Initiative Collects \$170M*, 102 TAX NOTES 713 (Feb. 9, 2004) (reporting that the initiative collected 1300 applications and \$170 million).
- ⁵⁸ I.R.C. § 6038D(a).
- ⁵⁹ See JOINT COMMITTEE ON TAX’N, TECHNICAL EXPLANATION OF THE REVENUE PROVISIONS CONTAINED IN SENATE AMENDMENT 3310, THE “HIRING INCENTIVES TO RESTORE EMPLOYMENT ACT,” UNDER CONSIDERATION BY THE SENATE 60 (Feb. 23, 2010) (noting that § 6038D does not modify or replace the FBAR requirements).
- ⁶⁰ The basic § 6038D penalty is \$10,000, increasing to a maximum of \$50,000 after notification by the Secretary. See I.R.C. § 6038D(d) (providing \$50,000 maximum for “any failure,” presumably meaning a limit for each annual

failure to file). Another provision increases substantial underpayment penalty for “any transaction involving a foreign financial asset” from 20 percent to 40 percent. See I.R.C. § 6662(b)(6). But these penalties do not approach the size of FBAR penalties such as the 50 percent of account value willful civil penalty and the possibility of imprisonment.

- ⁶¹ Evan Thomas & Mark Hosenball, *Cracking the Vault*, NEWSWEEK (Mar. 23, 2009).
- ⁶² See Lynnley Browning, *U.S. Said to Expand Tax Inquiry*, N.Y. TIMES, (Dec. 1, 2008).
- ⁶³ See Joanna Chung, *Former UBS Banker Given Prison Term*, FIN. TIMES (Aug. 22, 2009).
- ⁶⁴ Over 5000 foreign banks, such as UBS, Credit Suisse and Deutsche Bank, have signed qualified intermediary agreements with the U.S. See Letter from New York State Bar Association to Sen. Max Baucus et al. (Sept. 10, 2009) available at LEXIS, TNT library, 2009 TNT 175–67, [hereinafter NYSBA Sept. 10, 2009 Letter]. The alternative is nonqualified intermediary, or NQI treatment, which requires the submission of beneficial owner information for each specific account to avoid U.S. withholding on U.S. source payments of investment income such as interest and dividends. See generally Treas. Regs. §§ 1.1441–1 et. seq. (containing QI and NQI documentation and withholding rules. Importantly, there is no presumption of U.S. status for purposes of backup withholding with respect to gross security sale proceeds. See Treas. Regs. 1.6049–5(d)(3)(ii) (providing that withholding on gross proceeds is not required for payment to a non-U.S. intermediary unless the payer has actual knowledge that a nonexempt U.S. person is the beneficial owner of the payment).
- ⁶⁵ See Rev. Proc. 2000–12, 2000–1 C.B. 387 (outlining model QI agreement). Prior to the adoption of these nonresident withholding rules, the U.S. had little assurance that the rules for reducing rates on U.S.-source investment income payments to non-U.S. investors were properly enforced. See Susan C. Morse & Stephen E. Shay, *Qualified Intermediary Status: A New U.S. Withholding Role for Foreign Financial Institutions Under Final U.S. Withholding Regulations*, 27 TAX MGM'T INT'L J. 331, 332–33 (1998) (noting that the regulations require foreign financial institutions to provide information about “foreign status, eligibility for treaty benefits, and qualification for other statutory withholding tax exemptions such as those applicable to effectively connected income and foreign government or international organization status” and “plac[e] the burden of investigating beneficial ownership on QIs rather than on U.S. custodians”). See also REUVEN S. AVI-YONAH, INTERNATIONAL TAX AS INTERNATIONAL LAW 27, 28,

68–78 (2008) (outlining exceptions to the default 30 percent U.S. withholding tax on U.S.-source investment income).

- ⁶⁶ A compromise struck in the model QI agreement, in deference to bank secrecy rules, does not flatly require QIs to disclose the identity of their U.S. clients. Instead, it describes the option of reconciling the existence of a U.S. account holder with bank secrecy laws by excluding U.S. securities or other assets that generate U.S.-source reportable payments from the U.S. client's account. See Rev. Proc. 2000–12, 2000 C.B. 387 § 6.02 (“If QI is prohibited by law, including by contract, from disclosing to a withholding agent ... the account holder’s name ... then QI must (i) request ... the authority to make such a disclosure; (ii) request ... the authority to sell any assets that generate ... reportable payments or (iii) request that the account holder disclose himself.”).
- ⁶⁷ UBS apparently recommended to U.S. clients that they hold accounts through a nominee blocker corporation in a tax haven or that they take advantage of the fact that the qualified intermediary reporting rules only applied to assets that generated U.S. source income by moving U.S. account holders out of assets that produced U.S. source income, perhaps trading in U.S. treasuries for British gilts. See, e.g. UBS, QUALIFIED INTERMEDIARY SYSTEM: U.S. WITHHOLDING TAX ON DIVIDENDS AND INTEREST INCOME FROM U.S. SECURITIES 1 (Oct. 2004) (“A QI has to ensure that *US Persons* ... either declare themselves to the US tax authorities ... or are no longer permitted to invest in US securities.”).
- ⁶⁸ See Lynnley Browning, *U.S. Reports Agreement With UBS in Tax Case*, N.Y. TIMES at B3 (Aug. 13, 2009) (noting earlier resolution of criminal case against UBS).
- ⁶⁹ See *id.* (reporting civil case settlement).
- ⁷⁰ See Lynnley Browning, *Swiss Approve Deal for UBS to Reveal U.S. Clients Suspected of Tax Evasion*, N.Y. TIMES (June 17, 2010). This followed a decision by the Swiss Federal Administrative Court that the failure to file a W-9 with UBS for transmission to the U.S. tax authorities did not constitute “tax fraud and the like” and therefore did not meet a requirement under a 1996 treaty for an exception to bank secrecy protection. See Daniel Pruzin, *Switzerland for Now to Hand Over Data on Only 250 Secret Accounts with UBS*, BNA TAX MANAGEMENT WEEKLY REPORT 144–45 (Feb. 1, 2010).
- ⁷¹ See Lynnley Browning, *IRS to Drop Suit Against UBS Over Tax Havens*, N.Y. TIMES (Aug. 26, 2010).
- ⁷² The 2009 program followed another initiative, in 2003, which was generally characterized as having produced “limited success” in large part due to a lack of enforcement action and publicity. See *supra* note 57 (describing results of

2003 voluntary disclosure program launched in part as a response to offshore credit card initiative); JOINT COMMITTEE ON TAXATION, TAX COMPLIANCE AND ENFORCEMENT ISSUES WITH RESPECT TO OFFSHORE ACCOUNTS AND ENTITIES 48–49 (Mar. 30, 2009) (hereinafter JCT 2009 OFFSHORE ACCOUNT REPORT) (reporting the view that the lack of parallel enforcement actions and publicity limited the success of the 2003 program). In 2003 at least one onerous penalty provision, the 50 percent provision for willful failure to file an FBAR, was not yet law.

- ⁷³ See JCT 2009 OFFSHORE ACCOUNT REPORT at 49 (citing IRS report of 1299 applications in 2003).
- ⁷⁴ See Marie Sapirie, *New Era of Enforcement Follows UBS Saga*, 59 TAX NOTES INT'L 501 (Aug. 16, 2010) (noting 14,700 disclosures under the program).
- ⁷⁵ See Sheppard, *supra* note 57, at 851.
- ⁷⁶ See, e.g., Lynnley Browning, *UBS Client Pleads Guilty to Tax Fraud*, New York Times (Apr. 12, 2010) (reporting on the ninth taxpayer to be caught up in UBS-related cases); Press Release, U.S. Department of Justice, Tax Division, Seven UBS Clients Charged With Hiding Over \$100 Million in Secret Swiss Bank Accounts to Defraud the IRS (Apr. 15, 2010), available at http://www.justice.gov/tax/txdv10_USB_Clients.htm (reporting seven prosecutions, out of which two defendants had plea bargained). The tendency of such press releases to cluster in April has not gone unnoticed. See Joshua D. Blank & Daniel Z. Levin, *When is Tax Enforcement Publicized?*, 30 VA. TAX REV. 1 (2010).
- ⁷⁷ See U.S. Department of Justice, Press Release, Justice Department & IRS Announce Results of UBS Settlement & Unprecedented Response in Voluntary Tax Disclosure Program (Nov. 17, 2009), available at <http://www.justice.gov/tax/txdv091241.htm>.
- ⁷⁸ See, e.g., James Andreoni et al., *Tax Compliance*, 36 J. ECON. LIT. 818, 846 (1998) (summarizing tax compliance studies associating a high subjective probability of detection with significantly higher compliance rates).
- ⁷⁹ Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 GEO. L. J. 1, 39–41 (2004) (quoting SUSAN T. FISKE & SHELLEY E. TAYLOR, *SOCIAL COGNITION* 384 (2d ed. 1991)). See generally Edward J. McCaffery & Joel Slemrod, *Toward an Agenda for Behavioral Public Finance*, in *BEHAVIORAL PUBLIC FINANCE* (Edward J. McCaffery & Joel Slemrod eds., 2006).
- ⁸⁰ See, e.g., James Alm, Betty R. Jackson & Michael McKee, *Getting the Word Out: Enforcement Information Dissemination and Compliance Behavior* 93 J. PUB. ECON. 392, 401 (2009) (reporting results of laboratory study showing that subject-to-subject messaging about audit outcomes significantly affects

compliance decisions and also showing different responses to different combinations of government information); Jeffrey Dubin, *Criminal Investigation Enforcement Activities and Taxpayer Noncompliance*, 35 PUB. FIN. REV. 500, 516, 518 (2007) (concluding from a longitudinal study of state segmented data that audits and criminal investigation activities significantly influence compliance behavior). See also James Alm & Mohammad Yunus, *Spatiality and Persistence in U.S. Individual Income Tax Compliance*, 57 NAT'L TAX J. 101, 121 (2009) (finding correlation between geographic residence and evasion behavior).

- ⁸¹ See ALAN H. PLUMLEY, I.R. PUBLICATION 1916: THE DETERMINANTS OF INDIVIDUAL INCOME TAX COMPLIANCE: ESTIMATING THE IMPACTS OF TAX POLICY, ENFORCEMENT, AND IRS RESPONSIVENESS 35 (1996) (estimating the indirect audit effect at 11.6 times the direct audit effect); Dubin, *supra* note 86, at 519 (reporting result of 15.1:1 under simulation doubling audit rates).
- ⁸² See SUSAN T. FISKE & SHELLEY E. TAYLOR, SOCIAL COGNITION 270–71 (1984) (noting “retrieval biases,” “strength of association biases” and ease of imagining events); Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 163, 163 in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel Kahneman, Paul Slovic & Amos Tversky, eds., 1982). (“Life-long experience has taught us that instances of large classes are recalled better and faster than instances of less frequent classes, that likely occurrences are easier to imagine than unlikely ones, and that associative connections are strengthened when two events frequently co-occur.”) See also Ronald Chen & Jon Hanson, *Categorically Based: The Influence of Knowledge Structures on Law and Legal Theory*, 77 S. CAL. L. REV. 1106, 1179 (2004) (“[C]ues that are prominent or catch our attention are more likely to activate associated categories and schemas.”).
- ⁸³ See Morse, *supra* note 11, at 510 (“[An audit] publicity campaign featuring more typical taxpayers would have more salience.”).
- ⁸⁴ See Joanna Chung & Haig Simoniam, *Former UBS Employee Charged With Helping Billionaire Evade Tax*, FIN. TIMES, May 14, 2008 (noting the December 2008 guilty plea of real estate magnate Igor Olenicoff, who agreed to pay \$52 million in back taxes related to “income earned on about \$200 million of assets kept offshore”); see also Lynnley Browning, *Suicide Victim May Have Hidden Millions Abroad*, N.Y. TIMES, Sept. 15, 2009, at B1 (reporting that the government had begun to build a criminal tax evasion case involving as much as \$100 million in back taxes against Finn Caspersen before his death).
- ⁸⁵ See, e.g., Lynnley Browning, *Florida Man, a UBS Client, Pleads Guilty to Tax Fraud*, N.Y. TIMES, June 26, 2009 (reporting Rubinstein guilty plea); Lynnley

Browning, *First Client from U.S. Is Arrested in UBS Case*, Apr. 3, 2009 (reporting Rubinstein arrest).

- ⁸⁶ See Lynnley Browning, *UBS Client Pleads Guilty in Tax Case*, N.Y. TIMES, Apr. 15, 2009 (reporting Moran guilty plea).
- ⁸⁷ See Lynnley Browning, *Inquiry Widens as UBS Client Pleads Guilty*, N.Y. TIMES, July 29, 2009 (reporting Chernick guilty plea).
- ⁸⁸ See Samantha Henry, *UBS Client Pleads Guilty to Hiding Assets*, ASSOCIATED PRESS, Sept. 26, 2009 (reporting Homann guilty plea).
- ⁸⁹ See David Voreacos & Carlyn Kolker, *UBS Client to Admit Failure to Report Swiss Account to IRS*, BLOOMBERG, Aug. 15, 2009 (reporting anticipated McCarthy guilty plea).
- ⁹⁰ See Kim Dixon, *Ex-Boeing Manager Pleads Guilty in UBS Tax Case*, Reuters, Oct. 5, 2009.
- ⁹¹ Lynnley Browning, *Settlement Anticipated in UBS Case*, N.Y. TIMES, June 22, 2009 (reporting the description of a government official).
- ⁹² See Laura Saunders, *IRS Extends Deadline to Declare Foreign Accounts*, WALL ST. J., Sept. 22, 2009, (reporting “no discernible pattern as to which customers were selected” for required disclosure under UBS settlement and repeating on practitioner’s comment that “[s]everal of our clients with ‘plain vanilla’ accounts well under \$1 million have gotten these letters.”). The U.S. John Doe summons request did not discriminate based on the size of the account. See Memorandum in Support of Ex Parte Petition for Leave to Serve John Doe Summons at 5, *In re Tax Liabilities of John Does* (S.D. Fla. No. 08–21864) (June 30, 2008) (describing John Doe class as any U.S. taxpayer with “signature or other authority ... with respect to any financial accounts,” except for taxpayers who had supplied UBS with Forms W-9 and been subject to Form 1099 reporting). However, since the description of account selection criteria under the summons settlement is not yet available, it is difficult to tell whether targeting a range of accounts was an intentional strategy. See Sheppard, *supra* note 57, at 850 (speculating that the U.S. targeted large accounts and accounts with particularly creative planning).
- ⁹³ Publicizing taxpayers who have been caught is likely more important that publicizing the audit rate or the compliance rate, both of which draw mixed results in terms of their ability to promote additional compliance. Taxpayers may interpret the audit rate as communicating that audit activity exists or communicating that an audit is too unlikely to worry about. Cf. Alm, Jackson & McKee, *supra* note 80, at 401 (noting conflicting results for “official” publication of audit information in laboratory study). The IRS does publish audit rates, though it keeps the factors that affect its audit selection mechanism secret.

The typically cited problem with publicizing the compliance rate, as opposed to quietly disclosing it, is that taxpayers can interpret the figure as meaning “a clever minority cheats” instead of “most people pay their taxes.” In one real-life experiment, Minnesota taxpayers received a letter from the Minnesota Department of Revenue stating that nearly all taxpayers—93 percent—were compliant. Increased compliance, measured by reference to actual tax returns filed, was not statistically significant for those who received the letter. The possibility that the audience will self-identify with or aspire to be part of the “clever minority” makes this a risky strategy. See Marsha Blumenthal et al., *Do Normative Appeals Affect Tax Compliance? Evidence from a Controlled Experiment in Minnesota*, 54 NAT'L TAX J. 125, 135 (2001) (stating that a statement of high compliance “may be interpreted to mean that the revenue department is unable to detect cheating”).

- ⁹⁴ See BNA, TAX MG'T WEEKLY REPORT at 100 (Jan. 25, 2010) (noting 150 ongoing offshore account criminal investigations and that “hundreds of taxpayers are still coming in under IRS’s basic procedures for voluntary disclosure”). Plea bargain publicity has continued to emerge, and continues to feature the average wealthy. See, e.g., Lynnley Browning, *UBS Client Pleads Guilty to Tax Fraud*, N.Y. TIMES (Apr. 12, 2010) (reporting guilty plea of Harry Abrahamsen of Oradell, New Jersey, whose UBS account was allegedly financed by claiming \$1.3 million in inflated expenses—which would have produced a tax benefit of perhaps approximately \$500,000).
- ⁹⁵ See Sheppard, *supra* note 57, at 850 (suggesting that the IRS should pursue and publicize 50 UBS cases and 20 from other banks).
- ⁹⁶ See Lynnley Browning, *Seeking Bank Secrecy in Asia*, N.Y. TIMES (Sept. 22, 2010) (reporting hundreds of billions of dollars in account value reductions in Europe and gains in Hong Kong and Singapore).
- ⁹⁷ See Lynnley Browning, *U.S. Widens Tax Inquiry Into HSBC*, N.Y. TIMES (July 9, 2010) (reporting criminal investigation of London-based HSBC and two of its clients).
- ⁹⁸ I.R.C. § 6103. The statute defines “return information” very broadly and it includes “any information developed or obtained by the IRS during the course of an audit or investigation of the taxpayer, as well as the mere fact that the taxpayer’s return has been or is being audited or investigated.” Stephen W. Mazza, *Taxpayer Privacy and Tax Compliance*, 51 KAN. L. REV. 1065, 1091 (2003). A series of exceptions permits disclosure of return information in certain specific circumstances, which include several third-party disclosure permissions necessary to effective administration. For example, the IRS may disclose information in connection with judicial proceedings, see, e.g., I.R.C. § 6103(h)(4), and under certain circumstances to

obtain relevant information, *see* I.R.C. § 6103(k)(6), or put an interested party on notice, *see, e.g.*, 6103(e).

- ⁹⁹ *See, e.g.*, I.R.C. § 6103(b)(1) (permitting disclosures to the general public when it publicizes “data in a form which cannot be associated with, or otherwise identify, directly or indirectly, a particular taxpayer”).
- ¹⁰⁰ *See, e.g.*, Mazza, *supra* note 98, at 1121 (“The IRS’s current efforts to communicate strong and meaningful deterrence messages are hampered by the lack of an exception in section 6103 permitting disclosure of return information to criminal tax proceedings.”).
- ¹⁰¹ The circuit courts have divided into three camps. The Ninth and Sixth Circuits have adopted a “public records” exception that permits the IRS to publicize taxpayer information that has been disclosed in litigation, including in an indictment or other filing that precedes a final determination. *See* Rowley v. United States, 76 F.3d 796, 801 (6th Cir. 1996) (holding valid IRS disclosure of taxpayers’ names and tax deficiency in an advertisement for the sale of property under tax lien despite the later release of the lien due to improper notice); Schrambling v. United States, 937 F.2d 1485, 1488–89 (9th Cir. 1991) (concluding that the filing of a tax lien destroyed confidentiality); Lampert v. United States, 854 F.2d 335, 338 (9th Cir. 1988) (focusing on press releases relating to charges and final resolutions and declining to use a “strict, technical reading of the statute” because such a reading would “defeat the purposes of the statute”), *cert. denied*, 490 U.S. 1034 (1989). The Fourth Circuit adopts the technical statutory reading rejected by the Ninth Circuit and holds that no disclosure of return information is permitted regardless of the public disclosure of such information elsewhere. *See* Mallas v. United States, 993 F.2d 1111, 1120–21 (4th Cir. 1993) (finding a violation of Section 6103 under a strict statutory reading and on facts including the disclosure of more facts than appeared in the court opinion, which was subsequently unanimously reversed by an *en banc* Fourth Circuit decision). The Fifth, Seventh and Tenth Circuits have adopted forms of an “immediate source” exception, which permits disclosure if the IRS in fact drew the relevant information from court or other public proceedings and not from inside agency information. *See* Thomas v. United States, 890 F.2d 18, 21 (7th Cir. 1989) (noting that Section 6103 “is not a prohibition of any kind against the disclosure of opinions of the Tax Court”); *see also* Rice v. United States, 166 F.3d 1088 (10th Cir. 1999) (finding no Section 6103 violation where IRS press official had obtained press release information from public findings and trial and sentencing proceedings); Johnson v. Sawyer, 120 F.3d 1307, 1325–26 (5th Cir. 1997) (finding a violation of Section 6103 where information disclosed by IRS employee “came either from Johnson’s return file or from information ‘in [the IRS employee’s] head’”). *See generally* Mazza, *supra* note 98, at

- 1105–14, 1121–22 (analyzing case law and related cases in other contexts considering when public disclosure diminishes privacy rights and describing and evaluating Joint Committee and Treasury recommendations “which essentially adopt the Ninth Circuit’s public records exception”).
- ¹⁰² See IRS, Offshore Tax Avoidance and IRS Compliance Efforts, <http://www.irs.gov/newsroom/article/0,,id=110092,00.html> (last visited Oct. 12, 2009).
- ¹⁰³ See Internal Revenue Manual § 9.5.11.9(1)–(4). An earlier variant of the voluntary disclosure program included a more definite undertakings to not recommend criminal prosecution. See MICHAEL I. SALTZMAN & LESLIE BOOK, *IRS PRACTICE AND PROCEDURE* ¶ 12.07[3] (2009) (describing policy between 1945 and 1952).
- ¹⁰⁴ See 31 U.S.C. § 5321(a)(5) (providing for a penalty of the greater of \$100,000 or 50 percent of the balance in the account at the time of the violation). Prior to 2004, the maximum penalty for a willful violation was the lesser of \$100,000 or the account balance at the time of violation. See BITTKER & LOKKEN, *supra* note 45.
- ¹⁰⁵ See *id.*; IRS, Voluntary Disclosures: Questions and Answers, *supra* note 51, at Q & A 22 (giving penalty example). Delinquency penalties for failure to file and failure to pay are typically calculated as a percentage of the tax due per month of failure to file or pay, up to a maximum of 25 percent each. See I.R.C. § 6651. The accuracy penalty equals 20 percent of certain underpayments including an underpayment attributable to negligence, disregard of rules or regulations, a substantial underpayment or other misconduct. See I.R.C. § 6662. See generally LEANDRA LEDERMAN & STEPHEN W. MAZZA, *TAX CONTROVERSIES: PRACTICE AND PROCEDURE* § 10.02 (2d ed. 2002).
- ¹⁰⁶ Cf. Fred Feingold, Further Guidance Needed on Who Must Report Foreign Accounts, 123 TAX NOTES 1023, May 25, 2009 (arguing that the FBAR proposal goes too far, as ignorance of reporting requirements, not willful intent to evade tax, may cause failure to comply with FBAR filing).
- ¹⁰⁷ See IRS, Voluntary Disclosure: Questions and Answers, *supra* note 51, at Q&A 32.
- ¹⁰⁸ In guidance, the IRS stated that a 5 percent penalty might apply to accounts that the taxpayer “did not open or cause ... to be opened, [where] there has been no activity ... during the period the account ... was controlled by the taxpayer, and ... all applicable U.S. taxes have been paid on the funds [deposited] in the accounts.” Memorandum from Linda E. Stiff, Deputy IRS Commissioner for Services and Enforcement, to Commissioner, Large and Mid-Size Business Division and Commissioner, Small Business/Self-Employed Division (March 23, 2009), at 2. An inherited account, for

- example, might fit these criteria. However, practitioners report that as a practical matter taxpayers cannot persuade the government to apply only a 5 percent penalty. *See, e.g.*, Remarks of Frank Agostino, Kathryn Keneally & Bryan Skarlatos, The Prosecution and Defense of Offshore Bank Accounts, ABA Tax Section Teleconference and Live Audio Webcast (Mar. 3, 2010).
- ¹⁰⁹ Statement from IRS Commissioner Doug Shulman on Offshore Income, Mar. 26, 2009, available at www.irs.gov/newsroom/article/0,,id=206014,00.html.
- ¹¹⁰ *See id.*; *see also* IRS Extends Deadline for Disclosing Hidden Offshore Accounts, IR 2009–84, Sept. 21, 2009.
- ¹¹¹ As this article went to press, the government announced a second FBAR-targeted voluntary disclosure program that used a 25-percent-of-account-value fine for most accounts and added a 12.5 percent penalty for smaller accounts whose value did not exceed \$75,000 in any covered year. *See Second Special Voluntary Disclosure Initiative Opens; Those Hiding Assets Offshore Face Aug. 31 Deadline*, IR 2001-14 (Feb. 8, 2011).
- ¹¹² *See* Cheek v. United States, 498 U.S. 192, 201–02 (1991) (considering case involving alleged willful failure to file a Federal income tax return).
- ¹¹³ *See, e.g.*, Fred Feingold, *Further Guidance Needed on Who Must Report Foreign Accounts*, 123 TAX NOTES 1023 (May 25, 2009) (arguing that many FBAR nonfilers fail to file due to ignorance of the requirement).
- ¹¹⁴ *See* United States v. Sturman, 951 F.2d 1466, 1476–77 (6th Cir. 1991) (holding that actions taken to conceal assets from the government, including the use of different corporations to transfer funds, together with admitted “knowledge of and failure to answer a question concerning signature authority at foreign banks on Schedule B of his income tax return” “provid[ed] a sufficient basis to establish willfulness on the part of the defendant”).
- ¹¹⁵ *See supra* text accompanying notes 13–14 (outlining reward elements built into tax administration).
- ¹¹⁶ *See* I.R.C. § 6103(b)(1) (defining “return”); 31 U.S.C. § 5314 (authorizing statute for FBAR regulation); 31 C.F.R. § 103.24(a) (requiring FBAR filing).
- ¹¹⁷ *See* I.R.C. § 6103(b)(1) (defining “return” as “including supporting schedules, attachments, or lists which are supplemental to, or part of, the return so filed”).
- ¹¹⁸ *See* IRS, Voluntary Disclosure: Questions and Answers, *supra* note 51, Q & A 6, 26 (indicating that all missing “returns” may be filed with the voluntary disclosure letter and not specifying that FBARs should be sent separately).
- ¹¹⁹ *See* BITTKER & LOKKEN, *supra* note 45 (“[A]lthough this reporting regime is administered by the IRS, it is not the only Federal agency having access

to the reported information, and government use of the information is not restricted to tax enforcement.”); LEVY, *supra* note 37.

- ¹²⁰ See 31 U.S.C. § 310(c)(2); *see also* Lee Sheppard, *FBAR Filing for Hedge Funds*, 125 TAX NOTES 496, 500 (Aug. 17, 2009) (calling practitioner’s § 6103 concerns a “red herring”).
- ¹²¹ *Cf. Baucus Seeks to Deter, Detect, Discourage Offshore Tax Evasion*, Tax Notes (Mar. 12, 2009), *available at* 2009 TNT 46-19 (reporting on legislation discussion draft that would have required FBARs to be filed along with tax returns and to require tax preparers to ask due diligence questions specifically relating to FBAR compliance).
- ¹²² The banking law, at 31 U.S.C. § 310(c), references the Privacy Act, 5 U.S.C. § 552a, which includes an exception for any court order, *see* 5 U.S.C. § 552a(b)(11) and has been classified by Congress as a statute that does not provide general protection against FOIA disclosure for the information that it covers, *see* 5 U.S.C. § 552a(b)(2). The law relating to the disclosure of tax return information, for example to third parties under FOIA and in civil litigation, has developed differently. *See, e.g.,* LEDERMAN & MAZZA, *supra* note 105, at § 3.04 (noting issues related to the “tension between FOIA and Section 6103”).
- ¹²³ *See* Department of the Treasury, Form TD F 90-22.1.
- ¹²⁴ In one case, a district court awarded a taxpayer \$75,000 in compensatory damages and \$250,000 in punitive damages plus costs as a result of IRS employees’ discussion of a taxpayer’s case on a radio show with the taxpayer and submission of a letter to the editor concerning the case in response to the taxpayer’s prior letter to the editor. *See Ward v. United States*, 973 F. Supp. 996, 1000–02 (D. Colo. 1997) (imposing damages pursuant to I.R.C. § 7431(c)).
- ¹²⁵ *See* I.R.C. § 6103(c).
- ¹²⁶ I am aware of at least one such settlement. *See* IRS News Release IR-2004-151 (Dec. 16, 2004), *available at* www.irs.gov/newsroom/article/0,,id=132350,00.html (reporting tax shelter settlement involving corporate taxpayer Hercules, which waived privacy rights in connection with the press release).
- ¹²⁷ I.R.C. § 6103(b)(2).
- ¹²⁸ *See* 122 Cong. Rec. 24012 (1976).
- ¹²⁹ *Church of Scientology of California v. IRS*, 484 U.S. 9 (1987). *See also* Long v. IRS, 891 F.2d 222, 223–24 (9th Cir. 1989) (holding on remand that audit “check sheets” were not in a form that constitutes a reformulated data base of the sort that is eligible for disclosure under the Haskell amendment).

- ¹³⁰ See *Willamette Industries, Inc. v. United States*, 689 F.2d 865 (9th Cir. 1982); see also *Gary, Plant, Mooty, Mooty & Bennett, P.A. v. IRS*, 1990 U.S. Dist. LEXIS 18799 (following *Willamette* and holding that Section 6103 did not block a FOIA claim for the IRS to produce the “Brown Report,” relating to industry-level data about computer company audits).
- ¹³¹ *Shell Petroleum, Inc. v. United States*, 46 Fed. Cl. 719, 725 (2000).
- ¹³² Listing types of taxpayers in a press release was apparently not effective when used in connection with the 2003 voluntary disclosure program. See IR 2003–95 (July 30, 2003) (“People from all walks of life applied for the [2003 voluntary disclosure] program, including lawyers, dentists, business executives, estate heirs and numerous other occupations.”).
- ¹³³ Pennsylvania has recently adopted an interesting, salient, Orwellian approach to publicizing a tax amnesty program. See Pennsylvania Dep’t of Revenue, http://www.pataxpayup.com/portal/server.pt/community/resources_advertising/18999 (last visited May 21, 2010) (including links to communications including TV commercial titled “We Know Who You Are.”).
- ¹³⁴ See *Treas. Regs.* § 1.451–1(a) (“If a taxpayer ascertains that an item should have been included in gross income in a prior taxable year, he should, if within the period of limitation, file an amended return and pay any additional tax due.”); LEDERMAN & MAZZA, *supra* note 105, at § 2.02 [D] (describing generally amended return practice).
- ¹³⁵ See *supra* note 103 and accompanying text (describing voluntary disclosure guidance).
- ¹³⁶ See, e.g., Letter from Stuart E. Abrams et al. to The Honorable Douglas H. Shulman, Commissioner of Internal Revenue & John DiCicco, Esq., Acting Assistant Attorney General, Department of Justice, Tax Division 2 (Mar. 30, 2010) (asserting that to maintain consistency with taxpayer and practitioner expectations, the government should ensure that taxpayers who attempt voluntary disclosure in “good faith” are not prosecuted, even if their disclosures are technically late).
- ¹³⁷ See SALTZMAN & BOOK, *supra* note 103, at ¶¶ 12.07[3][d] & [e] (distinguishing quiet disclosure from voluntary disclosure and noting disadvantages such as the waiver of Fifth Amendment protection and the possibility of an additional violation if the amended returns are incorrect).
- ¹³⁸ Remarks of Frank Agostino at The Prosecution and Defense of Offshore Bank Accounts, ABA Tax Section Teleconference & Live Audio Webcast (Mar. 3, 2010) (describing long-standing “quiet disclosure” approach based on private practice experience in Hackensack, New Jersey).

- ¹³⁹ Cf. LAWRENCE R. JONES, JR., DEALING WITH THE IRS COLLECTION DIVISION § 1412, at 235–26 (1995) (stating that a taxpayer has a very limited chance of criminal prosecution if failure to file is corrected by filing tax returns and recommending the resolution of “all questionable items on the delinquent tax return . . . in favor of the IRS” to minimize the risk of fraud charges).
- ¹⁴⁰ Of course, the taxpayer’s willingness to choose the quiet disclosure option instead of the voluntary disclosure option with its more explicit commitment to avoid a criminal prosecution recommendation depends in part on the taxpayer’s risk aversion.
- ¹⁴¹ See IRS, Voluntary Disclosure Questions and Answers, *supra* note 51, at Q & A 10 (“Those taxpayers making ‘quiet’ disclosures should be aware of the risk of being examined and potentially criminally prosecuted for all applicable years.”).
- ¹⁴² See Raskolnikov, *supra* note 3, at 724 (noting that very high compliance regime penalties will induce gamblers, particularly aggressive gamblers, to try to hide behind the compliance regime).
- ¹⁴³ See TREAS. INSPECTOR GEN’L FOR TAX ADMIN., NEW LEGISLATION COULD AFFECT FILERS OF THE REPORT OF FOREIGN BANK AND FINANCIAL ACCOUNTS, BUT POTENTIAL ISSUES ARE BEING ADDRESSED (Sept. 29, 2010).
- ¹⁴⁴ See INTERNAL REVENUE SERVICE, FISCAL YEAR 2009 ENFORCEMENT RESULTS 2, 3, available at <http://www.irs.gov/newsroom/article/0,,id=217442,00.html>.
- ¹⁴⁵ See David D. Stewart, *New IRS Group to Examine Wealthier Individuals Using Offshore Arrangements for Evasion*, TAX NOTES (Sept. 2, 2009) available at LEXIS, TNT library, 2009 TNT-168-1.
- ¹⁴⁶ See, e.g., I.R.C. § 6038D(c).
- ¹⁴⁷ I.R.C. § 6011(e) generally specifies the Secretary’s ability to require electronic filing. Robert Foley of State Street Bank has suggested that taxpayers at least be able to elect electronic FBAR filing, citing in part the ability of the IRS to more effectively use electronically submitted data. See email from Robert J. Foley to Notice Comments (Aug. 27, 2009), available at LEXIS: TNT library, 2009 TNT 173-19 or Doc. 2009-20081).
- ¹⁴⁸ The applicable FBAR regulation delegates to the Secretary of the Treasury the authority to prescribe the information that must be listed on the form. 31 C.F.R. § 103.24(a).
- ¹⁴⁹ Cf. Blank, *supra* note 26, at 1632 (describing the problem of overdisclosure under tax shelter disclosure rules).

Facilitated Self-Assistance Enhances Taxpayers' Taxpayer Assistance Center (TAC) Experiences

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In the summer of 2005, Congress mandated the Internal Revenue Service (IRS) to research, taxpayer needs and IRS service delivery at present and in the future. The goal of the mandate was to ensure that service-related decisions are informed by research and guided by stakeholder engagement. To fulfill the mandate, the IRS formed a team to create Taxpayer Assistance Blueprint, or TAB, products. The TAB Phase 1 Report, released in April 2006, presented preliminary IRS research relative to taxpayer needs, preferences, and behaviors.¹ The Phase 2 Report, released in April 2007, built upon the baselines and improvement themes identified in Phase 1 and produced a 5-year strategic plan for taxpayer service.² The 5-year plan was to be the future of IRS service delivery as envisioned collaboratively by the IRS, the IRS Oversight Board, and the National Taxpayer Advocate.

TAB Phase 2 research from the 2006 IRS Oversight Board Taxpayer Customer Service and Channel Preference Survey indicated that about two in five (43 percent) Taxpayer Assistance Center (TAC, IRS office) users said they would consider contacting the IRS on the web instead of in person to get needed information or assistance.³ Another key finding from TAB Phase 2 was that there is greater taxpayer value in getting forms and publications online rather than through any other channel.⁴ These findings suggested the IRS pursue opportunities to enhance services provided in the TACs, and the Facilitated Self-Assistance Project (FSRP) began.

The FSRP was a collaborative effort among Wage & Investment Research and Analysis (WIRA), Field Assistance (FA), and Modernization and Information Technology Services (MITS) to test the alternative TAC business model. With the exception of forms and publications racks, the TAC business model included only face-to-face service in which taxpayers must wait for assistance, irrespective of service task. Face-to-face service in TACs is the IRS's second most expensive delivery channel.⁵

The goal of the FSRP was to test a service option in which taxpayers, with in-person assistance readily available, conducted certain tax-related tasks using IRS.gov. After

using the new service option, study participants were asked to share their opinions about the service experience.

The FSRP was originally administered at 15 TACs from March 10, 2008, to April 15, 2008. Due to data collection problems, a second phase of data collection was necessary.⁶ The second phase of the FSRP was conducted in 50 TACs from January 2 to April 30, 2009. A formal research report was released in the autumn of 2009, and our paper is based on that report.⁷

Research Problem

The objective of the FSRP was to determine if self-assistance computer workstations, with IRS assistors available, are an effective and efficient means of providing customer service in TACs. The primary research question of this study was:

Does changing the TAC business model to more differentiated service delivery increase taxpayer and/or government value?

The market segment for the study included taxpayers seeking tax-related services available on IRS.gov in TACs that were selected to offer and test facilitated self-assistance (FSA).

This paper begins with a profile of FSA users, including demographic and service-task characteristics and is followed by an examination of taxpayers' opinions on the value of FSA. Taxpayers' verbatim comments are presented to support quantitative findings and enhance the reader's understanding of user's opinions. The paper concludes with data limitations, challenges, and recommendations regarding future implementation of FSA. The terms "users" and "participants" are used interchangeably. Findings presented in this paper are from FSRP Phase 2 unless otherwise noted.

Research Methodology

FSRP Phase 2 was conducted at 50 TAC sites from January 2, 2009, to April 30, 2009. FA selected participating TACs by judgmental sample—a non-probability sampling method that uses basic criteria specified as relevant to addressing the research objective. FSA was to be offered to all taxpayers who sought service for project eligible tasks and who were judged eligible to participate by an IRS employee. Since TACs and taxpayers included in the project were not randomly selected; results from this study may not be statistically representative of all TAC visitors.

The FSRP included several data collection instruments: participant eligibility, Intake Survey, and Exit Survey. IRS employees stationed at TAC reception desks evaluated eligibility and performed study recruitment, as well as administered the

Intake Survey to willing participants. Exit Surveys were completed online by project participants after completion of their FSA service task.

Eligibility for FSRP participation was determined by three factors: 1) English language proficiency, 2) physical ability to use computer workstations without adaptive technology, and 3) service tasks that were within the scope of the project. FSRP service tasks were selected based on electronic services that were available on IRS.gov during the project period. In-scope service tasks for the project were:

1. Free File or Free File Fillable Forms
2. Where's My Refund?
3. Frequently Asked Tax Questions and Answers
4. Forms and Publications
5. Earned Income Tax Credit (EITC) Assistant
6. IRS Withholding Calculator
7. Online Payment Agreement
8. E-File Locator Service
9. Economic Stimulus Payment/Rebate
10. Employer Identification Number (EIN) Application
11. Electronic Federal Tax Payment System (EFTPS)

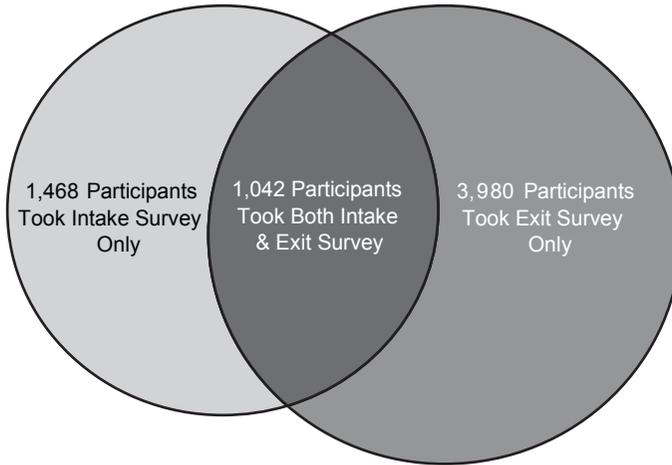
If the taxpayer was judged eligible and was prepared to receive service, the taxpayer was invited to participate in the study and obtain service using a computer with an IRS employee available to help them. Project protocol required that an IRS employee, called a facilitator, be available to assist FSA users, as needed, in performing their tasks. The facilitators were directed to assist project participants but not to enter any data for them.

Research Findings

TAC Visitors' Willingness to Try FSA

Participant eligibility data indicated that, of taxpayers who were assessed as capable, had FSRP eligible tasks, and were prepared to conduct their business, 49 percent chose to try the new service option.

Figure 1 displays the number of FSA users who participated in the study's surveys, including those who responded to more than one survey. Of 7,858 FSA users, 6,490 responded to one or both of the project's surveys (Intake Survey and/or Exit Survey).

FIGURE 1. FSRP Survey Participation

Source: FSRP Intake and Exit Survey data, January 2, 2009, to April 30, 2009.

Data for Figure 1 based on:

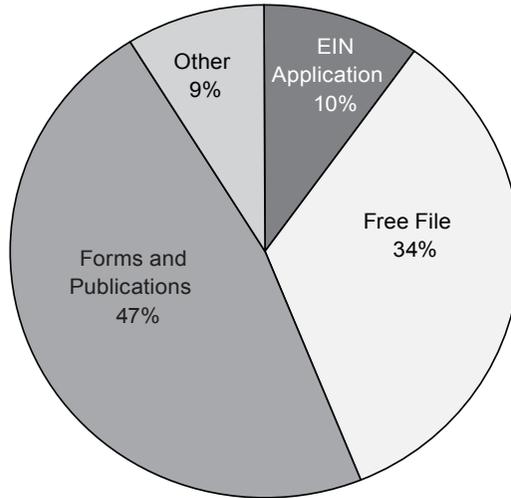
Of 7,858 FSA users, 6,490 responded to one or both of the project's surveys (Intake Survey and/or Exit Survey). Intake Survey data were obtained from 2,510 FSA participants, and 5,022 FSA users participated in the Exit Survey; 1,042 FSA users participated in both the Intake and Exit Surveys.

Profile of FSA Users

The Intake Survey captured demographics and service task for taxpayers who participated in the FSRP. Demographic information collected included respondents' age, total household income, and gender. Intake Survey data indicated the following characteristics:

- Most FSA users were 54 or under (78 percent), and nearly half were 25 to 44 (48 percent).
- Approximately half (51 percent) of respondents had a total household income of \$35,000 or less.
- Males and females made up 54 and 44 percent of the sample, respectively.⁸

Figure 2 displays the most common service tasks among FSA users were seeking tax forms or publications (47 percent) and Free File (34 percent).

FIGURE 2. Distribution of Main Service Tasks

Source: FSRP Intake Survey data, January 2, 2009, to April 30, 2009.

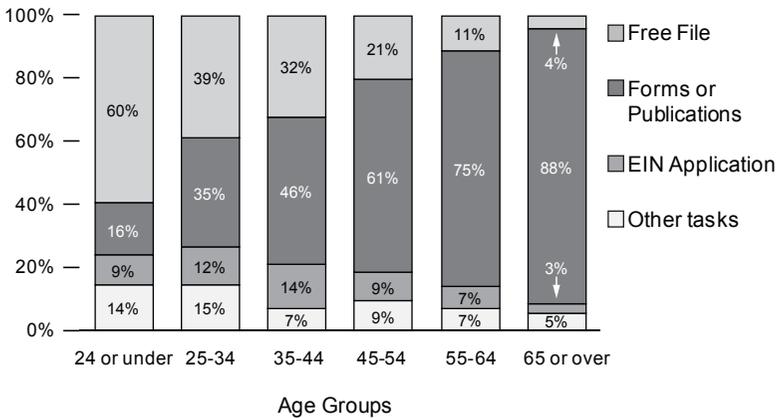
Data for Figure 2 based on:

Primary Service Task	Count	Percent Respondents
Forms or Publications	1,176	47%
Free File	844	34%
EIN Application	255	10%
Where's My Refund?	100	4%
Frequently Asked Tax Questions and Answers	62	2%
Online Payment Agreement (OPA)	22	1%
Earned Income Tax Credit (EITC) Assistant	18	1%
E-File Locator Service	10	0%
Economic Stimulus Payment/Rebate	9	0%
Electronic Federal Tax Payment System (EFTPS)	9	0%
IRS Withholding Calculator	5	0%

Service task was also examined in conjunction with FSA user demographic characteristics. Younger respondents appeared most likely to use FSA for Free File: 60 percent of users 24 or under used FSA for Free File (Figure 3). In contrast, most seniors 65 or over (88 percent), used FSA to obtain forms or publications.

FIGURE 3. Distribution of FSA Users' Service Task by Age Group

Age Groups	Other Tasks	EIN Application	Forms or Publications	Free File
24 or under	14%	9%	16%	60%
25 – 34	15%	12%	35%	39%
35 – 44	7%	14%	46%	32%
45 – 54	9%	9%	61%	21%
55 – 64	7%	7%	75%	11%
65 or over	5%	3%	88%	4%

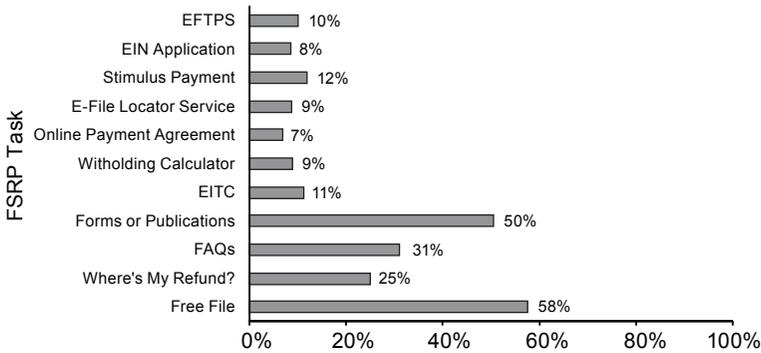


Sources: FSRP Intake and Exit Survey data, January 2, 2009, to April 30, 2009 (n = 994).

Similarly, the use of FSA for forms and publications increased with income level, while use of FSA for Free File decreased with income level.

FSA Participants' Intentions to Use IRS.gov in the Future

After completing tasks using FSA, nearly three quarters (73 percent) of respondents answered the Exit Survey question, “In the future, would you use the IRS website (www.IRS.gov) again for any of the following services?” As shown in Figure 4, over half of the respondents (58 percent) indicated that they would prepare returns online, followed by getting forms or publications (50 percent). Use of the Online Payment Agreement was the FSA service task least selected (7 percent).

FIGURE 4. Intentions to Perform FSA Tasks Using IRS.gov in the Future

Source: FSRP Exit Survey data, January 2, 2009, to April 30, 2009 (n = 3,648).

Note: FSA users could make multiple responses; total will not sum to 100 percent

Additional Exit Survey analyses were conducted to examine whether FSA users would use IRS.gov again in the future for the same task. Among FSA users who used Free File and said they would use IRS.gov in the future, 95 percent said they would use the IRS Web site for Free File again. For those seeking forms or publications who said they would use IRS.gov in the future, 83 percent said they would use the IRS Web site to obtain forms or publications again.

Wait Time for Service

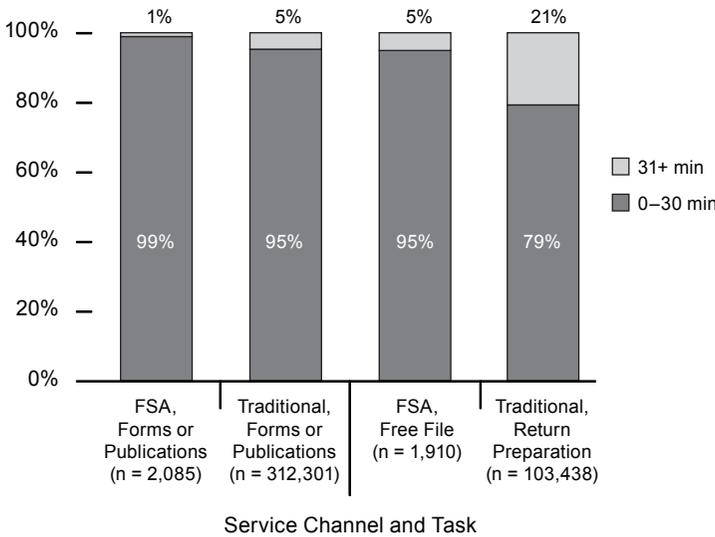
In order to assess taxpayer value of FSA, wait time for the new service option versus traditional TAC service (i.e., face-to-face service) was examined. For FSA users, wait time was measured from the time the IRS employee designated the taxpayer as willing to participate to the time the taxpayer logged into an FSA computer workstation. The average workstation wait time for the two most common FSRP tasks—getting forms or publications or using Free File—was 3.7 minutes and 7.1 minutes, respectively. Wait time for traditional TAC service is measured from the time a customer receives a Q-Matic ticket to the time she or he is called to see an assistor. These data are captured in Business Objects in categories, (i.e., 0 minutes, 1 to 30 minutes, 31 to 45 minutes, etc.); therefore, FSRP data were grouped similarly for the two most common and comparable FSRP tasks.

Figure 5 indicates that wait times between FSA and traditional face-to-face TAC service were similar for obtaining forms or publications. For both FSA and traditional service, nearly all taxpayers (99 and 95 percent, respectively) waited 30 minutes or less to obtain forms or publications. However, wait time for Free File was shorter for taxpayers using FSA than it was for those using traditional TAC

service. Nearly all taxpayers (95 percent) who used an FSRP workstation for Free File waited 30 minutes or less, while 79 percent of those who used face-to-face service had similar wait times for paper or electronic return preparation.

FIGURE 5. Wait Time for FSA vs. Traditional Service

Wait Time Comparison: FSA vs Traditional	0–30 min	31+ min
FSA, Forms or Publications (n = 2,085)	99%	1%
Traditional, Forms or Publications (n = 312,301)	95%	5%
FSA, Free File (n = 1,910)	95%	5%
Traditional, Return Preparation (n = 103,438)	79%	21%



Sources: FSRP Screening and Exit Survey data, January 2, 2009, to April 30, 2009; Business Objects, January 2, 2009, to April 30, 2009.

Taxpayers who used FSA had shorter wait times than taxpayers who used traditional service in TACs. Findings indicate that 75 percent of FSA users who sought assistance for Free File had a wait time of less than 5 minutes.

FSA users’ comments regarding wait time:

I came into the office today to have an IRS staf (sic) person prepare my tax return, but the self e-file service was offered and I used it. I found it more convenient than waiting to see a representative and relatively easy for anyone who is computer literate.

It was my pleasure to be able to receive the type of services that was render (sic) to me without a long period of waiting

A wonderful experience ~ the assistance I received from the IRS Employee made the process even easier...I plan to use the system again for my 2009 filing. GREAT Job IRS ~ keep up the good work! No more Waiting!

According to the IRS Customer Satisfaction Survey Field Assistance National Report (January 2009 to April 2009), promptness of service remains the top improvement priority for FA customers. Similarly, wait time was a key concern from FSA users' perspectives. FSA was acknowledged as a positive improvement in this area. Reduced wait time decreases taxpayer burden and improves taxpayers' overall experience using TACs.

Service Time

Unlike wait time, service time for the two primary FSRP tasks was longer than traditional face-to-face service. Service time was defined as the time FSA users were logged into a workstation. Service time for traditional TAC service is defined as the time between when the customer is called to see an assistor and the time the customer's ticket is closed by that assistor.⁹

On average, it took FSA users about 2 minutes longer to obtain forms or publications, compared to taxpayers using traditional TAC service for the same task (8.7 minutes vs. 6.5 minutes). Regarding Free File, FSA users who completed an electronic return took an average of 53.3 minutes to do so. Taxpayers who sought traditional service for paper or electronic return preparation experienced a lower average service time (45.8 minutes) than FSA users. This difference was possibly a function of experience between IRS employees and most taxpayers in preparing tax returns. The difference could also have been due to the learning curve associated with using FSA. Since using computers to complete their service tasks might have been unfamiliar to some taxpayers, it is possible that it took them longer to complete their tasks.

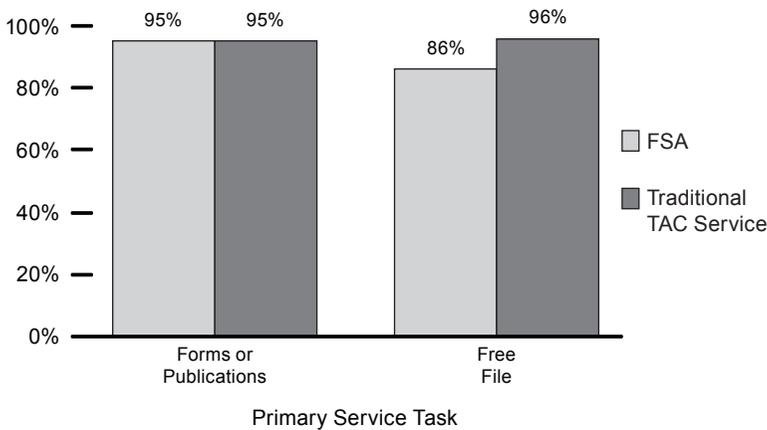
Despite it taking longer, nearly all FSA respondents (95 percent) who completed the task of filing a return using an FSRP workstation reported they were "Satisfied" to "Very Satisfied" with the service they received. Exit Survey data and taxpayers' open-ended comments appear to indicate that shorter wait times but slightly longer service time was a valuable trade-off.

Perceived Issue Resolution

To determine how perceived issue resolution compared between taxpayers using FSA and taxpayers who used traditional TAC service, FSRP data were compared with national customer satisfaction data from FA's transactional survey for the same period. Data regarding perceived issue resolution using traditional TAC service were obtained from the FA National Report for January 2009 through April 2009.¹⁰ Figure 6 shows that there was no difference in perceived resolution rates between FSA and traditional TAC service for forms or publications. However, perceived issue resolution for Free File using traditional TAC service was higher than using FSA by 10 percentage points. As mentioned earlier, this was possibly related to differing experience levels regarding tax preparation between taxpayers and IRS employees.

FIGURE 6. Issue Resolution for FSA Workstations vs. Traditional TAC Service

	FSA	Traditional TAC Service
Forms or Publications	95%	95%
Free File	86%	96%



Sources: FSRP Exit Survey data, January 2, 2009, to April 30, 2009 (n = 4,603); Field Assistance National Report, January 2009 through April 2009 (n = 112,188).

Overall, most FSA users (89 percent) reported that they were able to get answers to their questions or complete their transactions. Issue resolution was examined by age, total household income, and service task to determine if resolution rates among taxpayer segments varied. Younger FSA users (44 and under) achieved

lower rates of issue resolution than their older counterparts (84 percent vs. 91 percent). FSA users with a total household income of \$45,000 or less reported lower issue resolution rates than their counterparts (83 percent vs. 91 percent). FSA users whose task was forms or publications had the highest issue resolution rate (95 percent), and taxpayers who had other less common tasks had the lowest issue resolution rate (76 percent). A high resolution rate among FSA users who sought forms or publications was expected, since this is a less complex service task.

These findings were not surprising as FSA users whose total household income was more than \$45,000 and/or who were 45 or older were more likely to visit a TAC for a form or publication, while younger and/or lower income FSA users were more likely to use FSA for Free File. The lower issue resolution rate among Free File users may possibly be attributed to the users' experience level using computers, IRS.gov, or tax preparation software.

FSA users' comment regarding issue resolution (and service time):

I was really impressed by the fast service that I got today! All of my questions and concerns were answered. I know that if I have any more questions then I can use the website or come to my local IRS office to receive further assistance.

Ease of Use

Taxpayer value was assessed by asking FSA users how easy it was to use the new service option. Respondents who stated that their issue was resolved through FSA were asked how easy it was to use FSA. Almost all taxpayers (94 percent) indicated that FSA was "Just About Right" to "Very Easy to Use." Further, the majority (65 percent) of Exit Survey respondents who reported issue resolution felt that FSA was "Very Easy to Use."

Due to a programming error in the Exit Survey, respondents who did not receive issue resolution were not asked to indicate how easy FSA was to use or their satisfaction with the new service option; therefore data are limited to FSA respondents who perceived that they achieved issue resolution. However, as stated above, a majority (89 percent) of FSA respondents perceived that their issue was resolved.

FSA users' comments regarding ease of use:

This was very easy and stress free

The information was easily accessible (sic) and user friendly. I appreciate this service and will recommend it to my family and friends.

The experience for e-filing was easy to navigate. Would recommend it to family and friends.

Having the assistance of [IRS facilitator name], made the experience of filing on line much easier. As long as there is someone present for assistance, I think that people will get used to filing on line and it will become easier.

Satisfaction with FSA

Taxpayer value was examined relative to the level of satisfaction with FSA. In general, nearly all (96 percent) respondents who reported issue resolution indicated that they were satisfied with FSA.

Findings indicate that there was a direct relationship between satisfaction and ease of use. Almost all (98 percent) individuals who indicated that using FSA was “Very Easy” to “Just About Right” reported that they were satisfied with services. Of those taxpayers who indicated that FSA was either “Somewhat Difficult” or “Very Difficult” to use, 62 percent reported that they were satisfied with services. This finding suggests that, although some individuals had a more difficult time using FSA, the majority were still satisfied with the service they received.

FSA users’ comments regarding satisfaction with service:

Service was excellent! They provided me with any and every answer I needed to know. I am very satisfied with my first attempt to file my own taxes. It was a wonderful experience and I will do it again. Thank you.

THANK GOD FOR E-Z TAX RETURN.COM I WAS VERY MUCH SATISFIED, AND I LEFT SMILING. ALSO MY ASSISTANT [IRS FACILITATOR NAME], WAS A GREAT HELP. THANKS AGAIN. KEPT (sic) UP THE GOOD WORK.

This was a very productive trip to the IRS. I never knew that I could excess (sic) the computer to receive forms and publications that were not available at the office upon my visit there. Your people at the office were very helpful to me. I enjoyed my visit.

Taxpayer Expectations

Expectations about service may have played a role in how satisfied taxpayers were with FSA. Data from an open-ended question on the Exit Survey suggested that

some taxpayers' dissatisfaction may not be with FSA but with not being able to get the service that they expected.

FSA users' comments regarding expectations:

A supply of commonly used forms, such as those used to file automatic extensions for both Trusts and partnerships should be kept in the IRS office and immediately available. It should not be necessary to download such common forms.

I came in for HELP and they send you to a computer (sic) where I would like to talk to a person.

I came for 2 forms for 2007 tax year and had to wait in line, and then had to use computer. Took 20 minutes... To (sic) long!

As shown by the above FSA users' comments, some individuals entered the TAC with specific service expectations. In particular, some individuals expected immediate access to certain forms or publications that were not readily available through traditional TAC services.

Areas for Improvement

Survey respondents who perceived that they did not receive issue resolution (11 percent) were asked why their main issue was not resolved. The most common response selected was "Other, please specify" (28 percent). The second most common response selected was "Could not find the information I needed" (22 percent).

Despite a high proportion of respondents reporting issue resolution, 164 respondents provided written comments related to not getting their issue resolved. When examining open-ended comments, several themes and areas for improvement emerged including:

- FSRP computer workstation issues,
- Lack of assistance in finding what they needed,
- Inappropriate study recruitment and
- Free File website issues.

FSA users' comments regarding suggestions for improvements:

You need more then (sic) one person to help taxpayers on the computer.

After filing an e-mail or notification should be available. This would at least confirm that the information (data) was received and reviewed.

It would have been more helpful to have someone at this site trained to answer my questions which I did not think were that uncommon: my question had to do with Sch E rental income...

Need more terminals to assist tax payers

When the Federal government website says “free e-file” I believe the Federal government should make sure the chosen contractors honor the advertisement.

Data Limitations and Study Challenges

In addition to the project’s sampling methods, as discussed in the Research Methodology section, other issues potentially affecting the research results were uncovered. These limitations were related to IRS network performance, survey design, and inconsistency of project operations at TAC sites. Most of these difficulties related to the challenges of performing operational research in live production and service environments.

Intake Survey data transmission issues were experienced by all project sites during the entire data collection period—tax season 2009. There were no detectable patterns for missing data at particular project sites, within FA Areas, or in general. However, there was one project-wide spike in lost data during early February, but MITS was unable to identify the cause of the increased loss. Although efforts were made to remedy the problem, changes to the system were not implemented prior to the end of data collection. Therefore, information regarding demographics was not available for analyses for about 23 percent of study participants.

Survey design influenced how data were collected, and, ultimately, the findings derived from data analysis. One such design issue was a skip pattern that was inaccurately programmed into the Exit Survey. This issue directly affected how Exit Survey questions regarding ease of use, taxpayer satisfaction with service received, and plans to seek further assistance can be interpreted. Respondents only received these questions if they indicated that they received resolution for the tax issue that brought them to the TAC. As a result, it was not possible to determine opinions about satisfaction, ease of use, or plans to seek further assistance from individuals who did not achieve issue resolution. While analysis of responses to open-ended questions provided some information to address these areas, it would have been more informative to know how participants who did not achieve issue resolution felt about FSA.

Another survey design issue was that Exit Survey question 7 was not exhaustive in its response offerings. This question stated, “In the future, would you use the IRS website (IRS.gov) again for any of the following services? (Please select all

that apply).” Unfortunately, the option, “No future intended use,” was not offered. Therefore, it was not possible to distinguish people who did not intend to use IRS.gov in the future from those who did not answer the question.

In spite of standardized training sessions and materials for IRS managers and frontline employees, and regular, frequent conference calls with each of these groups, project operations varied among FSRP sites. Differences were observed regarding the proportion of taxpayers identified as eligible as well as study participation rates. For example, the participation rate in TACs ranged from 5 percent to 99 percent. This evidence, along with data from “shopping” visits to project sites, suggested that participant recruitment was not always performed according to project protocols. Employee buy-in, manager support, and adequate staffing appeared to be predictors of following prescribed project operations.

Despite data limitations, sufficient amounts of data were collected in order to increase the IRS’s understanding of potential taxpayer and government value of FSA. Approximately 8,000 taxpayers used FSA workstations and over 5,000 responded to questions regarding their experience.

Conclusions

Taxpayers who were willing to use FSA generally reported that issue resolution was obtained, that the system was easy to use, and that they were satisfied with the service received.

- The time expenditure trade-off between wait and service time appears to be valuable to taxpayers.
- FSA is a practical option for taxpayers who visit TACs for services available on IRS.gov.
- Findings suggest that facilitators are a necessary component of FSA, and that knowledgeable facilitators helped make taxpayers’ experience positive and beneficial.
- FSA provides value to taxpayers by increasing their awareness of IRS online services.
- Areas for improvement of FSA include computer systems and staff support.

Recommendations

Based on the findings of this report, several recommendations were presented in order to assist FA in making business decisions regarding the future delivery of FSA.

- WIRA and MITS continue to collaborate with Field Assistance to develop selection criteria for the potential future implementation of FSA.
- If it is not feasible for all TACs to administer FSA, focus implementation in TACs with high volumes of taxpayers seeking tax return preparation assistance.
- Since a large number of taxpayers enter TACs to obtain forms, consider implementation of separate dedicated “express lane” computers for tasks that do not require the input of personal identifiers (i.e., names, social security numbers, etc.), such as obtaining forms or publications.
- Self-assistance remain facilitated with adequate staffing made available, to ensure that taxpayers are receiving needed assistance.
- FA continue to “sell” FSA to employees before selling it to taxpayers. Successful implementation of FSA is dependent upon TAC staff and managerial engagement. IRS employees must understand the importance of their role in making FSA a success, by increasing awareness of IRS.gov and in helping taxpayers develop confidence in performing tasks using FSA. This may ultimately free TAC employees to answer more complicated tax questions as well as increase taxpayers’ awareness of additional service channels to address tax needs.
- Facilitators remain available and knowledgeable about IRS.gov to ensure taxpayers receive needed assistance. In open-ended comments, many taxpayers discussed how facilitators played an important role in helping them navigate the Web site, particularly for Free File, as well as how the experience was more positive with assistance.
- It is recommended that the TACs have adequate staffing in order for FSA to make taxpayers’ experience positive and beneficial. It may be more beneficial to taxpayers to have at least one person dedicated as a facilitator.
- Before implementing FSA in additional TACs, FA and MITS re-evaluate the current system design. It is important for the IRS to determine how the system as a whole can be reengineered to better support the future dynamic needs of FA. Expansion should include additional thorough testing of network capabilities, and all identified computer system limitations should be understood and addressed. Although the majority of customers indicated that they were satisfied with services, many of the individuals who gave a

reason for not getting their issue resolved cited computer or system problems. While the goal is to encourage taxpayers to use IRS.gov, if they have bad experiences using FSA in the TACs, they may be less inclined to use IRS.gov, including FSA, in the future.

Endnotes

- ¹ Internal Revenue Service, *The 2006 Taxpayer Assistance Blueprint Phase 1*.
- ² Internal Revenue Service, *The 2007 Taxpayer Assistance Blueprint Phase 2*.
- ³ *Ibid.*, page 109.
- ⁴ *Ibid.*, page 113.
- ⁵ *Ibid.*, Figure 2–24, page 52.
- ⁶ For details regarding the first phase of FSRP, see W&I Planning, Research, and Analysis, “Facilitated Self-Assistance Research Project Research Report,” September 8, 2008.
- ⁷ W&I Research and Analysis, “Facilitated Self-Assistance Research Project Phase 2, Research Report for Field Assistance” September 30, 2009.
- ⁸ An additional 2 percent of the sample were identified as “couples,” thus lacking a specific gender assignment.
- ⁹ Service time for face-to-face service is collected in Business Objects in taxpayer units and hours such that average service times could be calculated and compared with FSRP data.
- ¹⁰ The FA transactional survey asks questions regarding the nature of the taxpayer’s visit, demographic characteristics, perceived issue resolution, and satisfaction with TAC service.

3



Drivers of Noncompliance

Corcoro ◆ Adelsheim

Carley ◆ Hirshman ◆ Lee ◆ Martin

Robertson ◆ St. Charles

A Balance Due Before Remittance: The Effect on Reporting Compliance

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The relationship between a taxpayer's prepayment position and the understatement of taxes has been observed since at least 1969, but has not been the direct focus of much tax compliance literature. There is evidence that balance-due taxpayers have been found to understate their taxes more often than refund-due taxpayers.¹ The goal is to examine the hypothesis that prepayment position causes a portion of reporting noncompliance.

This research provides the Internal Revenue Service (IRS) with insight to the nature and behavior of the taxpayer population. There have been policy changes that temporarily change taxpayer's withholding intending to stimulate the economy. Congress enacted such a stimulus in 1992 with the intention of injecting \$2 billion per month in spending that year.² However, since the tax liability was not adjusted there was a greater possibility of taxpayers being under withheld. Thus in 1993, there was an increased chance in having to pay money back to the government. More recently, it is anticipated that the Making Work Pay Credit in section one of the American Recovery and Reinvestment Act of 2009 (ARRA) may cause an increase in balance-due taxpayers since not all taxpayers qualify for the additional tax credits to offset the change in their withholding.³ These policies of temporary withholding changes could cause an unanticipated prepayment position and in turn increase underreporting noncompliance. With this research, the IRS could address potential compliance problems associated with any future withholding changes, as well as increase the transparency of the taxes collected.

Whether a taxpayer has a balance due or refund due is determined by the timing of the payments within the year. Prepayment position does not change the amount of tax liability, yet the different behavioral shifts in reporting compliance violate standard economic assumptions. In a way, this research also adds to a debate on standard economic theory versus behavioral economics, reference-dependent theories. Growing literature within behavioral economics has noted that individuals violate standard economic assumptions and exhibit behavioral shifts dependent on frames of reference. Other literature in support of standard economic theory found that these behavioral shifts dissipate with increased information and experience. This research can act as an empirical data-driven test for the behavioral theory's viability to complement the experimental evidence already found.

Purpose and Structure of Report

The report is organized as follows:

- *Background and Objectives*—Presents a review of previous tax compliance work outside the IRS and overviews goals of this paper.
- *Research Methods*—Provides a description of the methodology used to analyze the interactions of a taxpayer's prepayment position and reporting compliance.
- *Research Findings*—Presents the results of the models.
- *Conclusions and Recommendations*—Summarizes the report and proposes future work based on the information gained from the models and hypothetical policy changes.
- *Appendices*—Provides a detailed description of the methodology and data analysis developed for this study.

Background and Objectives

Tax Compliance

One of the earliest theoretical tax compliance models was established by Allingham and Sandmo (AS) (1972). A taxpayer makes compliance decisions based on expectations of an audit, their risk aversion, and the total amount of their assets. Their seminal paper focused on varying tax rates and reporting compliance. Their theory implies that tax compliance can be increased by increasing penalties or increasing the probability of an audit by increased examinations. AS's framework has been used as a baseline model to analyze a number of influences to tax compliance.

A recent paper utilizing the AS framework is Kleven et al. (2009). Their research is particularly noteworthy, for its ingenious new dataset that is similar to the Taxpayer Compliance Measurement Program (TCMP) and National Research Program (NRP) datasets. With cooperation from the Danish Inland Revenue (SKAT), Kleven et al. set aside a stratified sample of roughly 40,000 Danish individual tax filers who were followed for the 2007 and 2008 tax years. The first year, half of the sample was audited while the other half was deliberately not audited.⁴ The following year the whole sample was broken into three mailing groups. Two of the groups received letters informing that they were randomly selected to face a 'threat of audit.' This left the final third as a deliberately not audited control group. The exogenous audit probabilities allowed them to examine the causal effects of prior audits and threats of audits.

Like previous IRS research (Ho (2003), SB/SE Research Seattle/San Jose (2007)) focusing on varying levels of income visibility (self-reported to third-party reported income) Kleven et al. found that the Danish population as a whole was largely compliant, but there was significant tax evasion in self-reported income. In addition, both prior audits and threat of audits increased the self-reported income compliance.

The tax compliance survey by Andreoni, Errard, and Feinstein (1998) does an excellent job summarizing the variety of theoretical and empirical research on tax compliance including how it has evolved from the AS model. As noted in their survey, examples of empirical tests using the AS model have focused on the influences of tax preparers, interactions with labor supply decisions, and cases when the audit probability is endogenously determined. The difference in a taxpayer's balance due or refund prepayment position is the timing of the payments within the year; in both cases, the tax liability remains the same. This survey like many others is silent on the influence of a taxpayer's prepayment position on compliance.

Prepayment Position

Under the Allingham and Sandmo framework, a taxpayer's prepayment position would not matter since their total tax liability remains unchanged; due to this, much of the tax compliance literature is largely silent on prepayment position being a contributing factor to noncompliance. Taxpayers with a balance due have received an interest-free loan from the government, whereas refund taxpayers have given the government an interest-free loan.

In times of a sluggish economy, changes in Federal Withholding Tables have been used to invigorate the economy. In theory, the reduced withholding in selected tax brackets would stimulate the economy by boosting the respective households' take-home pay increasing the demand for goods and services. Congress enacted such a stimulus in 1992 with the intention of increasing consumer spending by \$2 billion per month.⁵ However, tax liabilities were not adjusted; thus an estimated 8.9 million taxpayers would hold an unexpected balance due when filing taxes in 1993. More recently, it was estimated that the Making Work Pay Credit portion of ARRA may cause an increase in balance due taxpayers. Not all taxpayers are qualified for the additional tax credits to offset the change in their withholding.⁶ According to a 2009 TIGTA report, "the Making Work Pay Credit is to be advanced to taxpayers through their wages by a decrease in Federal income tax withholding. This creates the vulnerability that some taxpayers may have their taxes underwithheld at the end of Tax Years 2009 and 2010." The report found that more than 15.4 million taxpayers could unexpectedly owe taxes for the 2009 tax year since they were advanced more of the credit than they were entitled to

receive. TIGTA analyzed the changes to the withholding tables to identify groups that could potentially be advanced more Making Work Pay Credit than they are entitled to receive. They determined the tables did not account for taxpayer situations such as:

- Dependents who receive wages;
- Single taxpayers with more than one job;
- Joint filers in households where both spouses work or where one or both spouses have more than one job;
- Individuals who file a return with an Individual Taxpayer Identification Number (ITIN);
- Taxpayers who receive pension payments; and
- Taxpayers who are employed and receive Social Security or similar benefits.

In response, efforts have been made to publicize this issue and instruct affected taxpayers to adjust their withholding accordingly. How well the message was received is unknown.

Absent of outside influences, theoretical discussions attributed transaction costs and self-imposed, forced savings as reasons for a taxpayer's prepayment position.⁷ From the U.S. Treasury—Fact Sheet on the History of the U.S. Tax System—“[Prepayments] greatly eased the collection of the tax for both the taxpayer and the Bureau of Internal Revenue. However, it also greatly reduced the taxpayer's awareness of the amount of tax being collected, i.e. it reduced the transparency of the tax.” The transaction cost argument is the following—given that withholding reduces the transparency of the tax liability, individuals may optimize and find that the costs of properly adjusting their withheld income exceed the benefits. The forced-savings argument was born from some observations that a number of taxpayers voluntarily overprepay. The taxpayer optimizes by realizing that they cannot properly save income on their own, thus purposely over pay their withholding tax.

Christian et al. (1993) examined the relationship between prepayment position and tax preparers. Their work found that “paid-prepared returns have lower tax liabilities and that the reduction in tax liability is larger than the reduction in total prepayments.” Noncompliance was out of the scope of the paper, but they suggested that further research be done in regards to compliance and prepayment. There has been anecdotal and some experimental evidence that found balance due taxpayers are more likely to be noncompliant. Empirical examinations by Chang and Shultz (1990), and Adelsheim (1997) using the 1988 Taxpayer Compliance Measurement Program (TCMP) data found this positive relationship between a taxpayer's prepayment position and their underreported tax liability.

Prospect Theory

Kahneman and Tversky (1979) created prospect theory to explain situations not addressed by expected-utility theory, in particular shifts from risk seeking to risk aversion and vice versa.⁸ Prospect theory, a branch of behavioral economics, differentiates itself from expected-utility theory in three distinct ways. First, individuals make decisions based on a self-assigned intrinsic value relative to a neutral reference point rather than the individual's final monetary assets. Second, individuals are risk-seekers in loss domains and risk-averse in gain domains and the value function is steeper for losses than for gains. The curvature implies that a loss has a greater impact in an individual when compared to an equivalent gain. Finally, individuals' underweigh probable events when compared to certain events.⁹

This theory fits well as a framework for the taxpayers' apparent change in behavior due to their prepayment positions. Come filing season, a taxpayer would have an expectation of their tax liability, assumed to be zero additional liability.¹⁰ This expectation would be the individual's neutral reference point. Depending on the taxpayer's prepayment position, the individual may act risk seeking to lessen a balance due payment (a perceived loss) or risk averse to preserve a tax refund (a perceived gain). The taxpayer's behavior was presumably influenced by the taxpayer's perception of his probability of an audit and that probability of audit (and his perception of the probability) is generally influenced by what he reports on his return.¹¹

Such behavior has been observed in laboratory experiments. In these experiments all subjects hypothetically received the same level of net income by using "framing effects," net incomes were framed from either a gain (a refund due) or a loss (an additional tax balance due). An individual in the gain framework would be told that, in addition to their \$800 of assets, they would expect a refund of \$200. An individual in the loss framework would be told that their current assets were \$1100, and they would expect to pay \$100. Either way, all individuals would have a net income at \$1000 if a compliant return was filed. Depending on the frame of reference, the experiments found that those in a balance-due position were more likely to understate their tax liability.¹²

How the Current Study Differs from the Previous IRS Research

The main hypothesis in this research is that prepayment position causes a portion of underreporting noncompliance, whether this relationship exists or is simply a statistical illusion. Given a statistical relation, the direction of causation would need to be examined and the magnitude of the effect estimated. This question has not been examined in the context of the 2001 National Research Program (NRP). Unlike the TCMP data, the 2001 NRP can be linked to prior tax year

data. Examining the prepayment relationship with the TCMP and NRP datasets may lead to some general insights, for example, whether the incidence and size of the balance due effect is increasing, or whether the characteristics of balance due taxpayers are changing.

The previous IRS work mentioned above used Analysis of Variance (ANOVA) and did not analyze the prepayment effect in a fully multivariate framework. The ANOVA method controlled for single categorical causes of noncompliance one at a time. The previous work indicated a relationship but did not quantify it. Here a regression framework is used to simultaneously control for both categorical and continuous causes of underreporting noncompliance in order to isolate and quantify the hypothesized marginal impact of a taxpayer's prepayment position. The regression analysis in this study is not meant to predict reporting noncompliance; all other predictor variables were included specifically to isolate the impact of a taxpayer's prepayment position not to predict reporting compliance.

To further test the issue of causation, refinements to the regression model were needed. With the use of nonexperimental data like the TCMP and NRP datasets, a taxpayer's prepayment position and underreporting compliance are both determined by the taxpayer's behavior; in other words, they are endogenous. A prepayment position could cause a taxpayer to underreport, or both instances could be jointly caused by another external factor. If this external factor is not accounted for, then the estimated marginal impact of prepayment is potentially biased and inconsistent.¹³ Two additional methods are used to account for this causation issue. The first is to focus on a subsample of the population where the taxpayer's prepayment position is assumed to be less endogenous. The other is to use instrumental variables (IV).¹⁴ One equation estimates the taxpayer's prepayment position, while a second estimates understatement of tax liability.

In addition, this research could further contribute to the debate regarding the viability of prospect theory.¹⁵ The research can act as an empirical data-driven test to complement or refute the experimental evidence already found in support of prospect theory. If the results show that prepayment position causes noncompliance, this knowledge may help quantify consequences of adjustments to the Federal Withholding schedules. Finally, this research can also distinguish other characteristics of noncompliant returns by looking at the significance of the demographic predictors in the model.

Research Methods

Data

Research used archival taxpayer data collected for the 1988 TCMP and the 2001 NRP. Both datasets are stratified random samples and all regression analysis was weighted using NRP population weights to account for the stratification. The

older TCMP dataset was used to verify whether the paper's results were in line with the previous IRS research using TCMP. Like the Danish dataset generated in Klevin et al., all taxpayers in the TCMP and NRP were audited at random so the probability of audit is not determined by any characteristics of the return.

Two methods of regression analysis were performed on the data and will be discussed in detail in the methodology section. One method used the audit year's return information, the other required prior-year taxpayer information. In order to keep the dataset consistent between the two estimation methods, roughly 3,000 cases in the 2001 NRP dataset were excluded.¹⁶

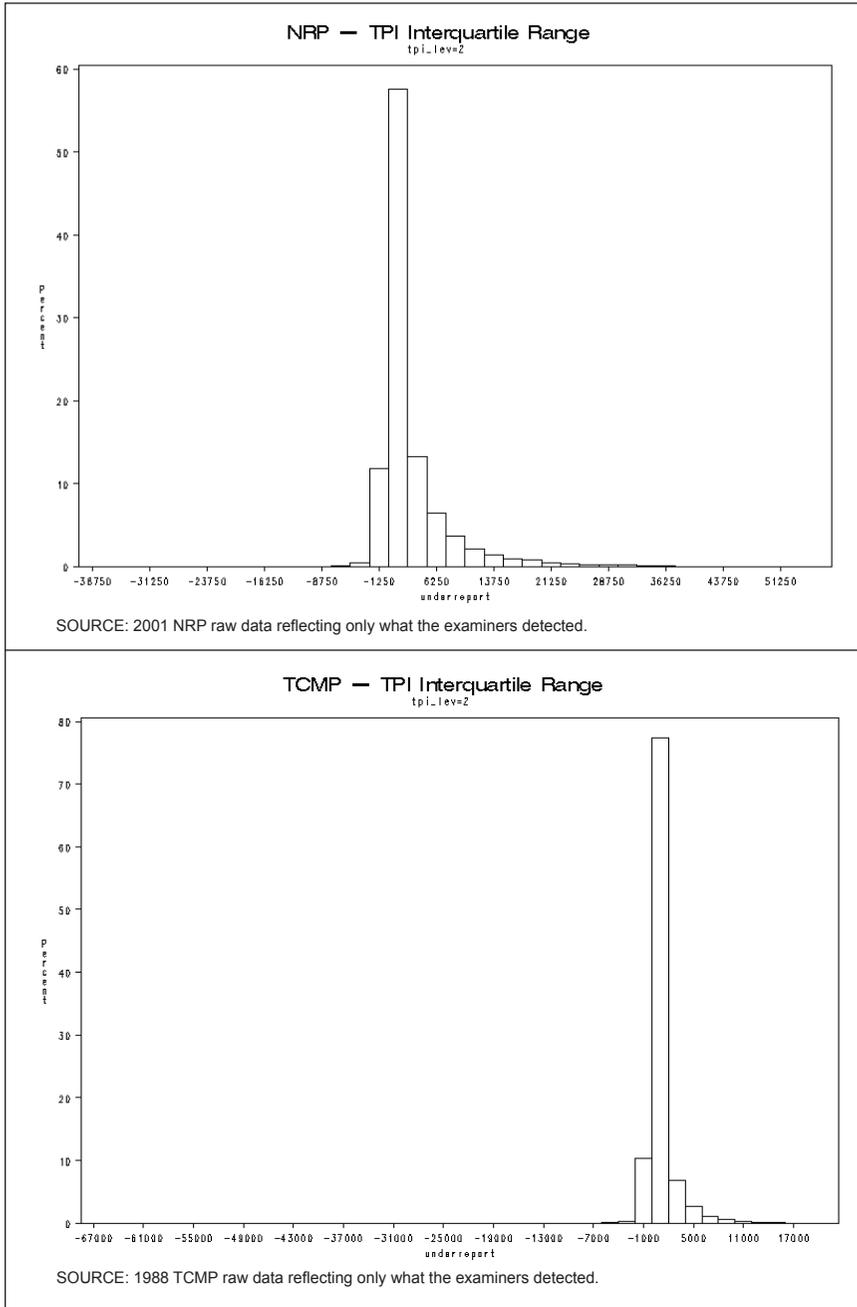
All the analysis used the audited 'as corrected' values for the predictor variables rather than the 'per return' or 'reported' values. This was done to minimize the correlation between all predictor variables and the immeasurable taxpayer non-compliance. The line item values reported 'per return' are likely highly correlated with a taxpayer's compliance inclination. Because of this high correlation, analysis using reported values would lead to the opposite conclusions. A noncompliant taxpayer would likely want to report a smaller than usual balance due or larger refund. It is counterintuitive for one to be noncompliant by paying a large sum to the government. The only variable using the taxpayer 'reported' values is underreporting, which by definition is the difference from the reported and the as corrected liability. All the results derived in the following sections were from the audited/corrected values and cannot be directly translated to any operational data. Operational data would only contain the reported values.

A LARGE NUMBER OF THOSE WHO HAVE A BALANCE DUE ALSO UNDERREPORTED TAXES

Figure 1 and Tables 1–4 show the descriptive statistics of the stratified TCMP and NRP datasets. Figure 1 shows a pair of unweighted histograms of the difference between reported and actual tax liability for both datasets with positive values corresponding to underreporting.¹⁷ If the errors were the result of mistakes, one would assume that errors were randomly distributed, with more or less equal numbers of over- and underreporting cases. However, both graphs exhibit a longer right-hand side tail in the distribution. This implies some amount of underreported taxes that cannot be attributed to random error.

The issue being addressed here is whether some of this underreporting non-compliance can be attributed to a taxpayer's prepayment position. Table 1 outlines a descriptive relationship between the taxpayers' prepayment position and their compliance in reported tax liability after both datasets were adjusted for the sampling stratification. The total percentages at the bottom of the table represent the estimated percent of the population that is in either prepayment position. According to the estimates about one in four taxpayers carried a balance due. The TCMP and NRP datasets roughly relay the same information: a higher proportion

FIGURE 1. Distribution of Change in Tax Liability (Underreport > 0 , Over report < 0)



of taxpayers who had a balance due also underreported their taxes (60.02 percent in TCMP, 61.99 percent in NRP) when compared to the proportion of taxpayers without a balance due after prepayments and underreported taxes (32.51 percent in TCMP, 32.28 percent in NRP).¹⁸

TABLE 1. Descriptive Statistics—By Prepayment Position† & Reporting Accuracy

Reported tax liability	TCMP	TCMP	NRP	NRP	
	no balance due	balance due	no balance due	balance due	
Overreported	5,500,863	2,012,321	6,120,977	1,728,002	Frequency
	7.15%	7.34%	7.50%	6.06%	Col Pct
Correctly reported	46,420,000	8,949,615	49,140,000	9,105,742	Frequency
	60.34%	32.64%	60.22%	31.95%	Col Pct
Underreported	25,010,000	16,450,000	26,350,000	17,670,000	Frequency
	32.51%	60.02%	32.28%	61.99%	Col Pct
Total	76,930,000	27,420,000	8,161,000,000	28,500,000	Frequency
	73.73%	26.27%	74.12%	25.88%	Percent

*Samples are weighted to compensate from stratification.
 **Totals are the weighted estimates of the population as a whole.
 †As established by the audits.
 SOURCE: Raw 1988 TCMP and 2001 NRP data.

In both datasets, of the taxpayers who carried a balance due prepayment position, less than 8 percent (7.34 percent TCMP, 6.06 percent NRP) were found to have overreported their tax liability. Slightly less than one-third (32.64 percent of TCMP and 31.95 percent of NRP) of the balance due group did not need an adjustment to their tax liability. Amongst the taxpayers who had a balance due, 60 percent also underreported their taxes. Both random audit data sets imply a correlation between reporting noncompliance and a balance-due prepayment position.

The previous IRS work by Adelsheim (1997) noted that in the taxpayer profiles of those who were slightly underwithheld and had a small balance due had a very similar profile to taxpayers who were owed a refund. Whether a taxpayer holds a slight balance due or a refund might be due to some randomness in slight reporting errors and miscalculations.

Taxpayers with large levels of underwithholding (resulting in large balance due payments) appeared to act more risky with larger underreporting of their tax liability. A reproduced version of the profile is Table 2. Returns with large balance due prepayment positions were associated with a large amount of underreported tax and had higher proportions of additional schedules. The average understated tax was \$104 for the non-balance due group and \$134 for the group with small balance due. Both were a fraction of the average underreported tax of the large balance-due group, which was \$976.

TABLE 2. TCMP Descriptive Statistics—Profiles by Prepay Position[†]

Variable	Exact withheld/ refund due	Balance due < \$120	Balance due > \$120
	Mean / %	Mean / %	Mean / %
Understatement of tax	\$104.00	\$134.00	\$976.00
Prepayment position	(\$934.00)	\$54.00	\$3,142.00
% w/ Interest income	57.30%	73.60%	79.34%
% w/ Dividend income	16.70%	22.68%	34.28%
% w/ Sch C	7.17%	8.90%	26.60%
% w/ Sch D	8.12%	7.96%	22.99%
% w/ Rental	9.21%	8.83%	24.04%
% w/ Sch F	1.36%	1.30%	4.57%
N	26,124	1,637	22,649

*Negative values denote overreporting/refund due.

[†]As established by the audits.

SOURCE: Weighted 1988 TCMP/Adelsheim 1997.

Table 3 is a similar profile with the weighted NRP data set. Again the data shows that the change in tax liability discovered via the random NRP audit is roughly the same magnitude for taxpayers who had a refund due and those who had a small balance due (an additional \$189.94 for refund due taxpayers and \$293.43 for small balance-due taxpayers). Taxpayers who had a large balance due had a tax change roughly 10 times as large as the refund-due and small balance-due taxpayers. Also, taxpayers with a large balance due often had a higher proportion of attached schedules.

TABLE 3. NRP Descriptive Statistics—Profiles by Prepayment Position[†]

Variable	Exact withheld	Refund due	Balance due—small*	Balance due—large
	Mean / %	Mean / %	Mean / %	Mean / %
Understatement of tax	(\$23.30)	\$189.94	\$293.43	\$2,468.17
Prepayment position	\$0.00	(\$2,284.63)	\$179.52	\$6,135.30
Primary age	57.84	41.89	46.50	50.92
% w/ Sch Aw	18.48%	36.53%	29.78%	52.26%
% w/ Sch C	10.09%	10.79%	15.91%	37.07%
% w/ Sch D	33.05%	19.43%	23.73%	33.93%
% w/ Sch E	22.40%	10.90%	11.27%	27.15%
% w/ Sch F	2.81%	1.25%	1.90%	3.94%
% w/ Interest income	75.18%	58.38%	67.04%	75.68%
% w/ Dividend income	46.26%	26.15%	31.66%	40.28%
N	589	21,011	2,027	18,252

*10th percentile of balance due.

**Negative values denote overreporting/refund due.

[†]As established by the audits.

SOURCE: Weighted 2001 NRP raw data reflecting only what the examiners detected.

The higher frequency of a Schedule C and other attachments along with balance due and underreporting falls in line with previous research.¹⁹ This link has been attributed to a number of reasons. The method of withholding is different for self-reported income. Reasons have been the added complexity of the return or the presence of less visible income. Taxpayers who are self-employed small business owners (ones with Schedules C or F) may also be inherently less risk-averse. Considerations were made in the model specifications to disentangle the effects of pure prepayment positions and prepayment position as a proxy for these other covariates.

Net Misreporting Percentage (NMP) is another way to view reporting compliance. NMP is defined as the sum across all observations of the net amount misreported divided by the sum of the absolute values of the amounts that should have been reported. Since misreporting induced by prepayment position might show up on any line, including refundable credits, the NMP was calculated on tax after refundable credits. Table 4 displays the NMP by various prepayment positions and income levels in the 2001 NRP dataset to show the major reasons why the amount of misreporting varies, and to what extent the rate varies. The table divides prepayment position by the 75th, interquartile range, and 25th percentiles of both balance due and refund due while excluding cases where the taxpayer had neither a balance due or refund due (2 percent of the sample). Total Positive Income (TPI) is also broken into three bins, TPI levels 1, 2, and 3, respectively corresponding to the 25th, interquartile range, and 75th percentiles.²⁰

TABLE 4. Net Misreporting Percentage by Income and Prepayment Position

TPI Level	Corrected Prepayment Position			Reported Prepayment Position		
	(1)	(2)	(3)	(1)	(2)	(3)
Large refund	10.95%	3.20%	0.80%	55.12%	12.38%	3.83%
Medium refund	8.19%	4.03%	2.06%	14.97%	7.87%	6.13%
Small refund	11.47%	4.90%	1.41%	12.02%	7.16%	22.47%
Small balance due	16.32%	5.35%	1.56%	12.19%	6.25%	10.39%
Medium balance due	26.55%	10.39%	2.81%	10.86%	7.85%	7.10%
Large balance due	34.15%	28.95%	10.17%	2.71%	9.27%	3.96%

Large, Medium, and Small prepayment are designated by 75th, interquartile range, and 25th of BD and RD even prepay comprised of 2 percent of sample and was included in small refund group. estimates weighted to compensate for stratification

SOURCE: 2001 NRP raw data reflecting only what the examiners detected.

This table breaks NMP by prepayment position defined on a per-return basis in addition to the as-corrected definition and shows evidence that there is a

difference in compliance broken down by corrected and reported prepayment position. Because of this, it must be emphasized that any of the results derived from this research cannot be used with operational or reported data. If a taxpayer was to be noncompliant, they would be very unlikely to report a large balance due, but may be found to have a large balance due after the audit. The noncompliant taxpayer would more likely report a smaller balance due or a larger refund rather than a smaller refund. In terms of reported prepayment position, a taxpayer who reports a large balance due is likely to be compliant.

Observing NMP by audited corrected prepayment position, there is a near monotonic increase in NMP going from a large refund due to large balance due at all income levels. A consistently higher portion of noncompliance was found in the balance-due domain than the refund due domain. A higher percentage of net misreporting was found in persons who are found to owe a large balance due.

The distribution of NMP by reported prepayment position is different than the corrected values. While noisier, the table does show what was expected: a higher proportion of taxpayers claimed large refunds due and a smaller proportion of taxpayers claimed large balances due. Specifically when comparing the large refund group to the small refund group in TPI level 2. Of those in the large refund group, there was 12.4 percent NMP compared to 7.2 percent in the small refund group and a large balance due prepayment position does not necessarily translate to larger proportions of NMP. The between-group differences are less consistent due to the fact that each group is muddled with a greater mix of compliant and noncompliant returns. A higher proportion of taxpayers have shifted into claiming better prepayment positions.

Theoretical Methodology

Taxpayers face a decision between complying by paying their full liability and non-complying and facing an increased chance of an audit. The prospect theory model assumes that an individual taxpayer's compliance decision is partially determined by their actual prepayment position. The taxpayer is assumed to sequentially do the following:

- Enter the filing process with some expectation of either a refund or balance owed based on prior experience;
- Draft a return;
- Realize the true prepayment position of a balance due, refund due or neither; and
- Make a compliance decision (finalize draft or change income/ deductions/credits).

In more detail, the model assumes that a taxpayer does not directly calculate his or her full tax liability to make a compliance decision. Instead the taxpayer assumes that after credits and deductions and their withholding prepayments that they have properly paid their tax liability. This is their reference point when filing their taxes, an expected zero additional liability.²¹ Once the tax return is drafted, the individual realizes their prepayment position. Either they fall in a zero-prepayment position, a balance-due position or a refund-due position. Based on the prepayment position, the taxpayer makes a compliance decision. The taxpayer then considers oneself to be in the loss domain if he or she has a balance due and is more likely to act risk-seeking to minimize loss. If the taxpayer is in a refund due position, he or she is likely to act risk averse to preserve their perceived gain. The result is the characteristic S-shaped value curve associated with prospect theory.²²

Empirical Methodology

WEIGHTED LEAST SQUARES

Least-Squares Regression analysis was used with the two datasets to explore the hypothesis that taxpayers with a balance due before remittance understate their tax liability more than an equivalent refund-due taxpayer.²³ The NRP data used in the analysis excluded roughly 3,000 cases. The excluded cases' primary TIN did not match a primary TIN used on a return for the prior 2 years. This was done to keep the dataset consistent with the dataset used in the Instrumental Variable refinement described later.

The weights adjusted to compensate for the oversampling stratification performed in TCMP and NRP. Necessary for the Weighted Least Squares (WLS) estimation to be valid, the right-hand-side regressors must be exogenously determined. An exogenous prepayment position could result from a policy that changed withholding for a given year. The regression was intended to simultaneously control for other factors that influence taxpayer underreporting and quantify how much a person's prepayment position affects underreporting. To get a baseline set of results, a WLS dummy variable regression was performed. Research estimated with two model specifications; one using WLS on the NRP dataset, the other to estimate after segmenting the NRP dataset, into three income groups.²⁴

The model for an individual's reporting decision can be stated as follows:

$$(1) \quad u = \beta_0 + \beta_1 BD + \beta_2 RD + x'_C \beta_3 + x'_{CD} \beta_4 BD + x'_{CD} \beta_5 RD + \varepsilon_u$$

Where in equation (1) the parameters β_j are to be estimated from the regression and ε_u is the random error term.²⁵

The individual's understatement of taxes (u) will be measured as the difference between the tax liability prior to refundable credits as determined by the examiner and tax liability stated by the taxpayer.²⁶

VARIABLES OF INTEREST

Prepayment position is measured by the difference between the tax liability and the total tax payments, both as determined by the tax examiner. This is broken up between balance due and refund due.²⁷ The outputs of interest are the parameters β_1 and β_2 which are the marginal effects of the two prepayment positions on reporting compliance holding all other predictors constant. If prospect theory holds, it is expected that the parameter on the balance-due prepayment would be positive ($\beta_1 > 0$); a taxpayer would be more willing to run the risk of an audit and underreport because of the perceived loss. Likewise the parameter associated with refund due would be negative ($\beta_2 < 0$); the taxpayer would act risk averse to preserve his or her gain. Alternatively, if taxpayer behavior is guided by expected utility as outlined in the standard AS model, prepayment position would have no influence on the taxpayer's reporting compliance; the parameters β_1 and β_2 would not be significantly different from zero. An additional indicator variable captured cases of no prepayment position where withholding exactly covers the tax liability. Its associated parameter estimate is expected to not be significantly different from zero.

OTHER COVARIATES

In order to ensure that the parameter estimates β_1 and β_2 report the change in underreporting caused only by prepayment position, the regression equation includes other profiling variables. The vector x_c contains return-specific characteristics noted in the previous literature that may also explain this withholding phenomenon, details are provided below. The intent is to isolate the effect of a taxpayer's prepayment position. This vector contains sets of dummy variables for the following characteristics—different occupation codes, varying types of income sources, and return complexity.²⁸ The vector x_{CD} contains select dummy variables from x_c which are interacted with the prepayment variables. The interactions were done in attempt to further isolate the marginal effect of prepayment position on compliance.

Liquidity constraints can explain why a taxpayer carried both a balance due and underreported tax liability. The constraint could be caused by a myopic savings plan throughout the year or from a negative financial shock (car repair, medical costs) realized by the individual. If the individual had a balance due and liquid assets to pay, they would pay the balance rather than face an audit. However if the individual was liquidity constrained, without the available assets to pay off the balance due, they might resort to underreporting. The indicator for interest income serves as a proxy for liquidity if the taxpayer has sufficient interest income to generate a Form 1099-Int then he or she likely has enough liquidity to pay off their balance due.

List (2004) found that the behavior outlined by prospect theory declines with further experience, so the taxpayer's age may play a role with their underreporting compliance and prepayment position. Income is thought to play a role in compliance; however the pure TPI amount can be misleading since the purchasing power can vary by states. An indicator on the existence of a state income tax and rescaling the taxpayer's TPI by the 2001 median state income adjusts for regional effects and influences of the current condition of the economy.

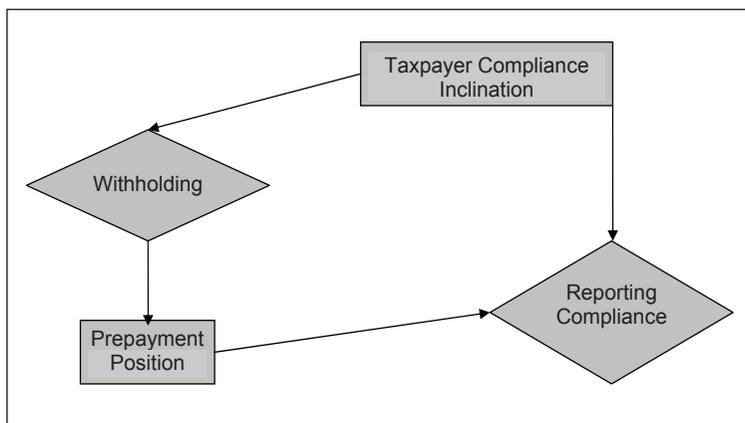
Indicators for Schedules C and F are intended to account for some of the characteristics such as return complexity, opportunity (or visibility) of certain fungible income, and expenses items as detailed in the data section. In addition, the analysis included the calculated Discriminant Function System (DIF) score for each taxpayer. In standard audits, some returns are selected for examination based on a DIF score. The DIF score rates the potential for change in a return, based on past IRS experience with similar returns. The highest-scoring returns are screened by IRS personnel identifying the returns most likely to need review. Here, the DIF score is used as a catch-all variable for noncompliance and accounts for a taxpayer's expectation for audit. Because of game theoretic inner monologues, the taxpayer's expectation of their audit probability would influence what is reported on their return. Hopefully the DIF captures these variations not identified with the indicator variables.

Inherent with the least-squares regression analysis, research can observe whether these other factors significantly contribute to underreporting. Research can test the significance of the estimated vectors β_3 to identify other drivers to underreporting. The statistical significance of the covariates could also be used to check the validity of the models. For example, if the models find that underreporting does not increase with higher DIF scores then there are likely issues with the specification of the model.

EMPIRICAL REFINEMENTS

An issue in the model is causation. As shown in Figure 2, the amount that taxpayers underreport and their prepayment position are both determined by the taxpayer. Since both are determined by the taxpayer, it is possible that the two variables are jointly caused by a taxpayer's unaccounted noncompliant behavior, so the resulting estimates from the previous model could be biased and inconsistent.²⁹ The DIF score can be used as a proxy for a taxpayer's noncompliant behavior, but it may not be sufficient.³⁰ To attempt to account for the endogeneity of prepayment position, two approaches were used. Each used the NRP dataset joined with return information from the previous 2 years.³¹

FIGURE 2. Flow Chart of Causation/Endogeneity Issues



INSTRUMENTAL VARIABLES

One approach used to correct for endogeneity was Instrumental Variables (IV) estimation.³² The system consisted of a pair of equations. Since an individual's underreporting depends both on prepayment position and his or her inherent compliance inclination, the estimation must be performed in stages. The first stage (equation 2) estimated a taxpayer's prepayment position in terms of all the external variables. The first stage regression fitted estimates of prepayment position were assumed to have corrected for the correlation between prepayment and noncompliant behavior. The second stage (equation 3) consisted of a modified version of the previously defined underreporting equation. The fitted estimates used from the equation for prepayment position that are no longer correlated with the error term.

$$(2) \text{ First stage: } PP = \delta_0 + \delta_1 PP_{t-1} + \delta_2 PP_{t-2} + z'\delta_3 + \varepsilon_{PP}$$

$$(3) \text{ Second stage: } u = \beta_0 + \beta_1 \hat{BD} + \beta_2 \hat{RD} + x'_C \beta_3 + \text{interaction terms} + \varepsilon_u$$

For an individual taxpayer, the vector z contains profiling variables of prepayment position. In order to make the model tractable, identifying assumptions mentioned below were made on the structural form of the system of equations. Some of the variables in the vector z may also reside in x_c but the vectors cannot be identical or linear combinations of each other. The variables that reside in vector z directly instrument for prepayment position are assumed to be correlated with prepayment position, but are not correlated with the decision to underreport in 2001 (reside in vector x_c).

Variables that influence prepayment and the reporting decision are assumed to be the current (NRP) year line items. These line items reside in both vectors x_c and z . It is assumed that the decision on reporting compliance is made annually; the decision largely depends on the individual's current tax situation. The taxpayer's decision on the amount to withhold, and thus his or her prepayment position is thought to be more backward looking, adapting from the prior years. The taxpayer's prior year's prepayment positions from 1999 and 2000 and the change in tax liability from 1999 to 2000 and from 2000 to 2001 (PP_{t-1} and PP_{t-2}) were used to instrument for the 2001 NRP tax year's prepayment positions. While it is feasible that what an individual's prior years' filing has influence on the current year, it is assumed that prior years' results only influence the 2001 reporting compliance via the 2001 prepayment position.

By running the IV estimation on the system of equations, it can be verified whether the results of estimating the previous WLS equation (1) may be an illusion of statistical feedback. The Hausman test was used to determine the severity of the endogeneity problem with the prepayment position variables.

SUBSET ANALYSIS

The second approach utilized the prior-year information to create a subset which had taxpayers with relatively stable withholding throughout the prior 2 years, but then realized a large absolute change in tax liability during the NRP year. Here it is assumed that the steady withholding but large change in tax liability (as found by the audit exam) resulted in an unexpected large prepayment position shock. If this large prepayment position is unanticipated then it is not determined by the taxpayer, thus reducing the endogeneity and the issue of bias. The rationale behind the reduction of endogeneity is consumption smoothing. If a taxpayer was aware of a large change in liability, one way to reduce the large financial shock would be to change the amount withheld; distributing the additional tax paid (or money received) throughout the year, rather than in a lump sum during tax season.

What accounted for 'stable' withholding was a withholding amount that stayed within an upper bound of an absolute change of 15 percent of the previous year. A 'large' absolute change in tax liability had a lower bound of a 20-percent change. Other bounds for 'stable' withholding and 'large' tax change were tested by incrementing each by ± 5 percent and ± 10 percent. The chosen subset data consisted of 7,365 cases. This specification struck a balance between a robust sample and sample size.³³ Table 5 compares the profiles of this subset to the remaining population within the NRP dataset. Based on the attached schedules, the two populations appear similar, with the subset population having slightly higher proportions of taxpayers with Schedule A attachments and interest income. For the subset population, there is a near one-to-one relationship with the average change in tax

liability and prepayment position. If there was a causal relationship, it would appear that the balance due amount nearly accounts for the change in tax.

TABLE 5. NRP Descriptive Statistics—Comparing Subset Population

Variable	Stable withheld & large tax change	Remaining sample
	Mean / %	Mean / %
Primary Age	49.600	42.744
Change in tax	547.00	674.01
Prepayment position	608.89	1337.48
% w/ Sch A	0.459	0.367
% w/ Sch C	0.133	0.169
% w/ Sch D	0.208	0.233
% w/ Sch E	0.124	0.147
% w/ Sch F	0.019	0.018
% w/ Interest income	0.713	0.602
% w/ Dividend income	0.308	0.293
N	7363	34499

SOURCE: Weighted 2001 NRP raw data reflecting only what the examiners detected.

Limitations and Deviations

Deviations from the original research plan revolve around one model assumption that was changed: the causal relationship between prepayment position and reporting compliance. Initially, the plan was to test whether prepayment position caused reporting compliance or reporting compliance caused prepayment position (via withholding amount). After the plan was submitted, it was thought that prepayment position is not likely caused by the reporting compliance decision; rather both were caused by the taxpayer's willingness to comply with the tax authority. Because of the change in the assumptions, the estimation method changed from a multivariate system of equations to Least Squares/Instrumental Variable estimation.

Also, the emphasis on reporting the marginal effects of the other covariates has been downplayed. All the regression results can be found in the appendix to see the influences of the other variables. The results largely fall in line with previous research, such as a higher DIF score corresponding to a higher degree of reporting noncompliance. Some parameter estimates appeared counter to prior research, such as greater reporting compliance from taxpayers with an attached Schedule C in the TCMP regressions. However, accounting for interaction terms with the attachment aligns the regression results to prior research. Fully dedicating a section outlining all the intricacies from the multiple models were thought to be too

tangential and take focus away from the main objective in testing the significance of prepayment position on reporting compliance.

One limitation of the research involves correcting for the endogeneity of a taxpayer's prepayment position. With the endogeneity, the WLS analysis would report an upper-bound estimate of the effect of a balance-due payment and a lower-bound estimate for a refund. The two model refinements may not fully compensate for the bias generated from not being able to quantify a taxpayer's willingness to comply. The subset analysis of the 2001 NRP may not have completely isolated taxpayers who had an unexpected prepayment position. The fact that the taxpayer had 'stable' withholding and a 'large' tax liability change from the prior year does not necessarily mean that the prepayment position was a shock. If the prepayment position was not a shock, then the subset did not correct for the endogeneity. The IV estimation may have been mis-specified. The line items chosen as instruments may be weakly correlated with prepayment position so the estimates were a poor fit to the model or the instruments chosen are still correlated with the reporting compliance error term.

Another potential limitation involves the reference point in terms of this prepayment behavior phenomenon. Schepanski and Shearer (1995) argued that the neutral reference is not zero additional liability (no balance due or refund due) but rather the expected prepayment position. With their expected asset condition as the true reference point, they argue that a taxpayer who expects a large balance due, but only realizes a small balance due would consider that within the gain domain, thus act risk averse. Likewise, a taxpayer who expects a large refund but gets a marginal refund would view that as a loss, and may act risk seeking to capture a larger refund. Given that a taxpayer's expectations are not coded in the random audit data, it is operationally difficult to test this behavior.

Research Findings

This research is to examine which prevailing economic theory coincides with the reality of reporting compliance. Prospect theory posits that an individual will be risk seeking in the face of a perceived loss; the same individual will act cautious to maintain a perceived gain. Thus prospect theory would expect a balance-due individual to seek relatively more risk, a refund individual, relatively less risk. In addition, the theory states that a loss has a greater impact on an individual's behavior when compared to an equivalent gain. The subsequent regression analyses were formed in light of this theory. Standard utility theory would suggest that prepayment position has no significant influence on tax reporting compliance; if so, the estimates should not be significantly different from zero. The following regressions were not intended to be used as a way to forecast or predict reporting noncompliance.

Impact of Prepayment Position on Reporting Compliance—WLS

Using WLS estimation under a number of specifications, it was consistently found that taxpayers’ behavior changed when presented with a balance-due or refund-due prepayment position and loss aversion.³⁴ The parameter estimates from WLS are reported in Table 6 and is segmented by modeling with and without interaction terms. The interactions were done in attempt to further isolate the marginal effect of prepayment position on compliance and are further examined in Table 7.

The interpretation of the parameter estimates are marginal effects; ‘for an incremental dollar balance due/refund due, the tax change from audit is \$X,’ with all other variables held constant. The balance-due and refund-due prepayment position variables were coded in dollar terms. In the regression without interaction terms, the marginal effects of the prepayment positions are the actual parameter estimates associated with the prepayment variables.³⁵

Referencing the ‘Exactly Withheld indicator variable, it was consistently found that taxpayers who had perfectly prepaid their liability (received neither a balance due or refund) were less likely to underreport their tax liability. Under the different model specifications, all of their associated parameter estimates were negative and or not significantly different from zero.

TABLE 6. Prepayment Parameter Estimates from WLS

Dependent Variable: Misreported Tax (underreport > 0, over report < 0)				
Without Interaction Terms				
Parameter	Full sample	TPI Level 1	TPI Level 2	TPI Level 3
Bal due	0.162**	0.287**	0.465**	0.151
	(0.002)	(0.006)	(0.004)	(0.004)
Refund	0.032**	-0.066**	-0.006	0.030
	(0.002)	(0.004)	(0.005)	(0.004)
No prepay pos	-304.656	-70.534**	-110.639	-2588.335
	(208.849)	(28.699)	(191.140)	(7553.931)
With Interaction Terms				
Parameter	Full sample	TPI Level 1	TPI Level 2	TPI Level 3
Bal due	0.404**	0.378**	0.501**	0.383
	(0.011)	(0.022)	(0.013)	(0.024)
Refund	-0.052*	-0.074**	-0.074**	-0.067
	(0.030)	(0.020)	(0.016)	(0.157)
No prepay pos	-340.829*	-64.225**	-300.256	-942.581
	(200.949)	(28.138)	(185.499)	(7332.515)

Appendix F has Table F1, which outlines the parameter estimations different model specifications.

Standard errors in parenthesis, ** p < 0.05; * p < 0.10.

Under the two model specifications with and without interaction terms, at a statistically significant level, holding a balance-due prepayment position was consistently shown to result in an increase in underreporting noncompliance. This result holds using the full sample and at each income level. A different behavior is shown when taxpayers have a refund due. All specifications show that a refund due is associated with smaller absolute changes in reporting compliance. The reaction to the loss condition is much greater than the reaction to the gain condition. For example, the regression performed on the population with income between the 25th and 75th percentile (TPI level 2). The marginal effect of an additional dollar balance due is an additional \$0.47 in underreported taxes discovered. This model predicts that a taxpayer found in a balance due would not underreport to completely remove their additional amount owed. This can be attributed to the taxpayer rationalizing using game theoretic elements. It would be better to underreport by a fraction and be required to pay back a smaller amount rather than run the greater risk of an audit by underreporting until the amount owed is zeroed. The marginal effect of an overpayment is a tax change of -0.006; the taxpayer would overreport his or her liability by less than a cent. In the taxpayer in a refund position is not likely to have reporting noncompliance.

These parameter estimates further support prospect theory, in that an individual is much more risk seeking. The individual is willing to underreport their tax liability to reduce a perceived loss when compared to the risk aversion to maintain a perceived gain. If expected-utility theory held, the estimates for balance-due and refund due would be identical or not statistically significant. The WLS regression using the 1988 TCMP dataset resulted in similar parameter estimates. At all income groups a balance due prepayment position was found to increase noncompliance by around \$0.30 for every dollar due. These results are in Appendix G.

While promising, the results from the analysis without interaction terms reported first section of Table 6 may be confounded with other causes of underreporting noncompliance. Table 7 extends the results of the second section of Table 6 and shows the marginal effects of the prepayment positions on tax reporting compliance when accounting for interaction terms.³⁶

The information in Table 7 also agrees with prospect theory after the interaction terms are considered. Any interaction term that was found to be not significantly different from zero was excluded in Table 7. The parameter estimates on the interaction terms report that among balance-due taxpayers, those with interest income are less likely to underreport their tax liability. It appears that liquidity indeed plays a role.

The presence of increased complexity and fungible income not subject to third-party reporting was captured by the presence of a Schedule C or Schedule F attached to the Form 1040. The inclusion of a Schedule C was found to increase underreporting when interacted with the balance due variable and it was found largely insignificant when interacted with the refund-due prepayment position.

Unexpectedly, in the most general regressions, inclusion of a Schedule F decreased underreporting. In those instances, the marginal effect was relatively small, and in most of the income-group regressions, the interaction with Schedule F attachments were found not significantly different from zero.

TABLE 7. Net Misreporting Percentage by Income and Prepayment Position

Parameter Estimates—Prepayment and Interaction Terms				
Balance Due				
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
BD/RD	0.404	0.378	0.501	0.383
x Interest	-0.225	—	-0.136	-0.211
x Sched C	0.218	0.230	0.193	0.188
x Sched F	-0.020	—	-0.050	—
x Age > 65	-0.110	-0.140	-0.175	-0.111
Refund				
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
BD/RD	-0.052	-0.074	-0.074	-0.067
x Interest	0.113	0.021	0.058	—
x Sched C	0.058	—	—	0.063
x Sched F	-0.012	—	—	—
x Age > 65	-0.095	0.047	—	-0.102

*All estimates from interactions that were not statistically significant were excluded and can be found in Appendix F.

Cumulative Effect of Prepayment With Interaction Terms				
Balance Due				
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
All interactions	-0.110	0.468	0.333	0.250
No interest	0.492	0.468	0.469	0.461
No sch C	0.050	0.238	0.141	0.062
No sch F	0.287	0.468	0.383	0.250
Age < 65	0.377	0.608	0.508	0.361
Refund				
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
All interactions	-0.095	-0.006	-0.016	-0.107
No interest	-0.101	-0.027	-0.074	-0.107
No sch C	-0.045	-0.006	-0.016	-0.169
No sch F	0.025	-0.006	-0.016	-0.107
Age < 65	0.108	-0.053	-0.016	-0.005

SOURCE: Raw 2001 NRP data.

List (2004) found that the behavior predicted by prospect theory dissipates with experience in a given market. Thus we might anticipate the prepayment effect to dissipate due to taxpayer age. The interaction with the senior citizen dummy (along with an age by years) variable was included. The marginal effect of age did not have a significant effect on underreporting compliance, but the parameter

estimates were found to be mostly negative. Interacted terms with the age indicator variable predicted a decrease of around \$0.10 in underreporting noncompliance. 'Experience' with tax filing did not fully explain the balance due noncompliance and the over 65 years indicator might be capturing other effects associated with those types of taxpayers.

The cumulative effect of a prepayment position inclusive of all the interaction terms is also reported in Table 7. With all the interaction terms included (along with different combinations of interactions) the taxpayers still appear to be more compliant if they have overpaid and more noncompliant if they have a balance due. Once again, the results follow the predictions of prospect theory.

PREDICTED NONCOMPLIANCE ASSOCIATED WITH TIGTA REPORT

The 2009 TIGTA report has a series of illustrative examples on how the Making Work Pay Credit and a taxpayer's situation might result in the individual being in the balance-due prepayment position. Some of the scenarios are duplicated below. Following the examples, Table 8 estimates the underreported tax liability predicted from the OLS regression.³⁷

Example 1: A taxpayer is claimed by his or her parents and works for the entire year during TY 2009. By the end of the year, this taxpayer will have had \$400 less withheld from his or her wages. Since he or she is claimed as a dependent, this taxpayer is not eligible for the Making Work Pay Credit and will therefore have to pay back the \$400 that he or she was advanced in the form of decreased withholding during the year. If this taxpayer usually receives a \$200 refund, he or she will owe \$200 when his or her TY 2009 tax return is filed.

Example 2: An unmarried taxpayer has two jobs for all of Calendar Year 2009. By the end of the year, this taxpayer will have received \$800 through reduced withholding. As a single filer, the taxpayer is eligible for only \$400 of the Making Work Pay Credit and will, therefore, have to pay back the extra \$400 that he or she was advanced in the form of decreased withholding during the year. If this taxpayer usually receives a \$200 refund, he or she will owe \$200 when his or her TY 2009 tax return is filed.

Example 3: A single taxpayer receives pension payments, receives Social Security benefits, and is employed for the whole year during Calendar Year 2009. This individual will receive \$400 through his or her pension, \$400 through his or her wages, and \$250 from the Social

Security Administration. By the end of the year, this household will have received an extra \$1,050. As a single filer who is employed, this individual is eligible for \$400 and will, therefore, have to pay back the extra \$650 that he or she received during the year. This scenario is exacerbated if taxpayers have more than one job.

TABLE 8. Predicted Effect of Balance Due on Underreported Income*

	Example 1	Example 2	Example 3
Balance due	\$400	\$200	\$650
Marginal effect	0.387	0.366	0.191
Predicted underreporting	\$154.80	\$73.20	\$124.15

*Assumes different marginal effects based on demographics.

SOURCE: WLS regressions using 2001 NRP.

If taxpayers act as prospect theory predicts, then people presented with an unexpected balance due would underreport their tax liability.

Refinements

The previous analysis implicitly assumed that a taxpayer's prepayment position was not determined by the taxpayer. It assumed that the balance due or refund due was caused by something external from the taxpayer. If the taxpayer's prepayment position and the amount of underreported tax are determined by taxpayer's annual compliance behavior, then the estimates predicting how much prepayment causes underreported taxes are biased and inconsistent.³⁸ Due to this omitted variable bias, the estimates predicting the effect of a balance-due prepayment position will be biased upwards, overstating the actual effect. Likewise, the effect of a refund would be bias downwards, understating this prepayment position's effect on underreporting noncompliance.³⁹ To address the issue of mutual causation (endogeneity) of a taxpayer's prepayment position and underreporting compliance, two refinements to the original model were performed. The first used the instrumental variable (IV) estimation approach; the second restricted the dataset to a subset of taxpayers who may have a more exogenous prepayment position.

IMPACT OF PREPAYMENT POSITION ON REPORTING COMPLIANCE— IV ESTIMATION

Withholding and prepayment positions and changes in tax liability from previous years were used as instruments for the 2001 NRP year prepayment positions. Hausman test statistics verified the need for IV estimation for the lower two TPI levels. The results from the IV regressions are in Appendix H. Table 9 focuses on the prepayment position variables. The sign of the IV parameters shows that

the balance-due prepayment position increases underreporting and refund due decreases underreporting. However, the influences for all prepayment parameter estimates are not significantly different from zero.

TABLE 9. IV Prepayment Parameter Estimates

	TPI Lev 1	TPI Lev 2	TPI Lev 3
Bal due	0.524 (1.96)	2.631 (3199.20)	1.253 (1.23)
Refund	-0.439 (1.27)	-3.335 (3.88)	-6.044 (17.51)
BD x interest	-0.468 (1.19)	-3.132 (0.68)	-1.268 (1.45)
RD x interest	0.444 (1.26)	3.465 (1048.80)	6.143 (17.36)

Standard errors in parentheses.

SOURCE: 2001 NRP.

Since the parameter estimates are not significantly different from zero, the IV estimates imply that the timing of the payments does not matter in a taxpayer's underreporting compliance decisions. These results align with traditional economic theory.

As reported in Appendix H, many of the other predictor variables are found to have little influence on underreporting. The DIF score is found to have a positive correlation with underreporting noncompliance for the TPI level 1 and TPI level 3 groups, but not for TPI level 2 taxpayers that make up the interquartile range (nearly half of the sample). With the high-income (TPI level 3 group), the Hausman Test statistic could not reject the hypothesis that the WLS estimation was efficient. However, the strength of the Hausman test is reliant on the strength of the IV regression. This concern is discussed in more detail in the conclusions and Appendix E.

IMPACT OF PREPAYMENT POSITION ON REPORTING COMPLIANCE— SUBSAMPLE

Restricting the sample to taxpayers with consistent withholding implies that the taxpayer expected business as usual from the previous years. The hope was that this subgroup captured those who were not making their prepayment position as a joint compliance decision with their reporting of tax liability, thus an exogenous taxpayer prepayment position. These results are reported in Table 10 and in Appendix I. The results with the subset of data are similar to the prior WLS analysis—a balance due prepayment position significantly contributes to greater underreporting of taxes but a refund due has a much smaller absolute influence on tax compliance.

TABLE 10. NRP WLS Regression—Stable Withholding

Dependent Variable: Misreported Tax Liability (underreport > 0, over report < 0)				
Parameter	Full Sample estimate	tpi_lev=1 estimate	tpi_lev=2 estimate	tpi_lev=3 estimate
State income tax	-20.206	52.801	-59.054	-361.690
	(65.278)	(48.147)	(44.861)	(553.374)
Bal due	0.730**	1.465**	0.594**	0.709
	(0.028)	(0.088)	(0.035)	(0.067)
Refund	-0.047	-0.048	-0.055	0.311
	(0.031)	(0.049)	(0.026)	(0.426)

Standard errors in parentheses.

** p < 0.05; * p < 0.10.

SOURCE: 2001 NRP, stable withhold ≤ ±15% change in withholding.

Conclusions and Recommendations

Conclusions

TAXPAYERS’ REPORTING COMPLIANCE IS CORRELATED WITH PREPAYMENT POSITION

The first estimation method by weighted least-squares assumed that the prepayment position was exogenously determined. This assumption could be valid in cases where policy changes temporarily adjust the withholding tables, but ultimately the amount a taxpayer withholds and prepays is determined by the taxpayer. The subset model filtered the NRP data to taxpayers who most likely had an exogenously determined prepayment position and the IV model used fitted estimates of the prepayment variables. Table 11 summarizes the analysis performed to test which economic model aligns with taxpayer behavior. Different signs of the balance-due and refund-due parameter estimates indicate that behavior is reference dependent. Coupled with oppositely signed estimates, a greater magnitude of the balance-due parameter implies loss aversion, a perceived loss has a greater impact in an individual when compared to an equivalent gain. Parameter estimates with opposite signs and different magnitudes support Prospect theory if, at minimum, the balance due parameter is statistically significant.

Most of the results suggest that taxpayers react to a balance-due prepayment position with an increase to underreporting noncompliance. To a lesser extent, there appears to be a decrease in noncompliance when presented with a refund. This is consistent with the behavior outlined by Prospect Theory: individuals behave differently depending on their perceived loss or gain in reference to a neutral point; a perceived loss generates a stronger reaction than an equivalent gain.

Among all the different regression analyses and robustness checks performed, the results from the high income group (TPI level 3) were found to be the strongest. Balance due significantly contributed to underreporting and refunds reduced underreporting.

TABLE 11. Summary of Report Findings

	WLS	Subset	IV
Different Signs	x	x	x
Loss aversion	x	x	
Statistically significant BD	x	x	
Statistically significant RD	x		

SOURCE: NRP and TCMP regressions.

INSTRUMENTAL VARIABLES RESULT IN QUESTION

Whether or not the significant parameter estimates found in the WLS and subset analysis was a statistical illusion has not been resolved. Due to endogeneity, these results report upper-bound estimates of the effect of a balance-due payment and a lower-bound estimates for a refund. The lack of statistically significant predictors with the Instrumental Variable estimation is a concern. The presence of additional Schedules and many of the other covariates that have historically been found to increase reporting noncompliance were found not to be statistically significant. The DIF score used for audit selection was not found to be a good predictor of taxpayers within TPI level 2, the bulk of the taxpaying population. This can be attributed to either a model mis-specification with poor instruments or improper weighting by using the wrong tool in the statistical package. If the model is improperly specified, then an alternate model with different instruments must be considered. By not properly accounting for the sample's stratification, the statistical package is not properly weighting the data; the parameter estimates are consistent but then the standard errors and test statistics are incorrect and the computer may understate the statistical significance of the estimates. Because the IV estimates are in question, Research cannot fully conclude that the results fully prove or disprove the change in reporting behavior due to prepayment position, but there is an indication that there may be a causal relationship.

Recommendations

The results show, at minimum, that this relationship between a taxpayer's prepayment position and underreporting tax compliance should be further examined. Understanding the behavior of taxpayers increases the efficiency of future research and targeted policy changes involving taxpayers' withheld tax prepayments.

INCREASED EDUCATION ON WITHHOLDING AND RELATED POLICIES NOT CLASSIFYING RETURNS

Most of the results show that there are differences in reporting compliance dependent on the taxpayer's prepayment position. The results should support preventative measures against unexpected prepayment positions. The biggest reasons for underwithholding are life changes, and unexpected income that's not fully withheld, all coupled with lack of information. Better education on withholding and policy changes and wider access to the withholding calculator would alert the taxpayer about the proper amount of income to prepay. Reducing the number of balance-due taxpayers potentially reduces the amount of reporting noncompliance.

These results—that prepayment position plays a role in underreporting compliance—should not be misconstrued into using prepayment position to classify returns. At the time of classification, only the reported values are known, and there is a distinction between the reported and the as-corrected by audit prepayment positions in NRP and TCMP.

ADDITIONAL RESEARCH NEEDED

Most of the results show that there are differences in reporting compliance dependent on the taxpayer's prepayment position. This should not be a complete recommendation in support of prospect theory. Even with random audit data from the NRP and TCMP, the endogeneity of taxpayer's withholding, thus prepayment position, is still an issue. The Instrumental Variable method was used in an attempt to correct for this endogeneity issue. Other model specifications and methods of analysis could test the robustness of the results. Some of these refined models to test the interaction could be made with minimal additional data acquisition and manipulation.

ADDITIONAL RESEARCH—EXAMINE REFERENCE POINTS

This model assumed that the taxpayer expects that his or her remaining liability after prepayments is at or near zero additional dollars. Schepanski and Shearer (1995) noted that a taxpayer's reference point is likely not zero liability but is likely close to the taxpayer's expected prepayment position. If this is the reference point, then analysis with as-corrected prepayment positions becomes less clear. Taxpayers who expect a large refund (because of last year's return) but actually realize a small refund could consider themselves in the loss domain. Likewise, those who expect to owe a large balance due, but realize a small balance due could interpret this realization as a gain. Extending the data to include more prior years could help this line of research. An expectation of prepayment position can be

generated by averaging the taxpayer's income-adjusted prepayment position from previous years. The NRP data can easily be linked to add operational data from the prior years not included in the NRP. Differencing the NRP-year prepayment position from these estimated averages expresses the data in terms of this new reference point.

ADDITIONAL RESEARCH—CHANGE IN REPORTED TAX LIABILITY AFTER REFUNDABLE CREDITS

There were subtle differences when reporting compliance was determined by the total tax via the actual line item and when it was determined by the total tax less any refundable credits like the EIC. Total changes in reporting compliance should also take into consideration these additional refundable credits. There can be cases where after considering the additional credits a taxpayer's tax liability can change. Minor analysis in this report used this definition of underreporting. The results were similar to the WLS results but there were no additional predictors used to control for the EIC or additional refundable credits. Calculating tax liability after refundable credits is not a reported line item, but can be easily calculated with the NRP data.

ADDITIONAL RESEARCH—ALTERNATE DISTRIBUTIONS OF UNDERREPORTING

Underreported tax is likely skewed. The models used in this research assume normality in the dependent variable (and error terms). Least squares estimation can be distorted due to outliers and thick distribution tails. The other model specifications accounting for the different distributions would lead to other parameter estimates that might be more insightful. If a hurdle involving negative values can be overcome, a log-linear model specification would have a log-normal distribution of underreporting. The resulting parameter estimates would reflect a taxpayer's cross elasticity of prepayment and underreporting. Alternatively, it would measure a proportional or percentage change in underreporting compliance in response to changes in prepayment.

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Appendices

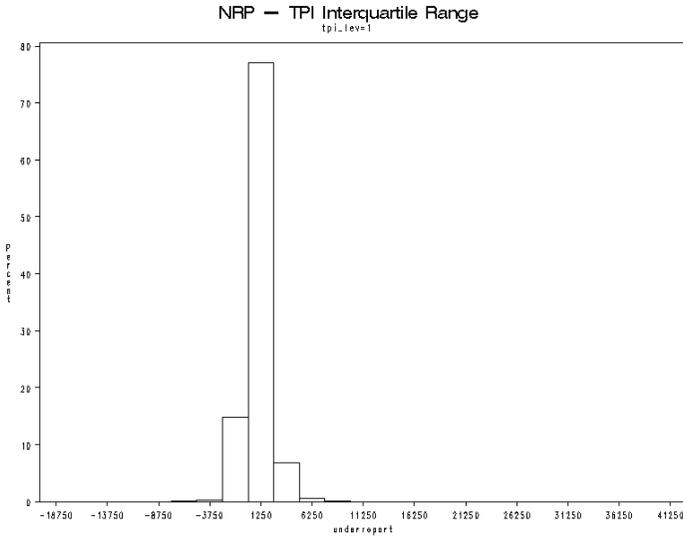
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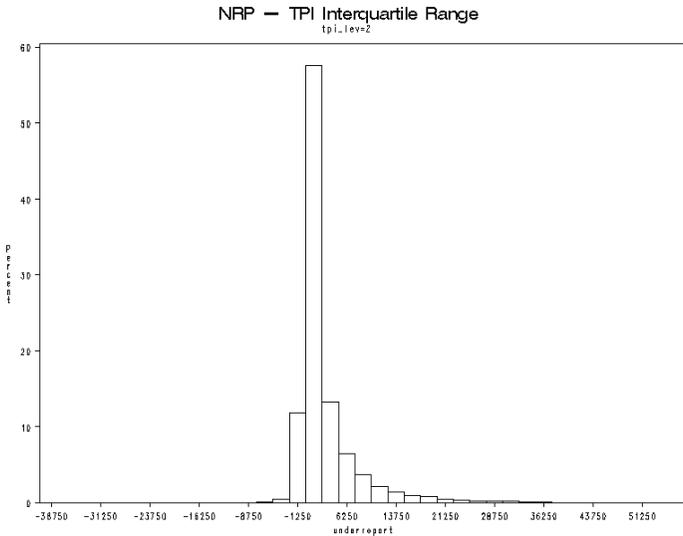
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Appendix B—Unweighted Histograms of Change in Reported Liability

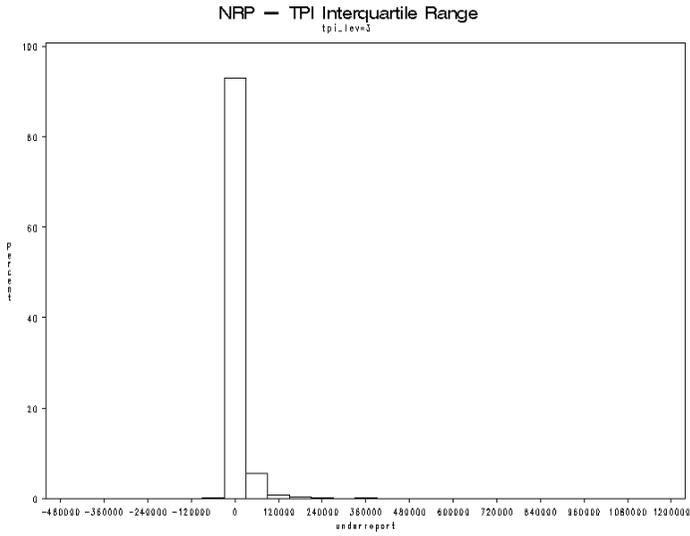
NRP TPI Level 1—Percentiles: [0, 25th]



NRP TPI Level 2—Percentiles: [25th, 75th]

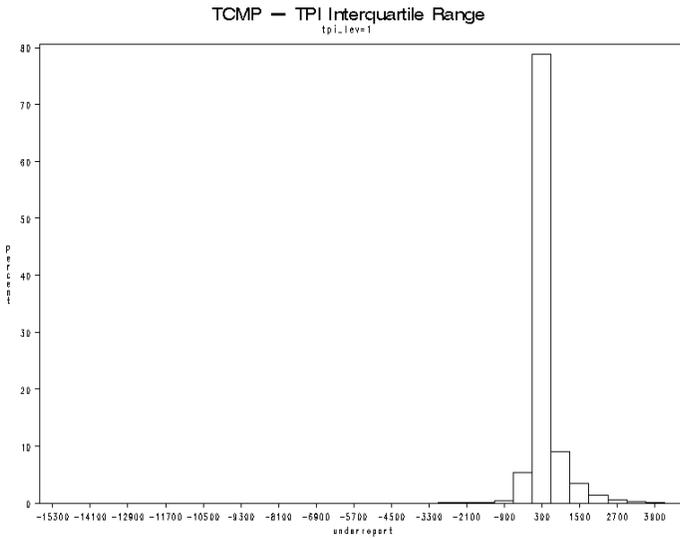


NRP TPI Level 3—Percentiles: (75th, 99th) [1]

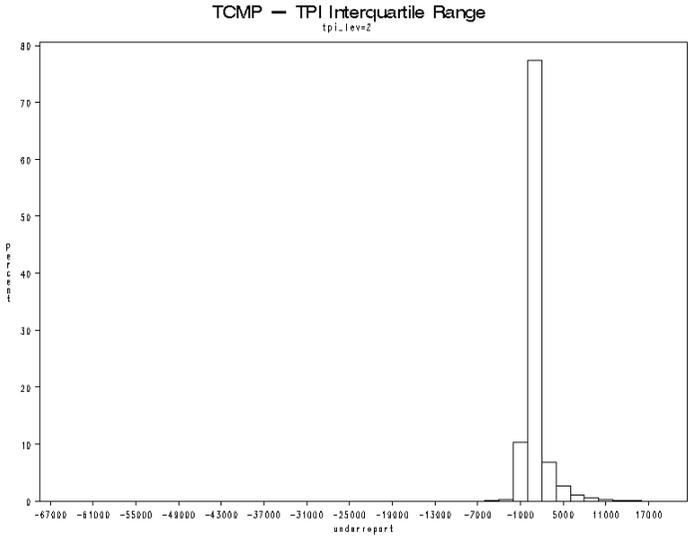


[1] Removed large outlier.

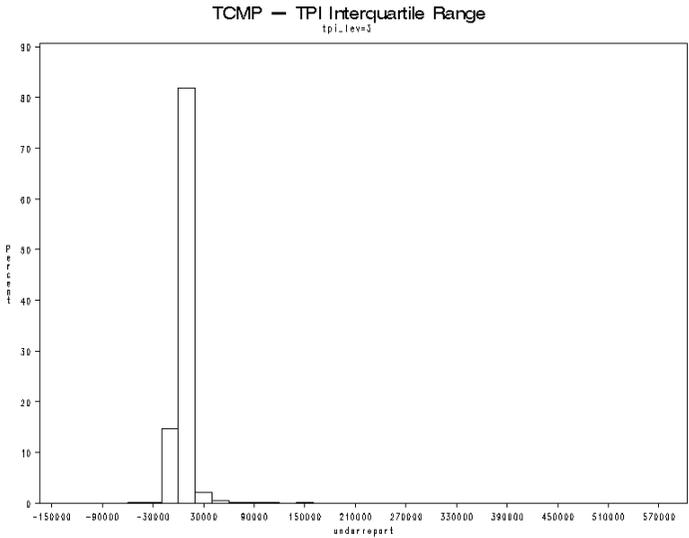
TCMP TPI Level 1—Percentiles: [0, 25th]



TCMP TPI Level 2—Percentiles: [25th, 75th]



TCMP TPI Level 3—Percentiles: (75th, 99th]

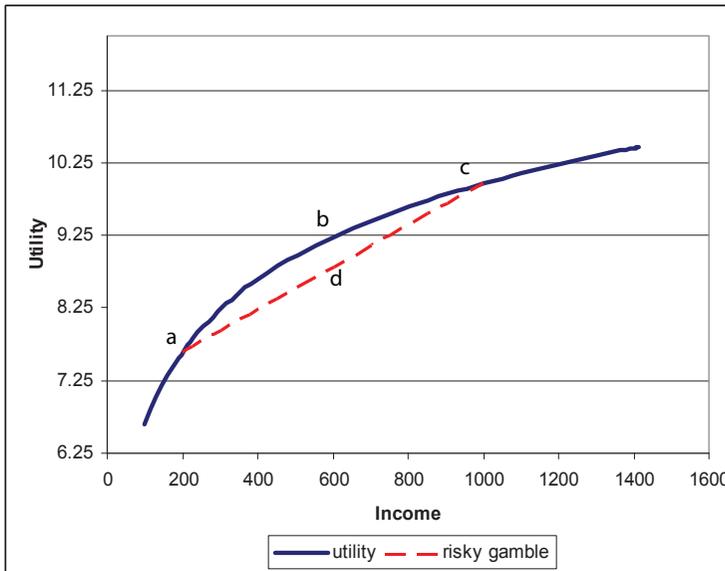


Appendix C—Discussion on Risk and Utility

A brief discussion on risk and utility is needed to highlight the theoretical differences between work based on the standard utility model (Allingham and Sando), and work based on Prospect theory. An extensive discussion on utility can be found in any intermediate economics textbook. Economics gives a framework to model an individual's preferences—a utility function. From its background in philosophy, utility quantifies the level of happiness or satisfaction from different levels of a particular good; for the following examples, money income is the good.

Risk aversion is equivalent to having a concave utility function. This individual gets greater satisfaction with an increase in income ($u' > 0$) but at a diminishing rate ($u'' < 0$); an individual is happier with more money, but at a decreasing rate. A person is said to be risk averse if the person prefers a certain prospect over any risky prospect of equivalent expected value. The graph in Figure 2 exhibits risk aversion. The solid curve represents an individual's utility function, or his or her level of happiness given a level of income. The dashed line represents a fair gamble of a 50-percent chance of an income of \$200 (point a) and 50-percent chance of \$1,000 (point c). The expected value of this fair gamble is \$600 (point d). Contrasting the points b and d illustrates that this risk averse person would not take the gamble.

FIGURE C1. Utility Curve with Risk Aversion

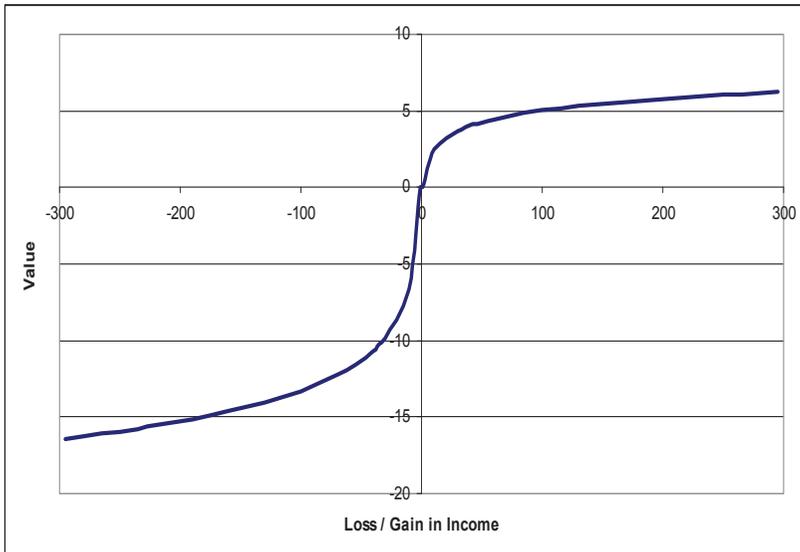


Point b illustrates what is called the certainty equivalent to the expected payoff from the risky gamble (point d). By the curvature of the utility function, the graph shows that this individual derives greater satisfaction from \$600 for certain, versus the gamble between \$200 and \$1000, thus is averse to risk.

Expected utility theory itself does not presuppose risk aversion. If an individual has a linear utility function they are said to be risk neutral. This is the case where the individual is indifferent between the risky gamble and the certainty equivalent. The other case is of risk seeking; here the individual has a convex utility function ($u' > 0$, $u'' > 0$) with a preference for the risky gamble over the certainty equivalent.

Kahneman and Tversky (1979) created prospect theory to explain the behavioral shifts from risk averse to risk seeking observed in their experiments that are not addressed in expected utility theory. Prospect theory differentiates itself from expected utility theory by having a value function dependent to a neutral reference point rather than a utility function dependent on the individual's final assets. The curvature of the value function is shaped such that individuals are risk seekers in loss domains and risk averse in gain domains and the value function is steeper for losses than for gains. In addition, the shape also implies that a loss has a greater impact in an individual when compared to an equivalent gain.

FIGURE C2. Prospect Theory Value Function



Appendix D—Omitted Variable Bias

Whether a taxpayer underreports on his or her taxes and their prepayment position is ultimately determined by the taxpayer; because of this, the two variables can be considered endogenously determined by taxpayer and both influenced by the taxpayer's noncompliant behavior. The varying compliance behavior is not observable in the data and thus cannot be controlled for (random effect). This creates a potential bias in the parameter estimates of the prepayment position variables.

Suppose the true real-world model for underreported taxes is as follows:¹

$$U_i = \beta X_i + \gamma N_i + \varepsilon'_i$$

Where U is the amount of underreported taxes

X are variables of interest (i.e. a taxpayer's prepayment position)

N represents the taxpayer's level of tax noncompliance behavior,

ε'_i is the random error term of the model which can include mistakes due to complexities of the tax code,

and β, γ are parameters of interest.

With the data, Research may be able to estimate the following (suppressing the subscripts for clarity):

$$U = \beta X + \varepsilon$$

This is due to the fact that a taxpayer's level of noncompliance is hard to estimate and would reside in this model's error term

$$\varepsilon = \gamma N + \varepsilon'$$

$$\hat{\beta} = (X'X)^{-1}(X'U) \quad \text{standard OLS estimate of the parameter of interest}$$

$$= (\sum X^2)^{-1} (\sum (X(\beta X + \gamma N + \varepsilon')))) \quad \text{substituting the true model into the equation}$$

¹This simplified model suppresses all the other covariates, the intercept terms and the distinction of the two prepayment positions. The usual intercept term can be suppressed by taking the difference from the mean for all the variables which allows the constant intercept terms to cancel out. This is done for clarity on how the bias can arise. These econometric results still hold in the estimated model. See Greene pp. 76 for more details.

$$\begin{aligned}
 &= (\sum X^2)^{-1} (\beta \sum X^2 + \gamma \sum XN + \sum X\epsilon') && \text{distributing and combining terms} \\
 &= \frac{(\beta \sum X^2 + \gamma \sum XN + \sum X\epsilon')}{\left(\sum X^2 / n \right)} && \text{using algebra to set up variances and covariances.}
 \end{aligned}$$

Taking the probability limit of the parameter estimate gives the following:

$$\text{plim } \hat{\beta} = \frac{\beta \sigma_X^2 + \gamma \sigma_{XN} + \sigma_{X\epsilon'}}{\sigma_X^2}$$

We assumed that after accounting for N the remaining regressors are uncorrelated with the true random error ($\sigma_{X\epsilon'} = 0$). After simplification we get that the probability limit of a parameter estimate for the effect of prepayment position on underreporting is the following.

$$\text{plim } \hat{\beta} = \beta + \frac{\gamma \sigma_{XN}}{\sigma_X^2}$$

Given that a taxpayer’s noncompliance behavior is unaccounted for, this estimate will not tend to the true value as the sample size increases, but will be bias and inconsistent.

Assumptions need to be made in order to make inferences about the parameters to be estimated. The variance (σ_X^2) is always a positive number. Research assumes that the amount a taxpayer underreports is positively correlated with a taxpayer’s noncompliance decision thus $\gamma > 0$.² The sign for the covariance between prepayment position and non-compliance (σ_{XN}) needs to be determined. Recall that a balance due prepayment position is coded in positive values and refund due in negative values. Using prospect theory as a guide the correlation between prepayment position and taxpayer’s compliance decision would depend on whether the taxpayer is balance-due or refund due. If the taxpayer has a balance due then the correlation would be positive ($\sigma_{XN} > 0$).³ The taxpayer views

²Signs could change depending on whether Research focuses on compliance versus non-compliance.

³The signs would be different if reported prepayment position was used rather than actual prepayment position. A noncompliant taxpayer would likely report a larger refund rather than not.

him- or herself in the loss condition thus more willing to be noncompliant and risk an audit. The opposite is true with a refund ($\sigma_{XN} < 0$), a taxpayer views him- or herself in a gain condition and less willing to risk losing the refund due to an audit.

With these correlations, if noncompliance is not properly accounted for, then the model would report an upward bias effect of a balance due position on underreported taxes and a downward bias of a refund position on underreporting. To account for this, an instrumental variable (IV, two-staged least squares, 2SLS) approach was used to create a fitted measure of prepayment position. Appendix E provides a detailed description of the IV approach used to estimate for this research.

Appendix E—Instrumental Variable Methodology and Results

$$(2) \text{ First stage: } PP = \delta_0 + Z_1 \delta_1 + PP_{t-1} \delta_2 + PP_{t-2} \delta_3 + \varepsilon_{pp}$$

$$(3) \text{ Second stage: } U = \beta_0 + X_1 \beta_1 + \beta_2 \hat{BD} + \beta_3 \hat{RD} + \text{interaction terms} + \varepsilon_u$$

Critical to the OLS model is the assumption that the predictor variables are uncorrelated with the model's error term (unaccounted or immeasurable variables). However, there is a problem. A taxpayer's specific compliance disposition may help to explain both their prepayment position and how much they are likely to underreport his or her tax liability. These varying dispositions are not observable in the data and thus cannot be controlled for (random effect).

It is plausible that prepayment positions are endogenous since the amount to withhold throughout the year is determined by the taxpayer. This implies that the variables BD and RD are correlated with random error (ε_u). The assumptions of them being independent in the WLS specification are invalid. This creates issues of bias and inconsistency in the parameter estimates.

Given that prepayment position is endogenous, Research used an Instrumental Variable (IV) approach to model the change in reported and actual tax liability. IV, first involves modeling the taxpayer's prepayment position as a function of exogenous or predetermined variables

The Hausman test was used to determine the severity of the endogeneity problem with the prepayment position. In general, this specification test involved the estimated covariance matrices from the WLS and IV estimations under the hypothesis that both are consistent.

If Research could not reject the null hypothesis associated with the Hausman test, then the endogeneity problem associated with prepayment position was not severe and Research could proceed with WLS. If Research rejected the null hypothesis, then there was an endogeneity problem and the IV estimation would be used.⁴

Table E1 reports the Hausman Test statistics. In cases where the TPI is below the 75th percentile, the null hypothesis that the WLS estimates are efficient is rejected. These results support the belief that there is an endogeneity issue with prepayment position. In the high income group (TPI level 3), the WLS estimates appear to be efficient.

TABLE E1. Hausman's Specification Test Results

Comparing WLS to 2SLS			
<i>Ho: WLS and IV consistent, WLS efficient</i>			
<i>Ha: IV consistent and efficient</i>			
	TPI Level 1	TPI Level 2	TPI Level 3
DF	31	31	28
Statistic	417.7	289.8	16.04
Pr > ChiSq	<.0001	<.0001	0.9652

SOURCE: WLS and IV estimations using NRP data.

⁴ Caveat: the Hausman test assumes that the 2SLS approach is consistent. If the instruments are weak or are correlated with the error term, then 2SLS is inconsistent as well. These issues of proper instruments were brought up in Klevin et al. (2009) and Andreoni, Erard, and Feinstein (1998).

Appendix F—NRP Weighted Least Squares (WLS) Parameter Estimations

Parameter	Dependent Variable: Understatement of Tax Liability											
	No Interaction Terms				With Interaction Terms				With Interaction Terms			
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
R-Square	0.158945	0.298356	0.437014	0.170145	0.223177	0.339663	0.471652	0.219011	0.339663	0.471652	0.219011	0.471652
N	41417	10503	20902	10478	41417	10503	20902	10478	41417	10503	20902	10478
State Income Tax	Estimate -147.709 (74.080)	Estimate 40.129 (13.903)	Estimate 17.959 (27.705)	Estimate -1971.662 (553.436)	Estimate -159.196 (71.223)	Estimate 35.116 (13.502)	Estimate 12.665 (26.858)	Estimate -2045.001 (537.365)	Estimate -147.709 (74.080)	Estimate 40.129 (13.903)	Estimate 17.959 (27.705)	Estimate -1971.662 (553.436)
Bal Due	Estimate 0.162 (0.002)	Estimate 0.287 (0.006)	Estimate 0.465 (0.004)	Estimate 0.151 (0.004)	Estimate 0.404 (0.011)	Estimate 0.378 (0.022)	Estimate 0.501 (0.013)	Estimate 0.383 (0.024)	Estimate 0.162 (0.002)	Estimate 0.287 (0.006)	Estimate 0.465 (0.004)	Estimate 0.151 (0.004)
Refund	Estimate 0.032 (0.002)	Estimate -0.066 (0.004)	Estimate -0.006 (0.005)	Estimate 0.030 (0.004)	Estimate -0.052 (0.030)	Estimate -0.074 (0.020)	Estimate -0.074 (0.016)	Estimate -0.067 (0.157)	Estimate 0.032 (0.002)	Estimate -0.066 (0.004)	Estimate -0.006 (0.005)	Estimate 0.030 (0.004)
No Prepay Pos	Estimate -304.656 (208.849)	Estimate -70.534 (28.699)	Estimate -110.639 (191.140)	Estimate -2588.335 (7553.931)	Estimate -340.829 (200.949)	Estimate -64.225 (28.138)	Estimate -300.256 (185.499)	Estimate -942.581 (7332.515)	Estimate -304.656 (208.849)	Estimate -70.534 (28.699)	Estimate -110.639 (191.140)	Estimate -2588.335 (7553.931)
BD x Interest	-	-	-	-	Estimate -0.225 (0.010)	Estimate -0.007 (0.013)	Estimate -0.136 (0.010)	Estimate -0.211 (0.022)	Estimate -0.225 (0.010)	Estimate -0.007 (0.013)	Estimate -0.136 (0.010)	Estimate -0.211 (0.022)
RD x Interest	-	-	-	-	Estimate 0.113 (0.030)	Estimate 0.021 (0.009)	Estimate 0.058 (0.014)	Estimate 0.133 (0.157)	Estimate 0.113 (0.030)	Estimate 0.021 (0.009)	Estimate 0.058 (0.014)	Estimate 0.133 (0.157)
BD x Sched C	-	-	-	-	Estimate 0.218 (0.005)	Estimate 0.230 (0.014)	Estimate 0.193 (0.009)	Estimate 0.188 (0.011)	Estimate 0.218 (0.005)	Estimate 0.230 (0.014)	Estimate 0.193 (0.009)	Estimate 0.188 (0.011)
RD x Sched C	-	-	-	-	Estimate 0.058 (0.006)	Estimate -0.004 (0.014)	Estimate 0.004 (0.011)	Estimate 0.063 (0.012)	Estimate 0.058 (0.006)	Estimate -0.004 (0.014)	Estimate 0.004 (0.011)	Estimate 0.063 (0.012)
BD x Sched F	-	-	-	-	Estimate -0.020 (0.005)	Estimate 0.029 (0.053)	Estimate -0.050 (0.017)	Estimate -0.015 (0.010)	Estimate -0.020 (0.005)	Estimate 0.029 (0.053)	Estimate -0.050 (0.017)	Estimate -0.015 (0.010)
RD x Sched F	-	-	-	-	Estimate -0.012 (0.007)	Estimate -0.076 (0.054)	Estimate -0.036 (0.032)	Estimate -0.005 (0.015)	Estimate -0.012 (0.007)	Estimate -0.076 (0.054)	Estimate -0.036 (0.032)	Estimate -0.005 (0.015)
BD x Age > 65	-	-	-	-	Estimate -0.110 (0.005)	Estimate -0.140 (0.015)	Estimate -0.175 (0.012)	Estimate -0.111 (0.010)	Estimate -0.110 (0.005)	Estimate -0.140 (0.015)	Estimate -0.175 (0.012)	Estimate -0.111 (0.010)
BD x Age > 65	-	-	-	-	Estimate -0.095 (0.006)	Estimate 0.047 (0.014)	Estimate 0.007 (0.010)	Estimate -0.102 (0.013)	Estimate -0.095 (0.006)	Estimate 0.047 (0.014)	Estimate 0.007 (0.010)	Estimate -0.102 (0.013)

Intercept terms are suppressed, standard errors in parentheses.

** p < 0.05; * p < 0.10

Table F1. WLS Regression 2001 NRP Continued

Parameter	Dependent Variable: Understatement of Tax Liability											
	No Interaction Terms					With Interaction Terms						
	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3	Full Sample	TPI Level 1	TPI Level 2	TPI Level 3
R-Square	0.158945	0.298356	0.437014	0.170145	0.223177	0.339663	0.471652	0.219011	0.339663	0.471652	0.219011	0.471652
N	41417	10503	20902	10478	41417	10503	20902	10478	41417	10503	20902	10478
Indicator - Sched A	Estimate 288.447 (67.359)	Estimate 36.381 (18.622)	Estimate 158.501 (22.704)	Estimate -1716.267 (795.244)	Estimate 255.289 (64.894)	Estimate 26.290 (18.178)	Estimate 159.809 (22.057)	Estimate -639.102 (773.422)	Estimate 255.289 (64.894)	Estimate 26.290 (18.178)	Estimate 159.809 (22.057)	Estimate -639.102 (773.422)
Indicator - Sched C	Estimate -86.632 (244.072)	Estimate 260.036 (60.952)	Estimate 271.411 (82.213)	Estimate -1630.748 (1260.053)	Estimate -389.183 (234.883)	Estimate 134.800 (60.827)	Estimate 111.663 (81.803)	Estimate -3447.102 (1228.098)	Estimate -389.183 (234.883)	Estimate 134.800 (60.827)	Estimate 111.663 (81.803)	Estimate -3447.102 (1228.098)
Indicator - Sched D	Estimate 55.917 (92.888)	Estimate -48.004 (22.761)	Estimate 31.102 (27.039)	Estimate 505.121 (1318.747)	Estimate 89.349 (84.350)	Estimate -42.397 (22.157)	Estimate 30.150 (84.222)	Estimate 490.482 (1199.182)	Estimate 89.349 (84.350)	Estimate -42.397 (22.157)	Estimate 30.150 (84.222)	Estimate 490.482 (1199.182)
Indicator - Sched E	Estimate 585.931 (87.620)	Estimate 25.465 (23.167)	Estimate 29.516 (29.516)	Estimate 439.650 (439.650)	Estimate 505.100 (84.350)	Estimate 22.509 (22.509)	Estimate 28.692 (28.692)	Estimate 427.443 (427.443)	Estimate 505.100 (84.350)	Estimate 22.509 (22.509)	Estimate 28.692 (28.692)	Estimate 427.443 (427.443)
Indicator - Sched F	Estimate -178.825 (1253.029)	Estimate 34.521 (392.825)	Estimate -283.781 (414.545)	Estimate -1395.734 (5018.637)	Estimate -368.167 (1204.450)	Estimate 78.498 (384.568)	Estimate -138.739 (404.114)	Estimate -1633.645 (4872.764)	Estimate -368.167 (1204.450)	Estimate 78.498 (384.568)	Estimate -138.739 (404.114)	Estimate -1633.645 (4872.764)
Num Sched C	Estimate 548.453 (179.739)	Estimate -95.266 (47.927)	Estimate 113.045 (59.967)	Estimate 1388.230 (831.385)	Estimate 166.512 (172.948)	Estimate -91.284 (46.522)	Estimate 46.778 (58.155)	Estimate 550.009 (808.280)	Estimate 166.512 (172.948)	Estimate -91.284 (46.522)	Estimate 46.778 (58.155)	Estimate 550.009 (808.280)
Num Sched F	Estimate 233.438 (166.139)	Estimate 37.808 (368.933)	Estimate 216.296 (385.394)	Estimate 510.643 (4601.631)	Estimate 536.790 (1121.167)	Estimate 37.001 (358.450)	Estimate 274.249 (373.712)	Estimate 1187.281 (4469.211)	Estimate 536.790 (1121.167)	Estimate 37.001 (358.450)	Estimate 274.249 (373.712)	Estimate 1187.281 (4469.211)
Indicator - Interest Income	Estimate -33.463 (67.310)	Estimate -25.102 (12.502)	Estimate -156.825 (25.182)	Estimate -2923.862 (958.691)	Estimate -68.169 (74.160)	Estimate -44.724 (15.220)	Estimate -130.378 (33.138)	Estimate -744.484 (1038.964)	Estimate -68.169 (74.160)	Estimate -44.724 (15.220)	Estimate -130.378 (33.138)	Estimate -744.484 (1038.964)
Indicator - Other Income	Estimate 452.930 (103.869)	Estimate 72.979 (24.175)	Estimate 181.030 (35.713)	Estimate 1009.333 (531.266)	Estimate 422.362 (99.853)	Estimate 86.994 (23.559)	Estimate 227.908 (34.654)	Estimate 968.908 (515.924)	Estimate 422.362 (99.853)	Estimate 86.994 (23.559)	Estimate 227.908 (34.654)	Estimate 968.908 (515.924)
Indicator for Age > 65	Estimate -171.858 (135.861)	Estimate 29.956 (24.699)	Estimate 21.284 (57.947)	Estimate 845.300 (1189.555)	Estimate 114.245 (131.025)	Estimate 35.819 (25.978)	Estimate 218.804 (59.505)	Estimate 3032.248 (1169.715)	Estimate 114.245 (131.025)	Estimate 35.819 (25.978)	Estimate 218.804 (59.505)	Estimate 3032.248 (1169.715)
Relative TPI	Estimate -151.191 (5.825)	Estimate 521.296 (32.258)	Estimate 21.246 (21.246)	Estimate -158.162 (11.411)	Estimate -133.432 (6.164)	Estimate 505.110 (31.407)	Estimate -15.893 (20.701)	Estimate -144.795 (12.241)	Estimate -133.432 (6.164)	Estimate 505.110 (31.407)	Estimate -15.893 (20.701)	Estimate -144.795 (12.241)
Primary Age	Estimate 1.042 (2.664)	Estimate 0.140 (0.481)	Estimate -0.254 (1.049)	Estimate -38.465 (23.568)	Estimate -1.705 (2.562)	Estimate 0.001 (0.468)	Estimate -0.697 (1.020)	Estimate -41.352 (22.886)	Estimate -1.705 (2.562)	Estimate 0.001 (0.468)	Estimate -0.697 (1.020)	Estimate -41.352 (22.886)
DIF Score	Estimate 1.543 (0.270)	Estimate 0.572 (0.065)	Estimate 16.370 (0.092)	Estimate 1.443 (2.829)	Estimate 0.260 (0.260)	Estimate 0.548 (0.063)	Estimate 0.904 (0.090)	Estimate 13.222 (2.778)	Estimate 0.260 (0.260)	Estimate 0.548 (0.063)	Estimate 0.904 (0.090)	Estimate 13.222 (2.778)

Intercept terms are suppressed, standard errors in parentheses.

* p < 0.05; ** p < 0.10

Appendix G—TCMP WLS Parameter Estimates

Table G1. TCMP WLS Regressions				
	(underreport > 0, over report < 0)			
	full sample	tpi_lev=1	tpi_lev=2	tpi_lev=3
R-Sq	0.119114	0.38378	0.420734	0.152767
N	54088	13522	27044	13522
parameter	estimates	estimates	estimates	estimates
State Income Tax	-24.923987 (30.649)	-11.91629 (6.619)	4.9213981 (15.047)	-247.51298 (224.298)
Bal Due	0.3639 (0.014)	0.342891 (0.012)	0.2889049 (0.010)	0.34388 (0.038)
Refund	-0.107112 (0.033)	-0.158673 (0.008)	-0.0579062 (0.016)	-0.10939 (0.276)
Indicator - Interest Income	56.67273 (27.735)	-24.738222 (5.962)	4.919593 (17.761)	555.66327 (625.834)
BD x Interest	-0.31988 (0.014)	-0.249134 (0.012)	-0.0924134 (0.009)	-0.30779 (0.038)
RD x Interest	0.090321 (0.033)	0.045317 (0.010)	0.0079406 (0.016)	0.09183 (0.276)
BD x Sched C	0.062502 (0.002)	0.2029 (0.012)	0.2518219 (0.007)	0.05922 (0.005)
RD x Sched C	0.085694 (0.006)	0.067042 (0.014)	0.0484029 (0.010)	0.08299 (0.012)
BD x Sched F	-0.076865 (0.002)	0.125294 (0.028)	-0.0474706 (0.010)	-0.06997 (0.005)
RD x Sched F	-0.059951 (0.014)	0.018134 (0.038)	-0.0369991 (0.019)	-0.07596 (0.028)
Indicator - Sched C	50.168572 (37.209)	-42.152099 (13.012)	-92.491659 (17.875)	46.10944 (196.172)
Indicator - Sched D	-140.61411 (353.814)	-42.943226 (143.816)	212.013634 (154.720)	-926.36842 (1139.952)
Indicator - Sched E	133.343963 (31.290)	23.515383 (9.418)	-6.1561525 (13.378)	64.52353 (155.286)
Indicator - Sched F	291.711844 (73.732)	-29.034204 (27.971)	104.036927 (35.371)	1057.65052 (388.198)
Indicator - Dividend Income	-53.601178 (25.599)	-15.750057 (6.899)	-58.264569 (10.953)	-511.13955 (145.945)
Indicator - Alimony Income	-57.772068 (154.921)	23.287686 (32.864)	-1.3602876 (76.212)	-436.35422 (1173.665)
Indicator - Capital Gain Income	271.088234 (38.667)	-13.143108 (12.202)	3.4793031 (16.855)	283.25353 (156.356)
Indicator - Other Income	225.784224 (34.905)	85.678201 (9.616)	102.701713 (15.353)	321.86276 (163.827)
Indicator - IRA Income	64.621606 (54.029)	-6.93238 (14.684)	45.8155355 (22.685)	130.44194 (305.235)
Indicator - Pension Income	-5.838312 (27.999)	-7.087528 (6.882)	-14.863958 (12.748)	-29.5074 (167.532)
Indicator - Unemp Income	-0.742442 (36.988)	41.184614 (8.328)	28.3615722 (16.486)	312.10128 (449.298)
Indicator - Soc Security Income	-45.468038 (53.274)	247.60049 (61.245)	-166.21938 (19.945)	176.37579 (227.242)
Indicator - Other Gain Income	258.774994 (94.411)	62.274545 (32.919)	33.486513 (41.508)	250.93513 (331.820)
Relative TPI	-14.681065 (2.335)	115.897938 (12.989)	129.573124 (13.848)	-16.23099 (4.390)
DIF Score	0.969843 (0.064)	0.530928 (0.016)	0.7623807 (0.038)	2.98313 (0.581)

SOURCE: 1988 TCMP.
Intercept terms suppressed, standard errors in parentheses
** p < 0.05; * p < 0.10

Table G1. TCMP WLS Regressions				
(underreport > 0, over report < 0)				
	full sample	tpi_lev=1	tpi_lev=2	tpi_lev=3
R-Sq	0.119114	0.38378	0.420734	0.152767
N	54088	13522	27044	13522
parameter	estimates	estimates	estimates	estimates
Indicator - Alimony Income	-57.772068 (154.921)	23.287686 (32.864)	-1.3602876 (76.212)	-436.35422 (1173.665)
Indicator - Capital Gain Income	271.088234 ** (38.667)	-13.143108 (12.202)	3.4793031 (16.855)	283.25353 (156.356)
Indicator - Other Income	225.784224 ** (34.905)	85.678201 ** (9.616)	102.701713 ** (15.353)	321.86276 (163.827)
Indicator - IRA Income	64.621606 (54.029)	-6.93238 (14.684)	45.8155355 ** (22.685)	130.44194 (305.235)
Indicator - Pension Income	-5.838312 (27.999)	-7.087528 (6.882)	-14.863958 (12.748)	-29.5074 (167.532)
Indicator - Unemp Income	-0.742442 (36.988)	41.184614 ** (8.328)	28.3615722 * (16.486)	312.10128 (449.298)
Indicator - Soc Security Income	-45.468038 (53.274)	247.60049 ** (61.245)	-166.21938 ** (19.945)	176.37579 (227.242)
Indicator - Other Gain Income	258.774994 ** (94.411)	62.274545 * (32.919)	33.486513 (41.508)	250.93513 (331.820)
Relative TPI	-14.681065 ** (2.335)	115.897938 ** (12.989)	129.573124 ** (13.848)	-16.23099 (4.390)
DIF Score	0.969843 ** (0.064)	0.530928 ** (0.016)	0.7623807 ** (0.038)	2.98313 (0.581)
SOURCE: 1988 TCMP				
Standard errors in parentheses.				
** p < 0.05; * p < 0.10				

Appendix H—Instrumental Variables (IV 2SLS) Parameter Estimations

Table H1. IV Estimation—First Stage Results			
Dependent Variable: Balance Due/Refund Due Amount			
	TPI Level 1	TPI Level 2	TPI Level 3
R-Sq	0.3245	0.3352	0.439
N	10503	20902	10478
parameter	Estimate	Estimate	Estimate
intercept	-699.009 ** (84.04)	-1,630.390 ** (45.47)	5,333.142 (5519.60)
1999 Prepay Pos	0.180 ** (0.01)	0.111 ** (0.01)	0.246 ** (0.01)
2000 Prepay Pos	0.271 ** (0.01)	0.353 ** (0.00)	0.359 ** (0.01)
Change in Tax '99 - '00	0.037 ** (0.00)	0.051 ** (0.00)	0.041 ** (0.01)
Change in Tax '00 - '01	0.248 ** (0.01)	0.330 ** (59.09)	0.218 ** (0.00)
State Income Tax	13.518 (37.86)	43.274 (125.80)	-1,353.740 (1757.40)
Indicator - 20% tax change	-319.232 ** (40.05)	65.344 (59.04)	3,707.037 ** (1364.40)
Indicator - stable withholding	-242.785 ** (47.75)	-127.891 ** (404.70)	-952.550 (2166.40)
No Prepay Pos	357.295 ** (76.96)	656.202 (48.21)	-3,915.020 (23900.70)
Indicator - Sched A	-38.508 (50.08)	-482.385 ** (156.10)	-10,026.700 ** (2516.70)
Indicator - Sched C	900.995 ** (153.90)	1,129.881 ** (66.08)	778.027 (3451.90)
Indicator - Sched D	-112.076 (61.28)	-354.143 ** (62.63)	146.857 (1610.40)
Indicator - Sched E	8.629 (62.42)	290.440 ** (841.40)	2,512.339 (1400.60)
Indicator - Sched F	675.260 (996.10)	1,252.561 (128.10)	3,369.736 (15560.60)
Num Sched C	-152.314 (134.10)	544.584 ** (810.60)	2,095.834 (2664.40)
Num Sched F	-393.284 (963.10)	-694.780 (53.92)	482.078 (14568.90)

SOURCE: 2001 NRP.
Standard errors in parentheses.
** p < 0.05; * p < 0.10

Table H1. IV Estimation—First Stage Results Continued

Dependent Variable: Balance Due/Refund Due Amount			
	TPI Level 1	TPI Level 2	TPI Level 3
R-Sq	0.3245	0.3352	0.439
N	10503	20902	10478
parameter	Estimate	Estimate	Estimate
Indicator - Interest Income	42.943 (33.91)	-157.626 ** (123.20)	-4,116.810 (3079.30)
Indicator for Age > 65	-229.391 ** (66.57)	-524.467 ** (55.06)	385.830 (3801.70)
Indicator - Dividend Income	-9.729 (50.01)	-263.839 ** (385.80)	-1,394.530 (1632.40)
Indicator - Alimony Income	-68.153 (389.90)	-500.321 (72.03)	8,326.480 (16795.30)
Indicator - Capital Gain Income	1.770 (64.86)	333.576 ** (234.90)	4,207.996 ** (1482.70)
Indicator - Other Gain Income	406.913 (244.80)	1,148.922 ** (169.80)	3,907.094 (3734.30)
Indicator - IRA Income	292.223 (223.90)	265.707 (76.26)	-2,902.470 (3161.20)
Indicator - Pension Income	-18.657 (85.01)	4.338 (79.61)	80.258 (1669.90)
Indicator - Unemp Income	136.243 ** (50.49)	160.285 ** (109.60)	362.867 (3159.30)
Indicator - Soc Security Income	343.574 ** (64.31)	-20.512 (76.39)	-3,853.180 (3556.60)
Indicator - Other Income	375.227 ** (64.97)	660.904 ** (44.59)	3,350.963 ** (1697.20)
Relative TPI	-727.599 ** (86.95)	251.877 ** (2.24)	-1,220.390 (41.21)
Primary Age	9.743 ** (1.30)	26.956 ** (585.20)	54.328 (75.18)
Indicator - Dependent Status	349.981 ** (56.13)	-730.385 (0.20)	57,556.060 ** (15759.20)
DIF Score	2.123 ** (0.17)	-0.690 ** 0.00	40.334 (9.11)

SOURCE: 2001 NRP.
Standard errors in parentheses.
** p < 0.05; * p < 0.10

Table H2. IV Estimation—Second Stage Results			
Dependent Variable: Change in Tax Liability			
(Underreport > 0, Overreport < 0)			
	TPI Level 1	TPI Level 2	TPI Level 3
N	10503	20902	10478
parameter	Estimate	Estimate	Estimate
Intercept	-297.847 (355.70)	-1,813.790 (392.00)	-17,243.900 (39004.30)
Income Tax	31.574 (18.50)	-16.582 (2.06)	-2,443.130 (1214.00)
Bal Due	0.524 (1.96)	2.631 (3199.20)	1.253 (1.23)
Refund	-0.439 (1.27)	-3.335 (3.88)	-6.044 (17.51)
Indicator - 20% tax change	-6.993 (529.30)	337.238 (80.36)	1,417.561 (966.50)
Indicator - stable withholding	15.017 (87.44)	-46.803 (2.20)	-444.788 (1506.00)
BD x 20% tax change	-0.160 (1.13)	0.322 (4.01)	-0.098 (0.07)
BD x Interest	-0.468 (1.19)	-3.132 (0.68)	-1.268 (1.45)
RD x Interest	0.444 (1.26)	3.465 (1048.80)	6.143 (17.36)
No Prepay Pos	-15.981 (202.50)	-380.719 (226.90)	-6,162.040 (9897.10)
Indicator - Sched A	38.787 (65.86)	-159.050 (800.30)	-2,472.750 (1791.20)
Indicator - Sched C	387.854 (405.70)	-21.377 (132.60)	280.428 (2588.30)
Indicator - Sched D	-67.048 (39.01)	-105.411 (293.90)	-673.212 (1141.50)
Indicator - Sched E	20.543 (36.89)	312.232 (1028.00)	1,661.845 (929.50)
Indicator - Sched F	250.481 (482.10)	-87.916 (305.80)	-2,401.500 (6267.30)
Num Sched C	-94.874 (95.21)	154.405 (913.40)	2,323.124 (1304.50)

SOURCE: 2001 NRP.
Standard errors in parentheses.
** p < 0.05; * p < 0.10

Appendix I—Stable Withholding Subsample Parameter Estimations

Table I1. NRP WLS Regression —Stable Withholding				
Dependent Variable: Change in Tax Liability (underreport > 0, over report < 0)				
	Full Sample	tpi_lev=1	tpi_lev=2	tpi_lev=3
R-sq	0.461733	0.425449	0.453458	0.569697
N	7365	1463	4482	1420
parameter	estimate	estimate	estimate	estimate
State Income Tax	-20.206 (65.278)	52.801 (48.147)	-59.054 (44.861)	-361.690 (553.374)
Bal Due	0.730 (0.028)	1.465 (0.088)	0.594 (0.035)	0.709 (0.067)
Refund	-0.047 (0.031)	-0.048 (0.049)	-0.055 (0.026)	0.311 (0.426)
Indicator - Interest Income	-147.294 (77.457)	-124.790 (64.437)	-114.718 (60.416)	1,547.723 (1477.473)
Indicator - 20% tax change	141.659 (54.050)	330.490 (59.547)	253.130 (50.270)	-1,623.948 (480.887)
BD x Interest	-0.274 (0.026)	-0.230 (0.081)	-0.092 (0.030)	-0.315 (0.066)
RD x Interest	0.095 (0.030)	0.039 (0.032)	0.043 (0.026)	-0.271 (0.426)
BD x 20% tax change	-0.067 (0.014)	-0.840 (0.091)	-0.162 (0.022)	0.083 (0.030)
RD x 20% tax change	-0.041 (0.011)	-0.082 (0.048)	-0.022 (0.019)	-0.022 (0.023)
BD x Sched C	-0.103 (0.011)	-0.375 (0.100)	0.283 (0.023)	-0.206 (0.023)
RD x Sched C	0.000 (0.012)	-0.025 (0.057)	0.056 (0.022)	-0.011 (0.024)
BD x Sched F	0.105 (0.017)	-0.020 (0.283)	-0.162 (0.039)	0.143 (0.036)
RD x Sched F	-0.073 (0.028)	0.040 (0.166)	-0.112 (0.054)	-0.069 (0.057)
BD x Age > 65	-0.269 (0.011)	-0.606 (0.115)	-0.145 (0.033)	-0.282 (0.024)
RD x Age > 65	0.019 (0.012)	0.128 (0.058)	0.020 (0.024)	0.018 (0.025)
No Prepay Pos	-1,099.411 (795.751)	-956.037 (371.181)	-	-1,139.609 (5517.760)
Indicator - Sched A	133.075 (55.240)	-50.854 (65.183)	152.536 (35.911)	11.266 (761.227)
Indicator - Sched C	107.772 (239.815)	95.285 (318.908)	-252.862 (151.808)	769.969 (1347.828)

SOURCE: 2001 NRP, stable withhold <= -+15% change in withholding .
Standard errors in parentheses.
* p < 0.05; ** p < 0.10

Table I1 . NRP WLS Regression —Stable Withholding Continued				
Dependent Variable: Change in Tax Liability (underreport > 0, over report < 0)				
	Full Sample	tpi_lev=1	tpi_lev=2	tpi_lev=3
parameter	estimate	estimate	estimate	estimate
Indicator - Sched D	-65.187 (81.091)	-194.100 (104.419)	-23.617 (48.558)	-398.500 (490.399)
Indicator - Sched E	150.031 * (78.159)	3.536 * (89.993)	198.630 * (49.043)	-293.317 * (427.974)
Indicator - Sched F	987.671 (2535.644)	536.642 (7486.036)	1,243.002 (1425.722)	2,316.243 (13690.284)
Num Sched C	285.393 (186.400)	18.770 (273.886)	197.329 (112.276)	844.532 (956.954)
Num Sched F	-824.093 (2511.941)	-694.127 (7475.372)	-573.397 (1406.304)	-2,904.946 (13649.349)
Indicator - Dividend Income	-83.104 (63.052)	-122.334 (60.705)	-52.801 (38.958)	-347.367 (474.882)
Indicator - Alimony Income	-305.963 (414.093)	75.888 (382.090)	-219.612 (246.893)	-30,984.763 (12364.958)
Indicator - Capital Gain Income	-29.466 (86.002)	103.667 (102.842)	-5.744 (52.929)	-158.073 (467.102)
Indicator - Other Gain Income	475.131 (327.234)	-239.960 (789.210)	-59.369 (202.203)	1,237.954 (1327.058)
Indicator - IRA Income	-167.384 (217.653)	0.831 (308.507)	-231.168 (131.301)	-584.702 (1070.143)
Indicator - Pension Income	23.123 (89.156)	-180.926 (94.468)	-6.676 (59.264)	-16.224 (510.441)
Indicator - Unemp Income	74.999 (102.698)	58.503 (78.842)	70.590 (67.897)	130.299 (1002.272)
Indicator - Soc Security Income	19.387 (97.559)	-112.863 (72.085)	-107.423 (79.991)	1,440.529 (1069.679)
Indicator - Other Income	266.934 ** (92.381)	488.191 ** (95.827)	110.477 ** (58.279)	307.603 ** (502.890)
Indicator for Age > 65	-34.548 (114.313)	4.941 (94.518)	-17.489 (99.077)	-940.256 (1225.884)
Relative TPI	-92.098 ** (17.943)	462.484 ** (114.648)	-20.607 ** (33.124)	-19.478 ** (42.471)
Primary Age	-1.330 (2.473)	-0.722 (1.774)	-2.004 (1.787)	-7.171 (23.438)
DIF Score	1.007 ** (0.237)	0.297 ** (0.226)	1.035 ** (0.155)	1.254 ** (3.586)

SOURCE: 2001 NRP, stable withhold <= -+15% change in withholding.
Standard errors in parentheses.
* p < 0.05; ** p < 0.10

Endnotes

- ¹ Clotfelter (1969), Adelsheim (1997), Christian et. al. (1993).
- ² Hershey (1992); New York Times.
- ³ Treasury Inspector General For Tax Administration (TIGTA) *Millions of Taxpayers May Be Negatively Affected by the Reduced Withholding Associated With the Making Work Pay Credit* (2009) Reference Number: 2010-41-002.
- ⁴ SKAT maintained the option of retroactive audits on taxpayers who would have been regularly flagged for an audit. The threat of audit letter read that either 100 percent of the taxpayers in their group would be audited, or 50 percent of taxpayers in the group would be audited. This experiment used up nearly 1/5th of SKAT's resources devoted to tax audits for the given years.
- ⁵ Hershey (1992); New York Times.
- ⁶ Treasury Inspector General For Tax Administration (TIGTA) (2009).
- ⁷ Christian et al. (1993).
- ⁸ Prospect theory has been analyzed and tested in barter markets (List 2004) and in the PGA Golf tour (Pope and Schweitzer 2009).
- ⁹ See Appendix C for a discussion in risk and utility.
- ¹⁰ Schepanski & Shearer (1995) focused on the reference point in terms of this withholding phenomenon. They argue that the neutral reference is not the actual prepayment position (as they use 'current asset position') but rather the expected prepayment position (expected asset condition). With their expected asset condition as the true reference point, they argue that a taxpayer who expects a large balance due, but only realizes a small balance due would consider that within the gain domain, thus act risk averse. Likewise, a taxpayer who expects a large refund but gets a marginal refund would view that as a loss, and may act risk seeking to capture a larger refund.
- ¹¹ This research focuses on the first two properties of Prospect Theory. The actual audit probability is unknown to the taxpayer so their assumed probability of audit (weight) and the actual audit probably would be identical for their compliance decision.
- ¹² Schepanski and Kelsey (1990), White et al (1993).
- ¹³ See Appendix D for the discussion on bias and inconsistency.
- ¹⁴ There has been discussion that none of the available instruments are likely to satisfy the assumptions for IV-estimation. Andreoni, Erard and Feinstein (1998), Kleven et al. (2009).

- ¹⁵ List (2004) found that the effects of prospect theory dissipate with more experience in the memorabilia trade market. Pope and Schweitzer (2009) found that prospect theory holds in PGA golf player's actions even with the most experienced golfers.
- ¹⁶ The hope is that a subset of taxpayers was not systematically excluded. Reasons for not having a match to prior years' returns: newly filing in 2001, change in filing status, and spouses alternate as primary taxpayer in different years.
- ¹⁷ The graphs show each interquartile range. The remaining histograms are in the appendix. In order to see the distribution of over/underreporting, each graph suppresses the cases where there is no change in the tax liability (one-third of each sample). In both datasets, even with the cases with zero tax change removed, a tall spike at the mode (of \$14 in underreported taxes) remains in each dataset.
- ¹⁸ Due to the weights used, Table 1 does not report what was found in the sample but rather extrapolations to the whole taxpayer population.
- ¹⁹ Adelsheim (1997), Ho (2003), SB/SE Seattle/San Jose IRS (2007), Kleven et al. (2009).
- ²⁰ Interquartile range lies between the 75th and 25th percentiles.
- ²¹ This current iteration ignores the reference point concerns brought up by Schepanski and Shearer, but further research could be done adapting the previous year's prepayment position as the expected asset position.
- ²² See Appendix C for a review on varying risk behavior.
- ²³ Alternate model specifications including tobit and multinomial probit. OLS was used for ease of interpretation.
- ²⁴ The income groups (TPI Levels) were segmented by the 25th percentile, inter-quartile range, and 75th percentile, with the assumption that there are behavioral differences between income groups.
- ²⁵ Bolded terms in (1) are vectors.
- ²⁶ Refundable credits like the Earned Income Tax Credit and the additional child tax credit are additional line items that can have issues with reporting compliance.
- ²⁷ The variables were coded when $BD > 0$ then $RD = 0$ and $RD > 0$ then $BD = 0$. Given this specification, to convert back to a continuous Prepayment position variable coded in the NRP dataset, $PP = BD - RD$.
- ²⁸ Occupation codes were taken from the reported occupation on the return, an additional field was created if the occupation code was absent. Return complexity was proxied by a series of indicators for the existence of attached schedule forms. The other variables can be found in Appendix F.

- ²⁹ Details can be found in Appendix D.
- ³⁰ A standard example of this issue is the economic returns of schooling. It can be modeled that the income an individual earns can be caused by his or her performance in school. However, both earnings and school grades are jointly caused by an immeasurable 'ability.' The taxpayer's DIF score would be analogous to a student's SAT score. An SAT score likely does not entirely capture a student's ability, the DIF score likely does not entirely capture noncompliance.
- ³¹ A previous iteration of the research proposed using a simultaneous equation model to examine causation between underreported tax liability and prepayment position. After further consideration it was considered unlikely that underreporting done at tax filing caused a taxpayer's prepayment position. More likely, it is an unaccounted taxpayer compliance inclination that causes both.
- ³² For a discussion of instrumental variables and causation, see Appendix E or Greene (2008) pp 74–85 and Angrist J.D., G.W. Imbens, and D.B. Rubin (1996) for a more detailed discussion.
- ³³ Restricting the upper bound for what could be deemed as 'stable' withholding, or increasing the lower bound for a 'large' tax change would severely limit the number of cases in the sample and reduce its robustness. Reducing the lower bound for 'large' tax change could contaminate the sample by including some cases where the tax change was not a shock.
- ³⁴ The income groups (TPI Levels) were segmented by the 25th percentile, inter-quartile range, and 75th percentile.
- ³⁵ The specified model without interactions: $U = \beta_0 + X_1 \beta_1 + \beta_2 BD + \beta_3 RD + \varepsilon_u$
The resulting marginal effect for refund due is $\frac{\partial U}{\partial RD} = \beta_3$
- ³⁶ The specified model with interactions:
 $U = \beta_0 + X_1 \beta_1 + \beta_2 BD + \beta_3 RD + X_{1D} \cdot BD \beta_4 + X_{1D} \cdot RD \beta_5 + \varepsilon_u$
The resulting marginal effect for balance due is $\frac{\partial U}{\partial BD} = \beta_2 + X_{1D} \beta_4$.
- ³⁷ The marginal effects in Table 6 assume different demographic characteristics for the different taxpayers in each example. Example 1—taxpayer does not have any interest income, Schedules C, F, and is under 65 years of age. Example 2—taxpayer has interest income, no Schedules C, F, and is under 65 years of age. Example 3—taxpayer has interest income, no Schedules C, F, and is over 65 years of age.
- ³⁸ See Appendix D.
- ³⁹ This is using correlations assumed using prospect theory. Numerical simulations would help verify whether these assumptions are valid.

Predicting Intentional and Inadvertent Noncompliance

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Tax noncompliance is socially harmful, as it can reduce revenues, distort labor markets, and undermine state stability by feeding perceptions of cheating and fraud. Reducing noncompliance can be facilitated if one understands the basis for that noncompliance. Kinsey (1984) defined noncompliance with tax laws as the “failure, intentional or unintentional, of taxpayers to meet their tax obligation.” Estimates of errors place the number of returns containing either an intentional or inadvertent error, or both, above 50 percent. Minimizing the number and size of such errors requires attending to both types of error. This point was made in 2007 by Michael Brostek in his testimony on tax compliance before the Committee on the Budget, U.S. Senate. For example, he noted that the Government Accountability Office had found that simplification had the potential to reduce the tax gap because it would reduce inadvertent errors by eliminating confusion, decrease misuse by making it harder to hide noncompliance, and increase willingness to comply due to increased understanding. In the case of simplification, the same action can reduce both intentional and inadvertent errors. However, when simplification is not possible, different strategies may be necessary to reduce the tax gap due to inadvertent and intentional errors. Educational outreach, for example, is more likely to impact inadvertent errors; whereas, enforcement, withholding, and information requirements may have a greater impact on reducing intentional errors. In order to provide a more nuanced approach to reducing the tax gap that is tuned to the needs of the taxpayers, understanding both intentional and inadvertent error is critical.

The majority of research on taxpayer noncompliance has been concerned with intentional errors on tax returns (i.e., evasion). The term intentional tax error is often used synonymously with “noncompliance” and “tax evasion.” Intentional tax errors comprise any form of willful misrepresentation while completing a tax return, for the purposes of minimizing the tax owed or maximizing a tax refund. Typically, these acts include under-reporting income, over-reporting deductions, and erroneously claiming credits with the intent of noncompliance. In contrast, inadvertent tax errors include mistakes, math errors, forgetting, and unintentional mis-interpretation or misunderstanding.

Our research, conducted for the Internal Revenue Service (IRS), explores both intentional and inadvertent error. We ask, is it possible, given the information on a return, to tell whether an error is intentional or inadvertent? Thus, this work

addresses the lack of knowledge concerning unintentional errors on tax returns and may provide potential guidance to examiners, while helping the Service better meet taxpayer needs by identifying factors that lead to inadvertent error.

The goal is to determine when it is possible to predict intentional and inadvertent errors given only the information available on a tax return. Once the contributing factors to the commission of errors are identified, the IRS can address these factors with the intent of reducing future errors. Also, profiles resulting from these models may be used in a similar fashion. This would enable more customized support to taxpayers. In addition, models gleaned from this study could be used in simulation models of taxpayer behavior enabling the IRS to explore the potential impact of various services and interventions.

Background on Noncompliance Modeling

Theories of noncompliance generally break down into those that emphasize economic deterrence and those that emphasize fiscal psychology (Milliron and Toy, 1988). Researchers in the economic deterrence paradigm tend to employ expected utility theory and view the taxpayer as a rational actor seeking to maximize personal gain by minimizing taxes paid. However, the evidence is mixed and taxpayers often fail to behave in an objectively rational manner. Researchers in the fiscal psychology paradigm tend to employ prospect theory (e.g., Kahneman and Tversky, 1979) and consider factors such as the cost of compliance and social context (Smith and Kinsey, 1987). Supporting evidence includes the generally high rates of compliance and the fact that compliance increases with the expectation of a refund and as knowledge of the tax law increases. Additionally, from a purely empirical perspective, there exist key correlates of noncompliance, of general intentional noncompliance, and of inadvertent error. For example, income level, youth and unfamiliarity with the tax laws, and gender are all highly correlated with noncompliance. Despite this body of information, no single, clear picture of the correlates of noncompliance exists.

This lack of a single, clear picture suggests that a multimodeling perspective is needed. We developed the first principles models using the open-source literature, which includes the results of psychology experiments and social empirical (survey-based) research. These models were developed in order to identify factors outside of those derivable directly from the tax returns that might account for errors. Further, it was felt that such models might provide greater insight into why errors occurred. Since the rationale for intentional and inadvertent errors in such first principles models is based on different social and psychological factors that may or may not be visible to examiners, these models should help distinguish the two types of error. The statistical machine learning models were developed in order to identify factors that were directly derivable from tax returns. Such models

were expected to be potentially predictive, but more related to tax law in its current form and with less ability to predict the impact of changes. Since the statistical distribution of intentional and inadvertent errors was likely to be different, the statistical models should help distinguish the two types of error.

Modeling Errors

In this study, we take a dual-teaming approach. We have two teams, working independently from different sources, to develop models of error. Team A works from open-source literature and has developed a model of intentional error and another of inadvertent error from theory using only the data and information in the published literature, much of which does not consider taxpayer applications. These are referred to as the first principles models. Team B works from the Exam Office Automation Database (EOAD) and the Individual Return Transaction Files (IRTF) database provided by the IRS and, utilizing statistical and machine-learning approaches, estimates a set of empirical models which are then combined into a unified empirical model. The first principles and the empirical models are then compared and contrasted by Team C, who uses a subset of the empirical data and applies the models from Teams A and B to that data, creating a combined model.

Compliance was modeled first for the tax return as a whole, and then for specific line items. Two line items have been modeled to date. The first line item examined was the earned income tax credit (EITC), as it is one of the most adjusted line items. The second is wages, salaries, and tips. Other potential line items to be modeled in the future include those found to be critical in the first principles intentional error model: capital gains, self-employment, farm income, student loans and Social Security income.

Data Used by Teams B & C¹

The IRS EOAD data includes 2.66 million records containing 2,379,523 exams with corresponding line items and valid incomes, filing statuses, and timeliness codes from the period 2002–2007, most of which were in 2006–2007. Of these, only the data from 2006 and 2007 was used, as it matched with the IRTF. In addition, in 2006, examiners switched to identifying “penalty” or “no penalty” before assigning reason codes. As this produced noticeable differences in the way reason codes were used, we used only the 2006–2007 for consistency. It is important to note that these are operational exams, and the returns included are those that were thought to be noncompliant. As such, this is a biased sample. However, it was the only available data with any non-researcher-proposed indication of error. Having

such an indication is a requirement for the specific statistical learning models employed in this exploratory study.

Of these 2,379,523 returns, all of which are in 2006–2007, 65,547 were marked as having intentional errors, 1.22 million tax returns were marked as having unintentional or inadvertent errors, and the remaining were not marked with either type of error by the examiners. This is a second source of bias, the examiners cannot know the intent for sure, have incentives not to mark a tax return as having an intentional error, and the taxpayers have incentives to provide support for inadvertent error. Consequently, even among this nonrepresentative sample, there may be fewer tax returns marked as containing an intentional error than is actually the case. These records include 1.12 million campus (correspondence) examinations, 216,774 field exams, and the remainder are office, no-show, no-response, or undeliverable mail. Although not itself a source of bias, the type of exam is indirect information about the likelihood of error and is information that would not be available with a tax return not in this operational set.

The EOAD data set contains two tables, E and C. The C table contains tax return data without specific line item information. Example fields are exam date, adjusted gross income, and preparer. The E table contains information about the line items examined during the audit. Every line item examined is included in this table, and some fields included are monetary adjustment by line item, reason for the adjustment and line item identification. The C table was cleaned and duplicate keys and records were removed. All records without valid filing statuses or adjusted gross income fields were dropped, resulting in 2.48 million records left. The C and E sets were combined in such a way that the tax return information was preserved from C along with summary information from the line item set.

Intent for the tax returns was determined from the intent of corresponding line items. If a tax return had at least one line item issue that was considered intentional, the whole tax return was marked as intentional. If a return had at least one unintentional line item, then it was considered to have inadvertent errors. This procedure resulted in some tax returns being marked as containing both intentional and inadvertent errors. Note that an alternative would have been to consider all the returns for which the error led to an underpayment of taxes to include intentional errors. In Figure 1, the distribution of level of error by level of adjusted gross income is shown. As can be seen, most of the errors result in under-reporting of income (right-hand side). However, both under- and over-reporting occur at all income levels. Based on our research of the general factors leading to intentional and inadvertent errors, as well as discussions with examiners, we found that it should not be assumed that all cases of under-reporting are intentional, nor that all over-reporting is inadvertent. In both cases, there are a number of factors that can lead to inadvertent errors in particular, the complexity of the return.

In Figure 1, it will be seen that there are returns with an error of zero dollars. A return that is marked with an error of size zero is one that, after the exam, either it was determined that no adjustments need to be made or the adjustments were such that those in the positive direction cancelled those in the negative leading to zero total adjustment.

When analyses of individual line items were done, expected burden was used to determine complexity. Information from an IRS-provided burden study was used in conjunction with an estimation of the number of lines of instruction a taxpayer would need in order to read to fill out that line item. This results in an estimation of low to high complexity per line item using a 5-point scale. For the return as a whole, its complexity was set based on the complexity of the line items used. To minimize error, this was turned into a 3-point scale as follows:

- Low complexity—Form 1040, 1040A, or 1040EZ without schedules
- Intermediate complexity—Form 1040A with schedules and 1040 with Schedules A, B, D, Additional Child Tax Credit, Educational Credits, Child Care Credit, Credit for the Elderly, or EIC
- High complexity—Form 1040 with Schedules C, E, or F, or other schedules and all other specific Forms 1040, e.g. 1040PR, etc.

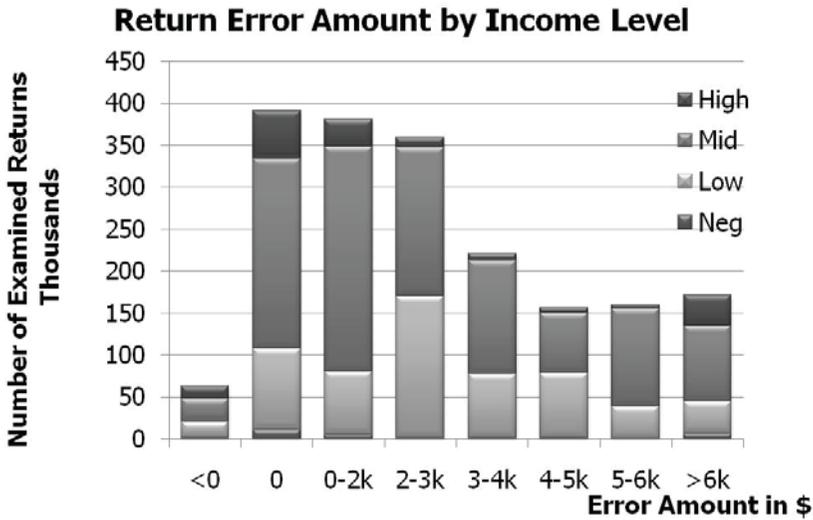
We only have the line items examined to determine which schedules were used. As such, it is likely that we are underestimating complexity.

The IRTF data came in several tables as it is a much larger database. It includes information about all tax returns from 2006 and 2007. In the IRS IRTF data, there are 139 million records that exist in both years. The records were matched via keys for EITC eligibility and age (which were calculated from the return year).

The IRTF data has fewer variables per tax return, and the data is less in-depth than the EOAD set. However, it does contain returns not examined. We used only those records in the IRTF that could be matched to records in the EOAD. There were a few key pieces of data gleaned from this set for use with the EOAD data when modeling intent. Those included date of birth, additional preparer information, and additional line items.

For the purposes of this study, for each variable, the data was placed into predetermined categories or “bins.” These same bins are used for both the first principles and the statistical models. The purpose of binning is four-fold: first, it reduces error by decreasing the granularity of the data; second, it enables comparability with existing studies in the literature; third, it enables the results to be used directly by field operatives; and fourth, it allows the results to be used directly in the construct simulation model (Hirshman, Martin, and Carley, 2008; Carley and Maxwell, 2006; Carley, 1990) and the SmartCard (Carley et al., 2010; Altman et al., 2009).

FIGURE 1. Distribution of Under/Over-Reporting (Loss) by Income Level



The income field used for our analysis was the adjusted gross income reported on the return. See Table 1. Additional variables created at this step were itemization, preparer use, exemptions claimed, and an initial capital gains variable. If the return indicated itemized rather than standard deductions, the itemized flag was set to 1. Preparer use was gleaned from the preparer variables and categorized as self-prepared, paid preparer used and IRS-prepared. The IRS/center-prepared tax returns included any prepared with IRS assistance, whether by an IRS employee or the TCE/VITA programs. We note that future work might want to separate these two types of returns. The number of exemptions claimed on each return was used as the exemption variable up to five. If there were more than five exemptions claimed, the variable value was set to 6. If the capital loss field was negative, then an initial capital gains flag is set to 1. Later, using line item data, a more robust flag may be set.

Another variable that required binning was the monetary adjustment of each overall tax-return: rar_ovedef_amt. See Table 2. When this field is negative, it indicates that the exam resulted in a lower tax liability than the original return indicated, i.e., the taxpayer is owed a refund. If it is positive, then the taxpayer owes additional money to the IRS.

TABLE 1. Income Bins

Initial Bins	Super Bins
AGI < \$0	Negative
AGI = 0	Low
\$0 < AGI < \$15,000	Low
\$15,000 < AGI < \$30,000	Middle
\$30,000 < AGI < \$50,000	Middle
\$50,000 < AGI < \$80,000	Middle
\$80,000 < AGI < \$120,000	Middle
AGI > \$120,000	High

TABLE 2. Monetary Adjustment Bins

Due/Owed Bins
Owe < \$0
Owe = \$0
\$0 < Owe < \$2,000
\$2,000 < Owe < \$3,000
\$3,000 < Owe < \$4,000
\$4,000 < Owe < \$5,000
\$5,000 < Owe < \$6,000
Owe > \$6,000

Bins were set so that there was an approximately uniform distribution.

After the initial adjustments and additions to the tax return set, the line item set, E, adjustments due to line item E were made. Of the line items included, 11.3 million corresponded with tax returns from C and were used. The first thing done was a determination of intent by reason code and by penalties. Very few line items, 82,000, were assessed penalties. Each line item had a reason code assigned by the examiner. These reason codes were split into intent groups after correspondence with the IRS. Possible values were intentional, unintentional or inadvertent, neutral, possible intentional, and "discard." It is important to note that only a subset of the reason codes was used to distinguish between intentional and inadvertent. If a line item had a penalty associated with it, it was also considered intentional. Later study revealed that this may not always be accurate. Finally, 57 percent of tax returns are marked as having inadvertent errors, and 4 percent are marked as having intentional errors.

Both the first principles and the empirical models used the same bins if they used the same variables. There are, however, some differences in variables available to the two modeling teams. For example, first principles models considered information about gender, which is not readily available from the tax returns. However, the empirical models are based on information on the level of the monetary return that is not readily available without access to the tax returns. By combining the models, a more comprehensive view of the correlates of noncompliance is possible.

Additional information from the IRTF data set was fused with the EOAD data. We were only provided with a subset of the IRTF database, and, as such, the corresponding records for some of the tax returns in the EOAD were not available. Hence, the set of tax returns used from the EOAD was pared down to just those 1.9 million records for which IRTF data was also available. The IRTF set contains information about the superset of taxpayers, including the date of birth and additional line items used: EITC, student loan interest, capital gains, and Social Security benefits. The taxpayers' ages and filing statuses were added to the tax return data set. Ages were binned accordingly: under 30, between 30 and 60, and over 60 years of age.

In the EOAD data, the rates of inadvertent and intentional errors, as marked by the examiners, increase with income (AGI) when looking at the percentages from the actual tax return errors. See Table 3. The exception is the negative-income category, which has an even higher rate of error than the high-income group. Note that the error rate is significantly lower across the board for intentional error as compared with inadvertent error. In part, this is due to a reluctance of examiners to mark a return as containing an intentional error, as explained later.

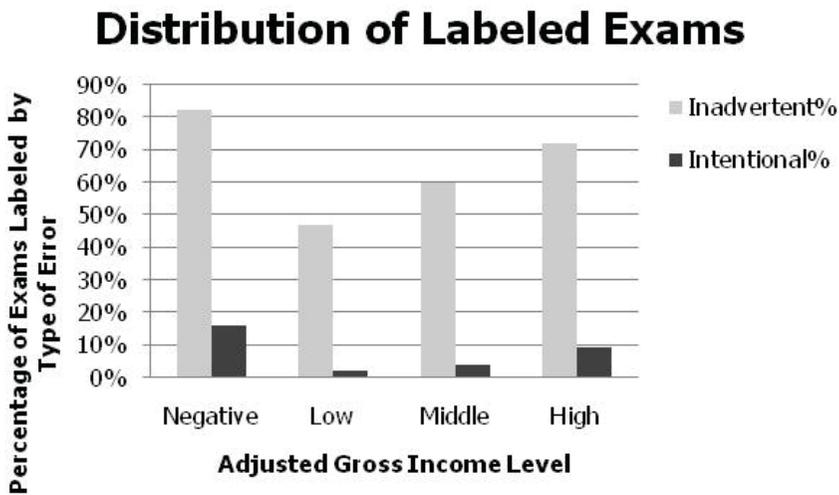
TABLE 3. Empirical Distribution of Inadvertent Error by Adjusted Gross Income Level

Intent/Income	Negative	Low	Middle	High	Total
Inadvertent	23498	270356	630648	117910	1042412
Not Inadvertent	5133	308807	424153	46392	784485
Intentional	4671	10290	46396	14110	75467
Not Intentional	23960	568873	1008405	150192	1751430
Total	28631	579163	1054801	164302	1826897
Inadvertent (percent)	82%	47%	60%	72%	57%
Intentional (percent)	16%	2%	4%	9%	4%

In Figure 2, the percentage of errors of each type by income level is shown. As can be seen, the distributions are different for intentional and inadvertent errors. In general, more tax returns are labeled inadvertent than intentional. Further, for

both intentional and inadvertent, as the level of income increases, the tendency to label the exam with an error increases. However, for all errors marked, there is a greater tendency to label tax returns as containing intentional errors if the report's income is high or negative; that is, of the returns marked with errors in the negative-income level 16.3 percent of the marked errors are labeled as intentional, and, of the high-income level, 11.1 percent are labeled as intentional. However, at the low-income level, of all the returns with errors only 4 percent are labeled as intentional. If there were no monetary differences, we would expect the fraction of errors labeled as intentional to be similar, regardless of income level. This may reflect a bias on the part of the examiners due to the fact that the tax loss is higher in the negative- and high-income areas, or it may reflect a greater lack of financial literacy at low-income levels. This difference in the distribution, and the lack of clarity on its cause, is one of the factors suggesting the need for a more comprehensive model of errors, rather than simply assuming that underpayment are intentional errors.

FIGURE 2. Percentage of Labeled Errors by Adjusted Gross Income Level



Model Details

The first principles and machine-learning models employ different variables due to the way in which they are constructed. These differences are summarized in Table 4. These first principles models did not make use of the EOAD/IRTF data. The intentional error model contains variables that are available on the tax return

and, so, can be applied to the combined EOAD/IRTF data. The inadvertent error model, at this point, contains less of that information and, so, cannot be applied to the EOAD/IRTF data as easily. As part of the next phase of study, we will impute the relation between the variables in the EOAD/IRTF data and the variables used in the first principles, inadvertent error model. In this latter case, future work will seek to find a mapping between the variables in the inadvertent error, first principles model and those items available on tax returns.

TABLE 4. Variables Used by the Different Models

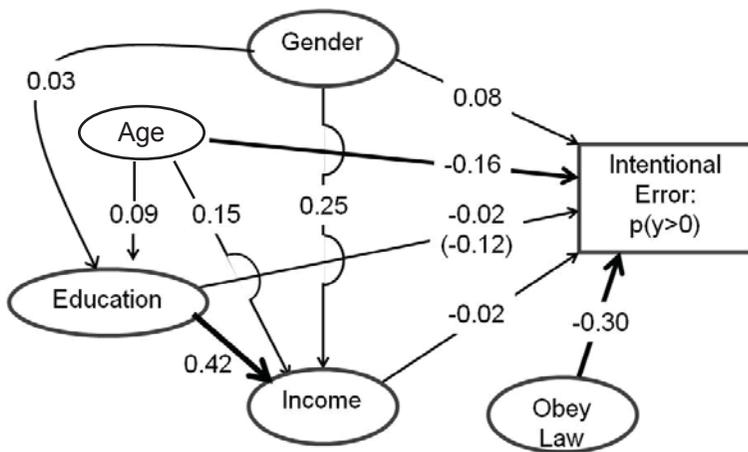
Variable	1st Principle Intentional	1st Principle Inadvertent	Machine-learning
EITC	no	no	yes
Age	yes	yes	yes
Burden/Complexity	no	yes	yes
Late	no	yes	yes
Filing Status	no	no	yes
Itemization	no	no	yes
Exemptions	no	no	yes
Preparer	no	no	yes
Error Amount	no	no	yes
Income	yes	yes	yes
Gender	yes	yes	no
Belief in obey law	yes	no	no
Education	yes	yes	no

Team A

The first principles models, as they are derived from the general literature and not the EOAD/IRTF data, provide a principled way of characterizing errors that can be applied to any return. The model of intentional errors from first principles predicts the probability that individuals will commit some error as determined by their sociodemographic traits, namely gender, age, education, and income, as well as their attitudes toward obedience to the law (Lee and Carley, 2009). This model incorporates scientific findings from several published papers on tax evasion and represents their weighted average, taking into account their similarities to the recent U.S. population. In Figure 3, the intentional error model, for the standardized regression models (or path coefficients) for predicting an intentional error, as derived from the open source literature, is shown. As can be seen, tendency to believe that laws should be obeyed, age, and, indirectly, education are primary drivers.

The inadvertent error model from first principles takes into account issues of literacy, the relative complexity of the tax law, stress due to time of filing, and basic sociodemographic correlates of error to predict taxpayer mistakes. The basic inadvertent error model is shown in Figure 4. In this case, general sociodemographic traits have a diagnostic role only to the extent they correlate with financial literacy and the expectation to receive a refund. In general, the dominant factor in producing an inadvertent error is task complexity; in other words, the burden in filling out the relevant line items.

FIGURE 3. First Principles Intentional Error Model



Taken together, the two first principles models suggest about a 45- to 50-percent error rate, of which about 30 percent are inadvertent and 20 to 30 percent are intentional. And, although we have not yet been able to estimate it, these models suggest that there are likely to be returns with both intentional and inadvertent error, particularly when the complexity of the return is high.

Team B

The empirical model of errors is a composite model employing three machine-learning and statistical techniques: the Proc Logistic regression model developed in SAS, a Bayesian Network Prediction model, and a j48 decision tree classifier with multiboosting. The models for error were formulated with 10 explanatory

variables and a binary response variable. For one set, the response variable is intentional error, and the other set has inadvertent error. The 10 explanatory variables are: income, error amount as determined by the exam, complexity (burden), late code, preparer used, exemptions, filing status, age, EIC, and itemization.

Proc Log is a linear regression procedure used to model dichotomous outcomes of interest, such as the error variables. A linear function is produced to model the relationship between the explanatory and dependent variables. The error variables were coded as “0” for no error and “1” for an error in order to be used with Proc Log. Proc Log can produce several “goodness of fit” indicators, but Proc Log was used primarily to produce classification tables for the IRS data. Once the classification tables were produced from the labeled set, they were used to predict outcomes in both the labeled and unlabeled sets for the intentional and inadvertent models.

The other software used for prediction was the Belief Net (BN) Power Constructor. This Bayesian network predictive software uses a conditional independence-based algorithm to construct a directed acyclic graph. Given the binned variables, this software can produce a graph that will calculate error probabilities for each tax return. Like the Proc Log classifiers, the resulting models are applied to the labeled and unlabeled sets for comparison. The predictive software (SAS and BNP) uses a tolerance of 0.5 to determine whether the model predicts that a particular tax return has an error. Changing this tolerance lowers or increases the threshold for prediction. We used a tolerance of 0.5 for inadvertent errors and 0.1 for intentional errors. This difference is a direct result of the fact that there are so few known cases of intentional error.

The models are learned using data gleaned from the EOAD and IRTF data sets provided by the IRS. The EOAD data is split into two sets: “labeled” and “unlabeled.” The labeled set is further divided into two overlapping sets: “intentional” and “inadvertent.” This was done at the full tax return level and by line item. The unlabelled set had neither intentional nor inadvertent errors. The data was again split by four income groups: negative, low, medium, and high. Each of these income groups has a substantially different profile in terms of taxpaying behavior and, so, errors. These splits were applied overall and by line item. Several line items or issues associated with each tax return were derived from the line item set. These include tips, self-employment income, farm income, alimony, as well as another indicator for capital gains. In lieu of learning separate models for exam types, such as field or campus, we simply controlled for the exam type.

Comparing, Contrasting and Testing the Models— Team C

The first principles intentional error models and the empirical models for intentional and inadvertent errors are applied to the labeled sets to determine how

well the models work. This is done for the overall tax return and by selected line items. After the models are assessed using the labeled data, they are then applied to the unlabeled sets to determine how many of these forms can be characterized. Finally, to create a composite model, the predictions of the various independent models are combined. Both intersection and union are explored.

Model results are strongest when controlling for income as cause, type, and level of error are different. There is substantial overlap among models suggesting a class of cases for which there is strong ability to discriminate between intentional and inadvertent errors. However, each of the models has a different strength with respect to the cases with less clear signals. Hence, a composite model, formed by combining the diverse models, provides a more comprehensive assessment.

Results

Both first principles and machine-learning models were built separately for inadvertent errors and for intentional errors. These models suggest that it is possible to discriminate apparently intentional from inadvertent errors for most returns. Of the 1,042,412 tax returns marked as inadvertent by the examiners, 81 percent are predicted to be inadvertent using machine-learning models. Of the 784,485 tax returns marked as intentional by the examiners, approximately 50 percent are predicted to be intentional using the machine-learning models. Of the records marked as both intentional and inadvertent by the examiners, approximately 84 percent are predicted to be both inadvertent and intentional using the respective machine-learning models. Using the first principles models, a higher percentage of the tax returns are marked as containing intentional errors.

Of the tax returns marked as inadvertent, 2 percent are predicted to be intentional by the empirical models. There are two possibilities:

1. The flags that are set by the examiner are wrong
2. The flags are correct and the intentional error models are “over” predicting

If the flags are wrong, then this 2 percent means that these models identify an additional 2 percent of the cases as containing intentional errors. If the flags are correct, this 2 percent error means that we would expect these intentional error models to incorrectly suggest that returns might contain intentional errors 2 percent of the time for returns already selected as thought to contain an error. This would be the cap on the inaccuracy of these models.

We expect that refined models that look at line items and explore the correlations among those may further increase the predictive value of the results. We also expect that combining the final models from Teams A and B will result in a

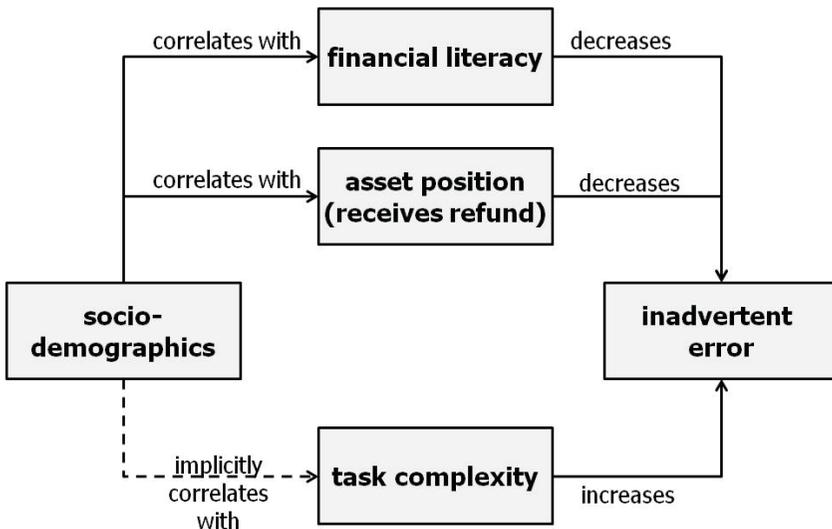
better general model that can be used by the Service in a variety of ways, including compliance-related education for both IRS enforcement staff and the taxpayer.

We now turn to a more detailed analysis of the modeling results for inadvertent and then intentional errors. In this more detailed analysis, we consider both labeled and unlabeled exams.

Inadvertent Errors

We developed from the open literature a general or first principles model of inadvertent errors. This is shown in Figure 4. As can be seen, two factors that drive inadvertent errors are complexity of the problem and financial literacy. That is, higher return complexity combined with lesser financial literacy translates to an increased likelihood of inadvertent error.

FIGURE 4. First Principles Inadvertent Error Model



Predicting Inadvertent Errors (0.5 Tolerance)

LABELED SET—ONLY THOSE CLASSED AS INADVERTENT

Accuracy results from applying the learned models to the known or labeled set of tax returns are shown in Table 5. Note that the predictive models return a percent likelihood of error for each tax return. The tolerance for these outcomes is set at the default of 0.5. At 0.5, the sum of the percentage of correct positives and correct

negatives is usually maximized, for both types of error. The tolerance is not a confidence interval. It is simply a cut-off point for whether the exam is predicted to have an error or not. Moving away from 0.5 increases the likelihood of false positives or false negatives. In an operational context, a different tolerance might be used for intentional errors if, e.g., the policy was to examine all possible cases of intentional error even if there is a high chance that the error, if there was one was not intentional. Similarly, for inadvertent errors, a policy that “education never hurts” might use a tolerance that produces a high level of false positives.

TABLE 5. Inadvertent Error Predictions by Models Independently and Collectively Given Labeled Tax Returns

Income	Negative				Low			
	Confirmed Error	Potential Error	Predicted Error	Inaccuracy	Confirmed Error	Potential Error	Predicted Error	Inaccuracy
BNP	80.96%	16.51%	97.47%	1.04%	30.03%	16.51%	46.54%	16.97%
PL	80.98%	16.51%	97.49%	1.02%	29.80%	17.16%	46.96%	17.20%
BNP \cap PL	80.51%	16.96%	97.47%	1.49%	28.24%	18.52%	46.76%	18.76%
BNP \cup PL	81.43%	16.06%	97.49%	0.57%	31.59%	15.14%	46.73%	15.41%
Average of Models	80.97%	16.51%	97.48%	1.03%	29.92%	16.83%	46.75%	17.09%
Confirmed Maximum	82.00%				47.00%			
Income	Middle				High			
	Confirmed Error	Potential Error	Predicted Error	Inaccuracy	Confirmed Error	Potential Error	Predicted Error	Inaccuracy
BNP	49.93%	23.51%	73.44%	10.07%	71.76%	28.24%	100.00%	0.24%
PL	49.42%	24.39%	73.81%	10.58%	70.29%	26.64%	96.93%	1.71%
BNP \cap PL	47.02%	26.46%	73.48%	12.98%	70.29%	28.24%	98.53%	1.71%
BNP \cup PL	52.33%	21.44%	73.77%	7.67%	71.76%	26.64%	98.40%	0.24%
Average of Models	49.68%	23.95%	73.63%	10.33%	71.03%	27.44%	98.47%	0.97%
Confirmed Maximum	60.00%				72.00%			

In table 5, 8, 11, and 14, the percentage errors for labeled tax returns are shown. To generate the values shown, the following factors were considered. Note that there are two ways for a model to match the conclusions of the examiner. A model can label the tax return as having the same type of error (inadvertent or intentional) as marked by the examiner. We refer to these as confirmed errors. Or, a model can label the tax return as not having an error of that type and the examiner also marks the tax return as not having an error of that type. These are confirmed non-errors and will not be reported. Similarly, there are two ways in which the models can mismatch the examiners.

A model can label the tax return as having an error of that type, and the examiner did not mark it as such. We refer to these as potential errors, as they are tax returns that the models would also characterize as having an error of that type. Or, a model can label the tax return as not having an error of that type, but the examiner did mark it as having an error of that type. We refer to these as mistakes.² It should be noted that the difference between the percentage of returns marked as having that type of error by the examiner (see Table 3) and the percentage of the returns that are confirmed errors are the mistakes. The basic idea behind this demarcation is that, although examiners may under-report errors, if they do mark an exam as containing a particular type of error, they are unlikely to be wrong. The percentages under mistakes can be thought of as the minimum level of inaccuracy expected when these models are used. Another feature of many of these tables is that we present results for both an intersected and a union approach on confirmed errors. In tables with these combinations, \cap is used for intersection on confirmed and \cup to denote union on confirmed. This refers to the way in which the models were combined for the confirmed errors, as well as confirmed nonerrors. In the case of the union, the potential errors are those cases for which none of the models suggested it was not in error.

More exams are marked as inadvertent than as intentional by the examiners, 57 percent and 4 percent respectively. If a model were to exactly match the examiners findings, the maximum number of labeled tax returns the model would label 4 percent as intentional. A model that exactly matches the examiners would for inadvertent errors have a higher percentage of the returns characterized as confirmed errors and for intentional errors have a higher percentage characterized as confirmed non-errors. The sum of confirmed errors and potential errors is the number of labeled exams a model suggests has that type of error. This is the predicted error. The maximum possible predicted error that can be confirmed is also shown in these tables. The predicted error will be higher than the confirmed maximum when the model predicts exams to contain an error of that type and the examiner did not. If the model does not mark a labeled exam as having an error when the examiner does label that exam as having an error, we refer to that as an inaccuracy in the model; alternatively, we could view this as cases where, if the model is correct, the examiner has erroneously labeled the exam.

Looking at Table 5, we can see that, for inadvertent error, the minimum level of inaccuracy is highest (i.e., the difference between the confirmed error and the confirmed maximum) when the return is from someone in the low- and middle-income area. In contrast, for negative- and high-income cases, the models tend to mark as inadvertent the same cases marked by the examiners. Specifically, the models estimate that more than 90 percent of these returns contain inadvertent errors. However, the models suggest that only 40 percent to 50 percent of the low-income returns and 65 percent to 75 percent of the middle-income returns contain inadvertent errors.

The accuracy is highest for negative and high incomes. Also, there is a great deal of overlap between the two models. However, the percentage of false positives is quite high. Increasing the tolerance or threshold for a positive result will minimize the false positives but at a cost to overall accuracy. If examiners have a tendency to

mark exams as inadvertent, even if they are not, then these models can be interpreted as suggesting, on average, that for low- and middle-income cases, 17.09 percent and 10.33 percent of the cases, respectively, may have been erroneously marked as inadvertent.

UNLABELLED DATA

Table 6 contains the models' predictions for inadvertent error in the unlabeled set of tax returns. Note that the percentages predicted are higher than the actual percentages based off the labeled set. This may be because something about the tax return or the taxpayer alerted the examiner that the case was inadvertent, so they just did not mark it. Or, this may be because there were other signals during the exam for the labeled cases that suggested they were intentional.

TABLE 6. Percentage of Unlabeled Exams Predicted to be Inadvertent by Models

Model/Income	Negative	Low	Middle	High
BNP	83.4%	69.0%	81.4%	100.0%
PL	80.3%	66.9%	84.0%	94.9%
BNP \cap PL	76.3%	62.8%	76.6%	94.9%
BNP \cup PL	87.4%	73.1%	88.8%	100.0%

PROFILES OF TAX RETURNS WITH ERRORS FOR WHICH THE ERRORS ARE LIKELY TO BE INADVERTENT

Because so many examined returns have inadvertent errors, picking definitive profiles is challenging. Many returns have both intentional and inadvertent errors. Nevertheless, trends definitely emerge. Illustrative profiles by income level are shown in Table 7. For all income groups, higher burden is associated with inadvertent error. We note that the first principles model for inadvertent error also suggests that complexity (and therefore burden) is a major contributor to inadvertent error. In this table, NA means not applicable.

Burden is consistently higher for erroneous tax returns. Although it is not always higher for every single tax return, when looking at the percentages of erroneous tax returns versus ones without inadvertent error, a clear pattern is shown. For example, 90 percent of nonerroneous tax returns in the negative group are in the lowest burden group. Eighty percent of those in the error group were in the highest burden group. Also, the percentage of those married filing jointly increases in each erroneous group. This may be a result of more opportunity for error as more lines of tax returns must be completed compared with those filing singly or as a head of household. Also, younger taxpayers (in the under 30 bin) have lower percentages of erroneous tax returns. Again, this may be due to younger people having less complicated tax situations in general.

TABLE 7. Profiles Consistent with Inadvertent Errors

	Age	Use Paid Preparer	Itemized	Income	Late	Burden	EIC	FS
Low	Mixed	Less Likely	More Likely	Mixed	Mixed	High	More Likely	Mixed
Middle	Older	Less Likely	More Likely	Higher	More extensions	High	More Likely	Joint-More likely
High	Slightly Older	Slightly more likely	Mixed	NA	Mixed	High	NA	Mixed
Negative	Slightly Older	Slightly more likely	Mixed	NA	Mixed	High	Mixed	Joint-More likely

Predicting Intentional Errors (0.1 Tolerance)

LABELLED SET—ONLY THOSE CLASSIFIED AS INTENTIONAL

The accuracy results from applying the learned models to the known or labeled set of tax returns are shown in Table 8. While the accuracy percentage is quite high (typically inaccuracy is less than 5 percent), there are many false negatives. Essentially, the models underpredict intentional errors at the 0.5 level, resulting in a high number of correct negatives. When the tolerance is set to 0.1, a wider net is cast, and more tax returns will be classified as intentional. This lowers the number of cases for which a model claims there is no intentional error, and the examiner marks the exam as containing an intentional error (false negatives). And, it increases the number of cases for which a model claims that the error is intentional, and the examiner does not (false positives). While there is a great deal of overlap in the Bayes Net and Proc Log models, the first principles model has different, yet still similar, results. Overall, by combining the models, a stronger result is produced.

We set the tolerance lower for intentional than for inadvertent errors for two reasons. First, there were simply far fewer tax returns marked as intentional. Second, by setting it lower, the overall mismatch with the examiners is lower. However, even though the overall mismatch is lower, the number of returns for which a model suggests there is an intentional error and the examiner does not will be higher. Thus, we erred on the side of forecasting potential errors.

In table 8, we see that the first principles model and the union of models with the first principles models tend to predict more intentional errors and tend to have lower minimum levels of inaccuracy. As with the inadvertent errors, the models are more accurate for negative and high income than for low income.

TABLE 8. Intentional Error Predictions by Models Independently and Collectively Given Labeled Tax Returns

Income	Negative				Low			
	Confirmed Error	Potential Error	Predicted Error	Inaccuracy	Confirmed Error	Potential Error	Predicted Error	Inaccuracy
BNP	14.17%	56.02%	70.19%	1.83%	1.03%	4.36%	5.39%	0.97%
PL	14.28%	55.43%	69.71%	1.72%	1.03%	4.66%	5.69%	0.97%
FP	13.15%	59.41%	72.56%	2.85%	1.43%	42.20%	43.63%	0.57%
FP ∩ PL	11.86%	71.35%	83.21%	4.14%	0.94%	42.59%	43.53%	1.06%
FP ∪ PL	15.58%	43.49%	59.07%	0.42%	1.53%	4.27%	5.80%	0.47%
FP ∩ BNP	11.78%	71.98%	83.76%	4.22%	0.93%	42.52%	43.45%	1.07%
FP ∪ BNP	15.54%	43.45%	58.99%	0.46%	1.53%	4.04%	5.57%	0.47%
BNP ∩ PL	13.48%	62.01%	75.49%	2.52%	0.93%	5.33%	6.26%	1.07%
BNP ∪ PL	14.97%	49.45%	64.42%	1.03%	1.14%	3.69%	4.83%	0.86%
n all	11.29%	73.61%	84.90%	4.71%	0.85%	42.68%	43.53%	1.15%
Union All	15.77%	39.13%	54.90%	0.23%	1.55%	3.46%	5.01%	0.45%
Average of Models	13.81%	56.85%	70.65%	2.19%	1.17%	18.16%	19.34%	0.83%
Confirmed Maximum	16.00%				2.00%			

Income	Middle				High			
	Confirmed Error	Potential Error	Predicted Error	Inaccuracy	Confirmed Error	Potential Error	Predicted Error	Inaccuracy
BNP	2.72%	13.14%	15.86%	1.28%	5.71%	24.92%	30.63%	3.29%
PL	2.68%	13.06%	15.74%	1.32%	6.09%	27.04%	33.13%	2.91%
FP	2.61%	37.80%	40.41%	1.39%	4.79%	33.43%	38.22%	4.21%
FP ∩ PL	2.02%	41.14%	43.16%	1.98%	3.73%	46.45%	50.18%	5.27%
FP ∪ PL	3.27%	9.72%	12.99%	0.73%	7.15%	14.01%	21.16%	1.85%
FP ∩ BNP	2.03%	41.40%	43.43%	1.97%	3.65%	44.52%	48.17%	5.35%
FP ∪ BNP	3.30%	9.54%	12.84%	0.70%	6.85%	13.82%	20.67%	2.15%
BNP ∩ PL	2.57%	14.28%	16.85%	1.43%	5.42%	29.93%	35.35%	3.58%
BNP ∪ PL	2.83%	11.93%	14.76%	1.17%	6.38%	22.03%	28.41%	2.62%
n all	1.95%	41.74%	43.69%	2.05%	3.51%	48.03%	51.54%	5.49%
Union All	3.34%	8.92%	12.26%	0.66%	7.29%	12.51%	19.80%	1.71%
Average of Models	2.67%	22.06%	24.73%	1.33%	5.51%	28.79%	34.30%	3.49%
Confirmed Maximum	4.00%				9.00%			

UNLABELED DATA

Since the predictive models for intent determine so few errors, lowering the tolerance to 0.1 results in percentages of erroneous tax returns more in keeping with the actual exam error percentages. These results are shown in Table 9.

TABLE 9. Percentage of Unlabeled Exams Predicted to be Intentional by Models

Model/Income	Negative	Low	Middle	High
BNP	39.3%	2.0%	6.3%	7.0%
PL	30.5%	2.3%	5.7%	9.0%
FP	35.7%	30.2%	23.4%	25.1%
FP \cap P PL	14.7%	0.9%	2.5%	2.2%
FP \cup PL	51.5%	31.5%	26.7%	32.0%
FP \cap BNP	13.9%	1.0%	2.4%	2.1%
FP \cup BNP	61.1%	31.2%	27.3%	30.1%
BNP \cap PL	23.4%	1.2%	4.9%	5.5%
BNP \cup PL	46.4%	3.1%	7.2%	10.6%
Intersect all	11.0%	0.7%	2.0%	1.6%
Union All	64.5%	32.1%	27.7%	33.1%

PROFILES OF TAX RETURNS WITH ERRORS FOR WHICH THE ERRORS ARE LIKELY TO BE INTENTIONAL

By income level, the profiles of tax returns with intentional and unintentional errors are somewhat different. For all four income groups, markers for intentional error include self preparation, age greater than 30 years, high complexity, and no EITC. For all income groups, except low income, itemized deductions were also well represented. One consistent difference is the representation of head of household filers. They are consistently more represented in the “no error” group. Fewer of them and more married taxpayers appear in the group that make intentional errors. It should be noted that people may claim head of household status, even if they are not eligible to do so. We did not control for this. If we could determine that this claim was wrong, then that might move some of these cases to the intentional error category, if, in fact, this error was not inadvertent. However, the complexity of determining eligibility for head of household status in and of itself is likely to increase both intentional and inadvertent errors. Taking into account errors on other factors, such as head of household status, is a point for future research. These profiles for intentional errors are shown in Table 10.

TABLE 10. Profiles Consistent with Intentional Errors

	Itemized	Late	Exemptions	Error Amount	Filing Status
Low	No	Extension and No File	< 2	Very High and Low	Single and Married-J
Middle	Yes	Extension	Mixed	Very High and Low	Single and Married-J
High	Yes	Mixed	Mixed	Very High and Low	Married-J
Negative	Yes	Extension	Mixed	High	Married-J

Line Items—EITC

The first line item modeled was the earned income tax credit (EITC). This was because it is one of the most examined line items, being concentrated in low- and middle-income groups. It is also one of the most complex of the line items. As such, according to the theoretical first principles models, the likelihood of both intentional and inadvertent errors is likely to be higher than for other line items. Over 940,000 EITC line items were examined in the set. The average adjustment was $-\$2,285$ and the total was $-\$2.15$ billion. Almost all returns were labeled as containing inadvertent errors (more than 99 percent), while there were very few returns marked as containing intentional errors (less than 1 percent) for all income groups except the high-income group. Due to the nature of the EITC line items, there are no tax returns that employ this line item that are in the high-income bracket. The models behaved accordingly. We note that the distribution of errors for the EITC line item is not symmetric about zero; i.e., in most cases the errors result in tax-loss (under-reporting). The distribution is slightly more symmetric for taxpayers with low income who take the EITC than for other income levels. As with the entire set of tax returns, we do not make the assumption that errors resulting in under-reporting are intentional.

EITC MODELS—LABELED SET—ONLY THOSE CLASSIFIED AS INADVERTENT

The BNP and Proc Log models for error on the EITC line item, unlike the corresponding models for error somewhere on the overall tax return, do not use taking the EITC credit as a control. The EITC error results are shown in Table 11. The BNP line item model for EITC results in a much higher percentage of false positives than the full tax return BNP model. The Proc Log model outperforms the full tax

return model significantly and, remarkably, does not overlap very much with the BNP model. This line item may be a good candidate for ensemble learning because of this lack of overlap. By combining the models in an ensemble, the strengths of both individual models can be exploited. It is likely that the Proc Log model is overestimating the likelihood of inadvertent errors. As such, in this case, it would not be reasonable to use the union of the two models as the composite model of inadvertent errors. Another important point is that the minimum level of inaccuracy is much lower for the Proc Log model than the BNP.

TABLE 11. Inadvertent Error Predictions by Models Independently and Collectively Given Labeled Tax Returns for Inadvertent Error on the EITC Line Item

Income	Negative			Low			Middle		
	Confirmed Error	Potential Error	Mistakes	Confirmed Error	Potential Error	Mistakes	Confirmed Error	Potential Error	Mistakes
BNP	41.98%	0.00%	58.02%	33.53%	0.75%	65.72%	36.80%	0.12%	63.08%
PL	100.00%	0.00%	0.00%	86.57%	4.88%	8.54%	88.07%	4.23%	7.71%
BNP \cap PL	41.98%	0.00%	58.02%	29.24%	4.93%	65.84%	32.65%	4.25%	63.10%
BNP \cup PL	100.00%	0.00%	0.00%	90.87%	0.71%	8.42%	92.22%	0.10%	7.69%

EITC MODELS—UNLABELED INADVERTENT EITC LINE ITEMS COMPARED WITH INTENT ON OVERALL TAX RETURN

As previously noted, the unlabeled set had no error designation, so, for the sake of comparison, the results of the EITC line item models were compared with the intent ascribed to the overall tax return. This compares, for a specific return the type of error on a line item with the type of error on the tax return as a whole. For the unlabeled set, the Bayes Net model outperformed the Proc Logistic model. Proc Log tended to mark the vast majority of the line items as inadvertent, which resulted in large percentages of false positives. For the line items, the model can be applied to the unlabeled data directly, and/or in comparison with the predicted intentionality of the tax return as a whole. In Table 12, the latter is shown. In this case, we assume that the predicted type of error for the tax return as a whole is correct. Then if a model labels the EITC line item as inadvertent, and the parent model labeled the overall tax return to be inadvertent, we would say that is a confirmed error. If a model labels the EITC line item as inadvertent, when the overall tax return was not labeled as inadvertent, then that model is suggesting there is a potential error on that line item. If a model does not label the EITC line item as inadvertent, but the overall return was labeled as inadvertent, then that model is either mistaken, or the source of error is on a different line item. From a conservative point of view, then, the minimum inaccuracy would be that all of these last cases are actually model mistakes and the percentage shown can be thought of as the minimum possible mistakes.

TABLE 12. Match of the Models Independently and Collectively for Inadvertent Errors on the EITC Line Item for Unlabeled Tax Returns Assuming that the Prediction for the Overall Tax Return holds

Income	Negative			Low			Middle		
	Matches Overall Exam	Potential Error	Mistake	Matches Overall Exam	Potential Error	Mistake	Matches Overall Exam	Potential Error	Mistake
BNP	50.98%	4.25%	44.77%	77.55%	0.42%	22.02%	77.19%	3.56%	19.25%
PL	50.98%	48.53%	0.49%	24.74%	73.30%	1.95%	23.76%	74.74%	1.50%
BNP n PL	6.70%	48.53%	44.77%	4.66%	73.31%	22.03%	5.99%	74.74%	19.27%

INADVERTENT EITC PROFILE

The EITC profiles are somewhat different from those for the tax returns when viewed in their entirety. See Table 13. All but two negative income tax returns were classified as having inadvertent errors, so there was no basis for a comparison. Also, high-income tax returns were excluded, as so few claimed EITC. Again, the people who tended to make errors were a bit older and the complexity somewhat higher, but it was not as pronounced as in the whole tax returns. There were fewer distinguishing characteristics between those who made errors and those who did not. This is at least partially due to the high percentage (over 99 percent) of those making errors.

TABLE 13. Profiles Consistent with Inadvertent Errors on EITC Line Item

	Age	Preparer	Complexity	Exemptions	Error Amount	FS
Low	Mixed	Slightly more self	Higher	More < 2	Higher	More Singles
Mid	Slightly Older	Mixed	Mixed	More < 2	Higher	More Singles and HOH

EITC MODELS—LABELED SET—ONLY THOSE CLASSIFIED AS INTENTIONAL

Very few of the examiners marked the EITC line item as containing an intentional error. Table 14 clearly demonstrates the effects of “rare events” on our models. The rare event in this case is the designation of an intentional error on the EITC line item. The Bayes Net Model marked every single tax return as not having an error and was not included. The other two models marked some, though very few, tax returns as having intentional errors on the EITC line item. As with the set of tax returns as a whole, for the EITC line item, the models are quite likely to label a return as not having an intentional error when the examiner also marks it as such.

Overall, these models are more able to identify inadvertent errors on the EITC line item than on the return as a whole and are unable to identify intentional errors marked by examiners. This shortcoming is likely to be overcome by simply building the models on more data.

TABLE 14. Intentional Error Predictions by Models Independently and Collectively Given Labeled Tax Returns for Intentional Error on the EITC Line Item

Income	Negative			Low			Middle		
	Confirmed Error	Potential Error	Mistakes	Confirmed Error	Potential Error	Mistakes	Confirmed Error	Potential Error	Mistakes
PL	0.41%	0.00%	0.00%	0.01%	0.00%	0.58%	0.00%	0.00%	0.77%
FP	0.00%	0.00%	0.41%	0.00%	0.00%	0.58%	0.00%	0.00%	0.77%
FP ∩ PL	0.00%	0.00%	0.41%	0.00%	0.00%	0.58%	0.00%	0.00%	0.77%
FP ∪ PL	0.41%	0.00%	0.00%	0.01%	0.00%	0.58%	0.00%	0.00%	0.77%

EITC MODELS—UNLABELED INTENTIONAL EITC LINE ITEMS COMPARED WITH A LABEL OF INTENTIONALITY ON THE TAX RETURN AS A WHOLE

Compared with the predictions for the return as a whole, the EITC line item model produces similar results. See Table 15. Again, the Bayes Net Model was excluded as it marked no errors. This data suggests that, even when the overall exam is likely to include an intentional error, intentional error is likely not to be on the EITC line item. One must be cautious in over interpreting the EITC result, however, as it is based on so little data.

TABLE 15. Match of the Models Independently and Collectively for Intentional Errors on the EITC Line Item for Unlabeled Tax returns Assuming that the Prediction for the Overall Tax return holds

Income	Negative			Low			Middle		
	Confirmed Error	Potential Error	Mistakes	Confirmed Error	Potential Error	Mistakes	Confirmed Error Overall Exam	Potential Error	Mistakes
PL	0.16%	0.33%	3.92%	0.00%	0.05%	0.13%	0.00%	0.01%	0.11%
FP	0.00%	0.00%	4.08%	0.00%	0.00%	0.13%	0.00%	0.00%	0.11%
FP ∩ PL	0.00%	0.33%	4.08%	0.00%	0.05%	0.13%	0.00%	0.01%	0.11%
FP ∪ PL	0.16%	0.00%	3.92%	0.00%	0.00%	0.13%	0.00%	0.00%	0.11%

INTENTIONAL PROFILES

Very few intentional tax returns were identified by the models, which is not surprising, as intentional errors are truly rare events as labeled in the data by examiners. Like whole tax returns, for the EITC line item, the preparer tends to be self and the complexity high. Also, once again, head of household is not as represented in the error group. See Table 16.

TABLE 16. Profiles Consistent with Intentional Errors on EITC Line Item

	Age	Preparer	Itemized	Income	Late	Complexity	Exemptions	Error Amount	FS
Low	<60	Self	No	Lower	Less on time	High	More < 2	High	Very Few HOH
Middle	<60	Self	Yes	Mixed	Mixed	High	More < 2	Mixed	Very Few HOH
Negative	>30 <60	Mixed	Mixed	Mixed	On Time	High	Mixed	Mixed	Married-J

Discussion

It is important to recognize that these models are not true models of error so much as models of error as determined by IRS examiners. This is due to the data used. The EOAD data contain only operational exams. Consequently, the tax returns are not representative of the population. They were selected for examination because of some perceived noncompliance. In deciding which tax returns to further examine, a set of selection criteria are used resulting in a set of tax returns that are suspected to contain errors. Thus, the first source of bias is selection on the dependent variable-error. Future work should take the proposed models and test against a random sample of all tax returns.

The second limitation is the criterion for defining error. The criterion we used for asserting that the tax return contained an intentional error was that the examiner marked it as such. If an examiner did not mark a tax return as intentional, then we would not have marked it as such. In general, examiners cannot know for sure whether an error is intentional or inadvertent. Making that judgment requires knowledge of the taxpayer’s true motives at the time of preparing the return or possibly an admission of intent. However, such information is generally not available. In addition, examiners have very significant incentives not to characterize an error as intentional, since that generally carries with it a higher standard of proof. While taxpayers have every incentive to claim that they forgot, lost, or did not know something, for one taxpayer, that may be true and inadvertent, but for

another similarly situated taxpayer, it may be a simple attempt to cover up intentional noncompliance. To mitigate this bias, we used a jittering approach in which we tested the models by relabeling a few of the tax returns as intentional or not and rebuilding the models. This did not appreciably change the results.

Discussions with IRS staff also led to the conclusion that expectations about the source of error and/or level of error impacted the type of exam; e.g., field or campus. This source of bias is related to the differing proportions of intentional marking given the different types of exams. To mitigate this source of bias, all tax returns were considered collectively with controls for types of exams considered. However, future work might create separate models for field and campus exams, for the empirical models, and see how different these are as compared to the unified model that controls for the type of exam. In particular, differences vis-a-vis the profiles should be examined. In doing this, it will be important to keep in mind that the first principles models consider motivation and, as such, represent factors prior to the exam; hence, there should not be separate first principles models vis-a-vis the exam type. Additionally, it should be recognized that differences in profiles resulting from separate models of the field and campus exams will still be subject to the criticism of sampling on the dependent variable.

This research focused on accuracy; i.e., “was there an error?” Other key avenues of exploration are the degree of error (e.g., did it lead to a 1 percent or 30 percent difference in payments?) and the ambiguity of the error. We found that many tax returns contained both intentional and inadvertent errors and that, in some cases, one could not discern whether a particular error was intentional or inadvertent. This suggests a “gradient” in the “intentionality” of the error. Thus, one can think of some errors as being, e.g., 60 percent inadvertent. Future research might consider whether there are systematic factors that lead to classes of errors that are diagnosable as having a certain percentage of inadvertency. This could lead to a new support for the taxpayer; e.g., if there are a set of line items for which those errors that occur tend to appear as between (30 and 70 percent) inadvertent and for which the dominant factors are degree of burden or complexity and experience of the taxpayer then, this might suggest that such items provide sufficient ambiguity that they both confuse the taxpayer and that they present opportunities for those inclined to noncompliance.

In this research, the data did not support a systematic examination of the differences in compliance relative to math and nonmath errors or use or nonuse of software in preparing taxes. Future work should explore alternative data to see if, in fact, there is greater symmetry in errors with respect to math errors than other errors and whether, in fact, the errors in favor or not in favor of the taxpayer with respect to math errors have reduced proportionally with increasing use of computation support such as e-preparation and e-filing of tax returns. In addition, our simulation work shows that the use of software and paid preparers are also critical codeterminants of error. In part, e-filing and the use of software in preparing taxes reduced math errors in particular.

Conclusion

This research suggests that it is possible to identify factors associated with intentional and inadvertent noncompliance on tax returns. From a theoretical perspective, the core difference in causes of errors from the first principles models is that a belief in obeying laws will decrease intentional errors and is irrelevant for inadvertent errors; whereas, complexity or burden is a strong predictor of inadvertent errors and is not a direct predictor of intentional errors. The machine-learning models suggest that, for inadvertent errors, age, use of paid preparers (no for negative and low income, yes for middle and high income), taking the EIC, and the overall burden/complexity of the exam are diagnostics for assessing when an error is inadvertent; whereas, filing late, taking multiple exemptions, and larger errors are diagnostic of the error being intentional.

The most challenging part of this effort has been dealing with rare events. In general, many statistical-leaning models work better when there are vast quantities of data and when the data contains a uniform set of results. While a 50/50 split on the results (inadvertent/intentional) is not required, a more even split than 99.9/.01 is helpful. Despite the rarity of the event (the intentional error), trends are definitely emerging for both inadvertent and intentional errors; however, more work is needed on the models to increase the accuracy and robustness of the results. This challenge is difficult for the tax returns as a whole; but, it is even worse for the individual line items. One possible way of mitigating this would be to get more data. Another extension would be to see if imputing labels for line items that are not labeled, when the exam as a whole is labeled, would alter the results.

Our investigations suggest that the key to improved accuracy is to employ an ensemble of techniques that blend results from multiple diverse models. As noted previously, the various models have different strengths and weaknesses and, as such, tend to pick up on different aspects of the factors that lead to errors. By blending the models, a more robust comprehensive picture emerges. We note that even blending the Bayes Net, the Proc Log, and the first principles models improve the predictive model for intentional errors. We expect the same will be true for the inadvertent errors. The gains, however, will be larger for intentional than for inadvertent errors, as a higher percentage of the tax returns marked as containing inadvertent errors as opposed to intentional errors by the examiners were classified as inadvertent by the machine-learning models. In addition, the gains will be larger at the individual line-item level. If sufficient gain is made at the line-item level, it might be possible to then re-estimate the type of error for the exam as a whole using a composite of line-item characteristics and overall exam characteristics. The lower accuracy of the machine-learning models for intentional errors means greater room for improvement as additional machine learning techniques are employed. Although not reported here, we are currently investigating models that may reach as high as 80-percent accuracy.

The examination of individual line items is another way of improving the overall accuracy of the results vis-a-vis classifying at least those returns containing errors as an examiner would have. With individual line items, there is still the problem that intentional errors are a rare event; however, restrictions on which taxpayers can utilize which line items does alter the proportions and makes the distribution slightly less rare. Further, by building models of errors for key line items, an overall improved ensemble model is made possible. Future work should expand on this by focusing on an exploration of additional line items and building a composite model using line-item and overall predictions. Self-employment promises to be a fruitful line item to consider.

Future research should explore more components of the tax return, such as Schedule C. For Schedule C, we note that it should not be treated as a uniformly complex item. For example, returns with a Schedule C of greater than \$10,000 are more complex than are Schedule C returns under \$10,000. Using a more fine-grained assessment of complexity of the various parts of the tax form seems warranted, particularly as complexity has turned out to be a dominant underlying root cause.

Other ensemble techniques should also be used. For example, the intersection/union results for intentional models show that, by adding in the first principles model, accuracy can be improved. The next step here is to employ the specific coefficients from the first principles models for intentional and inadvertent models in the statistical models.

Having a wider range of data would also help improve the model, as it would provide more cases and examples of returns without errors. This would support the use of unsupervised learning techniques and enable us to make better use of the first principles models. Using such techniques is critical if we are to move further beyond the constraints imposed by training models on the basis of exam results. The core issue will be determining the extent to which these techniques can provide useful models of error, intentional and inadvertent, that are independent of known biases. The lack of data also influences the number of variables available. For this study, we did expand the data by fusing and cleaning portions of two different datasets—EOAD and IRTF. The result of this data fusion and cleaning is that we were left with a small set of variables for which there was data on all tax returns. However, many of these variables showed no relation to errors in any of the models. The end result was a set of variables for which there was clean data, sufficient variance, and some relation with errors. We find that, adding other of the available variables did not tend to significantly change the results. If more data were available, that might lead to additional variables in the models. Based on the data currently available, the main additional variables we could add have to do with metrics on where errors occur in the tax return assessments.

Finally, we note that, while it is useful to know whether an error is intentional or not, the underlying core issue is simply, “what is the root cause of the error?” This

work has suggested a number of root causes: individuals simply not believing that they should obey laws, complexity of the tax form (and, therefore, burden placed on the taxpayer with differential impacts based on whether this is a numerical calculation burden or general cognitive/verbal complexity), assumptions about risk, timepressure, and inexperience in paying taxes. Further work should be done to refine this list and identify those classes of taxpayers and portions of the tax forms where one or more of these root causes is dominant. Such further work should consider using, as feasible, the codes used by the National Research Program and the reason codes. We note that the ultimate goal is to identify interventions that could be focused on types of taxpayers who are predicted to have a high likelihood of either inadvertent or intentional noncompliance. Distinguishing inadvertent from intentional is a first, albeit insufficient, step to address root cause. This research lays the groundwork for identifying those interventions.

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Endnotes

- ¹ The EOAD and IRTF data were held in a secure facility on a stand-alone machine following the CASOS technical control policy guidelines. Only members of the Center for Computational Analysis of Social and Organizational Systems team at Carnegie Mellon University who were cleared by the IRS to handle sensitive data were allowed access.
- ² From an experimental perspective, these categories of match and mismatch are the same as the traditional false+ and false– distinction that is used when ground truth is known. Since there is reason to suspect that the examiner markings contain errors, we use the term match and mismatch instead of correct and false. In summary, potential errors are, from a ground-truth perspective, false positives; whereas, mistakes are, from a ground-truth perspective, false negatives.

4



Tax Code Complexity and Compliance Burden

Contos ◆ Guyton ◆ Langetieg ◆ Vigil

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Individual Taxpayer Compliance Burden: The Role of Assisted Methods in Taxpayer Response to Increasing Complexity

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Desirable features of any tax system are fairness, simplicity, and efficiency. These characteristics encourage voluntary participation—raising revenue for government operations, while minimizing the cost of collection. People certainly argue about the fairness of the U.S. income tax system, but there is a definite consensus that it is highly complicated. The U.S. income tax is progressive; higher marginal tax rates are applied at higher income levels, but these are offset by a myriad of tax deductions and credits (not to mention all the rules and exceptions to rules that apply to each). There has been a steady trend toward increased complexity since the Tax Reform Act of 1986. In recent years, the trend has been compounded by increased administration of economic stimulus and social benefits programs (e.g., health care reform) directly through the tax system.

Another desirable feature of a tax system is efficiency—that is, a tax system that does not distort economic decisions. For example, high marginal tax rates may discourage labor market participation leading to lower economic output. Alternatively, a generous tax credit that targets home ownership may result in overinvestment in the purchase of homes, and underinvestment in alternatives such as retirement or savings. Compliance burden, the subject of this paper, is a form of inefficiency in the tax system.

A highly complicated tax system, such as that of the U.S., presents opportunities for evasion, impedes compliance, and requires significant resources to administer. Allingham and Sandmo (1972) and Slemrod (1985) analyzed the role of risk and the taxpayer's decision to avoid taxes in the context of determining the optimal level of tax law enforcement, or compliance. Slemrod notes that governments, however, do not expend the level of resources necessary to enforce the tax laws optimally. Andreoni et al. (1998) reinforce this by noting that the IRS budget has been declining in recent decades. They point to further evidence in declining examination rates, which stood at about 4 percent in the 1960s, but have declined to about 1 percent in recent years. Furthermore, the frequency with

which penalties are applied to taxpayers who underreport income or otherwise evade taxes has also declined. According to the authors, these conditions encourage taxpayers to increasingly conclude that the benefits of increased evasion are greater than the potential costs associated with being detected and the likelihood of paying penalties.

A study by Karlinsky et al. (2004) further reinforces this conclusion. In their study, participants were surveyed regarding their attitudes toward the severity of various crimes, revealing that tax evasion is generally not considered a serious crime and, furthermore, is seen in a somewhat positive light by some taxpayer segments—perhaps a reflection of frustration on the part of the taxpaying public concerning tax system complexity. Nonetheless, this is against the backdrop of a Federal tax gap estimated at \$345 billion for Tax Year 2001 alone (Mazur and Plumley, 2007).

Because the U.S. tax system is so complicated, compliance burden—the time and money taxpayers expend to comply with Federal tax law—can be a barrier to compliance. Slemrod & Sorum (1984) showed that the resource costs of filing the individual income tax was 5 percent to 7 percent of Federal and state revenue collected among employers who participate in the withholding system—or, equivalently, 1.4 percent of aggregate adjusted gross income. Erard and Ho (2003) showed that compliance burden, defined as the average time in hours to complete a tax return, was positively related to noncompliance, either through frustration of the taxpayer or ignorance of tax provisions resulting from complexity.¹ Another study, Slemrod (1985), concluded that relatively more complicated tax returns, such as those filed by the self-employed, and those that report capital gains income, experience higher compliance burden expenditures. In addition, taxpayers with a higher value of time (measured as the after-tax wage rate) and taxpayers who itemize tended to use the services of paid professionals. The author further concluded that “complexity encourages taxpayers to interpret the tax law to their advantage” and “unpredictability and the existence of complicated ways to avoid taxes may erode confidence in the fairness of the tax system and thereby affect voluntary compliance.” More recently, Auerbach et al. (2010) discuss compliance costs as a factor expected to impede compliance with the new health insurance mandates.

The IRS began reporting compliance burden on tax forms beginning in 1988, using the A.D. Little (ADL) study. This model focused on compliance burden primarily associated with the time spent on gathering tax materials, recordkeeping, form preparation, and form submission, and ignored other components of compliance burden such as tax planning and out-of-pocket costs. This latter omission became increasingly relevant as more taxpayers availed themselves of paid assistance from preparers and software. Furthermore, the estimates became increasingly out of date as time passed.

In 1998, the IRS contracted with IBM to develop an improved methodology to measure and model the compliance burden imposed by the tax system. The result

was a model able to measure compliance burden (the time and out-of-pocket costs associated with filing taxes), inform tax policy (measure the compliance burden resulting from a change in tax policy), and guide administrative initiatives.

The current model is an extension and significant reformulation of the original IRS/IBM model. It also measures components of burden associated with changes in tax policy and tax administration, but it benefits from new survey data and updated econometric analysis. The current formulation also benefits from a common modeling framework with the business burden model. Another notable change is that the current model measures total monetized burden, comprised of both time and out-of-pocket costs.

The most recent model follows the general framework discussed in Guyton et al. (2003) and, similarly, by the President's Advisory Panel on Tax Reform (2005). As such, it measures total burden as the direct compliance costs and inefficiencies that would disappear if the Federal tax system did not exist. Specifically, total burden is divided into two components: tax liability and excess burden. Tax liability is defined as the tax, penalty, and interest paid by taxpayers. Excess burden represents the remaining costs: compliance burden, efficiency costs, psychological costs, and administrative costs. Compliance burden, the time and money taxpayers spend to comply with the Federal tax system, includes all activities associated with filing a tax return: tax planning, recordkeeping, gathering tax materials, etc. As mentioned above, efficiency costs are costs associated with distortions in the allocation of capital resulting from the incentive effects of the tax system. Psychological costs reflect the frustration or anxiety induced by the tax system. Finally, administrative costs are direct budgetary costs of administering the tax system. The primary cost of administering the Federal tax system is the budget of the IRS.

Components of total burden often interact with one another. For example, taxpayers may spend more time and money on additional tax planning in order to reduce their income tax liability; taxpayers may forego benefits associated with voluntary credits in order to avoid the costs associated with filing the credits; or some taxpayers may choose to hire a paid professional to prepare their return in response to a change in tax policy that resulted in increased complexity.

This paper presents the current econometric specifications of the individual taxpayer burden model developed using recently collected Tax Year 2007 compliance burden data. The resulting model is then used to estimate compliance burden using data from an earlier survey which covered Tax Years 1999 and 2000. Finally, the model and data from each survey are used to develop compliance burden estimates for the intervening years. This was necessary since the modeling effort will support estimation of compliance burden in future years, as well as support longitudinal compliance analysis by estimating burden for prior years. In doing so, we attempt to understand the effects of changes in tax system complexity, technology, and the use of assisted tax-preparation methods, since these factors changed dramatically during this period.

Individual Taxpayers

From Tax Years 2000 through 2007, individual taxpayers increasingly adopted assisted preparation methods (paid preparers, tax preparation software, and IRS-sponsored tax preparation services—VITA and TCE) to complete their tax returns.²

Table 1 shows that, in Tax Year 2000, 72 percent of all taxpayers used an assisted method to complete their 1040-series (1040, 1040A, 1040EZ) tax returns. That year, paid preparers completed 55 percent of all individual returns, while self-preparers using software accounted for 17 percent of all individual returns. The percentage of taxpayers using assisted methods increased steadily until Tax Year 2006, reaching 87 percent, before declining in Tax Year 2007 to 85 percent (that year a large volume of simple returns were filed only to collect Economic Stimulus Payments), before rising again to 92 percent in Tax Year 2008. During the same time period, the percentage of taxpayers that prepared their own tax returns declined from 28 percent in Tax Year 2000 to only 8 percent in Tax Year 2008.

TABLE 1. TY 2000–2008 1040-Series Returns Prepared With Assistance in Percentages

Tax Year	Third Party Prep Paid Preparer	Self Prepared with Software Assistance (On-Line Filed/Self V-Coded/Telefiled)	Taxpayers Using a Paid Preparer or Software Assistance or TCE & VITA
2000	55%	17%	72%
2001	57%	19%	76%
2002	57%	20%	79%
2003	61%	22%	84%
2004	59%	25%	85%
2005	59%	25%	86%
2006	60%	26%	87%
2007	56%	26%	85%
2008	60%	29%	92%

SOURCE: R:S-97 Report, IRS Master File System, Compliance Data Warehouse, ETA, SOI.

TABULATIONS: IRS:RAS:RFDA, April 2010.

NOTES:

TY 2004 software filings include telefiled returns.

TY 2006 data includes 1040/A/EZ returns filed only to claim Telephone Excise Tax Refund.

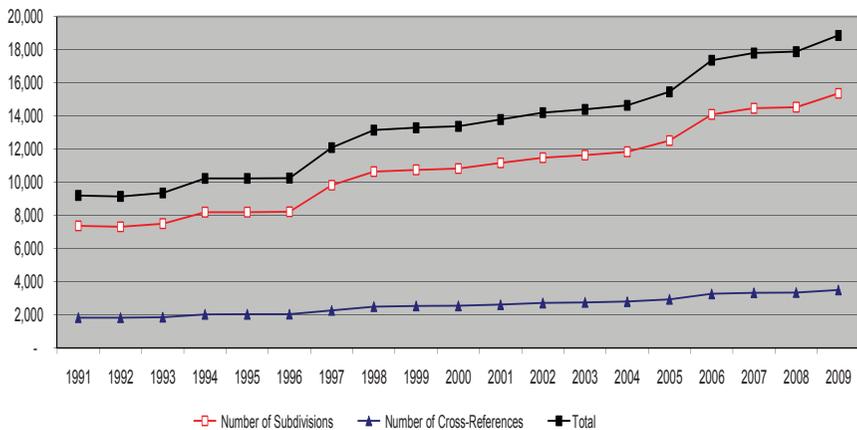
TY 2007 data includes an estimated 15 million taxpayers that filed solely to claim an Economic Stimulus Payment.

A major reason for the trend toward increased usage of tax preparation assistance is increased tax system complexity.³ One proxy for tax system complexity is the number of times the tax code can be subdivided. Preliminary IRS research indicates, as illustrated in Figure 1, that the number of subdivisions and cross-references, proxies for the complexity of the Internal Revenue Code, increased by about 30 percent between Tax Years 2000 and 2007. In addition, a growing

number of taxpayers—about an 8-percent increase over the same timeframe—have found themselves subject to form lines that require involved recordkeeping and complicated calculations, such as the alternative minimum tax; increasingly complicated capital gains rules; and an increasing number of elective benefits.

Although a major driver of individual taxpayers' increasing migration to assisted-preparation methods is tax system complexity, we find evidence that some taxpayer segments that had not encountered increased tax system complexity are, nonetheless, migrating to assisted methods. This suggests that there are reasons beyond tax system complexity taxpayers consider when choosing a preparation method.

FIGURE 1. U.S. Tax Code Complexity: Individual Taxpayers by Tax Year



One explanation is that changes in the taxpayer population over time may have resulted in the filing of more complicated tax returns. In Table 2, we compare select taxpayer data to illustrate changes in the demographic and economic characteristics of the taxpayer population between Tax Years 2000 and 2007. The number of returns and all of the remaining filing categories increased during this time period. For example, all returns filed rose from 129.4 million in Tax Year 2000 to 143.0 million in Tax Year 2007, an increase of 10.5 percent. However, when we consider the growth in the share of the categories, a more appropriate measure of changing taxpayer composition, we see that taxpayers filing joint returns decreased by 2.7 percent, while taxpayers filing head of household increased by 5.2 percent, suggesting that more tax returns are being filed by nondependent taxpayers. In addition, the share of returns reporting salaries and wages, returns traditionally associated with relatively lower burden, declined by 0.7 percent. The opposite is true for a number of categories associated with higher burden. Categories such as business income or loss, pension and social security income, statutory adjustments, alternative minimum tax, and the earned income credit all increased

significantly, ranging from percentage share growth of 15.1 percent to 185.1 percent. Overall, we see evidence that returns filed for Tax Year 2007 were more complicated than those filed for Tax Year 2000, due to an increase in return complexity beyond increases in tax law complexity.

TABLE 2. Change in the Demographic and Economic Characteristics of the Individual Taxpayer Population between Tax Years 2000 and 2007

	Number of Returns			Shares		
	Tax Year 2000	Tax Year 2007	Growth: % change	Tax Year 2000	Tax Year 2007	Growth: % change
All returns [1]	129,373,500	142,978,806	10.5%			
Joint returns	50,268,249	54,065,030	7.6%	38.9%	37.8%	-2.7%
Head household	18,208,359	21,169,039	16.3%	14.1%	14.8%	5.2%
Salaries & Wages	110,168,714	120,844,802	9.7%	85.2%	84.5%	-0.7%
Business or profession net income [2]	13,312,586	16,932,476	27.2%	10.3%	11.8%	15.1%
Business or profession net loss [2,3]	4,287,423	5,696,992	32.9%	3.3%	4.0%	20.2%
Pensions & Annuities [4]	21,765,211	27,678,148	27.2%	16.8%	19.4%	15.1%
Social Security Benefits [5]	10,608,572	15,011,961	41.5%	8.2%	10.5%	28.0%
Total statutory adjustments [6]	23,197,425	36,050,434	55.4%	17.9%	25.2%	40.6%
Alternative Minimum Tax [7]	1,304,198	4,108,964	215.1%	1.0%	2.9%	185.1%
Earned income credit [8]	19,277,225	24,583,940	27.5%	14.9%	17.2%	15.4%

SOURCE: *SOI Bulletin* Historical Table 1. Individual Income Tax Returns: Selected Income and Tax Items for Tax Years 1999–2008.

[1] Year-to-year comparability of the "all returns" total is affected by changes in dollar income filing thresholds, while year-to-year comparability of the number of returns by type of tax form used is affected by changes in the specific filing require.

[2] Rent net income (or loss) excludes sole proprietorship (including farm) rental income or loss; these are included in business or profession net income or loss. Rental losses are before "passive loss" limitation and, therefore, exceed the amount included.

[3] Losses are after "passive loss" limitation.

[4] Excludes Individual Retirement Arrangement (IRA) distributions.

[5] Up to 85 percent of Social Security benefits were taxable.

[6] Includes adjustments not shown separately in this table. Total excludes certain business-related expenses, deduction for two-earner married couples, and certain alimony payments.

[7] Under "alternative minimum tax" (AMT), generally high-income taxpayers to whom the tax applied were required to pay the larger of the regular income tax or the AMT.

[8] In Table 1, the amounts "used to offset income tax before credits" and "used to offset other taxes" (that are income-related) are reflected in the statistics for "total tax credits"; however, "excess earned income credit (refundable)" is reflected.

Another possible explanation is improvements in labor productivity over time, since labor productivity is conceptually related to the cost and ease of preparation.⁴ We believe that productivity improvements in technology have mitigated some of the increased burden associated with both tax and nontax system complexity and is also contributing to the general trend toward assisted tax preparation. Bureau of Labor Statistics data indicate that labor productivity in the tax preparation services sector, as well as overall labor productivity, increased by about 15 percent to 20 percent between Tax Years 2000 and 2007.⁵ In their survey of large businesses, Slemrod and Blumenthal (1993) found that these taxpayers increasingly managed complexity through computerization—purchasing computer hardware or filing software. We observe results consistent with the interpretation of productivity gains when we compare compliance burden data from the Tax Year 2007 survey of taxpayers to the surveys conducted for Tax Years 1999 and 2000. While additional study of the role of labor productivity and its impact on choice of preparation methods is warranted, the data from these studies are consistent with the interpretation that taxpayer compliance costs are at least staying constant in real dollar terms over this period and may be decreasing despite increases in tax system and tax return complexity. A similar qualitative interpretation can be found in a recent temporally comparative report on the compliance costs for small businesses conducted by New Zealand Inland Revenue (2010).

Individual Taxpayer Burden Modeling Approach

The primary objective of the individual taxpayer burden model is to measure and explain individual compliance burden. We developed a model reflecting the recent public finance literature and used current statistical techniques. When developing this model, we identified two criteria that the model should possess. First, it was important that the model be easily adaptable to changes in the economy and the tax system. Second, the model should be sufficiently generalized so that compliance burden of other taxpayer populations, such as businesses and tax-exempt entities, could be modeled. The resulting model meets both criteria.

Economic Model

Following the methodology in Contos et al. (2009a) and Contos et al. (2009b), which modeled the compliance burden of small businesses, we employ a log-linear specification in which the natural logarithm of burden is linearly related to a set of explanatory variables. The dependent variable, $\log(\text{Burden})$, is monetized time and money and is based on data obtained from surveys of individual taxpayers. To control for the type and volume of activities performed by each taxpayer, tax items from the primary forms and schedules were organized into one of four

complexity categories: low, medium-low, medium, and high. We use the logarithm of modified positive income as a proxy for the taxpayer's income in the current period. Modified positive income generally represents the income amounts on the 1040-series returns with some modifications.⁶

We assume that taxpayers select the combination of time and money necessary to fully comply with the requirements of the Federal tax system while minimizing compliance costs. This assumption may not hold true for all taxpayers all the time, but we believe that taxpayers tend to adopt a compliance process that reduces complexity. For example, low-complexity taxpayers are more likely than high-complexity taxpayers to undertake all of the prefiling and filing activities related to their tax returns without assistance. As modified positive income increases, and, with it, complexity, taxpayers face a higher opportunity cost on these activities. Taxpayers with relatively high complexity may invest in tax preparation software or hire a professional tax preparer to advise them on issues related to tax planning, as well as the preparation and filing of their tax returns. The increased out-of-pocket costs reduce the time they spend on tax-related activities so we see a substitution of money for time. For many of these higher income and more complicated returns, our model shows lower compliance costs associated with assisted methods, despite higher fixed costs and additional consumption of often higher quality services.

The Data Set

As mentioned previously, compliance burden data was collected by surveying taxpayers who filed an individual tax return for Tax Years 1999, 2000, and 2007. The most recent survey, which covered Tax Year 2007 taxpayers, resulted in 6,968 responses and a response rate of 48 percent. The population was defined as individual taxpayers who filed any of the tax forms in the 1040 series: Forms 1040, 1040A, or 1040EZ. The sample was a stratified random sample, which, when weighted, represents the individual taxpayer population. Nonresponse bias analysis was conducted and the sample weights were adjusted accordingly, as discussed in Brick et al. (2009).

The earlier survey effort, hereafter referred to as the 2000 survey, was conducted in two phases. The Wage and Investment (W&I) and Self-Employed (SE) surveys focused on taxpayers who filed a return for Tax Years 1999 and 2000, respectively. In total, 6,366 responses were completed from the W&I population for a response rate of just under 61 percent. Likewise, 9,081 responses were collected from SE taxpayers, for a response rate of 56 percent. Again, the samples were stratified random samples representative of the individual taxpayer population.

The surveys collected information on both the time and money individuals spent on prefiling and filing activities, as well as some demographic data. Each survey was then linked to the matching administrative record to create the estimation dataset. The administrative record includes select items from the primary

tax forms and various secondary forms and schedules. Both the survey and administrative records were extensively reviewed and cleaned for memory recall and administrative and processing errors. The data received further cleaning through the application of robust regression methods discussed in the Simulation Issues section of this paper. Data missing as a result of incomplete responses or robust regression were imputed using multiple imputation techniques as discussed in Contos et al. (2009b).

Econometric Model

To model the conditional distribution of taxpayer compliance burden, we employ a log-linear regression specification in which the natural logarithm of burden is linearly related to a set of explanatory variables. This type of model is supported by the survey data, as well as the survey findings of large and mid-size business taxpayers conducted by Slemrod and Blumenthal (1993) and Slemrod and Venkatesh (2002). The model was developed and finalized using the Tax Year 2007 survey data, since they are the most recent survey data available. The 2000 survey data was then run through the same model. For comparability reasons, all money amounts were converted to 2007 constant dollars. In addition, the model was updated to reflect tax law relevant for each year by adjusting the complexity categories.

Next, we considered pooling the data from the two surveys and generating econometric specifications from this data. As discussed earlier, this is an important exercise since the model will be used to estimate burden in future years, as well as support longitudinal compliance analysis by estimating burden in prior years. The Chow test was used to determine if pooled coefficients for both data years were superior in explanatory power to a model that estimates a distinct set of coefficients for each year. Based on the results of the Chow test, we concluded that separate coefficients should be estimated for each year.⁷

Since the pooled model was not an option, we proceeded to account for changes in technology and use of assisted tax preparation methods over the 2000 to 2007 time period by making two assumptions. We assumed that the changes occurred at a constant rate and that productivity changes in self- and paid-prepared returns were closely related to overall labor productivity. First, we blended the results from the two models. The blended estimates for Tax Years 2001 to 2006 were produced using a weighting scheme that favored estimates from the closest survey year.⁸ Next, we used Bureau of Labor Statistics data using overall labor productivity to adjust the estimates for changes in productivity between Tax Years 2000 and 2007.^{9,10}

Because one of the objectives of this modeling effort was to estimate burden in future years using IRS administrative data, the choice of independent variables was limited to IRS data.¹¹ Using administrative data from subsequent tax years allows us to produce burden estimates for forecast years. The dependent variable,

$\log(\textit{Burden})$, is based on survey responses. It is defined as the natural logarithm of total prefilling and filing compliance costs—that is, the monetized time and money taxpayers spend to comply with Federal tax laws. Monetizing compliance costs enables us to account for the substitution of time and money and allows aggregation of burden across activities to create a single measure of compliance burden. The key choice was whether to monetize the value of time and add it to the out-of-pocket costs or rather to “chronotize” the out-of-pocket costs and add it to time. Monetizing time was adopted for both technical and program management reasons.¹²

As mentioned previously, we expect compliance burden to increase with modified positive income (\textit{mpi}), but at a decreasing rate, so we expect the coefficient to be positive and less than 1.

The most unique aspect of modeling compliance burden is the need to control for the type and volume of activities performed by taxpayers to meet their Federal tax obligations. We developed a proxy for the type of activities performed. Each tax item from the primary forms and schedules was organized into one of four complexity categories: low, medium-low, medium, and high. These complexity categories are based on the notion that burden increases as a function of both the type of tax-related activities completed by the taxpayer, as well as the volume completed. For example, if an individual completes an additional tax item one year, holding everything else constant, compliance burden should increase since the taxpayer will have adjusted his recordkeeping, familiarized himself with the relevant taxpayer instructions, or perhaps paid higher preparation fees. A complete listing of the variables and complexity assignments is included in Appendix A.

To develop the complexity categories, we initially placed the various tax items into categories based on recordkeeping intensity and tax planning activities.¹³ To test the assignment criteria, the model was then run with the natural logarithm of the money amount for each item as a separate right-hand-side variable. The magnitude of the estimated coefficients was compared with the rest of the items in that complexity category. Items that had coefficients significantly different from their peers were moved to a more suitable category.

As a proxy for the volume of activities, we used the money amounts reported by each taxpayer for that item. This is based on the notion that the larger the amount reported on a tax item, the more transactions typically associated with the activities related to that line. The variable *Low* is then obtained by summing the natural logarithms of all values on lines categorized as having low complexity. The remaining complexity variables, *Medium-Low*, *Medium*, and *High* are defined analogously. By utilizing the properties of logarithms in the complexity categories, the equation acquires a desirable property, that is, each tax item included in the categories acts as a separate regressor, but the coefficients of all items of the same category are restricted to be the same.

We included dummy variables to measure the effect of preparation method on compliance burden where self-preparation is the reference category. The

remaining preparation categories represent paid (*Paid*) and software preparation (*Soft*). Taxpayers who use assisted preparation methods typically incur additional costs through the purchase of assistance from tax professionals such as certified public accountants, enrolled agents, or from tax preparation software such as TurboTax, TaxCut, etc. As discussed earlier, the trade-off is a reduction in the amount of time it would have taken taxpayers to research and complete each line of the tax forms themselves. In addition to preparation of their tax returns, taxpayers may also receive tax-planning advice and can be reasonably assured that they receive tax benefits (elective credits) they may not have received had they prepared their own tax return. In addition to an accurately prepared tax return, taxpayers may also benefit from representation in the event they are contacted by the IRS about their tax return. We expect the coefficients for the preparation dummies to be positive since there are fixed costs associated with using assisted methods.

To control for efficiency gains associated with hiring a paid professional, we include in the specification an interaction term between *Paid* and the natural logarithm of *mpi*, *Paid-mpi*. As discussed above, a taxpayer who has hired a paid professional may experience lower marginal compliance costs for additional items than he would have experienced if he either self-prepared or software prepared his own tax return. Although complexity is already captured in the complexity categories, this interaction term captures any additional effect of complexity on burden unaccounted for by the complexity categories. Since this interaction term represents the reductions in burden at the margin associated with hiring a tax preparer, we anticipate the coefficient to be negative and smaller in magnitude than the *mpi* coefficient.

To control for additional efficiency gains associated with hiring a paid professional or using software, we include a variable that measures the percentage of forms a self-prepared taxpayer did not have to consider when completing their return. This variable, *Consider*, is equal to 1 minus the ratio of the number of lines on the forms the taxpayer filed over the total number of lines on all individual tax forms. As such, it represents the percentage of all form lines associated with forms a taxpayer did not fill out when completing his or her tax return.¹⁴ We anticipate the coefficient to be negative since simpler returns will have a value for *Consider* closer to 1. For example, a self-prepared Form 1040EZ taxpayer would have a value for *Consider* close to 1 since most of the forms and schedules are irrelevant to this taxpayer. In contrast, a self-prepared Form 1040 taxpayer who itemizes, has a family, and has a business with corresponding credits would have a value for *Consider* closer to zero.

To control for the contribution of specific individual taxpayer characteristics, three additional variables were included in the model. The first variable, *HH/Widow*, is a dummy variable and is equal to 1 if the taxpayer's filing status is head of household or qualifying widow(er). The second variable, *Married*, is

a dummy variable and is equal to 1 if the taxpayer's filing status is married filing jointly. We expect both of these dummy variables to be positively associated with compliance burden since both of these taxpayer groups tend to have more complicated family and lifestyles than single taxpayers.

Finally, the third variable, $\log(\text{Exemptions})$, is the natural logarithm of the number of exemptions claimed by the taxpayer (Form 1040, line 6).¹⁵ The number of exemptions is associated with completion of additional lines on the tax form, such as child tax credits, earned income credit, etc. It controls for increased compliance burden typically associated with taxpayers who claim exemptions for household members who may not be fully captured by the complexity categories.

Total monetized compliance burden was estimated using the following equation:

$$\begin{aligned} \text{Log}(\text{Burden})^{16} = & b_0 + b_1 \text{Log}(\text{mpi})_i + b_2 \text{Low}_i + b_3 \text{Medium_Low}_i + b_4 \text{Medium}_i + \\ & b_5 \text{High}_i + b_6 \text{Paid}_i + b_7 \text{Soft}_i + b_8 \text{Paid_mpi}_i + b_9 \text{Consider}_i + b_{10} \text{HH/Widow}_i + \\ & b_{11} \text{Married}_i + b_{12} \text{Log}(\text{Exemptions}_i) + \varepsilon_i \quad (1) \end{aligned}$$

where the letter *i* indexes the taxpayer.

Simulation Issues

The individual taxpayer population is highly diverse and covers returns in a large range of modified positive income; Table 3 shows the ratio of average burden to modified positive income by percentile range. It is clear that the survey data are skewed with a heavy tail. Taxpayers in the lowest decile have average mpi of \$6,237, and their burden represents 2.2 percent of mpi; those in the highest decile have average mpi of \$1.7 million and average burden of 0.6 percent of mpi, indicating that lower income taxpayers experience a larger share of burden, measured as a percentage of their income.

TABLE 3. 2007 Average Individual Income Tax Compliance Burden as a Percentage of Modified Positive Income

Decile	Average mpi	Average Burden as a Percentage of mpi
0 to 10	\$6,237	2.2%
10 to 20	\$13,209	1.6%
20 to 30	\$20,270	1.2%
30 to 40	\$27,874	1.1%
40 to 50	\$36,295	1.0%
50 to 60	\$47,164	0.9%
60 to 70	\$61,849	0.9%
70 to 80	\$83,279	0.8%
80 to 90	\$124,541	0.8%
90 to 100	\$1,716,546	0.6%

Our log-linear regression specification addresses the inherent skewness in the compliance burden data as recommended by Manning and Mullahy (2001). Although there are a variety of alternative functional forms to address skewness, a Box-Cox test for the optimal transformation of the dependent variable confirmed logarithmic transformation as the best option.¹⁷ Although both the survey and administrative data were cleaned and standardized early in the process, there was still concern that outliers could affect the robustness of the model. The detection of potential outliers was of particular interest, since the survey required respondents to recall the intensity of the various activities performed and to isolate and report only the activities they incurred as a result of the Federal tax system.

Given the complexity of the multivariate outlier detection process, robust regression was used to identify and adjust the weights of observations with reported values furthest from the initial regression line. Robust regression is an iterative process that reduces the importance of observations with large residuals by lowering their weights (based on a weight function) and then re-estimates the regression with the new weights, repeating the process until it converges.

Since total monetized compliance burden was transformed into logs, an important issue was how to accurately transform the estimates back to levels. In a standard regression model, the error (ϵ) is ignored when predicting the value of the dependent variable. However, when one retransforms the dependent variable in a log-linear regression specification, the level of the dependent variable depends on the value of the anti-log of the error term ($\exp\{\epsilon\}$). In general, the contribution of this non-linear function of the error term cannot be ignored when predicting the level of the dependent variable. In a model where the error is heteroskedastic, this process becomes more complicated. In addition, since the model's objective is to support tax policy-making through "what-if" analysis, the model needs to perform satisfactorily in estimating compliance burden for subgroups of the business population and across the overall population distribution. All these issues led us to use a number of statistical techniques that improved the representativeness of the model across the entire population. The technical aspects of these techniques are discussed in detail in Contos et al. (2009b).

Estimated Coefficients

Robust OLS regression results for both survey collections are presented in Table 4. Estimated coefficients for $\log(mpi)$ are positive and less than 1 as expected, 0.491 and 0.439, respectively, and are significant at the 1-percent level, implying that as income increases, burden increases but at a decreasing rate. The coefficients are of similar magnitude for both years, but the 2007 coefficient is lower—perhaps partially confirming our hypothesis that technological improvements have reduced burden.

All the coefficients for the complexity categories are positive and statistically significant at the 1-percent level. The coefficients for *Low* are 0.009 and 0.005; for *Medium-Low* they are 0.009 and 0.008; for *Medium*, they are 0.012 and 0.013; and for *High*, they are 0.023 and 0.014. Positive coefficients imply that increases in complexity and the volume of an activity increase total burden. The magnitudes of these coefficients confirm the construction of the complexity categories. A dollar increase in a medium complexity item, holding all else constant, will increase burden more than a dollar increase in a low complexity item. Again, notice that although the coefficients are of similar magnitude, the 2007 coefficients are lower for three of the four complexity categories. As discussed earlier, this may be confirming our hypothesis of reduced burden due to technological improvement. However, differences in the underlying data and limitations in our ability to control for differences between the surveys may also be contributing to these differences.

TABLE 4: Regression Results*

Variable	Survey 2000 Coefficients		Survey 2007 Coefficients	
	Estimate	T-Stat	Estimate	T-Stat
Intercept	0.247	1.53	1.163	4.91
Log (mpi)	0.491	35.62	0.439	26.01
Low Complexity	0.009	11.59	0.005	5.69
Medium-Low Complexity	0.009	14.15	0.008	8.97
Medium Complexity	0.012	18.86	0.013	13.63
High Complexity	0.023	22.46	0.014	10.39
Paid Professional Prepared Return	1.843	9.87	1.299	4.74
Self Prepared Return Using Software	-0.558	-8.39	-1.025	-7.23
Log (mpi) and Paid Professional Prepared Return	-0.224	-14.84	-0.178	-9.15
Consider	-1.556	-17.91	-1.697	-9.26
Head of Household or Widow	-0.047	-1.48	-0.013	-0.29
Married	-0.270	-8.68	-0.306	-6.57
Log (Exemptions)	0.142	5.41	0.186	5.03
Adj. R-Squared	0.603		0.574	

*T-statistics in bold are statistically significant at the one percent level.

The coefficients for returns prepared by paid professional are 1.843 and 1.299, and both are statistically significant at the 1-percent level. This implies that, controlling for the size and complexity of the return, self-prepared returns have lower fixed costs than paid-prepared returns.

The coefficients for returns prepared by software are -0.558 and -1.025 and are statistically significant at the 1-percent level. Although the negative sign for the software coefficient is counterintuitive, it should be interpreted in the context of the *Consider* variable. For example, the 2007 coefficient for *Consider* is negative, -1.697 , as expected, and statistically significant at the 1-percent level. Because a self-preparer filing Form 1040EZ does not consider, on average, 95 percent of the lines on all individual tax forms, this taxpayer's $\log(\textit{Burden})$ is reduced by $-1.697 * 0.95$, or -1.61215 . Similarly, a W&I taxpayer that self-prepares and files Form 1040 does not consider, on average, 58 percent of the lines on all the tax forms, reducing his $\log(\textit{Burden})$ by $-1.697 * 0.58$, or -0.98426 .¹⁸ This implies that a taxpayer filing a 2007 self-prepared Form 1040EZ return has lower fixed costs, and total monetized burden, than an otherwise similar taxpayer using software. While a taxpayer filing a 2007 self-prepared Form 1040 return has higher fixed costs, and total monetized burden, than an otherwise similar taxpayer using software. Overall, lower 2007 coefficients for paid preparer and software returns indicate that the cost of software and professional preparation services has been declining in real terms.

The coefficients for *Paid-mpi* are negative, -0.224 and -0.178 , and are significant at the 1-percent level. As expected, as income increases, the burden associated with returns prepared by paid professionals increases at a lower rate than returns that are self-prepared. This implies that, although paid prepared returns have higher fixed costs than self- and software-prepared returns, as *mpi* increases above a certain level, the lower marginal cost leads to lower total monetized burden for paid prepared returns. If we combine $\log(\textit{mpi})$ and *Paid-mpi* to estimate the growth rate of burden associated with paid-prepared returns, we see that the effective coefficients for 2000 and 2007 remain virtually the same, 0.267 and 0.261 .

As discussed earlier, additional costs associated with software- and paid-prepared returns may reflect some combination of self-selection or demand for a different quantity or quality of services above and beyond the impact of lower marginal costs for paid-prepared returns, along with more effective handling by software of complex returns as suggested in the model.

The coefficients for *HH/Widow* are negative, but small and not statistically significant. The negative sign is counterintuitive implying that after controlling for size, complexity, preparation method, etc., single taxpayers have higher burden than head of household or qualifying widowed taxpayers. This coefficient can be interacted with $\log(\textit{Exemptions})$, which has a positive coefficient of 0.186 , and is statistically significant at the 1-percent level. If we combine the coefficients of the two variables, holding all else constant, we see that a taxpayer filing head of household with one child has a final coefficient of 0.116 ($-0.013 + 0.186 * \log(2)$ exemptions) whereas a single taxpayer has, by construct, zero effect.

The coefficient for *Married* is negative and statistically significant at the 1-percent level. Again, the sign is counterintuitive, but if considered in conjunction with $\log(\text{Exemptions})$, the model shows that married taxpayers have higher burden than single taxpayers. Similarly, the model shows that married taxpayers without children have lower burden than those that file head of household with one child. Another possible explanation is that married taxpayers tend to have more tax preparation and filing experience. A detailed discussion on how to estimate burden using 2000 and 2007 coefficients is included in Appendix B.

Findings

In this section, we present our findings and suggest some interpretations of the results. Table 5 shows the estimated distribution of monetized burden for the 8-year period covered by this study. From Tax Years 2000 to 2007, total monetized burden is estimated to have increased for the bottom 80 percent of the burden distribution and decreased significantly for the top 20 percent. This suggests that taxpayers that filed more complicated returns, such as the self-employed, have benefited disproportionately from productivity gains, better integration of recordkeeping and tax software, because of their disproportionate usage of assisted methods. For the lower four-fifths of the distribution, estimated burden actually increased. This is consistent with changes in the demographics of the taxpayer population, resulting in the filing of more complicated tax returns, as well as increased usage in assisted preparation methods and the fixed costs associated with these preparation methods.

TABLE 5. Distribution of Monetized Burden, by Tax Year

Decile	2000	2001	2002	2003	2004	2005	2006	2007
95%	2128	2013	1952	1934	1883	1910	1917	1842
90%	1235	1194	1171	1157	1145	1154	1170	1134
75%	531	536	535	533	537	546	559	548
Median	217	228	232	237	242	248	258	256
25%	86	94	97	102	107	111	116	118
10%	34	39	41	45	48	51	53	55
5%	19	22	23	26	28	31	31	33

Table 6 presents estimates of taxpayer burden using blended coefficients for Tax Years 2000 through 2007 in constant 2007 dollars.

Although it is widely accepted that tax system complexity has increased during the 8-year period we studied, we estimate that the average time burden per taxpayer declined from 23 hours in Tax Year 2000 to 19 hours in Tax Year 2007, a 17.4-percent decline. We similarly estimate that the average constant dollar money

burden increased from \$220 per taxpayer in Tax Year 2000 to \$258 in Tax Year 2007, an increase of 17.3 percent. Taken together, we see evidence of the trade-off between time and money. Average monetized burden is estimated as having decreased 7.5 percent in constant dollars from \$652 in Tax Year 2000 to \$603 in Tax Year 2007. Finally, total aggregate monetized burden for all taxpayers is estimated to have grown in constant dollars from \$84.3 billion in Tax Year 2000 to \$86 billion in Tax Year 2007—an increase of 2 percent—despite a much larger increase in the size of the filing population. We see evidence that, after adjusting for productivity, average and total monetized burden remained relatively constant in real dollar terms over this period and may have even decreased, despite increased complexity.

TABLE 6. Individual Taxpayer Burden by Tax Year: Using Blended 2000 and 2007 Coefficients

Variable	2000	2001	2002	2003	2004	2005	2006	2007*
Average Time	23	22	21	20	20	20	20	19
Average Money**	\$220	\$215	\$215	\$233	\$232	\$248	\$257	\$ 258
Average Monetized Burden**	\$652	\$614	\$601	\$603	\$588	\$610	\$615	\$ 603
Total Monetized Burden***	\$84.3	\$79.8	\$78.0	\$78.7	\$77.4	\$81.7	\$85.1	\$86.0

*The 2007 total monetized burden estimate does not include 10.6 million stimulus only taxpayers that accounts for approximately \$1.08 billion of additional burden.

** In constant 2007 dollars.

*** In billions of constant 2007 dollars.

Table 7 presents per capita individual taxpayer burden by tax year. An advantage of estimating per capita burden is that the measure is less sensitive to temporary changes in the filing population due to one-time events such as the telephone excise tax refund and the economic stimulus payment. Again, we see evidence of the trade-off between time and money. Per capita time burden declined from 10.5 hours in 2000 to 9.2 hours in Tax Year 2007. Over the full time frame, time burden declined by just over 12 percent. In contrast, average money burden increased by nearly 22 percent from \$101 in Tax Year 2000 to \$123 in Tax Year 2007. Average monetized burden declined over the 8-year period from \$299 in Tax Year 2000 to \$289 in Tax Year 2007.

Finally, Table 8 presents estimates of taxpayer burden using blended coefficients for Tax Years 2000 through 2007 in nominal dollars. As expected, average monetized burden increased for all but three years: 2001, 2002, and 2007, whereas total monetized burden decreased in 2001 and 2002 and then increased for all subsequent years.

TABLE 7. Per Capita Individual Taxpayer Burden by Tax Year: Using Blended 2000 and 2007 Coefficients

Variable	2000	2001	2002	2003	2004	2005	2006	2007
Average Time	10.5	9.8	9.5	9.2	8.8	9.0	9.0	9.2
Average Money*	\$101	\$98	\$97	\$105	\$104	\$112	\$119	\$123
Average Monetized Burden*	\$299	\$280	\$271	\$271	\$264	\$276	\$285	\$289

*In constant 2007 dollars

TABLE 8. Individual Taxpayer Burden in Nominal Dollars by Tax Year: Using Blended 2000 and 2007 Coefficients

Variable	2000	2001	2002	2003	2004	2005	2006	2007*
Average Monetized Burden	\$541	\$525	\$522	\$535	\$536	\$574	\$614	\$603
Total Monetized Burden**	\$70.0	\$68.1	\$67.7	\$69.8	\$70.5	\$76.9	\$85.0	\$86.0

*The 2007 total monetized burden estimate does not include 10.6 million stimulus only taxpayers that accounts for approximately \$1.08 billion of additional burden.

**In billions of dollars.

Conclusions

In this paper, we reported estimated differences in compliance burden for Tax Years 2000 and 2007. In doing so, we considered the effects on individual taxpayer compliance burden resulting from changes in tax return complexity, technological and related productivity changes, and increased use of assisted tax preparation and filing methods—since these factors changed dramatically during this time period. With these insights we presented one plausible interpolation of compliance burden for the intermediate years.

Our results suggest that average real monetized compliance burden may have declined by as much as 7.5 percent in constant dollars from \$652 in Tax Year 2000 to \$603 in Tax Year 2007. More conservatively, this result and the related analysis suggests that compliance burden did not materially increase over this period despite increasing complexity of the tax law, economic activity, and demographic characteristics. This interpretation is at least partially corroborated by the New Zealand Inland Revenue finding that real dollar compliance costs for New Zealand small businesses decreased by 1.3 percent between 2004 and 2009, despite increases in the complexity of New Zealand tax law.¹⁹ The conceptual framework we outline in this paper is expected to assist the IRS in its compliance burden forecasts for policymakers and the public. Other explanations for the differences in reported compliance burden between 2000 and 2007 include sampling, measurement, and modeling error. It will take additional compliance burden surveys over time to more definitively disentangle some of these competing explanations.

Although we estimate average monetized burden as having decreased 7.5 percent in constant dollars from Tax Year 2000 to Tax Year 2007, we do not find this decrease uniformly over the population. In particular, the overall average decrease is primarily attributable to a significant decrease in burden for the top 20 percent of the burden distribution. This suggests that increasing complexity is nonetheless imposing significant costs on the public and is likely one of the factors driving increasing use of assisted methods. We expect to continue to examine the drivers of compliance costs and the implications for tax administration in future studies as we collect more data on the subject.

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Appendices

Appendix A

Form	Line	Short Description	Complexity
F1040	7	Wages	Low
F1040	8.1	Taxable Interest Income	Low
F1040	8.2	Tax Exempt Interest	Medium/Low
F1040	9.1	Taxable Dividends Amount	Medium/Low
F1040	9.2	Qualified Taxable Dividends Amount	Medium
F1040	10	State Income Tax Refund	Low
F1040	11	Alimony Received	Medium/Low
F1040	14	Supplemental Gains/Losses	Medium
F1040	15.1	Gross IRA Distributions	Medium/Low
F1040	15.2	Taxable IRA Distribution	Medium
F1040	16.1	Gross Pension Annuity Amount	Medium/Low
F1040	16.2	Taxable Pension/Annuity Amount	Medium
F1040	19	Taxable Unemployment Compensation	Low
F1040	20.1	Gross SS Amount	Medium/Low
F1040	20.2	Taxable Social Security	Medium
F1040	21	Other Income	Medium
F1040	23	Educator Expenses	Medium/Low
F1040	24	Reservist and Other Business Expense Amount	Medium
F1040	25	Health Savings Account Deduction Amount	Medium
F1040	26	Moving Expense Amount	Medium
F1040	28	SE Retirement Plans Deduction	Medium/High
F1040	29	SE Health Insurance Deduction	Medium/High
F1040	30	Penalty on Early Savings Withdrawal	Medium/Low
F1040	31.1	Alimony Paid	Medium/Low
F1040	32	IRA Payment	Medium/Low
F1040	33	Student Loan Interest Deduction	Medium/Low
F1040	34	Tuition and Fees Deduction Amount	Medium/Low

Form	Line	Short Description	Complexity
F1040	35	Domestic Production Activity Deduction	Medium
F1040	36	Other Adjustments	Medium
F1040	36	MSA Deduction	Medium/Low
F1040	36.2	Jury Duty Pay Deduction	Medium/Low
F1040	45	AMT	Medium
F1040	47	Child/Dependent Credit Amount	Medium/Low
F1040	48	Credit for the Elderly of Disabled	Medium
F1040	50	Education Credit	Medium/Low
F1040	51	Foreign Tax Credit	Medium
F1040	52	Child Tax Credit Amount	Medium/Low
F1040	53	Retirement Savings Contribution Credit	Medium/Low
F1040	54	Adoption Credit Amount	Medium/Low
F1040	54	Mortgage Certificate Credit	Medium/Low
F1040	55	Residential Energy Credit	Medium
F1040	55	Other Statutory Credits	Medium
F1040	55	DC First Time Homebuyer Credit	Medium/Low
F1040	58	Combined SE Tax	Medium
F1040	61	Advance EIC Amount	Medium/Low
F1040	62	Schedule H Combined Household Employment Tax	Medium
F1040	63	Accumulation Distribution Tax (ADT)	Medium
F1040	64	Withholding Tax Amount	Low
F1040	65	Estimated Tax Credit	Medium/Low
F1040	66.1	EIC	Low
F1040	66.2	Nontaxable Combat Pay Amount	Low
F1040	67	Excess SS Tax and RRTA Tax Withheld	Low
F1040	68	Additional Child Tax Credit Amount	Medium/Low
F1040	69	Request for Extension Payment	Medium/Low
F1040	70	Health Coverage Credit	Medium
F1040	72	Total Payments	Low
F1040	72	Phone Excise Tax Credit	Medium
F1040	73.1	Balance Due / Refund Amount	Low
F1040	75	Credit Elect Amount	Medium/Low
F1040	77	Estimated Tax Penalty	Medium
F6251	4	Home Mortgage Interest Amount	Medium
F6251	9	Investment Interest Expenses	Medium/High
F6251	11	Net Operating Loss	High
F6251	14	Incentive Stock Options Amount	High
F6251	15	Benefit of Estate and Trust Amount	Medium/High
F6251	17	Adjusted Gain/Loss	Medium
F6251	18	Depreciation on Assets	High
F6251	19	Passive Activities Amount	High
F6251	27	Other Adjustment Amount	High
F6251	28	Alternative Tax Net Operation Loss	High

Form	Line	Short Description	Complexity
F6251	33	Foreign Tax Credit	Medium
Sch A	4	Total Medical Deduction	Medium
Sch A	5	State and Local Income Tax	Medium/Low
Sch A	6	Real Estate Tax	Medium/Low
Sch A	9	Taxes Deduction	Low
Sch A	10	Financial Home Mortgage Interest Amount	Medium/Low
Sch A	11	Personal Seller Home Mortgage Interest Paid	Medium/Low
Sch A	12	Deductible Points	Medium/Low
Sch A	14	Investment Interest Paid	Medium/High
Sch A	15	Total Interest Deduction	Low
Sch A	17	Other Contributions	Medium/Low
Sch A	18	Carryover Contributions	Medium/High
Sch A	19	Total Contributions Deduction	Low
Sch A	20	Total Casualty Theft Loss	Medium
Sch A	24	Gross Limited Miscellaneous Deduction	Medium
Sch A	28	Other Non Limited Miscellaneous Deductions	Medium
Sch B	3	Excludable Saving Bond Interest	Medium
Sch C	2	Returns and Allowances	Medium/High
Sch C	3	Net Gross Receipts	Medium/Low
Sch C	4	Cost of Goods Sold	Medium/High
Sch C	9	Car and Truck Expense	Medium/High
Sch C	13	Depreciation	High
Sch C	16	Mortgage Interest	Medium
Sch C	17	Legal and Professional Services	Medium
Sch C	21	Repairs and Maintenance	Medium/High
Sch C	24	Travel Expense	Medium
Sch C	26	Wages Expense	Medium
Sch C	27	Other Expenses	Medium
Sch C	30	Business Use of Home Expense	Medium/High
Sch D	7	Net Short Term Gain/Loss	Medium
Sch D	7	Net Short Term Gain/Loss (Post May)	Medium
Sch D	13	Capital Gains Distribution	Medium/Low
Sch D	15	Net Long Term Gain/Loss (Post May)	Medium
Sch D	15	Net Long Term Gain/Loss	Medium
Sch D	18	Sch D 28 percent Gain	High
Sch D	18	Sch D 28 percent Gain (Post 2003)	High
Sch D	19	Unrecaptured Section 1250 Gain	High
Sch E	3	Total Rents Received	Medium
Sch E	4	Total Royalties Received	Medium/High
Sch E	12	Mortgage Interest Amount	Medium
Sch E	19	Rental / Royalty Deduction	Medium
Sch E	19	Rental / Royalty Deduction	Medium
Sch E	20	Rental Depreciation	Medium/High

Form	Line	Short Description	Complexity
Sch E	24	Rents and Royalties Income	Medium/High
Sch E	25	Rents and Royalties Loss	Medium/High
Sch E	30	Partnership/S-Corp Income	Medium/High
Sch E	35	Estate and Trust Income	Medium
Sch E	36	Estate and Trust Loss	Medium/High
Sch F	2	Cost of Purchased Item Cash	Medium
Sch F	5	Gross Co-op Distribution Cash	Medium
Sch F	6	Gross Agriculture Program Payments Cash	Medium
Sch F	7	CCC Loans Forfeited Cash Amount	Medium
Sch F	8	Gross Crop Insurance	Medium
Sch F	9	Custom Hire Cash	Medium
Sch F	15	Machine Hire Expense	Medium
Sch F	21	Gas, Fuel, Oil Deduction	Medium/High
Sch F	23	Mortgage Interest Amount	Medium/Low
Sch F	27	Repairs and Maintenance Expense	Medium/High
Sch F	31	Supplies Purchased Expense	Medium

Appendix B: Technical Appendix

Since total monetized compliance burden was transformed into logs for purposes of regression analysis, the estimates had to be retransformed back to levels. As discussed extensively in Contos et al. (2009b), this is not a trivial exercise. In a standard regression model, the error term (ϵ) has a mean of zero and is thus ignored when predicting the dependent variable. However, when one retransforms the dependent variable in a log-linear regression specification, the dependent variable depends on the value of the anti-log of the error term, ($\exp(\epsilon)$). In general, the contribution of this non-linear function of the error term cannot be ignored when predicting the level of the dependent variable. To illustrate, consider the log-linear specification:

$$\ln(Y_i) = \beta'X_i + \epsilon_i, \quad (1)$$

where i indexes observations, X_i is a column vector of explanatory variables, β is a column vector of coefficients, and ϵ_i (conditional on X_i), is a normally distributed error term with zero mean. In this specification, the natural log function has been used to transform the dependent variable, Y_i . As in a standard regression, the mean of our transformed dependent variable is equal to $\beta'X_i$. However, when we retransform this specification to obtain the level of Y_i , we obtain:

$$Y_i = \exp\{\beta'X_i\} \exp\{\epsilon_i|X_i\} \quad (2)$$

Therefore, the conditional expectation of Y_i given X_i may be computed as:

$$E(Y_i|X_i) = \exp\{\beta'X_i\} E(\exp\{\varepsilon_i|X_i\}) \quad (3)$$

Although $E(\varepsilon_i|X_i)$ is zero, the value of $E(\exp\{\varepsilon_i|X_i\})$ is a nonlinear function of the error variance.

An additional complication was that the errors were heteroskedastic, indicating that the expectation of the anti-log of the error was no longer constant. To account for heteroskedasticity, we assumed that the conditional distribution of Y_i given the explanatory variables X_i was normal. As such, equation (3) simplified to:

$$E(\exp\{Y_i|X_i\}) = \exp\{\beta'X_i\}\exp\{1/2\sigma_i^2\} \quad (4)$$

The first term is estimated by replacing β with its regression estimate. However, the second term requires estimation of the variance of the error term (σ_i^2) for each observation in our sample. To address this problem, we defined and estimated a parametric specification for the variance of the error term. The detailed steps are as follows:

- A. Regress $\ln(Y_i)$ on X_i and obtain estimated residuals, ε_i .
- B. Define v_i and set it equal to ε_i^2 . Regress v on x and compute the predicted value (\hat{v}_i) for each observation.
- C. Perform a weighted regression of $\ln(Y_i)$ on X_i using $1/\hat{v}_i$ as a weight variable. A new weight variable will be created by multiplying the sample weights by $1/\hat{v}_i$.
- D. Use the result from step C to compute the predicted linear value of Y as:

$$y_i^* = \exp(\beta'X_i + \hat{v}_i/2) \quad (5)$$

where $\beta'X_i$ uses estimated coefficients from step C and \hat{v}_i is the estimated squared error from step B.

A simplified method of estimating total monetized burden for Tax Year 2007 using micro level data is to add the estimated coefficients of the weighted regression of $\ln(Y_i)$ (analogous to step C, above) and one half of the estimated coefficients of the regression of v on x (analogous to step B, above). Coefficient estimates using data obtained from a survey of Tax Year 2007 taxpayers are presented in Table 8. As an example, $\log(mpi)$ can be calculated as $1.163 + 1.427*0.5 = 1.8765$. Estimates for Tax Year 2000 would be produced similarly, using coefficients presented in Table 9. Estimates can then be blended and adjusted for productivity, as discussed in the Econometric Model section, to produce estimates for Tax Years 2001 through 2006.

To use the model for tax policy-making through “what-if” type analysis another issue must be considered. As discussed in Contos et al. (2009b), an undesirable feature of assigning an estimate of the expected taxpayer burden to each taxpayer in the sample is that it causes the predicted burden values to be much less

dispersed than the actual reported values. Given that taxpayer burden is highly skewed, this approach also causes the median of the predicted burden amounts to be significantly higher than the median of the reported burden distribution. To better match the reported burden distribution, we developed a stochastic micro-simulation methodology that simulates burden according to the distributional assumptions inherent in our model. The mean of the normal distribution we draw from is set equal to zero, and the variance is set equal to the estimated variance of the error term from our regression analysis; since we allow for heteroskedasticity, the estimated variance varies across observations in our sample. We elected to repeat this process 30 times for each observation, thereby yielding 30 simulated values of the dependent variable for each observation in our sample.

TABLE 8. Compliance Burden Coefficients Estimated using Tax Year 2007 Taxpayer Survey Data

Variable	STEP C Estimated Coefficients of Weighted Regression of $\ln(Y_i)$		STEP B Estimated Coefficients of Regression of v on x	
	Estimate	T-Stat	Estimate	T-Stat
Intercept	1.163	4.91	1.427	5.31
Log (mpi)	0.439	26.01	-0.076	-3.56
Low Complexity	0.005	5.69	-0.001	-0.75
Medium-Low Complexity	0.008	8.97	0.000	-0.44
Medium Complexity	0.013	13.63	-0.001	-0.50
High Complexity	0.014	10.39	0.003	2.19
Paid Professional Prepared Return	1.299	4.74	-0.979	-3.29
Self Prepared Return Using Software	-1.025	-7.23	0.085	0.56
Log (mpi) and Paid Professional Prepared Return	-0.178	-9.15	0.092	4.19
Consider	-1.697	-9.26	0.194	0.99
Head of Household or Widow	-0.013	-0.29	-0.049	-1.02
Married	-0.306	-6.57	0.015	0.30
Log (Exemptions)	0.186	5.03	0.000	-0.01
Adj. R-Squared	0.574		0.012	

TABLE 9. Compliance Burden Coefficients Estimated using Tax Year 2000 Taxpayer Survey Data

Variable	STEP C Estimated Coefficients of Weighted Regression of $\ln(Y_i)$		STEP B Estimated Coefficients of Regression of v on x	
	Estimate	T-Stat	Estimate	T-Stat
Intercept	0.247	1.53	1.283	6.43
Log (mpi)	0.491	35.62	-0.065	-3.69
Low Complexity	0.009	11.59	0.001	1.17
Medium-Low Complexity	0.009	14.15	-0.002	-2.43
Medium Complexity	0.012	18.86	0.001	1.53
High Complexity	0.023	22.46	0.003	2.43
Paid Professional Prepared Return	1.843	9.87	0.017	0.08
Self Prepared Return Using Software	-0.558	-8.39	0.202	2.58
Log (mpi) and Paid Professional Prepared Return	-0.224	-14.84	0.004	0.20
Consider	-1.556	-17.91	0.387	3.77
Head of Household or Widow	-0.047	-1.48	-0.077	-1.96
Married	-0.270	-8.68	0.042	1.14
Log (Exemptions)	0.142	5.41	0.000	0.01
Adj. R-Squared	0.603		0.017	

Table 10 compares the distribution of burden as reported in the Tax Year 2007 survey and how it changes following various adjustments. The first two columns compare the distribution of reported burden with the distribution of the prediction after adjusting for heteroskedasticity (transformation adjustment). Medians in both columns are significantly lower than the means, reflecting the fact that the median of a highly right-skewed distribution falls well below the mean of the distribution. In addition, the median of the predictions (332) is higher than the median reported burden (262), whereas the estimated mean (583) is much closer to the reported mean (554). The final column of Table 10 shows the distribution of the predicted burden after all adjustments. The predicted median (268) is now much closer to the reported median (262), while the mean is still slightly over-predicted (583 vs. 554) by about five percent. As the results indicate, our stochastic micro-simulation approach does a much better job of representing the overall distribution of reported burden than the non-stochastic micro-simulation methodology.

While, on average, we over-predict the Tax Year 2007 mean by approximately five percent and the Tax Year 2000 mean by approximately 10 percent, this is still a substantial improvement compared with the results given an assumption of homoskedasticity. An assumption of homoskedasticity would have led us to over-predict level burden by about 30 percent. To avoid over-predicting Tax Year 2007

level burden by five percent would require us to better fit a model of the variance. As we see above, even a fairly weak model for the variance substantially improves our overall prediction of burden. To account for the residual effects of heteroskedasticity that we cannot model, we apply a further correction factor of 5.14 percent (10.27 percent for Tax Year 2000) on average predicted monetized burden to fit the reported level average and hence total monetized burden.

TABLE 10. Distribution of Tax Year 2007 Reported Burden and Adjustments

Quantile	Reported Burden	Predicted with Transformation Adjustment	Final Predicted
95%	1,918	1,654	1,871
90%	1,226	1,083	1,182
75% Q3	560	596	572
50% Median	262	332	268
25% Q1	117	206	125
10%	55	125	60
5%	32	85	37
Mean	554	583	583

Endnotes

- ¹ Specifically, a 1-hour increase in time burden was associated with an additional \$119 of noncompliance.
- ² Volunteer Income Tax Assistance and Tax Counseling for the Elderly are IRS services that offer free assistance with tax return preparation and tax counseling using specially trained volunteers. These programs assist seniors and individuals with low to moderate incomes, those with disabilities, and those for whom English is a second language.
- ³ For a qualitative study of this issue, see Carr (2010). The study reports that monetary cost and ease of preparation are the most often cited factors in preparation method choice, with complexity primarily being a factor for usage of a paid preparer.
- ⁴ Ibid.
- ⁵ See <ftp://ftp.bls.gov/pub/special.requests/opt/dipts/> and http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=PRS85006092.
- ⁶ Modified positive income is defined as the sum of wages and salaries, taxable and tax-exempt interest, ordinary and qualified dividends, state income tax refunds, alimony received, net profit reported on Schedule C, capital and other gains, taxable and non-taxable retirement income (IRA distributions, pensions

and annuities, social security benefits), gross profits from active participation in a Partnership or S-Corporation reported on Schedule E, gross farm profits reported on Schedule F, unemployment compensation, and other income reported on the tax return.

⁷ The Chow test statistic is equal to:

$$\frac{(S_C - (S_1 + S_2))/(k)}{(S_1 + S_2)/(N_1 + N_2 - 2k)}$$

where S_C is the sum of squared residuals from the combined data. S_1 is the sum of squared residuals from the first group and S_2 is the sum of squared residuals from the second group. N_1 and N_2 are the number of observations in each group, and k is the total number of parameters. The resulting test statistic had a numerator of 8,310,268 and a denominator 8,064, which resulted in a test statistic equal to 1,031. Using an F-distribution with 10 parameters and 708,130 ($N_1 + N_2 - 2K$) degrees of freedom gives a level of confidence over 99 percent that the null hypothesis should be rejected. Based on the results of the Chow test, we concluded that the alternative hypothesis should be accepted, and two sets of coefficients were estimated.

⁸ Blended estimates were calculated using a simple weighting scheme that uses estimates of the two survey years. To calculate estimates for Tax Year 2001: the 2001 estimates produced using 2000 coefficients were weighted by 6/7ths, the 2001 estimates produced using 2007 coefficients were weighted by 1/7ths; for Tax Year 2002 estimates, the 2002 estimates produced using 2000 coefficients were weighted by 5/7ths, the 2002 estimates produced using 2007 coefficients by 2/7ths, etc.

⁹ See http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=PRS85006092.

¹⁰ Estimates were adjusted for year specific productivity: A proxy for technology was introduced into estimates produced using 2000 coefficients and removed from the estimates produced using 2007 coefficients. To calculate estimates for Tax Year 2003, 2003 estimates produced using 2000 coefficients were multiplied by the change in total productivity between 2000 and 2003, 1.116. 2003 estimates produced using 2007 coefficients were multiplied by 0.930, etc.

¹¹ Another objective was parsimony in trying to avoid over-fitting the data. We expect to explore extensions to the model in the future as we gather additional data.

¹² To monetize the value of time a wage rate was calculated for each taxpayer by dividing modified positive income by either 2,080 or 4,160, depending on the taxpayer's filing status. For example, the modified positive income of taxpayers who filed married filing jointly was divided by 4,160 to arrive at a wage rate.

Modified positive income of taxpayers with any other filing status was divided by 2,080. The resulting wage rate was restricted to be at least as large as the minimum wage rate in order to avoid zero or unreasonably small values. Separate maximum limits were set for three groups of prefiling and filing activities. For example, the maximum hourly cost for recordkeeping time was set equal to the fees charged by professional bookkeepers.

- ¹³ More specifically, the low category includes items that are reported on information returns or require very little recordkeeping. The medium-low category includes items that are reported at an aggregate level but require some recordkeeping. The medium category includes items that require additional recordkeeping and are reported to the IRS separately. Many of the items included in the medium category require attaching worksheets that document how the totals were determined. Finally, the high category includes items that may require a separate recordkeeping system or a process with potentially separate rules for each item. Tracking records across years is an additional component for most in this category.
- ¹⁴ Construction and use of this variable was motivated by the discussion in Lerman (2007) of the design and estimated impact of the Schedule O for Form 1040.
- ¹⁵ For purposes of calculating this variable, exemptions are not allowed to be less than 1.
- ¹⁶ Forecasting the logarithm of costs indicates that a change in any of the explanatory variables is associated with a certain percentage change in compliance costs, regardless of the initial level of these costs, Slemrod and Blumenthal (1993).
- ¹⁷ It is worth noting that, following the model selection process described by Manning and Mullahy (2001), we tested whether a Generalized Linear Model (GLM) model would perform better than OLS. First, the kurtosis of the log-scale residual was calculated from one of the consistent GLM estimators. Since the kurtosis was less than 3, the Park test was then used to select the appropriate GLM model. The estimated λ was equal to 1.58. If λ is equal to 1 (raw-scale variance is proportional to the raw-scale prediction) the Park test suggests considering a Poisson-like model. If λ is equal to 2 (raw-scale variance is quadratic in the raw-scale prediction) then consider the gamma model or the homoskedastic log OLS model. All three specifications were tried and the results were qualitatively similar so the simpler and more efficient OLS method was selected.
- ¹⁸ Wage & Investment (W&I) taxpayers are those individual taxpayers not filing Schedule C, Schedule E, Schedule F, or Form 2106, typically covering business, farm, partnership, rental and royalty income and expenses.
- ¹⁹ See Table 1.2.

Enhancing Compliance Through Improved Readability: Evidence from New Zealand's Rewrite “Experiment”

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Tax law complexity is an international phenomenon that is often criticized but infrequently tackled. United States (US) federal income tax law is no exception. In 1993, New Zealand (NZ) embarked upon an ambitious project to respond to calls for reducing complexity to stimulate further compliance by taxpayers through rewriting its income tax legislation. The project was essentially a reorganization of existing material followed by a progressive rewriting of the statutory language, with minor policy changes implemented throughout the process. No attempt was made to address the complexity of the underlying concepts, yet concurrent with the rewrite project, legislative amendments and new policy initiatives (including administrative simplification measures and social policy developments) had to be incorporated. The rewrite project, originally intended to take 5 years, took 15 years and considerable expense to achieve (Sawyer, 2007). To an extent this project was part of a larger experimental exercise that both Australia and the United Kingdom (UK) embarked upon (see James et al., 1998). Australia appeared to have “given up” part way through, although the Assistant Treasurer released the rewrite of 149 pages of income tax provisions for consultation in November 2009. The UK is nearing completion of its rewrite project. Thus the NZ experiment is the first to be completed and in itself comprised a number of unique features, including the establishment of the Rewrite Advisory Panel (the Panel) (Sawyer, 2008).

To put this experiment in its context, the rewrite project was intended to assist the NZ Government's simplification aspirations through reducing sentence length and improved readability of the Income Tax Act (ITA). Initial analysis of the success of the progressive outputs of the projects has been undertaken through employing readability measures such as the Flesch Reading Ease Index (and Flesch-Kincaid Grade Level (FKGL)), and to a lesser extent, the Cloze Procedure (see for example, Tan and Tower, 1992; Richardson and Sawyer, 1998; Castle, 2006a; Castle, 2006b; Harrison, 2006; Pau et al., 2007; and Sawyer, 2007).

This study provides further empirically tested insights into the success or otherwise of the simplification exercise, primarily through application of the Cloze

Procedure to important statutory provisions. Specifically, this study uses the Cloze Procedure focusing on the extent to which subjects can correctly fill in the gaps. This study tests undergraduate business students, at the commencement of their first tax paper (a course with over 250 students) on their understanding of several sections from the ITA, both as it stood in 1993, prior to the rewrite project commencing, and as it is now written in 2007. This was also tested on advanced level undergraduate tax majors during their final year tax papers (a course with over 100 students) to ascertain the extent to which reader knowledge, interest in the subject matter, and other issues not able to be captured in readability measures can be gauged to have met with success through the rewritten legislation. While the intended subjects are to be students rather than business taxpayers and tax practitioners, the literature has established (see for example, Richardson and Sawyer, 1998) that the major users of tax legislation are tax practitioners and implicitly, at least, students studying taxation.

This study enables triangulation of data utilizing several readability measures (Flesch, FKGL, and Cloze Procedure) applied to four versions of the ITA to assess the readability and understandability of the ITA against intended NZ Government policy outcomes for the rewrite project. The NZ evidence is anticipated to provide an excellent example of the degree of success in an experiment to reduce complexity (and consequently increase simplicity) through the expression of statutory provisions, and enhance tax compliance.

The remainder of this paper is organized as follows. Section 2 discusses the relevant literature on readability generally, and in the context of tax legislation, focusing on developments in NZ supported by comparative efforts undertaken in Australia and the UK. Then, in section 3, the reasoning behind adopting NZ as an experimental case study is explained. Section 4 provides an overview of prior research using Flesch and other readability measures in NZ, and presents the results of the Cloze Procedure employed in this study. Finally, section 5 sets out the conclusions from combining the results of this study with those of prior NZ readability research, considers a number of policy implications, acknowledges the limitations of readability research, and suggests areas for future research.

Prior Research on Readability Measures and Tax Legislation

Complexity and Noncompliance

A number of previous studies have recognized complexity of tax laws as a potential factor in tax noncompliance (see for example, Jackson and Milliron, 1986). Long and Swingen (1988, p. 132) provide a comprehensive definition of complexity that includes the ambiguity of tax laws; the need for numerous calculations;

the frequency of change in the tax laws; the excessive detail in the tax laws, such as rules and exceptions to the rules; the obligation to keep the records; and taxpayer forms and instructions. In keeping with previous NZ rewrite project studies (Tan and Tower, 1992; Richardson and Sawyer, 1998; Pau et al., 2007; and Saw and Sawyer, 2010), this study measures the readability of tax laws and other tax-related materials as a proxy for the complexity of the NZ income tax legislation.

Previous studies have found mixed results on the effect of complexity on non-compliance. For instance, Richardson and Sawyer (2001, p. 185) note that the mixed results imply that complexity can have different effects on compliance: complexity can open up opportunities for both intentional and nonintentional noncompliance; the uncertainty of the complex tax laws may encourage compliance among risk-averse taxpayers; and complexity can reduce the willingness of taxpayers to comply with tax laws (implying intentional noncompliance). Although previous studies have provided mixed evidence, the general conclusion from more recent evidence is that tax complexity can have a negative effect on compliance, whether intentional or nonintentional (see for example, McKerchar, 2003, p. 108).

Before moving on, it is important to understand what is meant by compliance. While there are a number of definitions, for the purposes of this paper *compliance* means (Roth et al., 1989, p. 21):

“*Compliance* with reporting requirements means that the taxpayer files all required tax returns at the proper time and that the returns accurately report tax liability in accordance with the Internal Revenue Code, regulations, and court decisions applicable at the time the return is filed.”

New Zealand’s Tax Rewrite Project and its International Context

There are a number of ways to encourage voluntary compliance, one of which is to simplify the tax law. In relation to NZ’s rewriting its income tax legislation project, NZ’s Inland Revenue Department (IRD) (2001, pp 4, 7) stated:

“Rewriting the Income Tax Act has always been seen as integral to increasing voluntary compliance with tax laws. This is because legislation that is clear, uses plain language and is structurally consistent should make it easier for taxpayers to identify and comply with their income tax obligations. ...

The rewrite cannot, however, eliminate all the complexity and inconsistency of tax law because the subject matter is inherently complex. The challenge is to ensure the complexity results from

the concepts rather than from the way the information is presented. Even then, the least complex way of expressing the concepts should be found.”

The NZ Income Tax legislation has grown significantly in both complexity and in size over time. When the initial income tax statute, the Land and Income Tax Assessment Act 1891, was first enacted, it was only 24 pages long. This is very small relative to the first major installment of the rewrite project, the Income Tax Act 1994 (ITA 1994), which extended to approximately 1,300 pages when the Taxation (Core Provisions) Act 1996 was enacted in July 1996. Since then, the income tax legislation has grown to approximately 2,000 pages with the Income Tax Act 2004 (ITA 2004) (Pau et al, 2007) and 2,850 pages with the Income Tax Act 2007 (ITA 2007) (Saw and Sawyer, 2010).

Much has been written concerning the NZ rewrite project, and it is not the intention of this paper to reproduce that discussion other than to summarize key themes and briefly overview the process. The Working Party on the Reorganization of the Income Tax Act 1976-1993 (the Working Party, 1993) was established and suggested the income tax legislation (Income Tax Act 1976 (ITA 1976) and Inland Revenue Department Act 1974 (IRDA 1974)) be rewritten in stages over a period of 4 to 5 years. The New Zealand Government issued a discussion document in 1994 (Birch and Creech, 1994), setting out the approach to the rewrite of the income tax legislation. The objective of the rewrite process was to make the legislation easier to understand without changing the effect of the tax laws. The drafting styles used in the rewrite process include the use of plain language, section headings, sub-headings, diagrams, and flowcharts.

Stage One of the rewrite of the income tax legislation was completed in 1994 with the enactment of the ITA 1994, the Tax Administration Act 1994 (TAA 1994), and the Taxation Review Authorities Act 1994 (TRAA 1994). The ITA 1994 was reorganized using a new alphanumeric numbering system. Stage Two of the rewrite process involved the rewriting of Part A (Interpretation) and Part B (Core Provisions) of the ITA 1994. Richardson and Sawyer (1998) found evidence that the reorganization and the rewrite up to this point were successful in terms of significantly reducing the average sentence length from 324 words to 53 words and some improvement in readability. However, the readability of tax legislation, as indicated by the Flesch Reading Ease Score, had not improved dramatically. Stage Three of the rewrite resulted in the enactment of the ITA 2004, with further changes made to Parts A and B, as well as the rewritten sections of Parts C (Income), D (Deductions), E (Timing and Quantifying Rules) and Y (definitions). Pau et al (2007) reviewed this stage of the process and found further improvement in readability. The final stage (Stage Four) of the rewrite process involved drafting

and enacting the ITA 2007, which incorporates rewriting of Parts F to the end of the ITA 2004, in addition to all the intermediate amending Acts. Saw and Sawyer (2010) review this final stage and find further improvements in readability. Thus the rewrite process of ITA was complete with the enactment of the ITA 2007 with effect from April 1, 2008.

During the early stages of the rewrite process, the Panel was established in 1995, consisting of one representative each from the New Zealand Institute of Chartered Accountants (NZICA), the New Zealand Law Society (NZLS), the NZ Inland Revenue Department (IRD), and the NZ Treasury. The Panel was chaired for most of the rewrite project by former President of the NZ Court of Appeal, the Rt. Hon Sir Ivor Richardson, and its initial brief was to consider and advise on issues arising during the rewriting of the ITA 1994. Sawyer (2008) provides a comprehensive review of the operation of the Panel. His study demonstrates that the rewrite project would not have been such a successful exercise (in relation to dealing with the detail and associated drafting issues) without the involvement of the Panel and the dedication of its members.

That said, the rewrite project is in a sense incomplete with regard to other key statutes. No effort has been made to apply a similar rewriting process to the TAA 1994 and TRAA 1994, nor to the Goods and Services Tax Act 1985 (GSTA 1985). A call to rewrite GSTA 1985 from the highest judicial level in NZ has to date “fallen on deaf ears.” The Hon. Justice Blanchard, a member of the Supreme Court, stated in 2006 (Blanchard, 2007, p 92) that “... it is to be hoped that once the redrafting exercise on the Income Tax Act is completed the team will move on to the [GSTA 1985], which is not, and never has been, a user-friendly statute.” The NZ GST is an important tax, contributing over 20 percent to the NZ Government’s annual tax revenues, and is extensively utilized for ascertaining tax liability.

In relation to developments in two other countries that embarked upon rewrite projects (Australia and UK), the outcomes to date differ. James et al. (1998) provide an early review of the three countries’ projects, highlighting the differences in approach to achieve a common goal of simpler and more understandable tax legislation. In relation to the UK, Saw and Sawyer (2010) observe that the project is nearing an end in terms of the installment process for the rewrite of the income tax legislation. Once finished, the project will be evaluated further before any further rewriting is considered in relation to other revenue statutes. Likewise, Saw and Sawyer (2010) comment on the unfortunate situation in Australia, where two income tax statutes are in operation, the original Income Tax Assessment Act 1936 (ITAA 1936) and the partially rewritten Income Tax Assessment Act 1997 (ITAA 1997). Until late in 2009, it appeared that the suspended rewrite project would forever leave two statutes, but the process has been revitalized with further draft legislation under review.

Readability measures

Redish and Selzer (1985) identify numerous mathematical formulas that can be used to measure readability. Readability formulas were originally developed in the 1920s to enable textbook publishers to assign children's books to the suitable grade level. Rudolph Flesch developed the Flesch Index in 1948 to measure the readability of adult reading materials such as popular magazine articles (see Flesch, 1979). While technical writing differs significantly from popular magazine articles, the Flesch Reading Ease Index has been commonly applied to technical writing, such as tax instruction booklets and legislation.

Much of the prior research on income tax readability in NZ, as well as Australia and the UK, has employed the Flesch Reading Ease Index, which is based on word length and sentence length, and is calculated using the following formula:

$$\text{Flesch Reading Ease Score} = 206.835 - 0.846wl - 1.015sl$$

where:

wl = number of syllables per 100 words

sl = average sentence length in words.

In the late 1940s, Edgar Dale and Jeanne Chall developed the *Dale-Chall Formula* for adults and children above 4th grade as a way to improve upon the Flesch Reading Ease Formula. This readability formula is rarely used in the context of technical materials and has not been utilized in taxation research.

Smith and Richardson (1999), in addition to using the Flesch Reading Ease Score, computed the F-KGL Index. The F-KGL, also developed by Rudolph Flesch, rates a given text based on a US-grade school level. The F-KGL Index is computed as follows:

$$\text{F-KGL Index} = 0.39 (\text{words/sentence}) + 11.8 (\text{syllables/word}) - 15.59.$$

The *Gunning FOG Index*, developed in the 1940s by Robert Gunning, is a figure in years of education required to read and understand text and is computed as follows:

1. The total number of words is divided by the total number of sentences to equal the average number of words per sentence;
2. The number of words with more than three syllables is divided by the total number of words to equal the percentage of difficult words; and
3. The figures derived in #1 and #2 are totaled, and then multiplied by 0.4.

Other readability formulae include the *Coleman-Liau Readability Score*, designed by Meri Coleman and T. L. Liau in the 1970s to gauge the understandability of a text. The formula for the Coleman-Liau Grade Level score is:

$$CLGL = (5.89 \times (AWL / ASL)) - (30 \times ANS / ASL) - 15.8$$

where:

AWL = average word length or number of characters per word (number of characters divided by the number of words);
ASL = average sentence length in words or average number of words in sentence (number of words divided by the number of sentences); and
ANS = average number of sentences.

The *Bormuth Readability Score* is based on a count of characters rather than syllables per word and words per sentence to determine a score corresponding to the estimated grade level. It was designed to evaluate more academic documents, such as school texts. The formula for the Bormuth readability score formula is:

$$BGL = 0.886593 - (AWL \times 0.03640) + (AFW \times 0.161911) - (ASL \times 0.21401) - (ASL \times 0.000577) - (ASL \times 0.000005)$$

where:

AWL = average word length or number of characters per word (number of characters divided by the number of words);
AFW = average familiar words per word (the number of words in the original *Dale-Chall list of 3,000 simple words* divided by the number of words); and
ASL = average sentence length in words or average number of words in sentence (number of words divided by the number of sentences).

The FOG Index, Coleman-Liau Readability Score, and Bormuth Readability Score have been used on technical materials, but rarely in the area of taxation, and are thus not considered further in this research. Bormuth used extensive selections of text, ranging in difficulty from first grade to college, covering a wide range of subject matter. He applied the Cloze Procedure to this text. He also developed multiple regression equations to predict word length, minimal punctuation unit length, and sentence length work led to development of the Cloze Procedure in the late 1960s.

According to Redish and Selzer (1985), readability formulae are an inadequate measure of the difficulty of technical reading material on the basis that readability formulae do not take into consideration the content, organization, and layout of

the reading material, all of which are major contributing factors to the readability of the reading material. Other factors that influence readability, including the frequency of changes in tax laws, the background knowledge of the reader, the interest of the reader, and the use of diagrams and flowcharts, are not accounted for by such readability measures. Mathematical formulae do not necessarily consider conceptual difficulty, semantics, reader characteristics, and presentation of the material such as font size, layout of text, graphics, and tables. Consequently, these formulae cannot result in an absolute measure of clarity (Smith and Richardson, 1999).

Stephens (2000) provides an excellent overview of what is meant by readability and how it may be measured. In relation to the Cloze Procedure (which was developed in 1953) she comments (p. 5):

“It was popular because its scoring was objective; it was easy to use and analyze; it used the text itself for analysis; and it yields high correlations to other formulas.

The Cloze technique does not predict whether the materials are comprehensible; it is an actual try-out of the material. It tells you whether a particular audience group can comprehend the writing well enough to complete the cloze test. ...

Cloze testing has been called a ‘rubber yardstick’ because Cloze scores reflect both the difficulty of the text and the reader’s abilities or resources. ...

In particular, critics suggest that Cloze is inappropriate for measuring text or reader’s abilities in languages other than their native language. The results of close testing reflect the reader’s basic intuition about the structure and vocabulary of the target language -- and that does not exist for the language student.”

This last comment is particularly important as a number of students in the tax classes in which the Cloze Procedure was applied have English as their second language. Stephens continues in discussing the strengths and weaknesses of readability tests (p. 7):

“THINGS THEY CAN DO

1. Their primary advantage is they can serve as an early warning system to let the writer know that the writing is too dense. They can give a quick, on-the-spot assessment. They have been

described as 'screening devices' to eliminate dense drafts and give rise to revisions or substitutions.

2. In some organizational settings, readability tests are considered useful to show measurable improvement in written documents. They provide a quantifiable measure of improvement or simplification.

THINGS THEY CAN'T TELL YOU AND WHY

1. How complex the ideas are;
2. Whether or not the content is in a logical order;
3. Whether the vocabulary is appropriate for the audience;
4. Whether there is a gender, class or cultural bias;
5. Whether the design is attractive and helps or hinders the reader;
6. Whether the material appears in a form and type style that is easy or hard to read."

Stephens (2000) also suggests combining readability formulae with questionnaires to seek out features of documents that could be altered to make reading easier, using experts and testing drafts with individuals that correspond with the intended audience. Readability formula can be used to provide feedback. That is, after a portion of text is written, an appropriate formula may be applied, the text revised and then retested to see if it has improved. In part, the progressive rewriting of the ITA in NZ followed this approach through preparation of numerous drafts of rewritten legislation, revisions released for feedback following submissions, and use of experts in reviewing internal drafting within the IRD.

Green (2001, p. 95), who applies the Cloze Procedure to economics materials, suggests that the extent to which the Cloze Procedure assesses global coherence depends upon the deletion strategy employed. Normally the Cloze Procedure is a means of testing the readability of a passage in which every n^{th} word (usually every five words) is systematically removed from a passage, and the participants are then required to insert the missing word.

Guillemette (1989) applies the Cloze Procedure to an IEEE Professional Standard, observing that while the readability scores from formulas can be

converted into grade-level equivalents, the usefulness of these results largely depends on the validity of user assumptions concerning the reading level and background of the target audience. Guillemette (1989, p. 41) concludes:

“The Cloze Procedure is a direct measure of readability which correlates with other measures such as judgments and comprehension tests. It is able to distinguish differences in readability not determinable by readability formulas. This study demonstrated that the Cloze is sensitive enough to detect differences in understanding between alternate audiences and in readability among passages in a text. This type of information can provide valuable feedback to authors by pointing out readability problems for revision efforts.”

Smith and Taffler (1992, p. 93) apply the Cloze Procedure to different narratives used in company annual reports. They conclude:

“The absolute level of Cloze score differed significantly according to the level of accounting sophistication of the user. This suggests that understandability is related both to complexity of context and to education and experience, and constitutes a different measure to readability indices calculated independently of either context or user.”

Stevens et al. (1993) compare readability formula with the Cloze Procedure and comment on why readability formulas are inappropriate measures of adult reading comprehension and why the Cloze Procedure should be the method of choice in assessing adult readers. That said, prior research has established that readability indices can be used to assist in predicting the readability of business and legal documents. Saw and Sawyer (2010) observe that the same mathematical formulae have been used by the United States (US) Internal Revenue Service (IRS) to measure the readability of taxation forms and instruction booklets (for example, Tan and Tower, 1992), which provides further support and justification in terms of their usefulness for measuring readability (and consequently understandability). Importantly, the results should be considered in conjunction with other measures of readability through triangulation of results in order to corroborate and strengthen the research findings.

Limited use of other forms of readability measures, such as the Cloze Procedure, have been applied in NZ, although greater use has been made of such measures in Australia. As a consequence, the results from prior Cloze Procedure testing and Flesch (and FKGL) readability measures, can be compared with other readability measures to gain a richer picture of the understandability of tax-related materials.

Research Method: New Zealand as A Case Study Experiment

Case Study Approach

At this point, one might ask why would the developments in NZ, a small country with approximately 4.5 million people (1.5 percent size of the United States), be of interest to other countries, including the United States, and in particular, the IRS. In the writer's view, the reasons are numerous (his personal bias accepted). Importantly, the subject matter under consideration (income tax legislation) is universally complex in terms of its concepts and expression in developed countries, and an attempt to reduce complexity and enhance understandability has been completed (the first of three experiments in developed common law countries—the others being Australia and the UK). Furthermore, analysis of the process adopted in NZ through employing various readability measures suggests that the efforts of the IRD (including the drafting team), the Panel, and contributions by way of submissions from tax practitioners have led to a commendable result—more readable (and potentially more understandable) income tax legislation. Furthermore, even if the impact of the rewrite project only produces a small reduction in legislative complexity and consequently minor improvement in compliance, this still makes the exercise worthwhile (assuming the benefits exceed the costs).

Case study research is often maligned and considered to be a nonscientific approach to undertaking research. Notwithstanding this view, case study research is used extensively in academic enquiry in traditional social science disciplines as well as practice-oriented fields, with the design and analysis considerations of prime importance, more so often than the description of events or the scenario under review (see Yin, 2003).

Specifically, in this paper, I adopt the explanatory case study approach for a single case set in its context, in relation to a significant event, namely the development and completion of NZ's tax rewrite project with respect to the ITA. Thus the paper outlines the major steps in the rewrite project, and since it was conducted in defined stages rather than in one major legislative enactment, each stage is able to be evaluated through use of appropriate readability techniques. While the project is complete, enabling researchers to reflect upon its impact, overall it is too early to assess whether the benefits will outweigh the sizeable compliance and associated costs incurred in drafting, preparing submissions, re-education of tax professionals, revising teaching material for students of taxation, and the legacy effect experienced through litigation based upon prior versions of the relevant legislation. Furthermore, increased compliance costs will be incurred as tax advisers

review all transactions and become familiar with the new section locations and groupings.

In terms of being an experiment, we can, at most, draw preliminary conclusions at this point, in terms of assessing the potential benefits through analyzing the impact that the new drafting style has had on the readability of the resulting legislation. In terms of the costs, Sawyer (2007) provides an early assessment, although if there are to be significant benefits that will outweigh the costs, most will not arise until the longer term, perhaps in the next 5 to 10 years.

Research Method: Application of the Cloze Procedure

In this study, the tool for assessing readability (and potentially understandability) of NZ's Income Tax legislation is the Cloze Procedure, applied to selected sections from four versions of the Income Tax Act: the ITA 1976; the ITA 1994; the ITA 2004 and the ITA 2007. The selection of four key sections was taken from the ITA 2007, which is the latest version of the ITA and one that the subjects, undergraduate taxation students, should generally be familiar with. The four sections covered key areas of tax residence for natural persons, sources of NZ income, the general deeming provision for income and exempt income, and the general permission for allowing deductions. The equivalent section in earlier versions of the ITA for these four sections was then selected from each of the preceding Acts (the ITA 2004, the ITA 1994 and the ITA 1976). The sections selected for each of the four versions of the ITA are set out in Table 1.

Table 1: Sections from the ITA used in the Cloze Procedure instrument

Version of ITA / Section	ITA 2007	ITA 2004	ITA 1994	ITA 1976
Income & exempt income	BD 1	BD 1	BD 1	242
General permission – deduction	DA 1	DA 1	BD 2(1)	104
Residence of natural persons	YD 1	OE 1	OE 1	241
NZ-sourced income	YD 4	OE 4(1)	OE 4	243

Four versions of the Cloze Procedure instrument were created, one for each of the four versions of the ITA. The instrument commenced with an explanatory cover sheet, indicating amongst other things the purpose of the study and that the study had Human Ethics approval from the University of Canterbury. The instrument concluded with a request for brief demographic information. A copy of the

instrument (without the blanks) for the ITA 2007 is attached as an Appendix to this paper.

The four versions of the instrument were randomly allocated to students in the second-year undergraduate class “Introduction to Taxation” at the commencement of their first week of classes (class size over 250) and to students in the third-year undergraduate class “Advanced Issues in Taxation” at the commencement of their first week of classes (class size over 100). Students would typically take the introductory class in their second or third year of study, with the advanced class taken a year later. Students were given a limited period of 15-20 minutes (due to time constraints for teaching) to complete as much of the instrument as they could and were encouraged to ensure that they completed the demographic information. Upon receipt of the completed instruments, the data was inputted by a research assistant, from which basic statistical results would be generated.

Overview of Prior New Zealand Research Findings and Results of This Study

Prior New Zealand Research using Flesch and FKGL Formulae

Prior NZ studies (see, for example, Saw and Sawyer, 2010) have employed both the Flesch Reading Ease Index and FKGL Index on the Income Tax legislation resulting from the rewrite project, along with testing these measures on Tax Information Bulletins (TIBs) prepared by the IRD, and binding rulings issued by the IRD. In providing an overall analysis of the rewrite project through use of the Flesch and FKGL indices, Saw and Sawyer (2010) include a series of tables with the Flesch and FKGL results over the complete period of the rewrite project. They suggest that the results highlight the success of the NZ rewrite project in terms of its goal of tax simplification as measured through readability measures. Through enacting the ITA 2007 average sentence length has been reduced from over 135 words per sentence generated in Tan and Tower’s (1992) study (with some sentences exceeding 300 words) to approximately 25 words per sentence.

The results of Saw and Sawyer (2010) also depict a remarkable improvement in the average Flesch Reading Ease Score, which indicates that the income tax legislation should now be more readable. The scores indicate that a university undergraduate should be able to read and understand most of the sections in the ITA 2007. Although there are still a number of sections that exceed the suggested benchmark of 30 words per sentence set by the NZ Government (Birch and Creech, 1994), this can be attributed to the nature of the complexity of the underlying concepts, a situation that is inevitable with income tax legislation in almost any jurisdiction. Table 2 reproduces Table 5 from Saw and Sawyer (2010) and provides

an overview of the Flesch Reading Ease Score results for the various stages of the NZ rewrite project, and a comparison with Australia.

Saw and Sawyer (2010), like Pau et al. (2007), also observe that in comparing the readability of the ITA 2007 with other tax related materials, the average Flesch Reading Ease Score is higher for the ITA 2007 and binding rulings, suggesting they are easier to read and understand compared to the IRD’s TIBs. This finding suggests that the drafters of TIBs should re-examine the drafting style adopted

Table 2: Summary of Flesch Reading Ease Scores (Income Tax Legislation)

Flesch Reading Ease Score	New Zealand								Australia		Education level	General Reading Ease Scale
	2007		2004		1994		1976		1997			
	#	%	#	%	#	%	#	%	#	%		
Below 30	35	18	16	20	21	80.7	40	100	11	12	University Graduate	Very Difficult
30-50	92	48	50	61	2	7.7	0	0	47	49	University Undergraduate	Difficult
50-60	44	23	6	7.3	1	3.8	0	0	22	23	Years 11-13	Fairly Difficult
60-70	15	8	7	8.5	1	3.8	0	0	11	12	Years 9-10	Standard
70-80	4	2	3	3.7	0	0	0	0	4	4	Year 8	Fairly Easy
80-90	2	1	0	0	0	0	0	0	0	0	Year 7	Easy
90-100	0	0	0	0	0	0	0	0	0	0	Year 6	Very Easy
Total	192	100	82	100	25	100	40	100	95	100	-	-

for preparing the content of TIBs to bring them more in line with the ITA 2007. Interestingly, binding rulings, which are also drafted by the IRD, were found to perform much better than TIBs that are prepared for a general audience. TIBs are provided by the IRD “as a service to people with an interest in New Zealand taxation,” and contain information about changes to tax-related legislation, proposed legislation, judgments, rulings, and other specialist tax topics. Binding rulings are a service provided by the IRD on a fee-basis for private, product, and status rulings. Public rulings are issued free of charge. All binding rulings reflect the IRD’s interpretations of the tax laws and are formally binding on the Commissioner. Table 3 reproduces Table 8 from Saw and Sawyer (2010) and reveals the relative successes in terms of relative readability of the ITA 2007, TIBs, and binding rulings.

Based on the 2006 NZ Census, approximately 14 percent of the NZ population had a university bachelor's degree or higher, indicating a relatively small proportion of the population should be able to read and understand income tax legislation. While this sector of the population will include most tax practitioners

Table 3: Summary of Flesch Reading Ease Scores (New Zealand Income Tax Legislation)

Flesch Reading Ease Score	ITA 2007		TIBs		Binding Rulings		Education level	General Reading Ease Scale
	#	%	#	%	#	%		
Below 30	35	18	4	25	8	44	University Graduate	Very Difficult
30-50	92	48	10	63	8	44	University Undergraduate	Difficult
50-60	44	23	2	13	1	6	Years 11-13	Fairly Difficult
60-70	15	8	0	0	1	6	Years 9-10	Standard
70-80	4	2	0	0	0	0	Year 8	Fairly Easy
80-90	2	1	0	0	0	0	Year 7	Easy
90-100	0	0	0	0	0	0	Year 6	Very Easy
Total	192	100	16	100	18	100	-	-

(and tax students in due course), it is unlikely to include a significant number of business taxpayers that operate small and medium enterprises (SMEs).

Prior New Zealand research using the Cloze Procedure and other measures

In March 2006, the Panel, in conjunction with IRD tax policy officials, commissioned a staged, post-publication review of the ITA 2004 by Richard Castle. The first stage was to identify the various methodologies available for evaluating the readability of the legislation (although readability formulae and a full empirical survey with questionnaires were excluded from consideration – Castle, 2006a). In his follow-up report, Castle (2006b) includes comments from an expert linguist's report (prepared by Harrison, 2006), in which she commences with a

comprehensive review of the prior readability literature, including a discussion of the Cloze Procedure. Harrison (2006) concludes that the prior studies have reinforced the validity of the Cloze Procedure as a useful means of judging comprehension of a particular text for a particular reader. Harrison (2006) observes that a major disadvantage of the Cloze Procedure is that it does not provide any explanation as to the difficulties of particular extracts and versions. Nevertheless, she observes that a substantial number of researchers agree that it measures understandability rather than readability.

In terms of the findings from Harrison's (2006) research, Sawyer (2008) provides a comprehensive analysis. Extracts from the ITA 2004 that were analyzed using the Cloze Procedure produced an average score of 68.1 percent and were marginally more understandable for intended readers (in this case tax professionals and revenue officials) than were extracts from the ITA 1976 (average score 62.5 percent). Both of these scores exceed the level of 44 percent suggested by Bormuth (1967) for his instructional range. Overall, the results suggest that the rewritten legislation (ITA 2004) may be easier for its primary users to read than the ITA 1976.

Harrison (2006) suggests that there could be many reasons for the varying levels of difficulty between Cloze versions. She also suggests that rather than speculate on the causes, it is more useful to triangulate the data by applying a second readability evaluation technique to these sections in a future study; a recommendation with which the current author concurs. Nevertheless, she cautions that, unless the combined score for both versions of the legislation is very low relative to other sections, such further analysis does not seem justified. While Harrison's (2006) findings are important and support earlier research using the Flesch Reading Ease Index and the F-KGL Index, it is important to note that the comparison is ITA 1976 to ITA 2004—the reorganized ITA 1994 was not compared using the Cloze Procedure. Prior research suggests that the reorganization itself may have a significant impact on readability (see Richardson and Sawyer, 1998).

Woellner et al. (2007) utilized Cloze Procedure testing on undergraduate students (considered to be “tax novices”) and tax practitioners and tax officers (considered to be “tax experts”). The authors found that the tax experts scored over 70 percent on both the ITAA 1936 and ITAA 1997, well over the benchmark of 44 percent. The tax novices failed to achieve the benchmark on both the ITAA 1936 and ITAA 1997, but found the ITAA 1997 marginally easier (at 35 percent) compared to 24 percent for the ITAA 1936.

Results of Using the Cloze Procedure on Undergraduate Tax Students in New Zealand

As noted in the previous section, the key contribution of this study is to assess the “success” of the NZ Government’s initiative of simplifying the income tax legislation through use of the Cloze Procedure on four versions of the ITA: the ITA 1976; the ITA 1994; the ITA 2004, and the ITA 2007. A total of 221 useable instruments were received, comprising 155 from the introductory tax class (60 percent) and 66 from the advanced class (62 percent). Table 4 sets out the demographic information of the 221 useable responses.

The four versions of the instrument were relatively evenly spread, ranging between 48 to 63 useable instruments for each of the four versions of the ITA. The four versions were also well spread between the two undergraduate tax classes, ranging between 34 and 46 for the introductory class for each version, and 14 to 18 for the advanced tax class. Given that there were fewer than 20 useable instruments for the four versions spread over the advanced tax class, it is considered inappropriate to test for significance of differences between the various versions of the instrument and the particular tax class. Nevertheless, descriptive statistics (including mean and standard deviations) were determined for the two classes and four variations of the instrument.

Several interesting observations from the background demographic data are worth noting. First, in terms of language of the subjects, over 30 percent did not have English as their first language, making the task of interpretation and understanding of the text more difficult, and in part reducing the effectiveness of the Cloze Procedure. English as a second language for student subjects ranged from as low as 27 percent for those completing the ITA 1976 version of the instrument to as high as 36 percent for those completing the ITA 1994 version of the instrument. In terms of age, most subjects were in the range 20-29 years which is unsurprising given that students would typically take these courses in their second or third year at university. The gender mix is very close to the university ratios as a whole (55:45 female to male).

Unsurprisingly, given that most students come to university from school in NZ, and that those with wage and salary earnings generally do not need to file tax returns (since income is taxed comprehensively at source and there are no deductions for employees), tax experience and related work was negligible for nearly 80 percent of the subjects. Nevertheless, nearly 20 percent had some minimal level of experience with tax issues outside of the classroom. Most respondents found the exercise to be difficult to extremely difficult, which is also unsurprising given the complexity of taxation law, the time frame in which they had to complete the exercise, and their limited tax experience. Of the four versions, the ITA 1976 was found to be the least difficult, a finding counterintuitive to the expectations from

Table 4: Demographic background information for Cloze Procedure testing

Item	Frequency	Percentage
Course		
Introductory course	155	70.14
Advanced course	66	29.86
Language		
English	152	68.78
Other: Chinese	40	18.10
Japanese	5	2.26
European	5	2.26
Other	19	8.60
Age		
15-19 years	50	22.62
20-29 years	158	71.49
30-39 years	9	4.07
40-49 years	2	0.90
50+ years	2	0.90
Gender		
Female	120	54.30
Male	101	45.70
Experience with taxation filing or related work (218)		
None	172	78.90
1-4 years	41	18.81
5-9 years	2	0.90
10-19 years	1	0.50
20+ years	2	0.90
Difficulty of exercise (210)		
Extremely easy	1	0.50
Very easy	2	1.00
Easy	8	3.81
Neutral	35	16.67
Difficult	52	24.76
Very difficult	58	27.62
Extremely difficult	54	25.71
<i>(Unless otherwise indicated, these results are based on 221 useable responses)</i>		

the prior readability research on the ITA in NZ. This finding is probably attributable to the sections selected which for the ITA 1976 were much less wordy than in the more recent versions of the ITA.

Turning to the basic descriptive statistical data, Table 5 sets out the means and standard deviations based on the four versions of the instrument and for the two undergraduate tax classes. For the purposes of this exercise, Bormuth’s (1967) 44-percent instructional range was used as a benchmark since both groups of students can be considered to be tax novices rather than tax experts. Only legible exact responses are treated as correct.

The data in Table 5 indicate that only in one instance did a particular version of the ITA exceed 44 percent, namely the ITA 2004 for the advanced taxation class, where over 55 percent of the responses exceeded the 44 percent mark. The data also indicate that those in the advanced tax class overall performed better than those in the introductory class. This suggests that the students benefited from their prior instruction in taxation where they would have been familiar with the concepts behind the four sections included in the instrument, although most would have experienced the ITA 2007. Interest in the subject matter is also likely to have been a factor as the advanced taxation course is not compulsory for accounting majors until 2011. In terms of the range of correct responses, the highest

Table 5: Basic Statistical Data for Cloze Procedure

Item	Class: Introductory	Class: Advanced	Overall
Means	%	%	%
ITA 1976	30.10	38.42	32.25
ITA 1994	29.59	35.95	31.75
ITA 2004	33.56	48.78	40.59
ITA 2007	30.17	35.84	32.09
Average	30.86	39.75	34.17
Standard Deviations			
ITA 1976	12.88	13.10	12.89
ITA 1994	15.19	8.92	13.66
ITA 2004	17.40	15.11	17.34
ITA 2007	13.27	17.05	14.59
Number of responses exceeding 44 percent			
ITA 1976	16.67	17.65	16.95
ITA 1994	26.67	20.00	24.44
ITA 2004	25.00	55.56	36.96
ITA 2007	17.86	38.46	24.39
Average	21.55	32.92	25.69

number was 72 percent for the ITA 2004 (by a student in each of the introductory and advanced tax classes). In total four student subjects exceed 70 percent, the level considered to designate the subject as an expert. The lowest correct level of responses was 5 percent (a student from the introductory tax class). A total of 50 out of 221 subjects exceed the 44 percent threshold (22.6 percent). In breaking this down between the two classes, 21 of the 66 students from the advanced class (31.8 percent) exceeded 44 percent, while 29 out of 155 (18.7 percent) exceed this level from the introductory class. Table 6 provides an overview of the frequency of correct responses across versions of the ITA and by tax class (introductory and advanced).

Table 6: Frequency of Correct Responses

Range (number) / Version of Act	0-20%	20-40%	40-60%	60-80%	80-100%
Introductory Class (155)					
ITA 1976	11	20	11	0	0
ITA 1994	8	13	8	1	0
ITA 2004	7	11	8	2	0
ITA 2007	6	17	4	1	0
Advanced Class (66)					
ITA 1976	2	7	7	1	0
ITA 1994	0	11	3	0	0
ITA 2004	0	5	8	5	0
ITA 2007	2	5	5	1	0

Overall, it appears that the student subjects found the ITA 2004 version of the four sections easiest to understand, as measured by the level of correct responses in filling in the gaps. The ITA 2007, the final version of the rewritten legislation, came in a close third behind the ITA 1976 (the pre-rewritten version)! As noted earlier, the number of observations for the advanced tax class makes significance testing comparison between classes unsuitable.

Comparing the results to those of Woellner et al. (2007), the results overall are strikingly comparable. In Woellner et al. (2007, p 723), students scored, on average, 35 percent for their partially rewritten statute (ITAA 1997), compared to 24

percent for the ITAA 1936. All four versions of the ITA in NZ scored higher than the ITAA 1936, with the ITA 2004 exceeding the ITAA 1997.

Conclusions, Policy Implications, Limitations and Future Research

The NZ Government's key objective in rewriting the ITA 1976 and IRDA 1974 was to make the legislation clearer and easier to read without changing the content of the current legislation (except in limited identified circumstances). Since the beginning of the rewrite project, NZ's income tax legislation has been subjected to reorganization, re-enactment, and extensive rewriting. This large-scale rewrite project has required all income tax legislation users to review their transactions and familiarize themselves with the new section locations and groupings (Sawyer, 2007). Thus, in achieving the long-term goals of tax simplification, legislative complexity in the short term may have been compromised.

That said, it is clear that the NZ Government is committed to reducing the complexity in New Zealand's tax laws with respect to the drafting style employed. The results of research to date provide some preliminary evidence that the NZ Government's effort has been successful in terms of improving the readability of the tax laws. Research on the rewrite project provides evidence that different drafting styles can affect the readability of income tax legislation. For example, the use of shorter sentences and active voice, and the use of alphanumeric numbering, can improve the readability of legislation. The NZ Government should take this into consideration when drafting other tax legislation, such as the TAA 1994 and GSTA 1985.

The NZ rewrite project experiment itself comes with a number of limitations, including the use of student subjects as proxies for users of tax legislation (recognized to be at the level of novices only), and the small sample size (particularly in the advanced tax class) making statistical significance testing unreliable. Within the context of NZ as a case study, it is important to recognize a number of unique features. The relative simplicity of the political processes in NZ, coupled with the relatively less complex starting point with regard to the income tax legislation that the NZ legislative drafters were faced with compared to that facing other countries, and the colonial history that forms a backdrop to much of NZ's income tax policy, facilitated the rewrite project. This should unsurprisingly enhance the Cloze Procedure results. Nevertheless, the IRS and others involved in US tax policy would benefit from the opportunity to assess the costs and benefits of rewriting legislative prose into a more simplified format, and, to this end, the New Zealand experiment, buttressed by the emerging empirical research, provides much "food for thought."

The use of readability tests provides evidence to support the NZ Government's intention behind the rewrite project, and it has been largely achieved in terms of more readable (and potentially understandable) legislation. However, while the Flesch-and FKGL-level research suggests incremental gains with each version of the ITA, the early Cloze Procedure analysis using tax students is less encouraging in that the ITA 2007 does not appear to be the easiest to read of the four versions of the ITA (the ITA 2004 occupies this place). More importantly, less than 25 percent of the subjects (acknowledged to be novices) exceeded the 44 percent instructional guideline. Various explanations for this situation can be extracted from the data, including the large number of subjects with English as their second language (31.2 percent), the tight time frame to complete the exercise, and the underlying complexity of tax concepts, collectively make expression in a readily understandable statutory format a very difficult task for drafters.

In terms of ongoing research in this area, it is intended to extend this work further in the future to incorporate application of the Cloze Procedure with tax practitioners and revenue officials as a group of experts. Future research could also incorporate scenarios requiring application of statutory provisions under various versions of the ITA, using undergraduate tax students and tax practitioners as subjects. Such research will allow for comparison against student subjects, as well as to studies undertaken in other countries, such as Woellner et al. (2007) on Australian students and tax practitioners and revenue officials.

Having data from two readability measures, one purely based on the results from assessing the text and the other using subjects' experiences, enables triangulation of results which may buttress the conclusions that can be drawn. To this end, the results provide limited support for enhanced understandability through the rewrite project's efforts to simplify the statutory language. A positive feature of the iterative rewrite project approach is that researchers (and hopefully drafters, as well) have been able to assess their work, both through testing it with drafts made available for public submission, and use of readability methods (there is evidence that the IRD undertook limited in-house testing in this regard—see Sawyer, 2007). This would then facilitate the process of drafters refining their text as a result of submissions (and potentially through redrafting to improve readability and understandability) to provide a better quality final product.

As Pau et al. (2007) observe, the NZ Government considers the rewrite process to be successful if the rewritten income tax legislation is accepted by all main users as clearer and easier to apply (Birch and Creech, 1994). This analysis is yet to be completed in full and, thus, future research could identify all the main users of income tax legislation, such as accountants, lawyers, revenue authority officials, and the judiciary, and examine (potentially through use of a questionnaire survey) their perceptions of the usability and readability of the legislation. Thus, future research could provide more conclusive evidence as to whether the rewrite process has in fact reduced the complexity of tax laws and enhanced compliance. Future

research should also be undertaken into quantifying the compliance cost impact of the rewrite project, once the long-term benefits have been achieved.

Notwithstanding the above observations, the question needs to be asked: “Does anyone really care if no one other than tax experts (for example, tax practitioners, tax lawyers, the Judiciary, tax academics, and tax officials) can read and understand the Income Tax Act?” Provided that taxpayers can determine their tax obligations through other means, such as from tax agents and tax authority publications, do they really need to be able to read and understand tax legislation? I would argue that it is a fundamental right for all citizens to be able to ascertain their basic legal obligations (including tax obligations) readily without incurring substantial cost and in an informed and unbiased manner. To this end, taxpayers with an “average” level of education should be able to read and understand (tax) legislation individually, should they choose to do so.

While this study has focused on NZ as an experimental case study, it is not the only common law country that has experimented with rewriting of its income tax legislation. Australia and the United Kingdom being major players, with research by Castle (2006b) suggesting that expert, yet nontax professional managers prefer the Australian partially rewritten legislation and the author himself the almost complete UK rewritten legislation! Further research should be conducted on the rewrite project in the UK, which is nearing completion, and now that the Australian project has recommended, future research should build on that of Smith and Richardson (1999) and Woellner et al. (2007).

The collective results of readability research on the NZ tax rewrite project provide evidence of improvements in readability (and to a lesser degree suggest improvements in understandability) through the process of simplifying the text of the ITA. Such an outcome should enable taxpayers and their advisors to more readily determine their tax obligations, thereby facilitating an environment that is conducive to improvements in the level of tax compliance.

This paper presents the latest in a growing literature of research on the completed rewrite project in NZ. It offers further insights into this important case study of a small country, without the complexity of the US, that undertook a massive project to completely overhaul and redraft its income tax legislation. While the findings provide their own insights, they should be read in the context of research into all aspects of the rewrite project, including the initial proposals and strategy adopted by the IRD, the involvement of the Panel, an assessment of the costs and benefits (including when and how these may be measured), and assessments of whether these simplification efforts have produced more understandable legislation. With the ITA 2007 still relatively new, ongoing re-education and reviews of transactions remain prominent, and disputes continue to be based on earlier versions of the ITA, meaning that compliance costs continue to rise and the benefits remain, in part, at least, elusive. Assessment of the ultimate impact on compliance levels must be left to another day.

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Appendix

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25 February 2010

Rewrite of the Income Tax Act—Assessing the Readability of Legislation

First please let me introduce myself. I am Professor Adrian Sawyer from the Department of Accounting and Information Systems. I have been involved for a number of years in conducting research evaluating the effectiveness of the Rewrite of the Income Tax Act Project in New Zealand. The rewrite project commenced in 1993 with the reorganization of the existing key revenue Acts and involved a progressive rewriting of the Income Tax Act resulting in the Income Tax Act 2007.

To date the research has focused on applicable readability formula such as the Flesch Readability Index. In this further extension of the research I wish to test readability using the method known as the Cloze Procedure. Briefly the Cloze Procedure is a technique in which words are deleted from a passage according to a word-count formula or various other criteria. The passage is presented to the intended subjects (in this study, you as tax students) who insert words to complete and construct meaning from the text.

Instructions:

What I would like you to do is to read the legislative sections and to fill in the blanks with the word that you believe has been removed in each instance. The intention of this study is to determine the degree to which students, as readers of tax legislation, collectively can correctly determine the missing words within the time frame provided. Here every fifth word has been deleted from four sections of the Income Tax Act. I would also ask you to complete several questions that follow which ask you for some background information. You have 15 minutes to complete this task to the extent that you can in this time.

This research has been reviewed and approved by the University of Canterbury's Human Ethics Committee and is therefore subject to strict guidelines. All responses will be treated in the strictest confidence and will only be used for this research project and possibly used collectively for comparison purposes with

future research involving New Zealand tax professionals. No one other than me, as the researcher, will have access to these responses. There are no markings on the documents and as such, it will not be possible to identify you in any papers derived from this study.

Completion of this documentation is completely voluntary. You do not have to answer any individual item or question if you do not wish to. You may withdraw your participation at any time until you have handed in the documentation. By completing the documentation and handing it in, however, it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project with the understanding that your anonymity will be preserved.

Yours sincerely

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Sections from the Income Tax Act 2007

BD 1: Income, exempt income, excluded income, non-residents' foreign-sourced income, and assessable income

Amounts of income

(1) An amount is income of a person if it is their income under a provision in Part C (Income).

Exempt income

(2) An amount of income of a person is exempt income if it is their exempt income under a provision in subpart CW (Exempt income) or CZ (Terminating provisions).

Excluded income

(3) An amount of income of a person is excluded income if—

- (a) it is their excluded income under a provision in subpart CX (Excluded income) or CZ; and
- (b) it is not their non-residents' foreign-sourced income.

Non-residents' foreign-sourced income

(4) An amount of income of a person is non-residents' foreign-sourced income if—

- (a) the amount is a foreign-sourced amount; and
- (b) the person is a non-resident when it is derived; and
- (c) the amount is not income of a trustee to which section HC 25(2) (Foreign-sourced amounts: non-resident trustees) applies.

Assessable income

(5) An amount of income of a person is assessable income in the calculation of their annual gross income if it is not income of any of the following kinds:

- (a) their exempt income;
- (b) their excluded income;
- (c) their non-residents' foreign-sourced income.

Defined in this Act:

amount, annual gross income, assessable income, excluded income, exempt income, foreign-sourced amount, income, non-resident, non-residents' foreign-sourced income

DA 1: General permission*Nexus with income*

(1) A person is allowed a deduction for an amount of expenditure or loss, including an amount of depreciation loss, to the extent to which the expenditure or loss is—

(a) incurred by them in deriving—

(i) their assessable income; or

(ii) their excluded income; or

(iii) a combination of their assessable income and excluded income; or

(b) incurred by them in the course of carrying on a business for the purpose of deriving—

(i) their assessable income; or

(ii) their excluded income; or

(iii) a combination of their assessable income and excluded income.

General permission

(2) Subsection (1) is called the general permission.

Avoidance arrangements

(3) Section GB 33 (Arrangements involving depreciation loss) may apply to override the general permission in relation to an amount of depreciation loss.

Defined in this Act:

amount, assessable income, business, deduction, depreciation loss, excluded income, general permission, loss

YD 1: Residence of natural persons*What this section does*

(1) This section contains the rules for determining when a person who is not a company is a New Zealand resident for the purposes of this Act.

Permanent place of abode in New Zealand

(2) Despite anything else in this section, a person is a New Zealand resident if they have a permanent place of abode in New Zealand, even if they also have a permanent place of abode elsewhere.

183 days in New Zealand

(3) A person is a New Zealand resident if they are personally present in New Zealand for more than 183 days in total in a 12-month period.

Person treated as resident from first of 183 days

(4) If subsection (3) applies, the person is treated as resident from the first of the 183 days until the person is treated under subsection (5) as ceasing to be a New Zealand resident.

Ending residence: 325 days outside New Zealand

(5) A person treated as a New Zealand resident only under subsection (3) stops being a New Zealand resident if they are personally absent from New Zealand for more than 325 days in total in a 12-month period.

Person treated as non-resident from first of 325 days

(6) The person is treated as not resident from the first of the 325 days until they are treated again as resident under this section.

Government servants

(7) Despite subsection (5), a person who is personally absent from New Zealand in the service, in any capacity, of the New Zealand Government is treated as a New Zealand resident during the absence.

Presence for part-days

(8) For the purposes of this section, a person personally present in New Zealand for part of a day is treated as—

- (a) present in New Zealand for the whole day; and
- (b) not absent from New Zealand for any part of the day.

YD 4: Classes of income treated as having New Zealand source [extract]

What this section does

(1) This section lists the types of income that are treated as having a source in New Zealand for the purposes of this Act.

Business in New Zealand

- (2) Income derived from a business has a source in New Zealand if—
- (a) the business is wholly carried on in New Zealand;
 - (b) the business is partly carried on in New Zealand, to the extent to which the income is apportioned to a New Zealand source under section YD 5.

Contracts made or performed in New Zealand

- (3) Income derived by a person from a contract has a source in New Zealand if the contract is—
- (a) made in New Zealand, except to the extent to which the person wholly or partly performs the contract outside New Zealand, and the income is apportioned to a source outside New Zealand under section YD 5;

(b) made outside New Zealand but the person wholly or partly performs the contract here, to the extent to which the income is apportioned to a New Zealand source under section YD 5.

Personal services in New Zealand

(4) An amount that is income under section CE 1 (Amounts derived in connection with employment) has a source in New Zealand if the amount is earned in New Zealand, even if the employer is not a New Zealand resident.

Accident compensation payments

(5) An accident compensation payment as defined in section CF 1(2) (Benefits, pensions, compensation, and government grants) has a source in New Zealand.

Background Information

Question 1:

Which age group are you currently in?

- 15-19
- 20-29
- 30-39
- 40-49
- 50+ years

Question 2:

What gender are you?

- Female
- Male

Question 3:

What is your first language for reading and writing?

- English
- Other (please state)_____

Question 4:

Which tax course are you completing this material for?

- ACIS 254: Introduction to Taxation
- ACIS 358: Advanced Issues in Taxation

Question 5:

How many years (part-time and/or full-time) tax-related work experience and/or tax filing experience do you have?

- None
- 1 - 4
- 5 - 9
- 10 - 19
- 20+ years

Question 6:

On the scale below please rate how easy you found it to complete the gaps in the sections of legislation by circling the corresponding number:

<i>Extremely easy</i>	<i>Very easy</i>	<i>Easy</i>	<i>Neutral</i>	<i>Difficult</i>	<i>Very difficult</i>	<i>Extremely difficult</i>
1	2	3	4	5	6	7

Tax Compliance Costs: the Effect of Authority Behavior and Taxpayer Services

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In addition to the tax law itself, the optimal enforcement of tax regulations is an important economic issue (Slemrod and Yitzhaki 2002, McCubbin 2004). Within the literature on tax compliance decisions, the question has been raised if a shift from a control-oriented to a customer-oriented approach of tax administration could reduce tax evasion (Hansford and Hasseldine 2002, Murphy 2004, Freedman et al. 2009). According to Kirchler (2007), instead of a “cops and robbers” mentality, educating and supporting customers could be more promising to convince taxpayers to comply.

As has been stated by Gale and Holtzblatt (2002), administrative issues may not only affect the compliance decisions of private taxpayers, but also their burden of red tape. According to the literature, the compliance costs of private businesses substantially exceed the administrative costs of the tax authorities (for a review, see Evans 2003, Vaillancourt and Clemens 2008). Vaillancourt and Clemens (2008) estimate the compliance costs of Canadian households and businesses at a range from 1.2 percent to 1.8 percent of the GDP, while the administrative costs of the Canadian authorities lie in a range from 0.2 percent to 0.5 percent.

Taking into account economies of scale within the tax compliance process (Sandford et al. 1989, Allers 1994, Evans 2003), the support especially of small and medium-sized businesses by government agencies could result in a decrease of the cost burden for the overall tax system. From this perspective, a more customer-oriented approach of tax administration could result in an improvement of productivity for the economy as a whole (Barton 2001).

From our point of view, there is a lack of empirical evidence regarding the hypothesized relationship between customer orientation and compliance costs. From an efficiency perspective, it is especially of interest to quantify potential cost reductions. Furthermore, the identification of the key cost drivers is an important question of research. Up to our knowledge, we estimate for the first time the effect of taxpayer services on the tax compliance costs of private businesses.

Using ratings on administrative quality as measure for customer orientation, we find empirical support for a relationship of authority behavior and compliance burdens. Our results suggest that service orientation may yield a significant

cost reduction for private businesses. In the German case, a positive evaluation of the authorities' service orientation is correlated with a cost reduction of about 30 percent. In Belgium, businesses with a negative rating regarding the information obtained from the revenue service bear on average an about 26 percent higher cost burden.

The paper is organized as follows. In the next sections, we illustrate the two data bases and our estimation strategy. We discuss potential caveats of cost measurement and especially the potential problem of endogeneity of our proxies for authority behavior. Thereafter, we analyze the regression results for Germany and Belgium. The last section concludes the paper, while the appendices contain additional regression results and cross checks for the Belgian data set.

Database

German Data

The German data has been raised by the Institute for Small and Medium Businesses Research in Bonn and the Institute for Economic and Political Research in Cologne in 2003 on behalf of the German Ministry of Economics and Labor. It contains information on the compliance costs resulting from business taxes, social insurance contributions, statistics, and labor market and environmental regulations. Further information is given by Kayser et al. (2004).

Corresponding to investigations in other countries (OECD 2001, European Communities 2004, DeLuca et al. 2007), the overall cost burden is calculated by the sum of internal personnel costs, expenses for external advice, and other monetary expenses. The cost burdens are subjective estimates given by the survey participants. The same holds for the labor costs per hour. The tax-related costs TC and the social insurance-related costs SC are described by a proportion of the overall burden of red tape. The sample has been selected to represent the German business population.

To our knowledge, the data is the best survey available concerning the tax compliance costs of German businesses. Nevertheless, some measurement issues have to be taken into account. A basic problem associated with measuring tax compliance costs is the reliability of the taxpayers' statements. As Tate (1988, p. 352) argues, the respondents may overstate their compliance cost burden to impose pressure on political authorities. On the other hand, the literature gives also some empirical evidence for a possible cost perception deficit. From this perspective, respondents may underestimate tax compliance costs by failing to remember parts of their cost burden.¹ Regarding our data set, we find a strong correlation between the compliance cost estimates and the "perceived" compliance burden.² We may

therefore assume that there is no systematic overestimation or underestimation of the burden of red tape.

Because of a relatively low response rate of 7.3 percent, the empirical results could be affected by a non-response bias.³ According to the literature, there are theoretical and empirical arguments for a positive and a negative non-response bias. Therefore, the net effect of a self-selection on average cost estimates is unclear and could result in “random noise.” A selection bias would not necessarily distort the regression results if it is not correlated with the investigated variables. Taking into account the small differences between the descriptive results of our database and international estimates (OECD 2001, European Communities 2004, Klun and Blažič 2005), there is no reason to suspect a major distortion due to non-response bias.

Table 1 contains the mean and median values (in parentheses) for the overall compliance costs (including statistics as well as labor market and environmental regulations), the relative burdens per turnover and employee, and the proportion of compliance costs caused by business taxes and social insurance contributions. According to the size criteria of the European Union, we define enterprises with less than 50 (between 50 and 249) associates as small (medium).^{4,5} The case number is also considered [in parentheses].

TABLE 1. German Data: Compliance Cost Burdens

Size class	Small	Medium	Big	Cases
Compliance costs per business (€)	37,726 (25,000) [434]	103,323 (53,000) [196]	649,716 (140,000) [97]	727
Compliance costs per associate (€)	3,296 (2,000) [434]	1,090 (499) [196]	894 (169) [97]	727
Compliance costs per turnover (%)	3.27 (1.83) [417]	1.06 (0.48) [184]	0.59 (0.11) [91]	692
Tax-related costs (%)	47.96 (45.00) [580]	37.39 (35.00) [225]	32.81 (30.00) [116]	921
Social insurance-related costs (%)	29.37 (30.00) [580]	30.20 (30.00) [225]	27.78 (26.00) [116]	921

Due to economies of scale, the relative cost burdens (per turnover or per employee number) are significantly higher for small businesses. Resulting from strong effects of business size on the compliance cost burden, we find also a remarkable difference between mean and median values that is driven by businesses at the edge of a specific size class. Table 1 documents further that the majority of the overall cost burden results from taxes and social insurance contributions. Regarding small businesses, about 75 percent of the overall cost burden are caused by corresponding administrative obligations.

In addition to the compliance cost burden, the survey contains general information on the participants (size, location of head office, legal form, sector), information on specific forms of employment (casual workers, fluctuation of employees, etc.), the accounting method used for tax purposes, the use of electronic

submission methods, Likert scale values regarding the “perceived” burden of complying with the legislation and value judgements on administrative quality. The ratings on tax administration are given on a 5-point Likert scale regarding the qualification, the service orientation and the processing time of the German tax and social insurance administration.

The distribution of ratings is documented by Table 2. A rating of 1 denotes very positive and 5 very negative. The proportion of a specific rating to the overall number of ratings is given in parentheses. Furthermore, we document also the total number of cases and the mean rating for each administrative issue.

TABLE 2. German Data: Ratings for Tax and Social Insurance Administration

Variable	1	2	3	4	5	Cases	Mean
QUALIFICATION TAX	42 (3.81)	506 (45.87)	397 (35.99)	98 (8.88)	60 (5.44)	1,103	2.66
SERVICE TAX	17 (1.57)	230 (21.24)	324 (29.92)	268 (24.75)	244 (22.53)	1,083	3.45
PROCESSING TAX	20 (1.84)	203 (18.66)	312 (28.68)	294 (27.02)	259 (23.81)	1,088	3.52
QUALIFICATION SIA	39 (3.80)	482 (46.98)	355 (34.60)	95 (9.26)	55 (5.36)	1,026	2.65
SERVICE SIA	29 (2.83)	340 (33.17)	349 (34.05)	187 (18.24)	120 (11.71)	1,025	3.03
PROCESSING SIA	26 (2.57)	327 (32.38)	371 (36.73)	187 (18.51)	99 (9.80)	1,010	3.01

Evidently, the qualification of the tax and social insurance administration is positively evaluated. Regarding this aspect we find in both cases about 50 percent of positive (1 or 2), but only 15 percent of negative (4 or 5) ratings. Taking into account the processing time and the service orientation, we can state divergent results. While the ratings for SERVICE TAX and PROCESSING TAX are relatively negative, we do not find a similar result with reference to the social insurance administration (SERVICE SIA, PROCESSING SIA).

Belgian Data

The Belgian data has been raised by the Federal Planning Bureau in Brussels by order of the Belgian Council of Ministers. It contains information on compliance costs resulting exclusively from business taxes.⁶ The data consists of four cross-sections regarding the years 2000, 2002, 2004 and 2006. Due to the fact that our data source is not a panel, most of the records are one-shot observations. Each survey contains two separated samples for enterprises (generally in the legal form of a corporation) and independent businesses (sole proprietorships). For further information, see De Vil and Kegels (2002), Joos and Kegels (2004), Janssen et al. (2006) and Kegels (2008).

The cost measurement is similar to the German data. However, except from tax adviser costs, monetary expenses are not considered in each survey year and are therefore excluded from further analysis.⁷ The response rates are higher than

in the German survey, but still relatively low. Regarding the enterprises surveys (independents surveys) the response rates lie in a range from 15 percent to 23 percent (from 8 percent to 17 percent). Taking into account that the compliance cost burdens are similar to international estimates (OECD 2001, European Communities 2004, Klun and Blažić 2005), there is no sign for a significant bias of the cost burden.

Table 3 documents the mean and the median (in parentheses) compliance cost burdens of sampled Belgian businesses in euro. The table contains separate values for independent businesses, as well as for small, medium, and big enterprises. As elucidated above, we use the size criteria of the European Union. In contrast to the German case, size is measured by the number of employees and not by the number of associates.⁸

TABLE 3. Belgian Data: Absolute Cost Burdens

Survey	Independent	Small enterprise	Medium enterprise	Big enterprise	Cases
2000	4,550 (2,975) [117]	40,110 (10,055) [87]	66,738 (17,105) [12]	201,506 (87,382) [32]	248
2002	11,044 (2,856) [174]	171,232 (14,310) [106]	85,681 (39,000) [23]	145,108 (62,250) [40]	343
2004	8,054 (3,240) [142]	74,490 (12,060) [77]	36,004 (25,020) [32]	304,529 (62,400) [61]	312
2006	2,400 (1,250) [113]	30,801 (10,000) [72]	39,024 (14,563) [20]	74,009 (30,750) [47]	252
Cases	546	342	87	180	1,155

As should be expected, the cost burden increases in business size. Furthermore, the lion's share of our data base consists of small businesses. The differences between median and mean values, as well as between different survey years, are remarkable. This results especially from the strong effect of business size on the compliance cost burden and from the variance of average business size between the different survey years. Due to economies of scale, business size does not only affect the absolute, but also the relative compliance cost burden. This is exemplified by Table 4 (relative costs in percent of turnover).

TABLE 4. Belgian Data: Relative Cost Burdens

Survey	Independent	Small enterprise	Medium enterprise	Big enterprise	Cases
2000	14.29 (5.83) [109]	10.19 (0.96) [80]	0.65 (0.17) [12]	9.98 (0.04) [32]	233
2002	221.03 (4.77) [158]	4.15 (0.80) [99]	0.33 (0.13) [23]	0.11 (0.04) [37]	316
2004	301.12 (4.64) [130]	17.90 (0.80) [74]	4.54 (0.22) [31]	2.99 (0.09) [60]	295
2006	11.03 (3.04) [100]	77.05 (0.66) [67]	0.13 (0.10) [20]	0.10 (0.03) [47]	234
Cases	497	320	85	176	1,078

Corresponding to the literature, the cost ratios are significantly higher for independents and small businesses compared to the bigger size classes. Nevertheless, we also find a high variance of cost ratios between different survey years. There are two main reasons for this outcome. On the one hand, size classes in our data are based on the employee number, but not on the turnover. A very low turnover results in the proportion of compliance costs to turnover converging to infinity. For example, the independents surveys in 2002 and 2004 contain cases with a turnover of less than 20 euro and very high cost ratios. On the other hand, especially high differences between mean and median values may also be a sign for outliers that could bias regression results. Therefore, an analysis for outliers seems to be necessary.

In addition to the cost burden, the data includes “demographic” information on business size, industry, and region, as well as ratings on the Belgian tax policy and the Belgian tax administration. For specific years, there is also information regarding business age, the number of establishments in Belgium, the legal form, the use of different information technology tools for tax purposes, and proposals to simplify the overall tax system.⁹

The questionnaire includes seven statements on administrative quality (original statements are in French language). The answers were given on a 5-point Likert scale:

1. It is easy to assess, which tax agency should be contacted (AGENCY).
2. It is easy to contact the right tax agency (CONTACT).
3. The tax administration gives precise answers (ANSWER).
4. Administrative decisions are clearly motivated (MOTIVATION).
5. The administration gives an answer within the expected delay (DELAY).
6. The answer is the same regardless of the contacted service personnel (CONTRADICTION).
7. The obtained information corresponds to your needs (INFORMATION).

Similar to the German case, we find a considerable variance in the distribution of ratings. For example, only about 30 percent of the requested businesses did give a positive statement regarding possible contradictions in the answers of administrative staff members to businesses’ requests (CONTRADICTION). By contrast, the majority was convinced to receive the required information (INFORMATION).

TABLE 5. Belgian Data: Ratings for Tax Administration

Variable	1	2	3	4	5	Cases	Mean
AGENCY	108 (6.99)	581 (37.58)	95 (6.14)	487 (31.50)	275 (17.79)	1,546	2.79
CONTACT	89 (5.79)	535 (34.81)	109 (7.09)	517 (33.64)	287 (18.67)	1,537	2.86
ANSWER	72 (4.67)	629 (40.79)	144 (9.34)	487 (31.58)	210 (13.62)	1,542	2.82
MOTIVATION	61 (3.96)	514 (33.40)	192 (12.48)	563 (36.58)	209 (13.58)	1,539	2.97
DELAY	96 (6.25)	709 (46.13)	173 (11.26)	356 (23.16)	203 (13.21)	1,537	2.77
CONTRADICTION	49 (3.20)	416 (27.17)	351 (22.93)	491 (32.07)	224 (14.63)	1,531	3.27
INFORMATION	59 (3.84)	725 (47.20)	194 (12.63)	426 (27.73)	132 (8.59)	1,536	2.79

Unlike the German case, only a relatively low proportion of respondents did neither give a positive nor a negative rating. This should result from the fact that 3 does not label a neutral rating, but no opinion.

Estimation Strategy

Reliability of Rating Behavior

In both countries, the data contains information on tax compliance costs and ratings on administrative quality from a taxpayers' perspective. Interpreting these ratings as proxies for authority behavior, we would expect that a customer-oriented administration results in a positive rating and, therefore, in a decrease of compliance costs. By contrast, a negative rating should be a proxy for administrative problems resulting in a significantly higher cost burden for the taxpayer.

A problem in estimating the effect of authority behavior on compliance costs lies in a potential endogeneity of the rating variable. A correlation could not only result from the authority behavior itself, but also from a dissatisfaction of the taxpayer with the compliance burden or the overall tax system. According to this argument, taxpayers with high compliance costs could "punish" the tax administration by negative ratings. On the other hand, it has to be expected that negative and positive ratings are significantly affected by the experiences of taxpayers with the administrative authorities. Therefore, if the ratings are reliable they should be a good proxy for authority behavior from a taxpayers' perspective.

Our data contain not only ratings on administrative quality but also on similar factors. This information can be used as a control parameter for the reliability of the administrative ratings. If the evaluation behavior of private businesses results mainly from a single factor like the compliance cost burden (endogeneity of the value judgment), we would expect a high degree of collinearity of all rating

variables. In this case, the taxpayer would punish or reward the authorities with a generally positive or negative statement that results especially from the compliance costs and not vice versa.

In the German data, we find the following correlations of rating behavior. We also include the correlations with the “perceived” compliance burden given on a 5-point Likert scale. If evaluation behavior is mainly driven by compliance costs, we would expect a strong correlation between rating variables and this “perceived” burden that may be interpreted as a proxy for psychological compliance costs.

TABLE 6. German Data: Rating Correlations

	QUALIFICATION TAX	SERVICE TAX	PROCESSING TAX	QUALIFICATION SIA	SERVICE SIA	PROCESSING SIA	PERCEIVED CC
QUALIFICATION TAX	1.000	0.523	0.369	0.432	0.258	0.223	0.155
SERVICE TAX	—	1.000	0.550	0.282	0.441	0.340	0.240
PROCESSING TAX	—	—	1.000	0.194	0.280	0.351	0.187
QUALIFICATION SIA	—	—	—	1.000	0.625	0.557	0.118
SERVICE SIA	—	—	—	—	1.000	0.659	0.212
PROCESSING SIA	—	—	—	—	—	1.000	0.185
PERCEIVED CC	—	—	—	—	—	—	1.000

According to Table 6, there is a wide variation of correlation coefficients. Coefficients for similar issues (ratings on tax administration) are considerably stronger than correlations between ratings on tax administration and ratings on social insurance administration. Furthermore, we find only a relatively weak connection between rating behavior and the “perceived” cost burden. Using all rating variables as exogenous factors of a linear regression analyzing PERCEIVED CC, we obtain an R^2 of only 7.93 percent. Therefore, no more than 8 percent of the “perceived” burdens’ variance may be described by rating behavior. From this perspective, there is no convincing evidence for an endogeneity of the taxpayers’ statements.

The Belgian data set contains not only ratings on tax administration, but also seven statements on tax legislation (original statements are in French language). The answers were given on a 5-point Likert scale:

1. The information on a tax regulation is obtained in advance before it is adapted (ADVANCE).
2. Tax regulations are easy to understand (UNDERSTANDABILITY).
3. Their objectives are clear (OBJECTIVE).

4. They are sufficiently adapted to all situations (ADAPTION).
5. The information on a tax regulation is obtained in a reasonable time to comply with the tax law (TIME).
6. The different tax regulations are coherent to each other (COHERENCY).
7. They include sufficient and adequate information content (ENTROPY).

This distribution does not seem to support the hypothesis of a very strong correlation between administrative and legislative ratings. On average, the requested businesses have a lower rating for tax legislation compared to the tax administration. Furthermore, there are also remarkable differences regarding the distribution of the legislative ratings (for example TIME and UNDERSTANDABILITY).

The following table documents the correlations of all rating variables within the Belgian data set.

TABLE 7. Belgian Data: Ratings for Tax Legislation

Variable	1	2	3	4	5	Cases	Mean
ADVANCE	133 (8.74)	447 (29.37)	191 (12.55)	422 (27.73)	329 (21.62)	1,522	3.00
UNDERSTANDABILITY	39 (2.54)	328 (21.33)	87 (5.66)	639 (41.55)	445 (28.93)	1,538	3.14
OBJECTIVE	73 (4.79)	428 (28.07)	130 (8.52)	597 (37.97)	315 (20.66)	1,525	3.00
ADAPTION	35 (2.30)	299 (19.61)	184 (12.07)	612 (40.13)	395 (25.90)	1,525	3.26
TIME	112 (7.28)	604 (39.25)	115 (7.47)	432 (28.07)	276 (17.93)	1,539	2.79
COHERENCY	42 (2.74)	307 (20.03)	244 (15.92)	587 (38.29)	353 (23.03)	1,533	3.29
ENTROPY	45 (2.93)	417 (27.18)	153 (9.97)	589 (38.40)	330 (21.51)	1,534	3.08

Evidently, the coefficients are considerably higher for correlations within administrative or legislative ratings. For example, the coefficients of ADVANCE for correlations with other legislative issues lie in a range from 0.349 to 0.434, while the range for correlations with administrative ratings is about 10 percentage points lower (from 0.257 to 0.329). Furthermore, we also find a considerable variance of the correlation coefficients. While there is a very strong correlation between AGENCY and CONTACT, the coefficient for the connection between AGENCY and ADVANCE is relatively low.

The observed diversity and interdependency of rating behavior does not support the hypothesis that ratings are mainly driven by a single factor. Hence, the empirical support for a strong effect of tax compliance costs on the overall evaluation behavior is relatively weak. Furthermore, we find also that ratings for similar issues (like AGENCY and CONTACT) are strongly correlated to each other compared to ratings for separate aspects (like ADVANCE and AGENCY). As an exogenous event should affect ratings for related aspects in a similar direction,

this can be interpreted as an empirical support for a rating behavior that is mainly driven by exogenous factors like the experiences of the taxpayer.

TABLE 8. Belgian Data: Rating Correlations

	ADVANCE	UNDERSTANDABILITY	OBJECTIVE	ADAPTION	TIME	COHERENCY	ENTROPY	AGENCY	CONTACT	ANSWER	MOTIVATION	DELAY	CONTRADICTION	INFORMATION
ADVANCE	1.000	0.434	0.356	0.372	0.396	0.349	0.394	0.295	0.252	0.291	0.329	0.257	0.301	0.308
UNDERSTANDABILITY	—	1.000	0.610	0.540	0.467	0.472	0.566	0.417	0.353	0.376	0.339	0.304	0.231	0.336
OBJECTIVE	—	—	1.000	0.555	0.425	0.504	0.503	0.333	0.305	0.345	0.347	0.299	0.258	0.358
ADAPTION	—	—	—	1.000	0.452	0.604	0.556	0.310	0.282	0.359	0.375	0.326	0.316	0.393
TIME	—	—	—	—	1.000	0.424	0.550	0.317	0.287	0.374	0.351	0.328	0.200	0.345
COHERENCY	—	—	—	—	—	1.000	0.592	0.288	0.280	0.365	0.405	0.334	0.344	0.386
ENTROPY	—	—	—	—	—	—	1.000	0.358	0.328	0.366	0.413	0.330	0.302	0.391
AGENCY	—	—	—	—	—	—	—	1.000	0.692	0.532	0.426	0.446	0.322	0.489
CONTACT	—	—	—	—	—	—	—	—	1.000	0.566	0.447	0.476	0.301	0.490
ANSWER	—	—	—	—	—	—	—	—	—	1.000	0.573	0.546	0.398	0.624
MOTIVATION	—	—	—	—	—	—	—	—	—	—	1.000	0.546	0.414	0.554
DELAY	—	—	—	—	—	—	—	—	—	—	—	1.000	0.451	0.596
CONTRADICTION	—	—	—	—	—	—	—	—	—	—	—	—	1.000	0.470
INFORMATION	—	—	—	—	—	—	—	—	—	—	—	—	—	1.000

Model Specification

Corresponding to the literature (Hudson and Godwin 2000, Slemrod and Venkatesh 2002), we use a logarithmic OLS model for our econometric analysis.¹⁰ Hence, regression coefficients may be interpreted as elasticities of the compliance cost burden related to an exogenous factor. The logarithmic transformation accounts for economies of scale in the tax compliance process and ensures linearity of the OLS regression:

$$CCOST = \alpha_0 + \alpha_1 \cdot SIZE + \alpha_2 \cdot ADMINISTRATION + \alpha_3 \cdot X + \varepsilon \quad (1)$$

$CCOST$ denotes the logarithm of compliance costs, $SIZE$ the appropriate measure for business size, $ADMINISTRATION$ the vector for rating behavior and X the vector of further control parameters. The coefficients (or the corresponding vectors) are described by α_0 to α_3 , while the error term is labelled by ε .

As the statements for administrative and (in Belgium) legislative issues are based on Likert scales, it seems appropriate to account for rating behavior by

dummy variables. We use separate dummies for positive and negative statements. Therefore, we compare in each specification of our regression businesses with a positive (negative) rating to all other businesses in the data set. This is due to the fact that businesses with a neutral rating do not seem to be a sufficient control group in our setting.¹¹

In detail we account for the following variables analyzing the German data set:¹²

CCOST—Logarithm of compliance costs: these are defined as sum of personnel costs, external costs and other monetary expenses. The sum is exclusively calculated if there are no missing values. Tax compliance costs are defined as the overall compliance costs multiplied with the proportion of tax-related costs. Regarding social insurance-related costs, we add 1 percent to the corresponding proportion to prevent undefined logarithmic values.¹³

SIZE—Regarding business taxes, we use the logarithm of turnover as size measure. In terms of the social insurance-related compliance costs, the logarithm of employees is more appropriate. In this case, we add one employee to prevent undefined logarithmic values. As an additional size measure, we include a dummy variable for employment-related activities (*EMPLOYMENT*) in case of at least two associates.¹⁴

ADMINISTRATION—Set of dummy variables regarding the following administrative issues: *QUALIFICATION*, *SERVICE* and *PROCESSING*. We account for positive ratings (1, 2) and negative ratings (4, 5) by a separate dummy variable for the tax and social insurance administration (*SIA*).

INDUSTRY—Set of dummy variables: we control for industrial businesses (*INDUSTRIAL*), traders (*TRADE*), construction businesses (*CONSTRUCTION*) and services for enterprises (*ESERVICE*). The remaining businesses are in the services sector as well (other services). Furthermore, we include dummies for liberal professions (*PROFESSION*) and crafts enterprises (*CRAFTS*).

LEGAL FORM—Dummy variables for legal form including individual enterprises (*INDEPENDENT*), partnerships (*PARTNERSHIP*) and the combination of a limited partnership and a limited liability company (German: *GMBH & CO. KG*). The remaining businesses are corporations.

OUTSOURCING—We utilize the logarithm of the proportion of external costs to total compliance costs increased by 1 percent as measure for the use of external advice.

AGE—Natural logarithm of business age raised by 1: the variable accounts for possible start-up costs of young businesses, which are documented by Hansford et al. (2003).

E-FILING—We take into account electronic accounting methods for the tax and social insurance administration (E-FILING). Furthermore, we also consider potential problems resulting from e-filing (E-FILING PROBLEM).

CASH ACCOUNTING—This dummy variable accounts for businesses using a cash accounting method. It is exclusively included for tax-related costs, but not for social insurance-related costs.

Within the German data set, we do not account for regional dummies. This is due to the fact that the German fiscal administration is organized by the states and not by a federal agency. Therefore, the use of regional dummies (German states) could intercept the effect of authority behavior. The following variables are exclusively considered within the social insurance-related models:

EMPLOYEES—Set of variables regarding specific forms of employment: we consider part time workers (PART TIME), casual workers (CASUAL), handicapped workers (HANDICAPPED) and trainees (TRAINEE). We use the logarithm of the proportion of these specific forms of employment to the total number of employees raised by 1 percent. Furthermore, we also consider specific obligations for foreign employees by a dummy variable (FOREIGN).

FLUCTUATION—This dummy variable takes a value of 1 if there has been a significant increase or decrease in the number of employees in the last three years of a business.

Within the Belgian data set, we exclusively account for control parameters that are available for all survey years. Hence, we include the following variables:

CCOST—Logarithm of compliance costs: the compliance costs are defined as sum of personnel costs and external costs. The sum is calculated if there are no missing values. Amounts in Belgian francs are converted into euro. Inflation effects are controlled by the year dummies.

SIZE—Businesses in the independents surveys do not have employees. For that reason, we deploy the logarithm of turnover as size measure.

ADMINISTRATION—Set of dummy variables regarding the following administrative issues: AGENCY, CONTACT, ANSWER, MOTIVATION, DELAY, CONTRADICTION and INFORMATION. We account for positive ratings (1, 2) and negative ratings (4, 5) by a separate dummy variable.

LEGISLATION—Set of dummy variables regarding the following legislative issues: ADVANCE, UNDERSTANDABILITY, OBJECTIVE, ADAPTION, TIME, COHERENCY and ENTROPY. We account for positive ratings (1, 2) and negative ratings (4, 5) by a separate dummy variable.

INDEPENDENT—The dummy variable controls for the requested group of the survey. It takes a value of 1 (0) for an independents (enterprises) survey.

YEAR—Set of dummy variables: we consider dummies for 2002, 2004 and 2006 to control for time series effects.

INDUSTRY—Set of dummy variables: within the enterprises survey, we control only for industrial businesses (EINDUSTRIAL). Regarding independents, we control in addition to IINDUSTRIAL for the primary sector (IPRIMARY) and construction (ICONSTRUCTION). The other independents are active in the services sector.

REGION—Within Belgium, the tax administration is at least for the major business taxes (Business Income Tax, VAT) organized by the Federal Public Service Finance. Therefore, it seems appropriate to control for businesses in WALLONIA and BRUSSELS. The remaining businesses are located in Flanders.

ADVICE—Variables measuring the use of external advice: similar to Germany, we utilize the logarithm of the proportion of external costs to total compliance costs increased by 1 percent (OUTSOURCING). Due to a considerable number of observations without any external advice in the Belgian data, we additionally take into account a dummy variable for businesses without external advice (INHOUSE).

Taking into account that our rating variables describe aspects that are closely related to each other, a complete model may also give a mistakable picture due to an “overspecification” of the model. That holds especially for Belgium, where we analyze the influence of 14 different aspects of tax administration and legislation. Therefore, we initially analyze the isolated effects of each rating variable on the compliance cost burden. In these basic models, we account for all other control variables, but do not consider any further rating variables. In the following, we develop an extended model, including all variables on administrative and legislative quality for which we account.

The differences between mean and median values in Table 1, Table 3, and Table 4 document that our data contains a number of potential outliers, which could bias our regression results. Taking into account that misperceptions of compliance costs by the requested businesses are possible, it seems appropriate to exclude cases with unusually high or low cost values. We estimate a simplified regression including only a limited set of variables and exclude all cases where the residuals exceed two standard deviations of the estimated standard residual:¹⁵

$$CCOST = \alpha_0 + \alpha_1 \cdot SIZE + \alpha_2 \cdot Y + \varepsilon \quad (2)$$

In the German data set, we identified 39 outliers for tax-related costs and 22 outliers for social insurance-related costs. In the case of Belgium, 60 cases were excluded as outliers.

As documented by Hudson and Godwin (2000) and Eichfelder and Schorn (2009), heteroscedasticity may be a problem regarding the estimation of tax compliance costs. For that reason, we use robust standard errors for our econometric analysis.

Results

German Data

Table 9 documents the basic model for the German data set. Hence, each correlation coefficient results from a different regression controlling exclusively for one rating variable.

TABLE 9. German Data: Basic Model

Model	Positive Rating			Negative Rating			Cases
	Coefficient	RSTD DEV	R ²	Coefficient	RSTD DEV	R ²	
QUALIFICATION TAX	-0.038	0.085	0.3631	0.309***	0.119	0.3706	544
SERVICE TAX	-0.247**	0.099	0.3717	0.089	0.085	0.3656	535
PROCESSING TAX	0.021	0.104	0.3620	0.056	0.083	0.3625	542
QUALIFICATION SIA	0.016	0.103	0.3727	-0.052	0.140	0.3729	485
SERVICE SIA	-0.171	0.106	0.3784	0.182	0.114	0.3786	484
PROCESSING SIA	0.053	0.106	0.3769	0.146	0.114	0.3787	483

Selected regression coefficients, robust standard errors, R2 and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related or social insurance-related compliance costs. Each correlation coefficient represents one OLS regression including the control parameters described by the section "model specification." Case numbers are identical for models with positive and negative dummies for rating behavior.

We find significant effects for the qualification and service orientation of the tax authorities. By contrast, there is no significant effect for the ratings on the social insurance administration (SIA) behavior. However, including all rating variables into one regression, we obtain the following results for selected variables (see Appendix A for the complete regression results):

TABLE 10. German Data: Extended Model

Model	Positive Rating		Negative Rating	
	Coefficient	RSTD DEV	Coefficient	RSTD DEV
R ²	0.3734		0.3686	
Cases	526		526	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
QUALIFICATION TAX	0.061	0.095	0.242*	0.128
SERVICE TAX	-0.360***	0.129	0.026	0.094
PROCESSING TAX	0.190	0.123	0.025	0.091
SIZE	0.339***	0.031	0.344***	0.032
Constant	4.360***	0.451	4.118***	0.464
R ²	0.3776		0.3765	
Cases	472		472	
QUALIFICATION SIA	0.135	0.140	-0.263	0.176
SERVICE SIA	-0.353**	0.157	0.227	0.152
PROCESSING SIA	0.190	0.146	0.093	0.141
SIZE	0.375***	0.051	0.366***	0.051
Constant	3.431***	0.561	3.327***	0.583

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related or social insurance-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

We find in this specification especially an effect of a positive rating for service orientation. Contrasting Table 9, this holds not only for taxes, but also for the social insurance administration. Furthermore, there exists only a relatively weak effect of the qualification of the tax administration in this model. Similar to Table 9, we do not find any significant effect of the processing time.

According to our estimate, the compliance cost burden of businesses with a positive rating for service orientation is about 30 percent lower compared to the other businesses in our data.¹⁶ From this perspective, there is evidence for a significant and substantial reduction of compliance costs resulting from a service-oriented administration approach.

The effect of authority behavior on the compliance costs of private businesses may vary with business size. Therefore, we estimate the extended model for small businesses (less than 50 associates including the entrepreneur) and medium and big businesses (50 and more associates including the entrepreneur). Regarding small businesses, we obtain the following selected results:

TABLE 11. German Data: Extended Model for Small Businesses

Model	Positive Rating		Negative Rating	
R ²	0.3106		0.2997	
Cases	319		319	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
QUALIFICATION TAX	-0.010	0.110	0.307**	0.124
SERVICE TAX	-0.436***	0.148	-0.074	0.107
PROCESSING TAX	0.340**	0.133	0.074	0.104
SIZE	0.327***	0.052	0.328***	0.053
Constant	4.654***	0.701	4.486***	0.705
R ²	0.3469		0.3466	
Cases	262		262	
QUALIFICATION SIA	0.120	0.177	-0.105	0.212
SERVICE SIA	-0.158	0.175	-0.089	0.190
PROCESSING SIA	0.082	0.173	0.172	0.165
SIZE	0.442***	0.101	0.432***	0.100
Constant	4.302***	0.696	4.302***	0.703

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related or social insurance-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

Unlike in the overall data set, we do not find a significant correlation of ratings regarding the social insurance administration. However, the effect of the tax authority behavior seems to be stronger than in the overall data. A negative rating for QUALIFICATION TAX yields an increase in the compliance cost burden of about 34 percent, while a positive rating for SERVICE TAX is connected with a cost reduction of about 35 percent.

Contrasting our hypotheses, we also find a positive and significant correlation for a positive rating of processing time of the tax administration (PROCESSING TAX). This should be interpreted cautiously. Taking into account the results for the overall data set (Table 9 compared to Table 10), this outcome is especially driven by the interaction of PROCESSING TAX and SERVICE TAX. In an isolated analysis excluding any further rating variables, the coefficient of PROCESSING TAX would be 0.090 and not significant. In this setting, we would also obtain a lower, but still significant, coefficient for a positive rating of SERVICE TAX (-0.299). Therefore, also the very high value of the correlation coefficient in Table 11 for this variable should be interpreted cautiously. Due to the interdependency of the different rating variables, a corresponding estimation problem does not seem to be a big surprise.

Regarding the medium and big businesses in the German data set, we obtain the following selected regression results:

TABLE 12. German Data: Extended Model for Medium and Big Businesses

Model	Positive Rating		Negative Rating	
R ²	0.3298		0.3248	
Cases	207		207	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
QUALIFICATION TAX	0.181	0.183	0.024	0.357
SERVICE TAX	-0.292	0.244	0.151	0.179
PROCESSING TAX	0.034	0.239	-0.043	0.173
SIZE	0.414***	0.059	0.411***	0.059
Constant	2.316**	0.941	2.326**	0.963
R ²	0.3450		0.3532	
Cases	210		210	
QUALIFICATION SIA	0.183	0.222	-0.363	0.313
SERVICE SIA	-0.569*	0.303	0.588**	0.242
PROCESSING SIA	0.423	0.277	-0.018	0.239
SIZE	0.312***	0.101	0.317***	0.101
Constant	5.030***	0.756	4.919***	0.785

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related or social insurance-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

Contrasting Table 11, we find significant effects for the service orientation of the social insurance administration, but no substantial impact of tax authority behavior. Businesses with a negative rating for SERVICE SIA bear on average an about 80 percent cost higher burden than comparable observations.

Hence, while the compliance costs of small businesses seem to be driven by the qualification and service orientation of tax authorities, medium and big businesses should be especially affected by the behavior of the German social insurance

administration. From this perspective, the effect of administrative issues on compliance costs depends on business size.

Belgian Data

Similar to the German case, we initially analyze the isolated effects of each rating variable on the compliance cost burden. We obtain under these conditions the following results:

TABLE 13. Belgian Data: Basic Model

Model	Positive Rating			Negative Rating			Cases
	Coef- ficient	RSTD DEV	R ²	Coef- ficient	RSTD DEV	R ²	
AGENCY	-0.049	0.062	0.6550	0.070	0.062	0.6552	1,003
CONTACT	-0.024	0.063	0.6579	0.073	0.063	0.6583	997
ANSWER	-0.129**	0.063	0.6554	0.175***	0.063	0.6566	1,000
MOTIVATION	-0.094	0.064	0.6540	0.145**	0.063	0.6551	1,001
DELAY	-0.175***	0.062	0.6584	0.225***	0.064	0.6599	1,000
CONTRADICTION	-0.013	0.068	0.6532	0.085	0.064	0.6538	993
INFORMATION	-0.220***	0.063	0.6578	0.315***	0.065	0.6618	997
ADVANCE	-0.067	0.064	0.6544	0.150**	0.062	0.6560	993
UNDERSTANDABILITY	-0.241***	0.069	0.6576	0.270***	0.067	0.6590	1,001
OBJECTIVE	-0.076	0.066	0.6550	0.134**	0.064	0.6561	993
ADAPTION	-0.180**	0.075	0.6539	0.232***	0.066	0.6560	994
TIME	-0.190***	0.062	0.6579	0.218***	0.061	0.6590	1,001
COHERENCY	-0.231***	0.072	0.6572	0.299***	0.064	0.6610	998
ENTROPY	-0.215***	0.064	0.6566	0.260***	0.062	0.6587	999

Selected regression coefficients, robust standard errors, R2 and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related or social insurance-related compliance costs. Each correlation coefficient represents one OLS regression including the control parameters described by the section "model specification." Case numbers are identical for models with positive and negative dummies for rating behavior.

Similar to the German case, we find positive regression coefficients for negative ratings and an opposite result for positive ratings. Hence, we can determine a significant and negative correlation between rating behavior and the burden of red tape for administrative and legislative issues. This demonstrates clearly the hypothesized influence of tax administration and tax legislation on the compliance cost burden. As we find highly significant coefficients for most administrative aspects, the evidence is clearly stronger than in the German case. This could partially result from the higher number of observations in the Belgian data.

Furthermore, the effect of administrative issues depends on the considered aspect. While problems of finding and contacting the correct agency (AGENCY,

CONTACT) do not seem to have a considerable effect, we can state a significantly lower cost burden for businesses who obtained precise answers (ANSWER) and the requested information (INFORMATION) in a reasonable time (DELAY). We find also significant effects for the motivation of administrative decisions (MOTIVATION), while potential contradictions between the statements of administrative staff members (CONTRADICTION) do not seem to be a major problem.

The same holds for the included aspects of tax legislation. We find an especially strong correlation for the UNDERSTANDABILITY and the COHERENCY of the tax law. By contrast, a clear OBJECTIVE of tax regulations does not seem to be an important cost driver. The evidence for the announcement of tax regulations is mixed. While there is relatively weak effect of ADVANCE (compared to the other rating variables), we find a strong correlation of TIME. Furthermore, we also find a highly significant effect for the information content of tax regulations (ENTROPY).

Including all rating variables in one regression, we obtain the following outcome:

TABLE 14. Belgian Data: Extended Model

Model	Positive Rating		Negative Rating	
R ²	0.6630		0.6674	
Cases	937		937	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
AGENCY	0.030	0.077	-0.062	0.076
CONTACT	0.103	0.078	-0.086	0.078
ANSWER	0.016	0.077	-0.032	0.079
MOTIVATION	0.018	0.077	-0.023	0.078
DELAY	-0.121	0.074	0.144*	0.074
CONTRADICTION	0.066	0.074	-0.060	0.073
INFORMATION	-0.160*	0.085	0.229***	0.086
ADVANCE	0.050	0.070	0.013	0.069
UNDERSTANDABILITY	-0.171**	0.081	0.143*	0.081
OBJECTIVE	0.066	0.079	-0.043	0.077
ADAPTION	-0.022	0.088	0.001	0.081
TIME	-0.149**	0.074	0.137*	0.074
COHERENCY	-0.097	0.090	0.154*	0.083
ENTROPY	-0.080	0.076	0.067	0.075
SIZE	0.281***	0.019	0.279***	0.019
Constant	5.397***	0.293	4.920***	0.295

Selected regression coefficients, robust standard errors, R2 and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. We estimate separate models for positive and negative statements on administrative and legislative quality.

In the extended model, we find significant effects only for a part of the considered rating variables. This result should be interpreted with caution. In the extended model, we include 14 different statements on administrative and legislative quality into one model. As these variables measure similar issues, it should

not be expected to obtain significant results for each aspect. By contrast, only the strongest and most important issues should “survive” into such a kind of setting. However, that allows us to draw conclusions on the most important cost drivers in the case of Belgium.

We can state that businesses, which were not convinced to receive the requested information, bear an about 26 percent higher compliance burden. Furthermore, we find a slightly significant increase of 15 percent in the cost burden for businesses who received the requested information with an unexpected delay. From this perspective, it seems to be essential that private businesses are supported with the necessary information by the administrative authorities in a reasonable time.

The model exemplifies further that the impact of administrative issues may be separated from the effect of the tax law itself. Taking into account legislative issues, we find significant effects of the UNDERSTANDABILITY and the timely announcement (TIME) of tax regulations. Furthermore, there is also an effect resulting from the COHERENCY of tax legislation. The relatively low significance of these variables results from the fact that they measure similar aspects. Hence, the model seems to be in some way “overspecified.”

Similar to the German data, we made separate regressions for different size classes. Due to the structure of the data set, we differentiate between independents (sole proprietorships) and enterprises (generally in form of a corporation). In contrast to Germany, we observed considerable differences between the basic model and the extended model resulting from the high number of rating variables. Therefore, it seems appropriate to estimate basic models and extended models for independents surveys and enterprises surveys.

In case of the independents we obtain the following outcome (Table 15 and Table 16) for the basic model and the extended model. The results are similar to the overall data set. However, the evidence is stronger. Regarding the basic model, we obtain significant results for all administrative rating variables (for CONTRADICTION only on a 10-percent level). In the extended model, the estimated coefficients for DELAY and INFORMATION are higher than in the overall data. According to our estimate, problems regarding INFORMATION result in an increase of the cost burden by about 39 percent. An unexpected DELAY adds further 26 percent.

Again, we find a considerable difference between the basic and the extended model results. Due to the high number of rating variables in the extended model, we observe only significant effect for the main aspects. Thus, we can conclude that a timely and accurate information of small businesses is the most important subject regarding tax administration, while the coherency of tax regulations seem to be the main issue for the ratings on tax legislation. Businesses with a negative rating regarding this aspect bear on average an about 28 percent higher cost burden.

TABLE 15. Belgian Data: Basic Model for Independents

Model	Positive Rating			Negative Rating			Cases
	Variable	Coef- ficient	RSTD DEV	R ²	Coef- ficient	RSTD DEV	
AGENCY	-0.218***	0.083	0.4259	0.255***	0.083	0.4291	472
CONTACT	-0.186**	0.086	0.4252	0.265***	0.085	0.4316	472
ANSWER	-0.139	0.086	0.4190	0.239***	0.086	0.4257	469
MOTIVATION	-0.230***	0.087	0.4245	0.318***	0.085	0.4335	472
DELAY	-0.263***	0.084	0.4314	0.369***	0.086	0.4419	471
CONTRADICTION	-0.011	0.089	0.4166	0.145*	0.085	0.4203	469
INFORMATION	-0.327***	0.083	0.4369	0.451***	0.085	0.4521	469
ADVANCE	-0.043	0.090	0.4176	0.165*	0.085	0.4221	472
UNDERSTANDABILITY	-0.338***	0.098	0.4316	0.348***	0.092	0.4344	473
OBJECTIVE	-0.198**	0.090	0.4216	0.261***	0.085	0.4272	470
ADAPTION	-0.173	0.110	0.4169	0.227**	0.093	0.4215	469
TIME	-0.220***	0.083	0.4281	0.244***	0.082	0.4302	474
COHERENCY	-0.366***	0.094	0.4365	0.406***	0.086	0.4464	472
ENTROPY	-0.151	0.092	0.4213	0.243***	0.086	0.4281	472

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. Each correlation coefficient represents one OLS regression including the control parameters described by the section "model specification." Case numbers are identical for models with positive and negative dummies for rating behavior.

TABLE 16. Belgian Data: Extended Model for Independents

Model	Positive Rating		Negative Rating		
	Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
R ²		0.4582		0.4697	
Cases		449		449	
AGENCY	-0.127	0.097	0.052	0.097	
CONTACT	0.033	0.105	-0.023	0.105	
ANSWER	0.157	0.118	-0.150	0.121	
MOTIVATION	-0.099	0.123	0.071	0.126	
DELAY	-0.153	0.103	0.231**	0.102	
CONTRADICTION	0.107	0.101	-0.066	0.099	
INFORMATION	-0.256**	0.118	0.329***	0.120	
ADVANCE	0.120	0.098	0.003	0.091	
UNDERSTANDABILITY	-0.199*	0.121	0.155	0.120	
OBJECTIVE	0.001	0.107	0.028	0.104	
ADAPTION	0.122	0.129	-0.105	0.114	
TIME	-0.167	0.104	0.130	0.099	
COHERENCY	-0.262**	0.126	0.244**	0.118	
ENTROPY	-0.168	0.109	-0.140	0.109	
SIZE	0.240***	0.029	0.235***	0.029	
Constant	5.509***	0.370	4.934***	0.362	

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. We estimate separate models for positive and negative statements on administrative and legislative quality.

In terms of the enterprises surveys, we obtain the following regression results for the basic model and the extended model:

TABLE 17. Belgian Data: Basic Model for Independents

Model	Positive Rating			Negative Rating			Cases
	Variable	Coefficient	RSTD DEV	R ²	Coefficient	RSTD DEV	
AGENCY	0.077	0.090	0.4047	-0.079	0.090	0.4048	531
CONTACT	0.083	0.092	0.4100	-0.069	0.092	0.4098	525
ANSWER	-0.166*	0.091	0.4078	0.159*	0.092	0.4074	531
MOTIVATION	-0.005	0.094	0.4036	0.012	0.091	0.4036	529
DELAY	-0.120	0.091	0.4073	0.121	0.091	0.4072	529
CONTRADICTION	-0.033	0.101	0.4017	0.027	0.092	0.4016	524
INFORMATION	-0.172*	0.095	0.4067	0.224**	0.095	0.4092	528
ADVANCE	-0.121	0.091	0.4075	0.151*	0.090	0.4086	521
UNDERSTANDABILITY	-0.164*	0.097	0.4076	0.195**	0.095	0.4091	528
OBJECTIVE	0.018	0.095	0.4050	0.028	0.093	0.4051	523
ADAPTION	-0.211**	0.103	0.4086	0.246***	0.094	0.4111	525
TIME	-0.204**	0.090	0.4124	0.229**	0.090	0.4140	527
COHERENCY	-0.099	0.110	0.4059	0.189**	0.096	0.4091	526
ENTROPY	-0.288***	0.089	0.4134	0.282***	0.089	0.4136	527

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. Each correlation coefficient represents one OLS regression including the control parameters described by the section "model specification." Case numbers are identical for models with positive and negative dummies for rating behavior.

TABLE 18. Belgian Data: Extended Model for Independents

Model	Positive Rating		Negative Rating	
R ²	0.4388		0.4387	
Cases	488		488	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
AGENCY	0.142	0.112	-0.159	0.112
CONTACT	0.188	0.110	-0.178	0.112
ANSWER	-0.108	0.104	0.079	0.109
MOTIVATION	0.058	0.102	-0.076	0.103
DELAY	-0.057	0.104	0.052	0.104
CONTRADICTION	0.014	0.108	-0.051	0.106
INFORMATION	-0.126	0.126	0.193	0.127
ADVANCE	-0.005	0.102	0.010	0.104
UNDERSTANDABILITY	-0.107	0.109	0.115	0.111
OBJECTIVE	0.170	0.115	-0.142	0.111
ADAPTION	-0.167	0.117	0.115	0.111
TIME	-0.163	0.108	0.183*	0.111
COHERENCY	0.053	0.123	0.041	0.117
ENTROPY	-0.267***	0.102	0.208**	0.104
SIZE	0.302***	0.025	0.299***	0.025
Constant	5.041***	0.356	4.715***	0.373

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. We estimate separate models for positive and negative statements on administrative and legislative quality.

Exclusively in the basic model, we can observe significant effects for administrative issues (INFORMATION and ANSWER) that are in most cases on a 10-percent level. Hence, we find only weak evidence for a correlation between ratings on administrative quality and tax compliance costs. By contrast, there is significant evidence for an impact of legislative issues that can be observed in the basic model as well as in the extended model.

Nevertheless, there are also considerable differences regarding legislative issues. In the overall data set, we observed especially strong effects for TIME, COHERENCY, and UNDERSTANDABILITY, while for enterprises ENTROPY, TIME, and ADAPTION seem to be the most important influence factors. In addition to the results for administrative issues, this may be interpreted as evidence for considerable differences in the tax administration process of small businesses compared to the bigger size classes.

Conclusion

In our paper, we analyzed empirically the effects of authority behavior and taxpayer services on the compliance costs of private businesses in Germany and Belgium. Using ratings of survey participants as measure for administrative quality, we found evidence for a considerable reduction of compliance burdens by a customer-oriented administration approach.

Due to the fact that the data contain a considerable number of rating aspects, we estimated a basic model concentrating on one rating aspect and an extended model including all rating parameters. While the basic models documents the effects in general (with the rating variable interpreted as proxy for administration or legislation), the extended model gives evidence, which aspects are the main cost drivers. Based on the extended model, we could also demonstrate that the effect of tax administration may be separated from the effect of tax legislation.

A positive rating for the service orientation of the German tax and the German social insurance administration results on average in a cost reduction of about 30 percent. In terms of small businesses, we also found a significant effect for the perceived qualification of the tax authorities. Problems to obtain the requested information in Belgium yield on average an increase in the cost burden of about 26 percent. An unexpected delay adds further 15 percent.

According to our results, service orientation and especially an accurate handling of the taxpayers' requests is an important issue in reducing the overall burden of red tape. By contrast, we find only in case of the Belgian independents (sole proprietorships) significant results for problems of getting access to the authorities (AGENCY and CONTACT in the basic model). We also do not find evidence that contradictions between statements of administrative staff members are an important problem from a compliance cost perspective. Within the

extended models, we do not find a significant correlation for clear answers to taxpayers' requests (ANSWER) and the motivation of administrative decisions (MOTIVATION). However, these aspects could be implicitly included within the INFORMATION variable.

Considering the processing time of administrative authorities, we find contradictory evidence. On the one hand there is no convincing effect of PROCESSING in the German data set. On the other hand DELAY significantly affects the compliance costs of Belgian businesses and especially independents. The ambiguity of the results may be explained by the different wording of the survey questionnaires. The Belgian questionnaire asks explicitly for an unexpected delay if taxpayers try to obtain information from the authorities. By contrast, PROCESSING in the German questionnaire describes an abstract operating time. From this perspective, a long processing time seems only to be a problem if it prolongs latency time and increases the taxpayers' uncertainty.

We find a stronger effect of tax authority behavior on the compliance costs of smaller size classes in both countries. This should be due to the lower information capacity of small businesses compared to the bigger size classes. While big businesses do not depend on the advice of the authorities, small businesses have only limited resources to spend on tax compliance and information requirements. Therefore, it is especially important that they are supported by the revenue service. Taking into account the economies of scale within the compliance process, improving taxpayer services for this group could be a promising measure to enhance the productivity of the overall tax system.

In terms of the bigger size classes, we find only weak evidence for an impact of tax authority behavior on the burden of red tape. However, there are significant effects regarding the service orientation of the German social insurance administration. This could result from specific aspects of withholding taxes on wage income. The complexity and automatization of payroll accounting should increase in the number of employees. Potential problems result for example from tax incentives for retirement plans, fringe benefits (childcare, free lunch, free transportation, company car, etc.) or working-time accounts that are typically an issue for the bigger size classes.

Therefore, big businesses depend to a higher degree on the service orientation of the social insurance authorities including the compatibility of the corresponding processes. From this perspective, service orientation could be especially important for employment taxes and payroll taxation. However, the evidence is not very strong. Therefore, further research seems to be necessary regarding this aspect.

The Belgian data contain also information on legislative variables that could be of interest from an administrative perspective. In addition to the understandability and coherency of the tax law, we found a significant effect for TIME. Therefore, the announcement and timing of new tax regulations should have a considerable

impact on the burden of red tape. Regarding the bigger size classes also the information content of fiscal regulations (denoted as ENTROPY) seems to affect the burden of red tape. Hence, the administrative burden of the bigger size classes does not seem to result from a lack of the understandability of the tax law (like in the case of independents) but from the limited information content of specific regulations. This emphasizes the higher information capacity of big businesses.

Our results imply that a service-oriented approach of tax administration significantly reduces the burden of private businesses to comply with the tax law. Within the administration process, it seems essential to provide timely and accurate information for the taxpayer. That includes especially that taxpayers' requests are answered carefully and without an unexpected or unreasonable delay. Furthermore, taxpayers should be informed about new regulations in sufficient time to arrange their affairs properly. Tax regulations should be easy to understand and coherent to other regulations in the legal system. From this perspective, time pressure in the process of fiscal legislation should result in an unnecessarily high burden of red tape.

Administrative issues seem to be most important for self-employed people and small businesses. Therefore, enhancing taxpayer services for this target group could be a promising step to optimize the productivity of the tax system. Taking into account the literature on linkages between compliance costs and tax evasion (Hasseldine 2001, Erard and Ho 2003), a reduction of the burden of red tape by administrative actions could also increase the overall compliance with the tax system.

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Appendices

Appendix A: Complete Regression Results

Regarding the German data set, we obtain the following complete results for the extended model of tax administration:

TABLE A1. German Data: Complete Results for Tax Administration

Model	Positive Rating			Negative Rating		
R ²	0.3734			0.3686		
Cases	526			526		
Variable	Coefficient	RSTD DEV	VIF Value	Coefficient	RSTD DEV	VIF Value
QUALIFICATION TAX	0.061	0.095	1.24	0.242*	0.128	1.14
SERVICE TAX	-0.360***	0.129	1.58	0.026	0.094	1.24
PROCESSING TAX	0.190	0.123	1.44	0.025	0.091	1.17
SIZE	0.339***	0.031	1.80	0.344***	0.032	1.81
EMPLOYMENT	-0.407**	0.182	1.32	-0.341*	0.175	1.32
INDUSTRIAL	-0.001	0.145	1.70	0.014	0.143	1.70
CONSTRUCTION	-0.230*	0.136	2.20	-0.204	0.139	2.21
TRADE	0.036	0.142	1.51	0.047	0.146	1.52
ESERVICE	0.282**	0.133	1.42	0.265**	0.133	1.44
PROFESSION	-0.050	0.116	1.49	-0.035	0.118	1.47
CRAFTS	0.159	0.116	1.83	0.137	0.117	1.83
INDEPENDENT	0.115	0.146	1.40	0.123	0.144	1.40
PARTNERSHIP	0.028	0.178	1.08	0.043	0.175	1.09
GMBH & CO. KG	0.044	0.159	1.18	0.032	0.159	1.18
OUTSOURCING	-0.270***	-0.056	1.03	-0.273***	0.056	1.03
AGE	0.009	0.045	1.58	0.011	0.046	1.60
E-FILING	-0.034	0.117	1.24	-0.024	0.117	1.23
E-FILING PROBLEM	0.093	0.214	1.24	0.118	0.212	1.25
CASH ACCOUNTING	-0.351	0.240	1.53	-0.351	0.235	1.53
Constant	4.360***	0.451	—	4.118***	0.464	—

Regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

In terms of the German social insurance administration, we obtain the following complete results for the extended model (overall data set):

TABLE A2. German Data: Complete Results for Social Insurance Administration

Model	Positive Rating			Negative Rating		
R ²	0.3776			0.3765		
Cases	472			472		
Variable	Coefficient	RSTD DEV	VIF Value	Coefficient	RSTD DEV	VIF Value
QUALIFICATION SIA	0.135	0.140	1.62	-0.263	0.176	1.43
SERVICE SIA	-0.353**	0.157	1.94	0.227	0.152	1.63
PROCESSING SIA	0.190	0.146	1.78	0.093	0.141	1.51
SIZE	0.375***	0.051	1.82	0.366***	0.051	1.83
EMPLOYMENT	2.737***	0.236	1.09	2.815***	0.243	1.09
INDUSTRIAL	-0.132	0.176	1.73	-0.111	0.177	1.74
CONSTRUCTION	-0.281	0.176	2.37	-0.253	0.176	2.38
TRADE	0.097	0.177	1.55	0.107	0.177	1.55
ESERVICE	0.098	0.165	1.41	0.110	0.168	1.41
PROFESSION	-0.217	0.143	1.43	-0.209	0.143	1.43
CRAFTS	-0.016	0.134	1.77	-0.021	0.134	1.78
INDEPENDENT	-0.128	0.172	1.17	-0.110	0.175	1.18
PARTNERSHIP	0.133	0.211	1.11	0.158	0.199	1.10
GMBH & CO. KG	0.087	0.184	1.21	0.063	0.181	1.21
OUTSOURCING	-0.460***	-0.079	1.07	-0.474***	0.073	1.06
AGE	0.082	0.063	1.58	0.102	0.064	1.57
E-FILING	-0.057	0.121	1.28	-0.050	0.120	1.27
E-FILING PROBLEM	0.055	0.210	1.22	0.009	0.214	1.21
PART TIME	-0.051	0.041	1.27	-0.042	0.042	1.27
CASUAL	-0.028	0.039	1.13	-0.020	0.040	1.13
HANDICAPPED	-0.126*	0.065	1.17	-0.117*	0.066	1.17
TRAINEE	0.026	0.043	1.21	0.027	0.044	1.21
FOREIGN	0.137	0.107	1.13	0.133	0.108	1.13
FLUCTUATION	0.233**	0.113	1.04	0.248**	0.115	1.04
Constant	3.431***	0.561	—	3.327***	0.583	—

Regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of social insurance-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

Regarding the Belgian case, we receive the following complete results for the extended model (overall data set):

TABLE A3. Belgian Data: Complete Results for the Extended Model

Model	Positive Rating			Negative Rating		
R ²	0.6630			0.6674		
Cases	937			937		
Variable	Coefficient	RSTD DEV	VIF Value	Coefficient	RSTD DEV	VIF Value
AGENCY	0.030	0.077	1.50	-0.062	0.076	1.49
CONTACT	0.103	0.078	1.55	-0.086	0.078	1.63
ANSWER	0.016	0.077	1.57	-0.032	0.079	1.66
MOTIVATION	0.018	0.077	1.37	-0.023	0.078	1.46
DELAY	-0.121	0.074	1.33	0.144*	0.074	1.32
CONTRADICTION	0.066	0.074	1.20	-0.060	0.073	1.31
INFORMATION	-0.160*	0.085	1.71	0.229***	0.086	1.71
ADVANCE	0.050	0.070	1.22	0.013	0.069	1.25
UNDERSTANDABILITY	-0.171**	0.081	1.50	0.143*	0.081	1.56
OBJECTIVE	0.066	0.079	1.37	-0.043	0.077	1.40
ADAPTION	-0.022	0.088	1.36	0.001	0.081	1.47
TIME	-0.149**	0.074	1.30	0.137*	0.074	1.33
COHERENCY	-0.097	0.090	1.42	0.154*	0.083	1.55
ENTROPY	-0.080	0.076	1.50	0.067	0.075	1.57
SIZE	0.281***	0.019	2.63	0.279***	0.019	2.63
INDEPENDENT	-0.352***	0.120	3.42	-0.340***	0.120	3.42
2002	0.105	0.084	1.65	0.130	0.084	1.67
2004	0.123	0.092	1.64	0.153*	0.093	1.65
2006	-0.339***	0.108	2.05	-0.321***	0.108	2.08
EINDUSTRIAL	0.151	0.100	1.51	0.161	0.099	1.51
IINDUSTRIAL	0.318	0.241	1.09	0.316	0.238	1.09
IBUIDING	0.016	0.102	1.41	0.036	0.101	1.42
IPRIMARY	-0.851***	0.104	1.55	-0.834***	0.103	1.56
OUTSOURCING	-0.282***	0.052	3.40	-0.270***	0.052	3.42
INHOUSE	-1.756***	0.226	3.45	-1.710***	0.228	3.47
BRUSSELS	0.041	0.101	1.58	0.060	0.098	1.57
WALLONIA	-0.136*	0.080	1.14	-0.149*	0.080	1.14
Constant	5.397***	0.293	—	4.920***	0.295	—

Regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of social insurance-related compliance costs. We estimate separate models for positive and negative statements on administrative quality.

Appendix B: Cross Checks

In contrast to the German data, the Belgian data set does not only include one-shot observations, but also second-shot and third-shot observations. If the effect of administrative and legislative issues on compliance costs is especially driven by cases with more than one observation, this could bias our regression results. Therefore, we estimate an alternative regression ignoring second and third observations of the same case. Excluding 329 observations, we obtain in the basic model the following results:

TABLE A4. Belgian Data (Adjusted): Basic Model

Model	Positive Rating			Negative Rating			Cases
	Coef- ficient	RSTD DEV	R ²	Coef- ficient	RSTD DEV	R ²	
AGENCY	-0.024	0.067	0.6736	0.030	0.067	0.6736	769
CONTACT	-0.010	0.070	0.6743	0.040	0.069	0.6745	769
ANSWER	-0.158**	0.068	0.6752	0.194***	0.069	0.6763	766
MOTIVATION	-0.108	0.069	0.6726	0.154**	0.069	0.6737	766
DELAY	-0.198***	0.067	0.6781	0.249***	0.069	0.6798	767
CONTRADICTION	-0.039	0.072	0.6724	0.108	0.069	0.6734	761
INFORMATION	-0.186***	0.067	0.6755	0.280***	0.070	0.6792	763
ADVANCE	-0.055	0.070	0.6738	0.131*	0.067	0.6752	764
UNDERSTANDABILITY	-0.243***	0.076	0.6776	0.257***	0.074	0.6784	769
OBJECTIVE	-0.076	0.072	0.6763	0.129*	0.069	0.6774	764
ADAPTION	-0.072	0.084	0.6715	0.139*	0.073	0.6727	763
TIME	-0.177***	0.067	0.6774	0.205***	0.067	0.6785	770
COHERENCY	-0.236***	0.079	0.6769	0.295***	0.071	0.6805	767
ENTROPY	-0.195***	0.070	0.6767	0.249***	0.068	0.6790	768

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. Each correlation coefficient represents one OLS regression including the control parameters described by the section "model specification." Case numbers are identical for models with positive and negative dummies for rating behavior.

We find no evidence that our regression results are mainly driven by second and third observations. As in the original model, there are negative coefficients for positive ratings and positive coefficients for negative ratings that are significant in most cases. Including all rating variables, we obtain:

TABLE A5. Belgian Data (Adjusted): Extended Model

Model	Positive Rating		Negative Rating	
R ²	0.6814		0.6861	
Cases	731		731	
Variable	Coefficient	RSTD DEV	Coefficient	RSTD DEV
AGENCY	0.050	0.082	-0.089	0.081
CONTACT	0.134	0.085	-0.145	0.084
ANSWER	-0.056	0.086	0.034	0.088
MOTIVATION	0.006	0.082	-0.021	0.084
DELAY	-0.143*	0.082	0.177**	0.074
CONTRADICTION	0.036	0.080	-0.016	0.079
INFORMATION	-0.105	0.093	0.181*	0.094
ADVANCE	0.041	0.076	0.032	0.073
UNDERSTANDABILITY	-0.198**	0.088	0.154*	0.088
OBJECTIVE	0.060	0.083	-0.046	0.081
ADAPTION	0.098	0.094	-0.094	0.086
TIME	-0.140*	0.081	0.117	0.080
COHERENCY	-0.140	0.098	0.195**	0.090
ENTROPY	-0.074	0.082	0.080	0.081
SIZE	0.286***	0.020	0.282***	0.020
SURVEY	-0.230*	0.123	-0.230*	0.123
2002	0.042	0.086	0.077	0.087
2004	0.121	0.117	0.091*	0.117
2006	-0.285***	0.110	-0.335***	0.105
Constant	5.204***	0.307	4.846***	0.310

Selected regression coefficients, robust standard errors, R² and case numbers; ***, **, * indicate significance on a 1-percent, 5-percent, and 10-percent level; dependent variable: logarithm of tax-related compliance costs. We estimate separate models for positive and negative statements on administrative and legislative quality.

While the effects of INFORMATION and TIME are relatively weak compared to the original setting, we find a stronger influence of COHERENCY and DELAY. Taking into account the results of Table A4 and Table A5, we do not find evidence that the results of our original setting are mainly driven by second and third observations of the same case.

Endnotes

- ¹ A possible underestimation of the cost burden has already been mentioned by Oster and Lynn (1955). Klein-Blenkers (1980, p. 140) asked German enterprises for the sum of overall compliance costs as well as for the sum of itemized cost elements. According to his findings, the sum of overall compliance costs was considerably lower (by about 50 percent). Hence, within the overall cost burden estimation some cost elements must have been “forgotten”. This can be interpreted as evidence for a cost perception deficit. Similar results are reported by Rametse and Pope (2002) and Chittenden et al. (2005). These authors try to estimate the psychological costs of tax compliance by computing the difference of the sum of overall compliance costs and the sum of itemized cost elements. In contrast to the qualitative findings of Delgado Lobo et al. (2001) and other authors, this difference is generally identified as negative. In the questionnaire of the German survey, businesses were asked for personnel costs, external costs and other monetary costs without an allocation to specific activities. This could result in a possible underestimation of the corresponding cost burden.
- ² This estimate is represented by a 5-point Likert scale, whereby businesses could declare their “perceived” burden resulting from compliance activities. In a logarithmic OLS model, we obtain a correlation coefficient of 0.483 (robust standard error of 0.101) for businesses with a high “perceived” cost burden (Likert scale rating of 4 or 5). Regarding social insurance-related costs, we receive a coefficient of 0.456 (robust standard error of 0.128). Hence, these businesses bear on average about 60 percent higher compliance costs than other businesses in the data set.
- ³ Pressure on the political authorities may be an incentive for private taxpayers with high compliance costs to participate in a survey. However, these taxpayers may also be particularly reluctant to take part in a survey, because they do not want to waste their time. Empirical investigations provide evidence for both arguments (Wicks 1965; Allers 1994; Rametse and Pope 2002).
- ⁴ See the recommendation of the European Communities K (2003) 1422 from the 6th of May 2003.
- ⁵ Instead of the number of employees, the German questionnaire exclusively quotes the number of associates including the entrepreneur. Hence, we use this information as size measure.
- ⁶ Employment taxes and social insurance contributions are not included. They are part of additional statistical material of the Federal Planning Bureau about the compliance costs of labor legislation.

- ⁷ Within the years 2000 and 2002, the data contains information about depreciations resulting from monetary expenses for tax compliance. However, this information has not been collected in the years 2004 and 2006.
- ⁸ This is caused by differences in the survey questionnaires.
- ⁹ Business age is available for 2000 and 2002. The same holds for the legal form and the number of establishments in case of an enterprises survey. The questionnaires of 2004 and 2006 contain statements on proposals to simplify the tax law. The use of different information technology tools is questioned in 2004 and—in another form—in 2006.
- ¹⁰ Regarding the Belgian data source, also an unbalanced panel regression should be possible. However, due to the survey design, most cases are one-shot observations. For that reason, we would lose the greater part of the overall information if we would choose a panel estimator.
- ¹¹ That holds especially for Belgium. Within the questionnaire, a rating of 3 does not account for a neutral rating, but for no opinion. Therefore, it is not evident that businesses with a positive rating have a lower cost value than businesses with a “rating” of 3.
- ¹² Due to the endogeneity of “real” compliance costs and the “perceived” cost burden based on Likert scale values, we do not consider a dummy variable for this proxy of psychological costs.
- ¹³ In contrast to tax-related costs, also a compliance burden of zero may be realistic regarding social insurance-related costs if a business has no employees.
- ¹⁴ The first associate is assumed to be the entrepreneur.
- ¹⁵ Corresponding to our main analysis, size is measured as logarithm of turnover or as logarithm of the employee number raised by one. In the German case, we consider no alternative control parameters for the tax-related costs and exclusively EMPLOYMENT in case of social insurance-related costs. Considering the Belgian data set, we include INDEPENDENT and YEAR.
- ¹⁶ The additional cost burdens are slightly higher than the coefficients in Table 10. This is due to the fact that these coefficients document exclusively the marginal but not the absolute effects of our logarithmic regression model. Regarding dummy-variables, there is no meaningful interpretation of a marginal effect.

5



Enforcement Strategies

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Collecting Collected Taxes

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Long ago Congress made the decision to collect taxes through business entities rather than to have every tax dollar collected directly by the government.¹ The decision created an effective and efficient means to collect most individual income taxes, employment taxes and excise taxes. This method of collecting taxes places businesses in the front line of tax collection as trustees for the government with respect to the taxes they collect.

The system works well as long as the entities collecting the taxes remit those taxes to the United States after collecting them. While the vast majority of entities remit the collected taxes in a timely fashion, unfortunately, not all entities do so.^{2,3,4} The failure to pay over collected taxes occurs in only a small percentage of cases; however, even this small percentage adds up to a significant dollar amount when spread across the entire economy.⁵ As of 2008 the failure to pay over collected taxes represented a \$58 billion piece of the overall tax gap.⁶

Predicting the general types entities that will fail to pay over the collected taxes does not require sophisticated modeling. The entities that will struggle to pay over the collected taxes will almost always be smaller businesses run by entrepreneurs.⁷ The failure will typically, but not always occur during the startup years. The failure to pay the collected taxes will frequently, but not always, signal that the business is about to fail.⁸

This paper examines techniques that could improve the current system for collecting from entities these collected taxes with the goal of creating a system that better encourages the entities to pay over the collected taxes at the outset and more effectively addresses the situations in which the failure has occurred. The paper makes several suggestions on improving compliance in this area. First, the returns reporting collected taxes should be made public. As will be discussed further, these returns do not carry with them the same need for privacy driving the disclosure provisions which current keep private most tax returns and making them public will have significant compliance benefits. This section of the paper addresses the benefits of transparency. Second, structures must exist to funnel the entrepreneurial businesses into compliance. The current system lacks sufficient structure and contains some structural provisions that actually encourage non-compliance.⁹ This section of the paper addresses the benefits of better structure. Third, the alternative mechanism for recovering collected taxes, the responsible officer provisions, needs changing to allow interest (and penalties) to be charged against the responsible officer from the due date of the entity return rather than from the date of assessment of the personal liability.¹⁰ This section of the paper addresses the benefits of changing the law to make responsible individuals more accountable.

Disclosing Public Trusts—Transparency

Proposal

A brief history of the twists and turns of the provisions in the laws of the United States governing disclosure of tax information is set out below. That history focuses on individual income tax returns, corporate income tax returns, returns of exempt organizations, pension plans and political contributions. Very little, if any, effort in this debate has been expended focusing on the returns reporting the money held by business entities in trust for the United States. This Article will return, below, to a more extended discussion of why the returns reporting the money held in trust for the United States most closely resemble the pension plan returns reporting the monies held in trust for employees. Like the returns of pension plans which Congress makes publicly available, the returns reporting money held in trust for the United States should likewise enjoy public availability.

Currently, returns reporting money held in trust contain information about both money held in trust and liabilities that do not stem from a trust relationship.¹¹ Those returns should be split into two parts with one part reporting the collected taxes and the other part reporting the taxes directly due from the entity. The “new” return reporting only the collected taxes should become publicly available while the “new” return for the entity liability would remain subject to the current disclosure provisions. The return reporting the collected taxes should report not only the obligation for the taxes but also the amount of payments made toward that obligation during the return period and with the return so that anyone viewing the return could ascertain if the trust obligation had been fulfilled or remained partially or fully unmet.

By creating returns reporting just the money held in trust and by making those returns public, everyone can determine if a business entity meets its basic obligation regarding the duty of handling the public’s money with which it was entrusted. Making this information public would allow everyone to make decisions concerning businesses entrusted with public funds just as everyone makes decisions concerning public officials entrusted with public funds. The monies reported on these returns do not belong to the taxpayers filing the returns, do not reveal business secrets and bear none of the reasons for protection that ordinary tax information carries. The effect of making this information public should allow everyone to make informed decisions on which businesses to support or not support, which businesses have a strong likelihood of failure and which competing businesses have gained an improper competitive advantage. Once this information becomes public, those entities failing to pay over the collected taxes should find a non-receptive public just as public officials would find a non-receptive public if they failed to properly handle public monies. The pressure caused by this

situation should inspire entities collecting taxes to properly report and pay these taxes thereby improving compliance in this segment of the tax gap.

Brief History of Disclosing Tax Return Information

Almost since the adoption of an income tax system, Congress has debated the appropriateness of publishing the returns of individuals and entities reporting that income.¹² In addition to income taxes, Congress has imposed several other types of taxes in its quest to gather enough money to satisfy its spending appetite.¹³ Most of the taxes reported to the IRS fall under the disclosure provisions of Section 6103, which prohibits the IRS from disclosing the information on those returns except in specifically prescribed situations.¹⁴

While the United States experimented initially with public disclosure of tax returns and return information, it evolved fairly early in the income tax era into a restrictive posture with respect to the general availability of information from tax returns.¹⁵ This more restrictive posture treated returns as public documents but subject to disclosure rules established by the President.¹⁶ Under this system, public disclosure of returns generally did not occur. Broad disclosure of returns and return information, however, took place within the federal government. In the disclosure provisions prior to 1977, Congress deferred to the Executive Branch to create rules governing this area. Within this context, a significant shift occurred in 1977 in reaction to President Richard Nixon's use of tax information.¹⁷

The Nixon White House used tax return information to attack the President's "enemies," and consequently Congress began to more carefully monitor the use of tax information.¹⁸ Its review of the situation resulted in a significant revamping of Section 6103 in 1976 to the statutory structure that exists today.¹⁹ Through the Tax Reform Act of 1976, Congress set out to eliminate the ability of the Executive Branch to obtain and use tax information and it successfully terminated that practice by removing the President's control of disclosure exceptions.²⁰ Instead of granting broad discretion to the Executive Branch, Congress took the disclosure power upon itself and created a series of narrow exceptions to govern disclosure of tax information. These limited exceptions produced a scheme in which nondisclosure of tax information now serves as the guiding premise.²¹

The debate over privacy of returns has not uniformly marched towards keeping private all tax information but rather has meandered as different types of tax information came under scrutiny. Disclosure of individual income tax information came up for debate with the Revenue Act of 1864, which provided that tax lists would be public.²² This debate continued in 1870 when the Commissioner ended publication in newspapers, but the information remained open to inspection.²³ Congress stepped into the debate in 1894 with the reenactment of the income tax

by prohibiting publishing of tax information and imposing criminal sanctions for violations.²⁴

The issues surrounding the disclosure of returns by business entities did not surface until much later.²⁵ In 1909 the Payne-Aldrich Tariff passed, which imposed an excise tax on corporations.²⁶ This law contained conflicting provisions on the public nature of corporate returns with one paragraph explicitly making them public records and the next punishing the divulgence of information.²⁷ The confusion caused by the conflicting provisions of the 1909 legislation resulted in an amendment to the provision in 1910 which stated that “any and all such returns shall be open to inspection only upon the order of the President under rules and regulations to be prescribed by the Secretary of the Treasury and approved by the President.”²⁸ This language essentially created a compromise between those who thought that corporate returns should be fully open to the public and those who did not.²⁹ The amendment also left the corporate returns as “public records” but only open to public inspection with the President’s authorization.³⁰

After the passage of the Sixteenth Amendment permitting income taxes, Congress passed tax legislation in 1913 to exercise its newly created taxing authority.³¹ In this legislation Congress essentially adopted the compromise on disclosure adopted in the 1910 provision.³² The debate surrounding the confidentiality of tax return information continued for two more decades with each side citing the policy reasons for and against publicity.³³ In 1924 Congress ordered the Commissioner to prepare and make publicly available the names, addresses and amounts of tax of individuals and corporations filing returns.³⁴ In 1934 Congress enacted further disclosure and then repealed it less than a year later.³⁵ Concerns over kidnapping, resulting from the publicity of individual income, overrode concern for the public’s need for this information, causing repeal of the 1934 disclosure provisions in 1935.³⁶ From 1935 until 1976, little changed in tax disclosure provisions, with Presidential order controlling disclosure of return information.³⁷ During this period, Presidential decree inhibited the publicity of tax return information, but availability of this information increased among government agencies.³⁸

In 1976 Congress enacted sweeping changes to Section 6103, severely restricting the use of tax return information.³⁹ Essentially, Congress assumed the role through legislation of determining which information to disclose, removing this authority from the Executive Branch.⁴⁰ Since the 1976 revisions to Section 6103, merely cosmetic changes have occurred. In section 3802 of the Revenue Reform Act of 1998, Congress provided for a major study of the disclosure laws.⁴¹ That section ordered the Joint Committee on Taxation and the Treasury Department to submit reports to Congress on the state of the disclosure laws and any needed changes. These reports provide a significant overview of the disclosure laws from both historical and policy perspectives and also outline legislative proposals.⁴² Nothing in these reports or in any legislative history specifically addresses the rec-

ommendation of this Article that returns of collected taxes present different issues than income tax returns and other returns reporting taxes of taxable entities.

In addition to Section 6103 which provides the primary directives on disclosure issues, two other statutes exist in the Internal Revenue Code which provide significant guidance concerning disclosure issues—sections 6104 and 6110. Section 6104 got its legislative start in 1950 when Congress first gave legislative attention to the different disclosure considerations present regarding returns of tax exempt organizations.⁴³ Essentially, 6104 takes the opposite approach to 6103 and provides for disclosure of the tax information of tax exempt organizations.⁴⁴ This disclosure occurs because of the tax benefits received by the tax exempt organizations and a perceived need for public awareness of the affairs of organizations that receive a public subsidy.⁴⁵

Section 6110 resulted from litigation under the Freedom of Information Act (FOIA) seeking disclosure of private letter rulings.^{46,47} In 1976 as Congress revised Section 6103, it added 6110 to create a more open system for parties trying to understand the IRS positions on specific transactions. Prior to 6110 certain law firms that regularly made private letter ruling requests had significant information on IRS ruling positions that was unavailable to the general public.⁴⁸ Section 6110 opened up the IRS decision making process. The IRS removes taxpayer identifying information and certain other data in the published rulings before the data is made public.⁴⁹ The inclusion of Chief Counsel Advice in 1998 significantly expanded Section 6110.⁵⁰ Litigation by Tax Analyst has increasingly expanded the interpretation of 6110's disclosure provisions, as it constantly pushes for disclosure of more information.⁵¹

The history of the disclosure provisions demonstrates a fairly broad consensus that privacy interests trump publicity of most tax returns and return information except in narrowly drawn circumstances. Broad exceptions to that consensus exist with respect to the returns of tax exempt organizations, political organizations, and pension plans. This Article argues that the private collection of federal taxes should trigger application of the broad exception to the general rule of privacy. To understand why, it is necessary to understand how the private collection of federal taxes operates.

Third Party Collection

Using business entities to collect taxes for the government results in efficient and often seamless tax collection as demonstrated by the significant percentage of federal taxes collected in this manner.⁵² Incorporating the collection of taxes into the purchase price of goods and services, a process which occurs with sales and excise taxes, requires little additional time or effort to collect the tax than to make payment for the underlying item. Similarly, using employers to collect income

and social security taxes directly out of employees' wages produces efficiencies and reduces compliance concerns because the taxpayer never sees the money but merely receives a net paycheck. By collecting taxes through such transactions, the government uses efficient structural tax principles which increase compliance while simultaneously lowering the both collection costs and the bitterness associated with making tax payments.⁵³

One of the most common ways in which businesses collect excise taxes on the government's behalf involves telephone companies. For example, telephone companies collect most of the communications excise tax as they collect telephone bill payments from their customers, simply adding the excise tax to the amount of the bill.^{54,55} The bill clearly details the amount of the excise tax, separating the amount from the bill's total. Upon receipt of payment, the telephone company sets aside the portion of the payment that represents the tax. The telephone company then reports the excise tax to the IRS on a Form 720, which is filed by the telephone company on a quarterly basis. Payments of the communications excise tax occur along with the filing of the Form 720.⁵⁶ At present the Form 720 reports both excise taxes collected by the entity from others as well as excise taxes for which an entity has its own liability. Proposed revisions to Form 720 to create a new form specifically for reporting collected taxes are discussed in more detail below.

Another common tax collected by business entities concerns employment taxes—income and social security taxes of employees withheld or collected by their employer for the benefit of the United States. With respect to employment taxes, the employer calculates the amount of taxes it should withhold from each employee's paycheck. Each time the employer pays its employees, it pays them the net amount of wages after withholding income and social security taxes and any other deductions.⁵⁷ The employer should set aside the money it holds back from the employees for payment of their income and social security taxes.⁵⁸ Unlike excise taxes where the entity actually collects the taxes from a third party, the employer "collects" these taxes from itself. The theory is that an employer with a gross payroll of \$10,000 will have \$10,000 with which to pay the wages. It will pay \$7,000 to its employees and place the other \$3,000 into a trust account and in such a manner collect the taxes.⁵⁹ Since some employers may have only have \$7,000 at the time of the payment of payroll, the concept of collected taxes sometimes breaks down when cash poor employers lack the resources necessary to satisfy the tax obligations of its employees. The law, however, does not distinguish between taxes collected from third parties as part of an excise tax and taxes collected from employees to satisfy the employees' income and social security taxes.⁶⁰

The public nature of the trust comes not only from the description of the monies held in Section 7501 but also in the manner in which the money is treated once collected. When a taxpayer pays a telephone bill that includes the communications excise tax, the taxpayer's liability ends there because that taxpayer receives credit for the payment of the excise tax regardless of whether the telephone company

actually pays over the tax.⁶¹ Similarly, the employee whose wages are withheld does not need to worry about whether the employer pays the withheld income and social security taxes over to the IRS because that employee receives credit for the payment regardless of whether the employer pays over the withheld taxes.⁶² In essence the entity collecting the taxes becomes an agent of the United States. It does not hold the collected money for the benefit of the individuals whose taxes are collected but rather for the benefit of the United States Treasury. Because the funds are held for the public benefit, the public nature of the trust exists not only by virtue of the statutory language which labels it a trust but also because of the operation of the trust and the monies it holds.^{63,64}

The legislative history of the disclosure provisions does not contain a discussion concerning why public trusts such as those held by business entities with collected tax dollars are subject to the same disclosure laws, or rather, nondisclosure laws as income tax returns. Congress did, however, provide for disclosure of certain types of returns and identified the reason for its treatment of those returns. The benefits that tax exempt organizations receive often serve as a basis for the policy argument behind disclosing their tax return information.⁶⁵

While business entities holding these trusts of collected taxes do not receive the same subsidies received by tax exempt organizations, some similarities exist between the benefits these entities receive and the benefits received by tax exempt organizations and pension plans.⁶⁶ First, the businesses do control funds for days or weeks, depending on their size, as the money passes from the taxpayer to the IRS.⁶⁷ For businesses with a high number of employees or large amounts of excise tax, the cash flow benefit could be substantial, even if short lived. Temporary control of this money helps to offset the cost of administering the tax, even though many businesses may not view it as much of a subsidy. Second, businesses are granted the right to operate subject to certain obligations that exist regardless of whether the business is tax exempt. The grant of authority to operate a business is the grant of a potentially valuable benefit which should not entirely be overlooked. Collecting taxes is a price the business must pay for the privilege of operating. Third, the money held in trust for the public in the collected tax situation is not unlike the money held in trust by a pension for its beneficiaries. It also bears similarities to other public trusts which keep their records open to the public.⁶⁸

Other reasons exist for disclosing returns of collected taxes, particularly employment tax returns reporting withheld income and social security taxes. The first of these ancillary reasons stems from the peculiar circumstances of employment tax returns. Many of these returns are prepared by "payroll tax providers." These providers prepare the returns, sign the returns, pull the money from taxpayer's checking accounts and file the returns and the required remittances. Taxpayers essentially turn over everything about payroll taxes to these firms that provide this service.⁶⁹

If collected tax returns were publicly posted, the accessibility of information on a public website would allow taxpayers who rely on payroll providers to pay their taxes to ensure that their taxes were paid. Of course, these taxpayers could go to the IRS now and make a request for their transcripts, but the availability of a website with an easy search feature might help to reduce the problem that payroll providers with a bent to steal cause—a small collateral benefit to this proposal.

A second ancillary reason for disclosing collected tax returns involves the Federal government and its relationships with federal contractors. The Federal government has a goal of not contracting with those who do not pay their federal taxes.⁷⁰ On January 20, 2010, President Obama signed a memorandum directing government officials to recommend how to ensure that no new federal contracts were awarded contractors delinquent in paying their federal taxes.⁷¹ One obvious way to accomplish this goal would be to publish the delinquent collected tax data in a form easily retrieved by federal contracting officers since collected taxes comprise over 90 percent of the unpaid federal tax debts of contractors seeking federal contracts.⁷²

This Article does not seek to change the practice of having third parties collect taxes for the IRS or the method by which third parties collect these taxes. Rather, it seeks to shed light on that process by changing the disclosure law regarding these taxes. Amending current disclosure law will not only significantly enhance the chances of closing the multi-billion dollar tax gap that exists because of the failure to pay over these collected taxes, but this change will also correctly align the disclosure laws with their policy considerations.

Reconciling Competing Goals of Increased Collection and Privacy of Tax Information

Disclosing tax return information brings together competing policies of openness and transparency against privacy rights, fiercely held individualism and concerns for unnecessary government intrusion. Disclosure also brings up competing claims concerning the benefits of openness. Proponents of opening up more information to the public cite the positive effects they perceive such openness will have on compliance.⁷³ Opponents on the other hand cite it as a concern, suggesting that it will detract from compliance as taxpayers become fearful that accurately reporting their taxes will negatively affect another aspect of life.⁷⁴

In order to determine when transparency should trump privacy and vice versa, it is necessary to examine the benefits and concerns raised on each side of the policy coin. Privacy concerns heighten when disclosure of tax information 1) concerns individuals rather than entities; 2) may disclose trade secrets or other information that might damage the taxpayer's business; 3) discourages rather than promotes accurate reporting of information; 4) results in associated costs which

outweigh the benefits of the information so disclosed; 5) fosters misunderstanding; and 6) politicizes the process.⁷⁵

Concerns for the need to disclose information heighten when disclosure of tax information 1) involves an entity whose information that receives significant tax subsidies such as tax exempt organizations; 2) involves an entity that is reporting information about funds held in trust for others such as pension plans; 3) involves an entity that, while receiving tax subsidies, exerts influence without adequate accountability of those exerting the influence such as the concerns driving Section 527 (j); and 4) when the tax return contains valuable information to other government entities under circumstances where further release of the information can be controlled.^{76,77}

The Joint Committee on Taxation Report (“JCT Report”), which Congress directed the Joint Committee on Taxation to prepare on disclosure law, describes presumptions either for or against disclosure.⁷⁸ The general recommendation of the staff of the Joint Committee with respect to returns and return information was that information “should not be provided unless the requesting *agency* can establish a compelling need for the disclosure that clearly outweighs the privacy interests of the taxpayer” (emphasis added).⁷⁹ In contrast to this general rule with respect to tax returns stands the policy recommendation concerning tax exempt organizations, stating that “disclosure of information regarding tax-exempt organization . . . should be disclosed unless there are compelling reasons for nondisclosure that clearly outweigh the public interest in disclosure.”⁸⁰ Tax exempt organizations, pension plans and political organizations thus receive a presumption for, instead of against, disclosure.

As a starting point, this Article adopts the two general principles set out by the Joint Committee staff that a presumption of nondisclosure of return information governs most return information and that a presumption of disclosure governs the information of tax exempt organizations.⁸¹ These principles fit the consensus on disclosure matters that has essentially controlled disclosure rules during the modern era of tax administration and certainly reflects the consensus in effect since 1934 and the repeal of the “pink slips.”⁸² Exploring the reasons behind these general principles provides an opportunity to determine where the returns of collected taxes should fall, and allows a testing of these principles against a specific type of tax information that has received very little, if any, attention in the policy debates surrounding disclosure.

The Joint Committee Report identifies the principal reason for the general rule of nondisclosure: privacy. The right to privacy is a bedrock principle in the United States.⁸³ It has driven the policy debate concerning disclosure from its inception. A second reason for the rule of nondisclosure is the view that confidentiality promotes accuracy on the returns submitted because taxpayers do not need to worry about collateral effects of reporting accurate information if they know that the returns stay within the IRS.⁸⁴ The principal countervailing interest to privacy in

this debate is the benefit that disclosure provides by shedding light on corrupt practices. This was a principle that weighed heavily for Progressives in the early part of the 20th century and drove the disclosure provisions enacted in 1909, 1924 and 1933, discussed above. While privacy eventually defeated the Progressive position and the presumption of nondisclosure won with respect to most tax returns, the victory has not meant complete confidentiality. As the JCT Report states, the showing of a compelling interest can overcome the general principle.⁸⁵

The table below clearly outlines the disadvantages and benefits of disclosing tax return information.

TABLE 1

Disadvantages of Disclosure	Benefits of Disclosure
1. Tax returns contain private information which the government compels taxpayers to report, and when disclosed, the individual may lose significant privacy protections. ¹	1. The disclosure of information may be necessary in order to protect taxpayer rights. ²
2. Tax return information that concerns individuals implicates greater privacy concerns. ³	2. The informational value of the data from the return may outweigh the privacy concerns and safeguards exist to protect privacy to the greatest extent possible. ⁴
3. Tax return information that contains trade secrets of a business implicates greater privacy concerns.	3. The disclosure of information assists in closing the tax gap. ⁶
4. When the disclosure of return information would discourage accurate reporting of information, the benefits of disclosure must overcome the concerns of inaccuracy. ⁷	4. When an entity is publicly traded, certain information on the return could influence investor behavior. ⁸
5. When the costs of disclosure outweigh the benefits, the decision to disclose becomes impractical. ⁹	
6. Disclosure has the potential to foster misunderstanding of the information in a manner that disadvantages the tax system or the taxpayer whose information was disclosed. ¹⁰	

¹ See JCT Report (Vol. I), at 5.

² Without disclosure of the existence of the federal tax lien, the Government cannot perfect its lien interest with respect to certain competing creditors. I.R.C. §6323. Alternatively, if the lien of the Government can defeat competing creditors without their ability to know of the lien, lending would dry up as creditors feared for the security of their loans.

³ See *United States v. Morton Salt*, 338 U.S. 632, 652 (1950) (holding "corporations can claim no equality with individuals in the enjoyment of a right to privacy."); "The Committee decided that the information that the American citizen is compelled by our tax laws to disclose to the Internal Revenue Service was entitled to essentially the same degree of privacy as those private papers maintained in his home." S. Rep. No. 94-938, 94th Cong., 2d Sess. (1976) This discussion focused on the ability to obtain tax information in non-tax criminal matters and highlights the kind of sensitivity surrounding tax information of individuals.

⁴ Statistical disclosures and state matching programs fall into this benefit category.

TABLE 1—CONTINUED

- ⁵ In a Letter from Michael P. Boyle, International President of Tax Executive's Institute to Senators Grassley and Baucus dated June 12, 2006, Mr. Boyle expressed concerns about expanded disclosure of corporate tax returns listing several reasons. One of his concerns specifically addressed the issue of proprietary information: "Public disclosure of tax returns of publicly traded corporations would also reveal confidential and proprietary data not currently contained in consolidated financial statements, including revenue and expense information by legal entity, jurisdiction, and functional category (e.g. sales, dividends, cost of sale). Although much if not all of the information in a tax return would be confusing to the majority of investors, disclosure would clearly aid a company's competitors enormously in understanding the taxpayer's business practices. Where a company's competitors are not subject to U.S. taxing jurisdiction (and hence, not subject to the same disclosure rules), the comparative disadvantage would be even more pronounced." See also Robert P. Strauss, *State Disclosure of Tax Return Information: Taxpayer Privacy v. The Public's Right to Know*, 5 STATE TAX NOTES MAGAZINE 24, 29 (July 5, 1993). (stating that disclosure "in this instance could disadvantage the individual company as competitors learn the private details of the company's activities. For small public companies, and for companies with foreign competitors this problem is most pronounced, because for small companies there will be a close relationship between their state and federal return and what they provide to the Massachusetts secretary of state for public review. They would now have their private financial affairs subject to competitive scrutiny. Foreign competitors of a domestic firm would not have to disclose the financial circumstances of their offshore parent companies, while now gaining access to information about the financial circumstance of the domestic firm.")
- ⁶ States have used this in adopting their shaming provisions.
- ⁷ JCT Report (Vol. I), at 5.
- ⁸ Joe Thorndike, *Tax History: Promoting Honesty by Releasing Corporate Tax Returns*, Tax Notes (July 15, 2002), at 324; Majorie E. Kornhauser, *More Historical Perspective on Publication of Corporate Returns*, Tax Notes, July 29, 2002. These articles describe the perceived benefits of disclosing corporate tax returns as a means of informing investors. In arguing that publication of corporate tax shelter participation may have the opposite effect desired by proponents of such publication, Joshua Blank points out that investors have been positively motivated to invest in corporations seen as aggressively seeking to lower their taxes. *What's Wrong With Shaming Corporate Tax Abuse*, 62 TAX L. REV. 539, 563 (2009) (citing Michelle Hanlon & Joel Slemrod, *What Does Tax Aggressiveness Signal? Evidence from Stock Price Reactions to news About Tax Shelter Involvement*, 93 J. Pub. Econ. 126, 128 (2009)).
- ⁹ See Lederman, *supra* note 60, at n.183 (citing Theodore P. Seto, *The Assumption of Selfishness in the Internal Revenue Code: Reframing the Unintended Tax Advantages of Gay Marriage 6* (Loyola Law Sch. L.A., Legal Studies Paper No. 2005-33, 2005), available at <http://ssrn.com/abstract=850645>). Of course a cost benefit analysis is essential in every policy decision. The benefits listed below are simply a part of this analysis.
- ¹⁰ See Charles W. Shewbridge, "Taxpayer Confidentiality Must Remain Paramount," TEI Says, 1999 TNT 206-60 (In comments on taxpayer confidentiality submitted to the Joint Committee on Taxation and the Treasury Department, the Tax Executives Institute (TEI) stresses the necessity of the confidentiality of taxpayer information "to the integrity of the tax system.") This is a big concern of TEI. TEI has also expressed concern that public disclosure of corporate tax returns would implicate the need to protect taxpayers from their return information being misused for political purposes. *TEI Opposes Public Disclosure of Corporate Tax Returns*, Tax Executive (May 2006-June 2006). Of course, this is a big concern in general about the disclosure of return information and is essentially reflected in the first reason.

The two statements from the JCT Report setting out the policies governing disclosure create several factors against which to test a request for a disclosure exception. The application of these tests permits a reasonable determination of whether a new proposed change to disclosure laws follows established policies. These policies are embedded in the subparagraphs of Section 6103 that contain the exceptions to the general rule of nondisclosure.⁸⁶

IRC 6103

Section 6103 outlines the disclosure principles of tax information, beginning with the general rule of confidentiality. The code section then creates exceptions to this rule through a series of four basic steps, detailed below.

First, does the disclosure contain “return” or “return information?”⁸⁷ If the information sought is not return or return information, then more general federal laws concerning disclosure of information take over.⁸⁸ If the information sought is return or return information, however, then the general rule of nondisclosure kicks into effect with no disclosure absent an exception.

Second, does disclosure of the information raise privacy concerns? If the disclosure occurs to the taxpayer or to the taxpayer’s proxy, privacy concerns are not implicated. In this situation, the reason for disclosure need not be compelling and may be simply that a taxpayer wants to view his own tax return.

When disclosure does not occur to the taxpayer or the taxpayer’s proxy, the next inquiry is whether the tax information concerns individuals. An individual’s tax information has the greatest presumption of nondisclosure and requires the greatest showing of a compelling interest. A business entity’s tax information also requires the demonstration of a compelling interest, but not quite as high as is needed for individuals.⁸⁹

Other factors enter into this step of the privacy analysis as well: 1) The nature of the tax information sought affects privacy concerns. Disclosure of a taxpayer’s entire return will implicate greater privacy concerns than a discreet portion of the return. 2) The type of disclosure also impacts privacy concerns. If the tax information clearly identifies the taxpayer and is published in a public place, then privacy concerns are elevated. Passing tax information to a limited group with restrictions on further publication creates less of a privacy concern. 3) The potential for publication of the tax information to reveal trade secrets will implicate a greater level of privacy concerns. 4) The potential for disclosure of the information to discourage accurate reporting on the return will create a stronger presumption of nondisclosure. 5) The potential for disclosure of the information to foster misunderstanding will also implicate greater privacy concerns.

Each of these factors affecting privacy can be seen as moving the needle on a dial, with one side of the dial representing complete nondisclosure and the other representing full disclosure. The needle sits on the nondisclosure side of the dial for disclosure of most tax information. When more of these factors are present and greater privacy interests are involved, the needle moves even further onto the nondisclosure side, and the more compelling the reasons must be to move the needle over to the disclosure side of the dial.

Third, do the benefits of the disclosure outweigh the privacy concerns? This step requires an analysis of the disclosure’s purpose and the gains derived from disclosing information. Many benefits can result from disclosing tax information,

which serve as the basis for the numerous exceptions that currently exist to the rule of nondisclosure. Disclosing tax information can help close the tax gap, catch criminals, protect the rights of others and serve many other useful purposes. Each exception represents an example of successful arguments for the benefits that disclosing tax information can bring.⁹⁰

Fourth, if the disclosure is to an “agency,” are adequate safeguards in place to limit disclosure of the information beyond that agency? Clear limitations on the use of the information must accompany any disclosure outside the IRS that is not to the taxpayer or the taxpayer’s proxy. In addition to the general admonition against further disclosure contained in Section 6103(a), almost every subsection of 6103 involving disclosure to an agency contains explicit safeguards regarding further disclosure as well as citations to agreements regarding disclosure, which will also contain restrictions on further disclosure.⁹¹

These four steps encompass the inquiry necessary to implement the disclosure policy stated in the JCT Report on Section 6103.

Section 6103 currently contains 13 exceptions to the principle of nondisclosure representing instances in which Congress found a compelling reason to override the principle. Congress has also created exceptions for tax exempt returns through 6104, opinions through 6110 and information concerning political organizations through 527. Examining the situations in which Congress has applied the four-step test and determined to create exceptions provides the basis for a system to test further exceptions to the rule of nondisclosure.

Testing the Policy

Section 6103(a) provides that “[r]eturns and return information shall be confidential, and except as authorized by the title,” no official or anyone else with access to this information “shall disclose any return or return information....” This very broad statement prohibiting disclosure follows the rule that absent a compelling showing of a need for disclosure, the information remains inside the IRS. Due to its breadth, this rule does not distinguish between individuals and entities.

The second test first concerns disclosure to the taxpayer or the taxpayer’s proxy. This portion of the test drives two of the exceptions set out in Section 6103.

6103(C) DISCLOSURE TO TAXPAYER OR TAXPAYER’S DESIGNEE

Although almost unnecessary, Congress created this exception with a limitation that the Secretary can restrict the disclosure of return information if such disclosure would “seriously impair Federal tax administration.”⁹² Permitting disclosure upon the request of a taxpayer avoids policy concerns because the taxpayer waives his right to privacy. No policy reasons for nondisclosure stand as a barrier to this exception and, therefore, there is no need to analyze the benefits side of the

equation.⁹³ The limitation within (c) stems principally from the Government's interest in protecting the identity of informants.⁹⁴ If a taxpayer or a taxpayer's designee could access all information in a taxpayer's file, then the taxpayer could learn the identity of any IRS informants who may have instigated investigation of the taxpayer's return.

6103 (E) DISCLOSURE TO PERSONS HAVING A MATERIAL INTEREST

This exception covers a variety of persons who have a material interest of a return filed by a taxpayer, viz, the taxpayer himself, the taxpayer's spouse and children, administrators of estates, trustees of trusts, trustees or guardians of incompetent individuals, executors and administrators, receivers and bankruptcy trustees, attorneys in fact, former spouses and responsible officers.⁹⁵⁻¹⁰⁵ Due to the lack of a need to protect privacy, the policy basis for the exception follows a similar path as that in Section 6103 (c), which involves the taxpayer's own information. Most of the persons with a material interest in the tax return essentially step into the taxpayer's shoes, have a direct connection with the return, or have an interest in knowing the information in order to make reasoned decisions.¹⁰⁶ Since few, if any, privacy concerns exist, little effort is needed to move the needle from the nondisclosure side to the disclosure side of the dial.

The remaining exceptions to the rule of nondisclosure set out in Section 6103 (a) and in the policy pronounced by the JCT Report all raise privacy concerns. Therefore, they require applying a combination of factors: the party seeking disclosure must demonstrate a compelling interest, benefits must exceed the costs, and rules must exist to limit further disclosure. These tests are met in each of the exceptions to the general rule of nondisclosure set out in the subsections of Section 6103. Because these disclosures implicate privacy interests, the reason for disclosure must be sufficiently compelling to move the needle over to the disclosure side. As will be seen with each exception discussed below, applying the four-step test outlined above provides a clear demonstration of the underlying policy reasons for disclosure:

6103 (D) DISCLOSURE TO STATE TAX OFFICIALS AND LAW ENFORCEMENT AGENCIES¹⁰⁷

This exception fully discloses both returns and return information, the broadest possible array of information, to a limited party—state and local taxing agencies. Disclosure to this limited party fully implicates all privacy concerns and has drawn many lawsuits over concerns of lost privacy.¹⁰⁸ The privacy issues here affect both individuals and entities, implicating heightened scrutiny of this exception. The cost of this disclosure does not outweigh the benefits because the taxpayer incurs

no direct dollar cost. The information transfer takes place directly, usually electronically, between the IRS and the receiving state or local entity.¹⁰⁹ The states perceive a significant benefit in receiving this information.¹¹⁰ This disclosure will not cause misunderstanding because the recipients of the information are tax collectors with specific knowledge and interest in the information.

Disclosure of tax return information to the state taxing authorities raises the traditional privacy concerns; however, none of the other factors suggest that this information should remain within the IRS and not be shared with states. The states perceive a significant benefit from the receipt of this information as demonstrated by their many letters to the Joint Committee.¹¹¹ For ease of tax administration, most states have chosen to base their income taxes on the federal model.¹¹² One consequence of this conformity is that states rely heavily on federal tax information to confirm the limited data they require from taxpayers.¹¹³ Currently, the state returns ask for less information from taxpayers since the states know that they can obtain additional information from the federal government.¹¹⁴ This system creates efficiencies because it keeps taxpayers from duplicating information in two parallel systems. Because the states could ask for the same information that appears on the federal return, their willingness to obtain this information through the disclosure exchange does not really subject taxpayers to a greater intrusion.

In addition to the overall benefits this disclosure provides to the tax system, other reasons exist in support of disclosure. The states must carefully safeguard the tax information they receive from the IRS as a part of this bargain.¹¹⁵ This safeguarding represents an integral part of this policy decision to allow disclosure, because this exception is so broad that state failure to safeguard the information could compromise the integrity of the entire taxpayer information database. The exception limits the use of the information, stating that the disclosure is “for the purpose of, and only to the extent necessary in, the administration of such law, including any procedures with respect to locating any person who may be entitled to a refund.”¹¹⁶ Additionally, the use is limited by the agreement entered into between the IRS and the state or local agency.¹¹⁷

Looking at how this provision would affect the needle on the disclosure dial, the needle would start on the nondisclosure side but no specific privacy of accuracy concerns would push it further to that side of the dial. The importance of the material to the states coupled with the elimination of duplication by sharing this information pulls the needle over to the disclosure side of the dial.

6103(J) DISCLOSURE OF INFORMATION FOR STATISTICAL PURPOSES¹¹⁸

This exception fully discloses both return and return information to some federal agencies, and discloses only return information to other agencies.¹¹⁹ The exception permits disclosure to allow certain agencies to use the tax information to

create statistics, specifically limiting the disclosure for this purpose alone.^{120, 121} Even though the disclosure implicates privacy concerns by releasing information about individuals and entities to the agencies, the overall effect of the disclosure here moves the needle to the disclosure side of the dial. The implication of the privacy concerns initially moves the needle further towards nondisclosure; however, the limited use of the information by the agencies, the protection on further disclosure and the importance of the data pull the needle to the disclosure side. Similar to the reasoning for release of data to the states, the release of this data may also have the effect of reducing burden on taxpayers by keeping them from receiving duplicate data requests from different government agencies.

The cost of this disclosure does not outweigh the benefits because there is no direct dollar cost to the taxpayer. The information transfer takes place directly, usually electronically, between the IRS and the receiving agency. Disclosure of this rich database of information benefits all taxpayers by aiding the economy in running more smoothly and reducing intrusions on privacy by the census data collectors. In addition, the statistical information that these agencies produce must protect the privacy of individual taxpayers.¹²² The importance of the data to the specific programs satisfies the compelling need test, even where, as here, many of the agencies receive data about individuals as well as entities.

6103(K) DISCLOSURE FOR TAX ADMINISTRATION PURPOSES

This subsection contains a number of discrete circumstances in which disclosure occurs, only one of which will be discussed here.¹²³ This provision permits disclosure to the public of specific taxpayer information, including information about individual taxpayers.¹²⁴ The information disclosed with filing a notice of federal tax lien (NFTL) is very specific, and therefore economically harmful to the named taxpayer.¹²⁵ Because of the sensitive and private nature of the tax data and the public nature of the disclosure, the filing of the NFTL would move the needle far to the nondisclosure side of the dial. Only the compelling need to protect the lien interest of the Government allows the needle to swing to the disclosure side.

The compelling need to disclose taxpayer information by filing an NFTL comes under the umbrella of tax administration. An NFTL is filed only when a federal tax lien exists, and the lien exists only when taxes remain unpaid. To collect the unpaid taxes, Congress created the federal tax lien to protect the United States' interest in the taxpayer's assets. The administrative problem with the lien is that without publication, only the IRS and the taxpayer know of its existence. Creditors remain unaware of the existence of the lien until its publication. In the 1966 Federal Tax Lien Act, Congress acknowledged that most creditors would defeat the federal tax lien unless a notice of the lien was properly filed.¹²⁶ It devised a system of filing as a mechanism for fairly treating creditors competing with the federal tax lien.¹²⁷ Filing the lien, however, discloses the taxpayer's identity and

address, the existence of an outstanding tax liability, the amount and type of that liability and the year(s) related to the liability.¹²⁸

The costs associated with filing the NFTL do not outweigh the benefits because the IRS secures its interest in the taxpayer's assets by filing the lien.¹²⁹ Even though this disclosure enables the availability of damaging information in an unlimited fashion, it meets the compelling need to disclose test. The only alternative to disclosure that would protect the IRS' secured status is a law that would make competing creditors vulnerable to losing their secured claims, without the opportunity to know of the competing tax lien.¹³⁰ Here, the benefit to the IRS and to competing creditors outweighs the privacy interests of the taxpayer. This exception to the rule of nondisclosure only occurs because of the compelling need to disclose the lien to protect the interests of the Government and competing creditors.

PROPOSED SHAMING LAWS

Even though Congress has not passed laws similar to the shaming provisions enacted by some states, applying this test to shaming laws provides insight into Congress' failure to follow the lead of the states. Shaming laws would greatly implicate privacy concerns. The shaming laws of most states do so in the broadest way by listing the names of individuals as well as entities. The proposals of the past decade seeking to shame corporations engaged in tax shelters still invoke privacy concerns, although not at the same level. Broad shaming laws, such as those many states have adopted, create a level of privacy concern similar to the level created by filing the NFTL—essentially the highest level of concern short of publishing an individual's return. Given the privacy interests presented by the proposal, proponents need to show a very compelling need for such a proposal to pass. As noted by the JCT Report, a more in-depth study on the benefits of shaming is needed to make a compelling case for such a law.¹³¹ In 2000 when the JCT Report was written, insufficient empirical data existed to support a compelling case for the benefit of disclosing information in this manner. The same concerns still exist today based on some of the articles discussing corporate shaming.¹³² Nothing like the compelling case presented by the filing of the NFTL exists with respect to shaming. Until it does, shaming should continue to stand on the sidelines of federal disclosure law.¹³³

Assuming that returns containing collected tax information contain only information about collected taxes and the entity, the disclosure of these returns can be tested similarly to the exceptions under Section 6103. Making these returns public would not implicate privacy concerns of individuals because all of the information concerns a business entity. So, this disclosure is not deserving of the strongest possible protections. Still, the proposal in this Article is to fully disclose the return, making all of the entity information about the collected taxes available to anyone seeking information about the entity.

Because the collected tax information is information about others paying their taxes through the entity, the information does not directly provide private tax information about the entity. If viewed strictly in that light, it is possible to argue that privacy concerns are not implicated. Nor does the disclosure involve privacy information about the individuals whose taxes have been collected because the reporting of collected tax data would occur only in an aggregate form. The inquiry does not stop here, however.

The tax information on a collected tax return does reveal entity information about the number and potentially the compensation levels of the employees. More specifically, the excise tax information reveals information about sales by the entity. This indirect revelation of information deserves some protection or at least a basis for disclosure. The revelation of this information may cause the entity to make an incorrect tax filing for the purpose of hiding trade secrets. It is also possible that an entity, knowing that the information would become public, would fail to file a return in order not to reveal the extent to which it was not paying taxes.

Even though the privacy interests of the entity may be weak, the entity has privacy interests in the conclusions that could be drawn from the tax data and the seriousness of those privacy interests push the needle onto the nondisclosure side a reasonable distance. It may not be possible to overcome these concerns from a Section 6103 perspective. The reasons for disclosing the collected tax returns derive from both the disclosure perspective and a collection perspective. From a disclosure perspective, the nature of the information serves as the basis for disclosing the collected tax returns. The information concerns money held in trust, and the public has a right to know what is happening to its money. This argument is unlike the reasons for other exceptions to Section 6103 and is the reason that this Article proposes that the change instead be made to permit this information to become public pursuant to Section 6104. This argument, if persuasive, could move the needle on the dial from the nondisclosure position to disclosure.

This Article will next examine the broadest exception to the rule of nondisclosure, Section 6104. This provision provides further background for this proposal concerning collected taxes and their placement within the Internal Revenue Code. Unlike the exceptions to Section 6103 discussion in this section, Section 6104 takes the view that certain returns have a different starting point from a disclosure perspective.

IRC 6104

Section 6104 begins with the opposite presumption of the 6103 provision, with its governing principle that tax information should be disclosed unless a reason exists for nondisclosure.¹³⁴ The tax exempt organizations, pension plans and political organizations governed by Section 6104 relinquish their privacy rights, in large part,

because of the tax benefits they receive.¹³⁵ The public has a legitimate interest in the information on the tax returns and applications of these organizations. This interest outweighs the privacy concerns and other policy concerns driving the nondisclosure policy behind Section 6103.

The history of Section 6104 starts later than that of Section 6103, in part because the history of tax exempt organizations, pension plans and political organizations trails the income taxes that these organizations receive exemptions from paying.¹³⁶ Tax exempt status was formally recognized in 1939.¹³⁷ Reporting requirements for these organizations followed in 1943.¹³⁸ Concerns about abuses in the charitable sector resulted in passage of additional reporting requirements for these organizations in 1950 and additional disclosure provisions.^{139,140} In 1958, applications for tax exempt status became available after an amendment to Section 6104.¹⁴¹ Pension plans were added to Section 6104 in 1974 as part of the passage of ERISA.¹⁴² As discussed further below, political organizations were added in 2000.¹⁴³

The JCT report cited four reasons for increased disclosure of information concerning tax exempt organizations:¹⁴⁴

- (1) increasing public oversight of tax-exempt organizations;
- (2) increasing compliance with Federal tax and other applicable laws;
- (3) promoting the fair application and administration of the Federal tax laws; and
- (4) advancing the policies underlying the federal tax rules regarding such organizations.”¹⁴⁵

To the extent that the basis for presumption of disclosure of tax information of the entities described in 6104 rests on the benefits they receive, as the Joint Committee staff cited with respect to tax exempt organizations, it is difficult to draw a parallel to the returns reporting collected taxes. While entities that collect taxes on the Government's behalf receive some small benefits for holding the taxes, the argument that those benefits outweigh the burdens has little merit.¹⁴⁶ Therefore, the reason for categorizing returns reporting collected taxes under 6104 comes from policies creating 6104 that extend beyond simply the grant of benefits to tax exempt organizations. For that reason, other types of taxpayers and returns that 6104 involves are discussed here as well.

One type of tax exempt organization with a special return that receives partial disclosure pursuant to Section 6104 is the trust for black lung patients.¹⁴⁷ Black Lung Benefits Trusts (BLBT) collect money for beneficiaries held in a public trust for them administered by the Treasury Department.¹⁴⁸ The money paid into BLBTs comes from coal mine operators seeking to “self-insure for liabilities under federal and state black lung benefits laws.”¹⁴⁹ These trusts file a return on Form 990-BL, portions of which are public pursuant to Section 6104. The money paid by coal mine operators into BLBTs is not a collected tax.¹⁵⁰ BLBTs serve a different purpose than most exempt organizations. They do, however, have a certain quasi-government aspect demonstrated by their ability to pour money into a trust administered

by the Treasury Department, the Black Lung Disability Trust Fund.¹⁵¹ Congress created BLBTs for the benefit of coal mine operators who had a requirement to pay black lung benefits.¹⁵²

Unlike most tax exempt organizations which receive public benefits, BLBTs instead serve a benefit to coal mine operators. The JCT Report did not address BLBTs and the policy issues behind their creation as tax exempt organizations. In this case the policy argument for disclosing a BLBT's return information cannot easily derive from the grant of government benefits as with most tax exempt organizations and particularly the tax exempt organizations that existed in 1950. The trust created here more resembles a public trust than a tax exempt organization. In this regard it represents an instance of disclosure not unlike the disclosure proposed in this Article for collected taxes.

BLBTs are singled out for discussion here because they have a different policy foundation than most tax exempt organizations. The policy basis for BLBTs as organizations whose returns face a presumption for disclosure more closely mirrors the basis for making public collected tax returns, since both circumstances involve trusts in which the public has an interest. Moving from tax exempt organizations, even those such as BLBTs, to pension plans makes this parallel more apparent. The reasons for disclosing pension plan information do not mirror those for tax exempt organizations, although some overlap exists.¹⁵³ Pension plans hold money paid by employers into a trust for their employees. The public trust created by pension plans more closely resembles the public trust created by collected taxes than the circumstances of most tax exempt organizations.¹⁵⁴ The disclosure of the tax return information of pension plans increases public oversight just as with a tax exempt organization. Publication allows plan beneficiaries to observe the finances of their pension plan. Even though pension plans serve a defined population of employees and former employees of a business, the health of the plan implicates significant public interest.

A failed pension plan invokes the intervention of the Pension Benefit Guarantee Corporation (PBGC), a quasi-government agency that pays pension benefits when a pension plan fails.¹⁵⁵ Because of government is standing behind the pension plan, the interest of the general public in the information about pension plans is heightened. Publication of pension plan information also, arguably, increases compliance with Federal tax laws because plan administrators know that they are being watched.

In addition to tax exempt organizations and pension plans, political organizations¹⁵⁶ described in Section 527 also have their returns disclosed under Section 6104.¹⁵⁷ Political organizations only came under the disclosure provisions of Section 6104 in 2000 as a result of Congressional desire to make public both contributors to political organizations and the expenditures of political organizations.^{158, 159} When the Supreme Court struck down and limited as unconstitutional some of the reporting requirements of the Federal Election Campaign Act of 1971 (FECA), Congress

relied on Section 6104 as a mechanism for shining light on those who stood behind the curtain of political organizations.¹⁶⁰ This use of Section 6104 served more to benefit campaign finance law than to promote tax disclosure.¹⁶¹ Using Section 6104 and Section 527 (j) to publicly name donors to political organizations stands in contrast to the shielding of donors to Section 501 organizations by 6104.¹⁶² While the information disclosure with respect to political organizations that occurs under Section 6104 differs significantly from the disclosure of information about collected taxes proposed in this Article, the use of Section 6104 for the purpose of disclosing donations and expenditure information of political organizations demonstrates that Section 6104 does not exist solely to shine a light on charities. Here, Congress used it for primarily a non-tax purpose.

Another possible reason cited by the JCT Report as a basis for publication of the tax information of tax exempt organizations is the fact that these organizations often fill a void that a Government organization would otherwise fill. The governmental nature of the operation of these tax exempt organizations provides a reason for opening up their records just as the records of the Government accessible to all.¹⁶³

The JCT Report contained a quote from Senator Carl Curtis made in 1969 during the legislative debates that led to significant overhaul and restructuring of the tax exempt sections of the Internal Revenue Code. The language used by Senator Curtis provides a powerful argument for placing the returns of collected taxes into the same category as tax exempt returns:

“[T]ax exemption is a high privilege. I believe the operation of a tax exempt foundation is *public trust*; and starting from the premise, I believe that all the business, all the transactions, all the receipts, all the investments, all the grants and all contributions made by the foundation to individuals or to institutions, are of public concern.”
(Emphasis added)¹⁶⁴

This quote helps to tie the returns of tax exempt organizations and the policy driving their disclosure with the returns reporting collected taxes. Senator Curtis’ use of the term “public trust” very accurately describes the effect of Section 7501.¹⁶⁵ That statute provides, in part, that “[w]henver any person is required to collect or withhold any internal revenue tax from any other person and to pay over such tax to the United States, the amount of tax so collected or withheld shall be held to be a special fund in trust for the United States.”¹⁶⁶ The statutory language describes a public trust held by the business entity. The monies so held are certainly of public concern. As described above, the persons paying the taxes receive credit whether or not the entity holding the funds in trust pays over the taxes to the IRS.¹⁶⁷ Therefore, the public has a direct concern with the public trust created when business entities hold collected taxes, since the persons whose taxes are collected received credit for

those payments whether or not the IRS ever receives the money.¹⁶⁸ The nature of the public trust created when business entities hold these taxes and the quasi governmental nature of this activity can perhaps more easily be seen if viewed through the lens of the policy debate in recent years surrounding private debt collectors.

During the past decade Congress has enacted Section 6306 which established “Qualified Tax Collection Contracts,” the statutory language for private debt collectors.¹⁶⁹ Even though the authority to enter into private collection contracts still exists in the Code, the IRS has recently decided not to renew any contracts and does not plan to renew. One of the biggest concerns with private debt collectors was that detractors of the program viewed collection of taxes as an inherently government function.¹⁷⁰ Even though the program did not allow private debt collectors to handle any money, the actions of these companies in assisting the IRS to collect taxes was viewed as too closely tied to government action to permit their actions to continue.^{171,172} It is interesting how the post-assessment use of private collectors could be such a hot topic because of the inherently governmental nature of the activity while most pre-assessment taxes are collected by “private collectors” without even a whisper of complaint and without public disclosure of what they collected and whether they paid over the taxes.

While the carefully vetted private debt collectors were not permitted to handle any dollars, business entities handle over a trillion collected tax dollars every year with no vetting prior to assumption of that responsibility.¹⁷³ The point here is not that the collected tax system requires dismantling in the same manner that the private debt collection program has been dismantled, but rather that the collected tax system is one of an inherently governmental function—the collection of taxes. Further, the collected tax system allows private parties to hold tax dollars which even the private tax collectors could not do. The governmental nature of the action coupled with the holding of large amounts of federal tax dollars makes the returns reporting collected taxes like the returns currently listed in Section 6104.

Placement of Collected Taxes within Disclosure Regime

While most of the businesses submitting returns to report collected taxes do not receive subsidies in the same manner as tax exempt organizations, they operate as businesses with the understanding that they have an obligation to collect federal taxes as a part of the grant of the right to do business. In this sense their role as tax collectors, while not subsidized, is a role in which they carry out a government function. In addition to carrying out a government function, these businesses also receive the benefits of holding this money as well as the burden of reporting on it.

The JCT Report cited two reasons for public disclosure that would apply equally to reporting collected taxes as to the entities list in Section 6104: 1) disclosure enables the public to provide oversight and 2) disclosure allows the public to determine

which organizations to support.¹⁷⁴ If tax returns reporting collected taxes became public through Section 6104, the public would have the opportunity to view those returns and report anomalies. The public would also have the opportunity to decide whether to support businesses that did not properly treat the collected taxes they held. Businesses, and government agencies, seeking to contract with the taxpayer would have an easy means of checking on this important measure of tax compliance.¹⁷⁵ Compliance or lack of compliance could form an important part of the decision to contract with the taxpayer.

A few states have opted to disclose certain collected tax information such as sales tax, excise tax, use tax and gasoline tax data.¹⁷⁶ The policies of these states essentially reach the same result as the result proposed here that disclosure of collected tax data is beneficial. A close look at these state laws and the policies behind those laws is warranted.

Wisconsin, home of the Progressives who lead the early 20th Century charge to disclose tax returns, has permitted disclosure of some aspects of its income tax returns since 1923.¹⁷⁷ In 1953 access to the entire return was paired back to access to the net taxes paid.¹⁷⁸ Public access to the amount of income tax paid extends to individuals as well as corporations; however, the information is available only upon a specific request to the Wisconsin Department of Revenue satisfying certain conditions.¹⁷⁹ While the Wisconsin disclosure provisions do not cover returns of collected taxes, other states do.

Vermont allows disclosure of a number of taxes.¹⁸⁰ Specifically, the plain language of the statute allows for anyone to obtain information about an entity holding money in trust concerning the compliance of that entity. The publicity of this tax data closely correlates with the collected tax data for which disclosure is proposed here. Vermont permits oral or written requests. The Tax Department responds by advising the requester whether the taxpayer is in “good standing,” which is the code phrase for fully paid upon the collected taxes, or is “not in good standing,” which is the phrase for a delinquent taxpayer. Vermont does not allow the public to view the returns.

Massachusetts passed a law in 1992 making public a host of tax information regarding publicly traded corporations, banks, and insurance companies.¹⁸¹ Businesses are currently required to disclose the following:

1. Name
2. Address of principal office
3. Massachusetts taxable income
4. Total Massachusetts excise tax due
5. Non-income excise tax due
6. Gross receipts or sales
7. Either gross profit or credit carries over to future years
8. Income subject to apportionment¹⁸²

The Massachusetts provisions require reporting of both income taxes and the sales and excise taxes more like the collected tax which are the focus of this Article. One problem with the Massachusetts statute is its focus on publicly traded companies. As will be discussed more fully below, companies of this size are very unlikely to have problems with reporting and paying collected taxes. The purpose for disclosing the liabilities in Massachusetts appears driven by a somewhat populist desire to insure that large companies pay their “fair share.” To the extent a goal exists for reporting collected taxes aside from the goal of aligning collected taxes with the proper disclosure provisions, limiting the reporting of collected taxes to public corporations would serve no collection purpose. The reporting of this information has now been in place for almost two decades with little data gathered showing any negative impact from this reporting.¹⁸³

The returns reporting collected taxes differ from almost all other tax returns because they do not contain information about a tax liability incurred by the taxpayer.¹⁸⁴ Rather they contain information about taxes collected and held in trust for the United States. These returns do not calculate a tax rate nor do they contain “secret” information about a business that would enable competitors to obtain an advantage. These returns simply report the amount of money held in trust by the tax collecting entity. This type of return information should not raise privacy concerns that drive the underlying secrecy of federal tax information.¹⁸⁵ Rather, this type of information should exist in the public domain in order that everyone has a transparent view of the money collected on our behalf by the entities serving as agents of the federal government. The disclosure policy reasons behind the decision to make public the returns reporting tax exempt and pension return information should apply to the returns reporting collected tax information.

Because the money is held in trust, there is no basis for distinguishing between the various entities reporting this information.¹⁸⁶ The information should be readily available in an unfiltered manner and posted on the internet so that it is easily accessible. Reporting all of the information in an unfiltered manner would make the task administratively easier for the IRS and allow those using the data to access it all without limitations on size of business or other limiting criteria. The reasons for disclosing the returns apply to all returns containing collected taxes.

Disclosing all returns fits with the collection aspect of the policy consideration as well as the disclosure piece. By disclosing all returns, businesses filing these returns know from the outset that the information on these returns differs from the information on other tax returns of the business. Knowing that it is different helps them understand why this debt obligation differs from other debt obligations of the business which should make it more likely that businesses would pay this debt, or go out of business, rather than paying the debts of trade creditors in an attempt to stay afloat.

Changes to Current Return Forms

Currently, returns reporting money held in trust contain information about both money held in trust and liabilities that do not stem from a trust relationship.¹⁸⁷ Those returns should be split into two parts: one part reporting the collected taxes (the “collected taxes return”) and the other reporting the taxes directly due from the entity (the “entity liability return”). The collected taxes return should become publicly available while the entity liability return would remain subject to the current disclosure provisions.¹⁸⁸ The collected taxes return should report not only the obligation for the taxes but also the amount of payments made toward that obligation during the return period and with the return itself. This would allow anyone viewing the return to ascertain if the trust obligation had been fulfilled or remained partially or fully unmet.¹⁸⁹

Two return forms require revision in order to accomplish this result. First, the employment tax return, Form 941, requires changing. Form 941, due on a quarterly basis, currently reports three primary tax liabilities of the entity having employment tax obligation. These tax liabilities consist of the amount of income taxes withheld from employees, the amount of social security tax withheld from employees, and the entity’s own liability for social security taxes.¹⁹⁰ Instead of one form that reports both collected taxes and the entity’s own obligation, two forms should exist. One form would report the collected taxes, described here as Form 941T (the T stands for “trust”) and the other would report the entity’s obligation, described here as Form 941E (the E stands for “entity”).

Form 941T should contain relatively little information in order to limit the disclosure of information and avoid confusion for anyone reading it. It should report the total amount of income taxes collected from its employees, the total amount of social security taxes collected from its employees and the total amount of taxes paid to the IRS during the quarter. Some additional information could be placed on the return similar to the information currently reported on Form 990 with respect to tax exempt organizations.¹⁹¹ This information is general information about the entity such as the type of organization, year of formation and state of domicile. Certain information required on the Form 990-BL might also provide some benefit such as “The books are in the care of:”, “Phone number:”, and “Located at:.”¹⁹²

Form 941E should track the information on the current Form 941, but will exclude the information on the collected taxes reported on the companion Form 941T.

The second return requiring revision is the Form 720 used to report excise taxes. Like the Form 941, this form currently reports excise taxes directly owed by the employer as well as excise taxes collected from others. Two forms, the Form 720T and Form 720E, should replace the current Form 720. The Form 720T should report only the excise taxes collected from others, identify the type of tax

collected and report the total amount paid to the IRS during the reporting period for the form. Some additional information could be placed on the return similar to the information reported on Form 941T discussed above.

The Form 720 E should retain the information on the current Form 720, but will exclude the information on the collected taxes reported on the companion Form 720T.

How Mechanics of Disclosure Should Take Place

The disclosure of the collected tax information should take place through posting every filed Form 941T and Form 720T on the internet. The posting should adopt a format that is easily searchable. Section 6104 (a)(3) currently contemplates posting on the internet certain returns disclosed under Section 6104 and 527. That same mechanism for dissemination of information should apply with respect to the returns reporting collected taxes. The posting of returns should occur as soon as possible after receipt. Neither the business entity nor the IRS should be required to produce copies of the returns posted on the internet.

The IRS should post any failure to receive a return on the internet. Individuals interested in collected tax returns of an entity should not be forced to guess whether a return was filed and not posted.

Proposed change to Section 6104(a)(1)(E)—Returns Reporting Collected Taxes—If a business is required to collect taxes for the United states and holds the collected taxes in trust pursuant to Section 7501(a), the returns of the business reporting the collection and payment of the collected taxes shall be open to public inspection and posted on the internet.

Proposed Change to Section 6104(a)(3)(C) Information Available on the Internet—The Secretary shall make publicly available on the internet the tax returns described in 6103(a)(1)(E).

Policy Reasons for Creating an Exception to the Rule of Nondisclosure

While disclosure policy drives the recommendation in this Article that collected tax returns should be disclosed under Section 6104 rather than kept private under Section 6103, the decision to disclose these returns could impact collection policy as well. This Article proceeds with the belief that the disclosure of collected tax returns would benefit compliance. In this unsubstantiated belief, the Article adopts the unsubstantiated position of the JCT Report that disclosing tax exempt organization information increases compliance whereas disclosing returns and return information with respect to taxable persons generally compromises voluntary compliance.¹⁹³

Assuming that disclosing collected tax returns will have the beneficial compliance effect that such disclosures controlled by Section 6104 currently have, the next issue concerns the costs associated with publishing this information. Under this proposal the taxpayer would bear little direct costs. The cost of preparing the returns would increase, if at all, only marginally. The IRS would bear the cost of publication. The real costs of this proposal would potentially consist of a decrease in compliance, as a result of publishing the returns. This disclosure proposal must then consider whether a taxpayer's likelihood of filing returns and reporting accurate information will decrease because of fears that information on these returns would disclose proprietary information or otherwise harm the business. Publication is unlikely to impact the accuracy of the withholding tax returns because of the direct link between these returns and the social security/withholding benefits of the employees including the employees responsible for filing the returns. This accuracy is checked each year for employment tax returns under the CAWRS program.¹⁹⁴ While it is possible that some taxpayers would react to publication by failing to file returns, this failure also has a detrimental effect on those responsible for filing the returns since it indefinitely extends the statute of limitations on assessment of their liability as responsible officers for the trust fund recovery penalty.¹⁹⁵ Although no definitive answer exists on possible detriments to publication of collected tax returns, no specific negative consequences immediately appears.

Creating collected taxes returns which report only the money held in trust and then making those returns public would enable everyone to determine if a business entity meets its basic obligation to properly handle the public's money with which it was entrusted. Publishing this information would also allow the public to make decisions concerning businesses entrusted with public funds just as everyone makes decisions concerning public officials entrusted with public funds. The monies reported on these returns do not belong to the taxpayers filing the returns and implicate few of the reasons for protection that ordinary tax information carries. Publishing this information facilitates informed decision-making regarding which businesses to support, which businesses have a strong likelihood of failure and which competing businesses have gained an improper competitive advantage. Once this information becomes public, those entities failing to pay over the collected taxes should find a non-receptive public just as public officials would find a non-receptive public if they improperly handled public monies. The pressure caused by this situation should encourage entities to properly report and pay collected taxes, thereby improving compliance in this segment of the tax gap.

The proposal in this Article to disclose all returns reporting collected taxes under the regime of Section 6104 turns on an interpretation of disclosure policy that places collected taxes into public view because of the trust nature of these returns.¹⁹⁶ It is possible to approach this problem based on the collection policy perspective rather than disclosure policy, by considering possibilities of increasing

transparency without moving collected tax returns under Section 6104. One such possibility would be to use tools essentially available already under Section 6103, which would require minor changes in that statute to the manner of publication of information about taxpayers who owe collected taxes. This Article does not recommend the collection policy approach but addresses it below as a potential path to increased compliance with a smaller change in the approach to disclosure policy with respect to collected taxes.

Shaming

As discussed below, the ability to disclose information concerning unpaid collected taxes already exists in almost all instances.¹⁹⁷ Once the IRS files an NFTL, the taxpayer's liability for collected taxes (or at least for liabilities on returns on which collected taxes are reported) becomes a matter of public record. This public record will be quickly found by credit reporting agencies and others tracking the filing of the federal tax lien.¹⁹⁸ Disclosure of this information is currently permitted under Section 6103(k)(2). This information goes to the county clerk's office where the taxpayer resides or where the taxpayer has property.¹⁹⁹ If the taxpayer is a corporation or partnership, the NFTL is filed as designated by the state where the entity's principal place executive office is located.²⁰⁰

Given that the information of an unpaid collected tax can become public through the filing of an NFTL as soon as ten days after the assessment of the tax, the next collection policy question is whether a more public pronouncement of the liability should occur in order to more effectively convince taxpayers with unpaid collected taxes (or potentially any unpaid taxes) to quickly satisfy the obligation. Starting in the late 1990s and continuing as an increasing trend, states have turned to further publicity dubbed shaming.^{201, 202}

In a tight market, one business may be able to hold a business advantage over its competitors if it avoids paying to the IRS the taxes collected from or on behalf of others. Publicizing the names of entities that fail to pay these taxes could potentially serve to level the playing field in such business areas. A business advantage obtained in this manner should instead become a business liability if competitors have knowledge of the situation and can use it in the marketplace. Much of the literature in this area characterizes this type of disclosure as "shaming."²⁰³ Shaming seeks to alter taxpayer behavior through the use of social pressure.²⁰⁴ In recent years over half of the states have adopted a limited disclosure exception allowing publication of the names of certain delinquent taxpayers.²⁰⁵ States enact such statutes with the hope that the individual or entity, seeking to avoid the negative publicity associated with this publication, will ultimately comply.²⁰⁶ The Article does not recommend that the United States adopt a shaming policy as a basis for the publication of taxpayers delinquent in paying their collected taxes; however,

the relatively recent policy debate surrounding the state shaming provisions provides a basis for examining one relevant policy reason for creating an exception to disclosure that would cover those taxpayers who were delinquent in paying over collected taxes.

If the United States were to adopt shaming as a basis for addressing unpaid collected taxes, it has several models to choose from as it reviews the statutes adopted by the states. The most common shaming provisions choose a numerical limit, such as the 100 taxpayers with delinquent collected taxes who owe the most outstanding liabilities, and publish the names of those taxpayers on a website or other prominent location. Another common method involves publishing the names of all delinquent taxpayers whose outstanding liabilities exceed a selected dollar amount. The dollar level for publication of an entity with debt should reflect an amount high enough to avoid information overload from all of the published names but low enough to provide meaningful information to competitors and consumers.

Using *ABC, Inc.* to illustrate the proposal, the IRS would consider posting the name of *ABC, Inc.* on its website at a special location designed to publicize delinquent taxpayers. The IRS would only publish *ABC's* name if *ABC* owed a sufficient amount, for example \$25,000, of unpaid collected taxes. Once *ABC* crossed the dollar threshold, the IRS would enter *ABC's* name onto the list of tax delinquents. The list would be available to anyone with internet access.

Currently, the IRS may not disclose tax information about any taxpayer without specific authorization under Section 6103. No exception exists for listing the names of entities that do not pay taxes, whether the taxes are income, excise, employment, or some other type. In many instances entities with unpaid collected taxes find themselves saddled with a filed federal tax lien; however, even when the lien is filed, their competitors and companies with whom they do business might not know about the existence of the federal tax lien.²⁰⁷

At present one exception to this general rule of nondisclosure in the Internal Revenue Code could fairly be characterized as a shaming provision, rather than simply a disclosure exception based on one of the traditional reasons.²⁰⁸ In 1996 Congress enacted Section 6039G.²⁰⁹ This section addresses a problem perceived by Congress when an individual renounces U.S. citizenship for the purpose of avoiding the payment of U.S. taxes.²¹⁰ The shaming remedy created by Congress to address this situation appears to be both too broad and too obscure.²¹¹ The remedy reaches too broadly because shaming, or publication of the names of individuals renouncing U.S. citizenship, occurs for all who renounce rather than just those who renounce for tax motivated reasons. The breadth of this reach diminishes the effectiveness of the publication of the names, because inclusion on this list does not tie directly to improper tax behavior. The remedy is also too obscure because the names of the shamed individuals are published in the Federal Register on a quarterly basis. The Federal Register seems a rather remote and inaccessible

place to publish names if its purpose is to have the individuals ostracized by their community of peers.²¹²

Regardless of its effectiveness, Section 6039G demonstrates a Congressional willingness to resort to shaming as an enforcement technique.²¹³ More recently Congress has flirted with the idea of using shaming to identify corporate taxpayers who seek to reduce or eliminate their tax liability by employing “abusive” tax shelters.²¹⁴ While numerous states have adopted shaming as a means of increasing revenue, no state has yet adopted shaming based on corporate tax shelter activity.²¹⁵

The concept of shaming has received much attention among writers seeking ways to promote tax compliance.²¹⁶ Earlier writing concerning shaming addressed its effectiveness in the criminal context.²¹⁷ Toni Massaro provided a critical analysis of shaming in this context and identified five conditions that a shaming statute should meet to be an effective remedy: 1) offenders should be members of an identifiable group; 2) sanctions must compromise social standing within the group; 3) group awareness of the sanctions and withdrawal from offenders; 4) offenders must fear withdrawal by the group; and 5) offenders must have means to regain social standing.²¹⁸ Massaro concludes that these tests are rarely met in modern America so she does not favor shaming as an effective remedy for criminals. Her article demonstrates that shaming fell from grace as an appropriate sanction because it lost its effectiveness as a punishment tool as American society evolved over the past 200 years.²¹⁹ Because the factors for effective shaming in a criminal case do not currently exist in America, she concludes that a reprise of shaming as a tool for effective criminal punishment and rehabilitation would be a mistake.

The concerns expressed by Massaro have validity for analyzing whether shaming would work in certain tax contexts, but they also fail to address certain issues presented by civil tax issues.²²⁰ Kirsch identified some of the shortcomings of shaming in the tax context, at least as applied to the expatriate situation currently adopted in the Code.²²¹ Assuming that Massaro’s often cited tests provide the most appropriate structure for determining the effectiveness of shaming, how do these tests apply to the context of the failure to pay over taxes held in trust by an entity? Is it worthwhile to consider the publication of the names of entities that fail to pay their trust fund taxes, or would such publication fail to motivate the named entities to pay the taxes while broadcasting to the world that the government has been unsuccessful in fixing the problem in this area of noncompliance?²²²

Many of the concerns raised about the effectiveness of shaming in the criminal context do not apply to the naming of liable entities in the trust fund context. Arguably, the publishing of names in the trust fund context serves not so much to shame the offending party as to inform competitors and potential customers. If the principal function publishing names is to inform rather than to shame, then the tests for effectiveness would be quite different than those set out in Massaro’s article. The focus moves from the impact of publication on the offender’s feelings

to the impact of publication on the behavior of its customers and, in their reaction, on the offender. Other than the few anecdotal consequences cited herein, the effect of the knowledge of an entity's failure to pay over its trust fund taxes is not known.

In addition to the concerns about shaming in the criminal context, Kirsch raised concerns about shaming in the civil context because of the way in which it was handled in 6039G.²²³ His concerns raise slightly different issues than the ones identified by Massaro and likewise need to be addressed in deciding whether to pursue publication as an effective remedy for failing to pay over trust fund taxes. Perhaps the largest single distinction between the expatriation statute and the proposal to publish names of entities not paying trust fund taxes is the failure of the definite link between having a tax motivated purpose for expatriation and the publication of the individual's name in the Federal Register implying that such a link may exist.²²⁴ The link between non-payment of trust fund taxes and publication would clearly exist. The employment or excise tax that gives rise to the trust fund liability is not a tax situation in which uncertainty exists. This is a situation with a straightforward tax and an unpaid liability that is almost always a certainty. The issue for trust fund taxes turns on non-payment and not the sometimes ambiguous language of the Internal Revenue Code in which the existence of a liability itself can be in play.²²⁵

Knowledge that an entity has failed to pay its employment taxes could modify the behavior of competitors of that entity or its customers.²²⁶ Competitors would seek to find ways to exploit that information and would feel disadvantaged that prior competition occurred on a non-level playing field. In addition, customers might make decisions about entering into long term contacts with an entity that could not keep current on its employment taxes since this failure would suggest a lack of financial stability.²²⁷ The information could assist both competitors and customers in making decisions.²²⁸

Many states have embraced shaming as a basis for altering taxpayer behavior in a manner resulting in greater success in tax law enforcement.²²⁹ The movement toward shaming in tax laws has increased significantly in the past decade.²³⁰ State shaming laws generally follow a pattern of disclosing the 100 or 200 largest delinquent accounts or disclosing accounts exceeding a certain dollar amount.²³¹ They generally do not distinguish between types of taxes. No state, however, focuses its shaming laws on collected taxes.

Balanced against providing a list that discloses outstanding tax obligations is the general policy that tax information has privacy protections other types of information about an entity do not. The question becomes whether protecting an entity's privacy with respect to its tax information should extend to money it holds in trust for the United States. The money held in trust for the United States does not reveal any business secrets about an entity. Because this type of shaming would occur with respect to an unpaid liability, an exception for disclosure of

the information already exists in Section 6103(k)(2). In this way, Congress has already demonstrated a willingness to reveal this information in a format designed to alert competing creditors of the existence of the liability making the issue of shaming or other disclosure listing of this information one of formatting rather than disclosing.²³²

Shaming seeks to modify behavior by targeting specific taxpayers with the highest unpaid taxes or some other identifying negative tax trait. While some states have expressed what they characterize as success through their shaming laws, shaming has limitations in a modern society as discussed by Massaro. The theory underpinning shaming applies equally to all types of unpaid taxes and, in fact, is applied by states adopting shaming laws to a broad spectrum of delinquent taxes.²³³ Because no proof exists that shaming laws succeed, because they represent a departure from the disclosure laws for a somewhat penal reason and because they represent a broad based exception to the disclosure laws rather than one targeted to collected taxes, this Article does not propose shaming laws as the remedy for increasing collected tax compliance.²³⁴

In addition to broader policy implications for rejecting shaming as a remedy for collecting collected taxes, a more specific reason exists for the circumstances of these taxes. Shaming would not serve as an adequate deterrent to individuals and entities considering the improper use of collected taxes. Tax shaming occurs well after the use of this money in a circumstance in which the money is frequently faced with a more immediate and real form of shaming, business failure.

While some persons may fail to pay collected taxes motivated purely by the personal gain of “embezzling” collected taxes, the majority of persons using collected taxes do so because of liquidity issues with the business.²³⁵ When collected taxes become the operating capital of businesses with liquidity issues, the people making the decision to do so already face very real shaming issues. These people face the shame of losing their business and perhaps losing their home and other personal assets.²³⁶ The shame of having their name published on a list by the IRS at some distance point in the future may come far down the list of matters causing them deep personal pain. The shaming remedy when applied to collected taxes seeks to shame the individual or entity responsible into paying the taxes at a point when the business has often failed and the individual is broke. No amount of shame can bring money into the Government when the party shamed has no ability to pay the taxes. Publication of the information of non-payment must come at an earlier stage when business decisions concerning the use of the trust fund money still have meaning.²³⁷

While shaming might deter a large corporation from investing in a tax shelter that will marginally improve its profits, the issues facing most entrepreneurs who tap collected taxes for working capital differ significantly and suggest that the shame from publication of non-payment of taxes may pale in comparison to the shame they seek to avoid by using the collected tax dollars.²³⁸ For this specific

reason, as well as for the more general reasons discussed here, shaming is not recommended as a better policy alternative to broad disclosure of collected tax returns.

Disclosing Some Returns Containing Collected Tax Information

As discussed above the failure to pay over collected taxes occurs in small businesses, usually during their start up phase when working capital needs achieve acute status. Since large businesses almost never have issues with failure to pay over collected taxes, should these businesses suffer the requirement of disclosure of their collected tax return information when such information will rarely disclose anything other than the timely filing and payment of the required taxes. Given the realities of when the failure to pay collected taxes occurs, would a disclosure provision targeted at the businesses most likely to have difficulty be preferable to the broad disclosure of these tax returns.

Through a targeted use of disclosure the possibility exists that the benefits of making information available could exist without burdening all entities that collect taxes with disclosure. Disclosure could occur for those entities in the target group which failed to timely file or pay their collected taxes.²³⁹ This approach would resemble shaming in the sense that it would not publish all entities, only the names of the “bad” entities. It would also resemble general disclosure from the perspective that it would provide information about all entities because it would provide information about all entities within the target group.

The exceptions to the rule of disclosure for tax exempt organizations, political organizations and pension plans do not provide for disclosure of only a part of the group of impacted entities. In each of those exceptions, all of the returns of exempt organizations or pension plans are displayed openly. No effort exists in the provisions opening those returns to the public to distinguish between good and bad taxpayers or large and small taxpayers.²⁴⁰ Such a distinction would not make sense in the disclosure of the returns of exempt organizations, political organizations or pension plans since the goal of disclosure stems from a broad desire for knowledge about all of the organizations.

One distinction, however, between pension plans and collected taxes is that the information on the pension plan return provides a picture into a complex investment situation. The payment or non-payment of collected taxes, however, is a black and white situation—either they were paid or they were not paid; the same simplicity of compliance does not exist in the pension plan situation. The amount necessary to properly fund a pension plan, while calculated by actuaries, does not represent the same type of clear cut picture presented

by collected taxes. For this reason publication of all pension returns provides information beyond the payment or non-payment situation presented with collected taxes. Therefore, it makes sense to publicize all pension plan returns because of the information such publication provides where a similar publication of the returns of collected taxes does not serve the same function.

If not all collected tax returns were published, the next issue concerns how to make the division between publishing and not publishing. This decision could rest on whether the return has unpaid taxes. The policy decision made along such grounds would parallel, in many ways, the policies present with respect to shaming. As mentioned above, at least one of those policy decisions has already been made in the area of federal tax liens. A decision to publish all collected tax returns on which the taxpayer has an outstanding balance in actuality provides little more information to the public, if any, than would already exist with the NFTL.²⁴¹ Such a decision involves small policy issues of the formatting of information but not broader policy issues of whether to allow such information into the public realm.²⁴²

Another way to limit publication of collected tax returns would be to publish all collected tax returns of entities of a certain size or age. Size measurement could occur in a number of ways; however, the ideal method for such a limitation would turn on finding the break point at which entities, based on size or some similar criteria, no longer fail to pay over the collected taxes. Disclosure of all returns reporting collected taxes would occur below that break point. This method, like the reporting of all entities, might create administrative simplicity while avoiding publishing information about collected taxes that in almost all instances would simply report that they were paid.

Many numerical cut off points exist in the Internal Revenue Code which base reporting, and other, decisions on size or similar criteria. Creating another such break point would not create precedent but would add a small layer of complexity in administration that simply reporting all returns would not create. While placing a limit on reporting holds some allure because it avoids dumping information into the public with very limited benefit, the simplicity of a policy decision that requires publication of all returns of collected taxes holds the greater allure. For that reason, the limited publication of returns reporting collected taxes is not recommended.

Conclusion of Transparency Section

Returns reporting collected taxes differ from other tax returns both in the type of information they report and the underlying nature of that information. Disclosing these returns is consistent with current disclosure policy when these returns are viewed as similar to the returns disclosed under Section 6104. Disclosing these

returns is consistent with good collection policy because their disclosure informs the taxpayer of the important and different nature of collected taxes as well as informing the public of compliance regarding collected taxes. For these reasons, the returns of collected taxes should move from the restrictive circumstances of Section 6103 to the openness of Section 6104.

Creating Structure for Payment of Collected Taxes—Structure

Proper Compliance Incentives

Before addressing each proposal and the compliance incentives it provides, it is important to look at the research that exists on how to best influence compliant tax behavior to see how the current system fits with the thinking on this subject, and to see how these proposals might fit into that thinking. Academics wrote much on tax compliance in the past few decades while, as discussed in the next section, little has changed in the compliance regime of collected taxes. Most of the writing does not specifically address the issue of failure to pay collected taxes where the unpaid liability is not at issue and the obligation for the tax is straightforward. Nonetheless, the literature provides a basis for approaching methods to encourage compliant behavior in the area of collected taxes as well as in more widely discussed areas of noncompliance such as the reporting of taxes by self-employed individuals.

Recent scholarship identified structural systems as an important mechanism for reducing behavior that the IRS seeks to prohibit and as a better alternative to statutory commands.²⁴³ Professor Edward K. Cheng describes statutory commands, terming these “fiat,” as a direct but not always effective method of regulating behavior. According to Professor Cheng, the alternative to fiat is an indirect method of regulation, terming this “structure,” to “establish mechanisms or procedures that push citizens toward compliance by making the undesirable behavior less profitable or more troublesome.”²⁴⁴

While direct regulation provides many benefits and is always an appealing option for legislatures, it relies principally on deterrence. Reliance on deterrence does not necessarily achieve the desired result when large numbers of people violate the law.²⁴⁵ At some point, the passage of unenforceable laws simply fails to provide the desired or necessary results, leaving structural laws as a potentially more effective alternative. Structural laws seek to regulate behavior by removing or minimizing the opportunities to violate the law rather than by punishing the violations.²⁴⁶ Two types of structural laws exist: (1) laws that create “a process that facilitates enforcement” and (2) laws that make it more difficult to achieve the undesirable activity.^{247, 248}

As discussed in the following section, Congress passed numerous statutory commands concerning the responsibilities of entities to collect certain taxes on behalf of the IRS and pay the taxes over to the IRS. These statutory commands created a system that works extremely well for collecting taxes from individuals who are employees.²⁴⁹ The system also works well to achieve payment from large corporations of the collected taxes where the leaders are managers and executives rather than entrepreneurs. The system works much less well with small entities in which the entity and the individual essentially share an identity. These small entities fail to pay over the collected taxes at a rate that has created a \$58 billion unpaid amount on the books of the IRS.²⁵⁰ While most people think of the tax gap as the result of underreporting of taxes, the failure to pay acknowledged tax obligations each year represents ten percent of the gap and amounted to \$33 billion of the tax gap in 2001.²⁵¹

Congress created an effective system for tax administration using structural laws to withhold taxes, and only used statutory commands to move the collected taxes from the accounts of the entities doing the collecting into the hands of the IRS. States are using some structural laws to assist in obtaining their collected taxes. It is time for Congress to consider some of the techniques the states have used and try to close the payment gap with techniques that extend beyond the current ability to collect presented by statutory commands and enforced collection action. In selecting the appropriate structural laws to address the payment of collected taxes, Congress and the Tax Administrator should determine the incentives that influence those paying over collected taxes.²⁵²

One issue that emerges repeatedly when analyzing the payment of collected taxes concerns the competing claims on the entities that owe these taxes. The competing claims force the responsible persons to choose whether to honor their personal commitments to trade creditors instead of impersonal creditors such as governmental entities. A second issue concerns the entrepreneurial spirit of the individuals who run the entities with collected tax problems and their belief that the business will turn the corner “at any moment,” so they can make good on unpaid obligations such as the collected taxes. Both of these issues present “legitimate” societal reasons for the decisions that responsible officers make that cause them to fail to pay over the collected taxes. Neither issue presents a legal basis for the decisions of the responsible officers.²⁵³

Nonetheless, the very real competing interests placed on the responsible officers of entities with outstanding collected tax obligations put incentives on these individuals that conflict with their best interest from a legal perspective and conflict with the societal goals of payment of taxes. The question is how to prioritize the payment of collected taxes so that it causes responsible officers to properly balance this requirement with their desires to pay their friends and their hopes to continue a flagging business because success lies just around the corner. Additionally, an appropriate structure must exist for those responsible officers who simply want to

use the collected taxes for their own benefit knowing that their use is an evasion of the payment of tax obligations.

The proposals set out below seek to address these concerns by providing a mix of information to allow responsible officers to make better informed decisions. Hopefully, better informed decisions will lead to higher compliance with the tax law.²⁵⁴ The proposals also seek to address the situation by providing the IRS with better information about who the IRS needs to pursue because earlier pursuit of the proper individuals will result in the collection of a significantly higher amount of the unpaid collected taxes.²⁵⁵ The proposals also seek to provide some benefits for compliant action and greater punishment for noncompliant action. The mixture of behaviors the proposals seek to influence mirrors the mixture of reasons for current noncompliance.

The variety of bases for the proposals fits with the research suggesting that “one size” enforcement activity does not fit all.²⁵⁶ Individuals and entities that fail to pay over the collected taxes will have unpaid taxes for different reasons.²⁵⁷ The path to non-payment may follow the same course as the path taken by those who seek to evade the payment of their taxes or it may follow a course driven by different considerations.²⁵⁸ Creation of a variety of responses that include information, incentives, and enforcement provides a much greater opportunity for success in reaching all of the individuals and entities within the target audience. Norms based appeals and enforced compliance action can both increase overall tax compliance, although each may impact a different group.²⁵⁹

Past and Current Compliance Efforts

The failure of entities to pay over collected taxes the entities held in trust has existed as a problem since the time these entities received the responsibility to collect taxes for the government. Many administrative and legislative responses have attempted to address the issue with varying degrees of success. As discussed in more detail below, attempts to address the problem through criminal tax provisions have proved especially ineffective.

Current IRC section 6672 has its origins in a criminal tax provision.^{260,261} When the 1954 IRC created section 6672 as the civil enforcement mechanism allowing the IRS to pierce the corporate veil and pursue individuals responsible for the failure to pay the collected taxes, IRC section 7202 came into existence as its criminal counterpart tracing its roots back to the same origins.^{262,263} Almost no one has been prosecuted under section 7202 despite the fact it dates back to 1954 and that \$58 billion of unpaid collected taxes exist on the books of the IRS today.²⁶⁴ Section 7202 presents prosecutors with significant problems as they must prove that an individual willfully violated the act.²⁶⁵ The difficulty is grounded in the discomfort felt by fact finders, whether the bench or a jury,

convicting someone trying to keep their business afloat.²⁶⁶ As section 7202 is almost never used as a basis for prosecution even though large amounts of collected taxes go unpaid, it represents a failure as an enforcement mechanism.²⁶⁷

Not long after the passage of the 1954 Code, Congress recognized the need for more enforcement in the collected tax area and sought to address that need through the creation of another criminal tax provision, IRC section 7215, in 1958.^{268,269} Section 7215 specifically refers to and is triggered by the IRS taking action pursuant to section 7512.²⁷⁰ This statutory scheme has now existed for over fifty years. During that time twelve reported decisions existed of individuals prosecuted pursuant to section 7215.²⁷¹ As with section 7202 this criminal provision had almost no impact on individuals and entities failing to pay over collected taxes.²⁷² Subsequent to the passage of section 7215, Congress has not enacted any criminal laws addressing the issue of the failure to pay collected taxes.²⁷³

Congress addressed a shortcoming of section 6672 in 1966 with the passage of IRC section 3505.²⁷⁴ The reason for creating section 3505 was to close a loophole in section 6672.²⁷⁵ Although the number of cases brought under section 3505 is relatively small, the statute appears to have the intended effect of stopping entities from making net payroll lending.²⁷⁶ One reason this provision may have succeeded where the criminal provisions did not is that the target audience of this statute, banks and other lenders, represents an audience that pays careful attention to statutory obligations and receives competent advice on how to meet such obligations.

Some small changes to section 6672 were enacted by Congress in 1996 and 1998 as a part of taxpayer bill of rights provisions to expand rights and codify procedures. However, those provisions did nothing to address shortcomings in the ability of the IRS to recover collected taxes.²⁷⁷

In July 2008, the GAO issued a report concerning outstanding payroll taxes.²⁷⁸ In this report, GAO identified five problems caused by the failure of businesses to remit payroll taxes: (1) public perception; (2) compliant taxpayers must shoulder greater burden; (3) unfair competitive advantage to noncomplying taxpayers; (4) prolonging the life of failed businesses through the noncompliance subsidy; and (5) unmet government financial needs in era of deficits.²⁷⁹ Next, GAO made six proposals to “fix” or improve the situation of non-payment of collected taxes: (1) develop a better process for monitoring collection actions taken by IRS collection officers; (2) review case assignment prioritization; (3) file notice of federal tax liens faster; (4) develop procedures for better monitoring how fast IRS collection officers cause assessment of section 6672 liability; (5) develop performance goals and measures; and (6) work with states to develop better measures and implementation of goals.²⁸⁰

Essentially all of GAO’s recommendations to “fix” the problem of compliance in the collected tax area have fallen on the IRS and not on the noncompliant

taxpayers. GAO sees the solution to the compliance problem as one which can be fixed by having the IRS work smarter, better, and faster rather than creating a structure in which the noncompliant entities are led to a path of compliance by structures that move them down that path.²⁸¹ The proposals below seek to build a better path rather than simply to find solutions to the problem in the efficiency of the IRS or by additional criminal or civil penalty statutes that seek to treat the problem by fiat.

Proposal

There are five structural proposals which will be discussed in turn:

1. Make the responsible persons of entities collecting taxes identify themselves to the IRS and provide these individuals with information about the legal consequences of collecting taxes
2. Provide incentives for new small business to timely pay collected taxes
3. Require bonds of individuals or entities with a history of failure to pay collect taxes
4. Eliminate the withholding and social security credit for responsible individuals who fail to pay the entity's collected employment taxes
5. Create an incentive for the responsible officers to pay the internal revenue code section 6672 liability where more than one responsible officer exists

The adoption of these proposals would put in place a system in which businesses collecting taxes and the individuals who run them would find themselves both informed and motivated to pay over the collected taxes to a much greater degree than exists today. With the implementation of these incentives, this corner of the tax gap should shrink.

Self Identification of Responsible Officers

As mentioned above, to become a trustee for the United States, an individual or entity merely needs to start a business in which (a) employees exist causing withholding of employment taxes, or (b) collection of excise taxes occurs. This Article proposes that the IRS should: (1) require identification of the individuals within an entity who have responsibility for the financial decisions of that entity and who control the funds of the entity in such a manner that they determine whether the taxes held in trust for the IRS get paid on time; (2) require the identified individuals to personally sign a document acknowledging responsibility as well as the

duties and consequences that flow from that status; (3) provide the identified individual with detailed information concerning their duties; (4) require that the list of responsible individuals be updated as positions change; (5) impose actual penalties on persons found responsible who were not on the list of responsible individuals for an entity that fails to pay collected taxes; and (6) set up a system for contacting the responsible individuals within thirty days following the end of a quarter in which collected taxes were not timely paid by the entity. Several states have decided to gather information about who is responsible for payment of collected taxes when a new business incorporates.²⁸² The IRS has a similar opportunity to gather this data and to use that information to create a structure that better fosters the payment of collected taxes. The IRS should do so.

When an individual or entity starts a business, it must request an employer identification number (EIN) from the IRS and use the EIN on the return reporting the employment or excise taxes. Currently, the IRS does not ask entities seeking an EIN to provide any information concerning the individuals who have responsibility for ensuring that any trust funds held by the entity get paid.²⁸³ By failing to request information about responsible officers at this juncture in the life of an entity, the IRS misses the opportunity to obtain valuable information and simultaneously educate the individual on their duties as a trustee.

Understanding the process of obtaining collected taxes is necessary to understand why the IRS should want to know who is responsible at an entity for making sure that the trust fund taxes get paid. To illustrate the process, a typical employment tax liability will set the scene:

ABC, Inc. (ABC) is a small manufacturing company that makes widgets. It has a payroll of twenty-five employees that it pays weekly. At the end of each week, *ABC's* bookkeeper writes twenty-five payroll checks. In the first quarter of 2008 each of its employees makes \$500 per week. The payroll checks made out to the employees each week are for \$400 because \$100 is taken from their weekly check to pay withholding taxes, social security, and other employee expenses. For purposes of this illustration, \$50 each week is withheld for employment taxes and \$25 each week is withheld for social security. After paying the payroll each week, *ABC* should hold \$1,875 in trust for the United States. If there are thirteen weeks in the quarter, *ABC* should remit to the United States \$24,375 at the end of the quarter to cover its obligation as a trustee for the withheld income and social security taxes. *ABC* will also have a corporate liability for half of the social security liability of its employees. However, that liability is not held in trust for the United States but rather represents a tax liability of the entity.

If *ABC* does not remit \$24,375 to the IRS at the end of the quarter, it is liable for this unpaid collected tax liability. With respect to this liability, the individuals at *ABC* and any other individuals or entities having responsibility for paying over the collected taxes that willfully caused the taxes not to be paid are also individually liable for this amount. This liability arises under IRC section 6672 that is variously known as the “one-hundred percent penalty” or the “trust fund recovery penalty.”²⁸⁴ The provisions of section 6672 allow the IRS to pierce the corporate veil and hold liable anyone who meets the tests of responsibility and willfulness. Assuming that *ABC* files its employment tax return for the quarter, the IRS will know at that point that *ABC* has an outstanding liability; however, the IRS does not currently know who the responsible people of *ABC* are. The IRS takes about two to three years to find out who is responsible at *ABC* and whether they acted willfully in failing to pay the collected taxes.²⁸⁵

To obtain the collected taxes that the entity did not pay over to the IRS, the IRS will seek to collect those taxes from the entity itself, using its administrative enforcement powers, such as lien and levy. In many cases in which the entity does not remit the employment taxes, the entity faces severe cash flow problems and the collection efforts of the IRS fail because no assets exist from which tax collection can occur. The failure to pay the employment taxes serves as a marker that the business failed.²⁸⁶ If this occurs, the only recourse for seeking the unpaid collected taxes that the entity held in trust lies in the pursuit of the individuals who had responsibility for running the entity. At this point, the IRS would benefit from knowing the names and other identifying information of these individuals. It does not currently know this information, and therefore must embark on a search to ascertain the identity of the individuals. This search, and the time it takes to begin this search, is a big part of the determination of who is liable. This proposal seeks to eliminate the search for who is responsible and simultaneously educate those individuals on their special responsibilities regarding collected taxes.²⁸⁷

As discussed above, many states have already identified this issue and have administrative requirements that entities seeking to incorporate a business in their jurisdiction must identify the individuals responsible for the monies held in trust by the newly incorporating entity.²⁸⁸ Creating this requirement at the time an entity seeks an EIN would not require a legislative change but merely an administrative one. The IRS would side step much of its currently lengthy process of determining who to assess for the section 6672 liability if it knew the individuals responsible for paying over the monies held in trust by the entity. Armed with knowledge of the individuals responsible, the IRS could simply send them

correspondence giving them a reasonable, but relatively short, period of time to explain why they were not willful in the failure to pay over the collected taxes. For individuals failing to respond to such an inquiry or responding acknowledging liability, assessment could take place immediately after the correspondence closing date. This might collapse the current two to three year waiting period for assessment to a period lasting two to three months after the return due date.

Obviously, some individuals identified as responsible for payment of the collected taxes would respond to such an inquiry with an explanation detailing why they were not willful in the failure to pay the collected taxes or an explanation of why they were no longer responsible at the time the collected taxes were not paid. Even an early response denying liability would allow the IRS to focus its collection efforts at a point much closer to the end of the quarter. This would be possible because of the known identity(ies) of the individual(s) who had claimed responsibility for the payment of the collected taxes.

For individuals who argued they were not willful in the failure to pay the collected taxes, their responses would provide an early focus on the specific issues in the case. A narrow range of defenses to the liability based on willfulness exists.²⁸⁹ The discussion concerning liability would focus on that narrow range within which the admittedly responsible individual would need to fall to avoid liability under section 6672. For individuals who denied responsibility at the time of the failure to pay over the collected taxes, the discussion would quickly shift to the third parties such individual alleges to have taken over the responsibility and the facts in support of such a takeover of responsibility. This could all take place before a field collection officer had to track down individuals associated with the corporation and would allow the collection officer to focus efforts on collecting information before beginning the field work.²⁹⁰

The IRS would want to establish a presumption concerning responsibility for those individuals listed by the entity as responsible. The presumptions would not necessarily control the outcome but would put an emphasis on individuals paying attention to the information provided to the IRS concerning responsibility.²⁹¹ The presumption should provide that any individual listed with the IRS as responsible for the payment of the collected taxes meets the test of responsibility absent clear and convincing evidence that such individual did not hold a responsible position during the quarter(s) at issue.

The second aspect of this proposal concerns the acknowledgment of the individuals designated as responsible and the information provided to those individuals. The proposal contemplates that anyone listed as responsible for payment of an entity's collected taxes would personally sign a form, under penalty of perjury, acknowledging his or her status as a responsible person.²⁹² Having individuals sign such an acknowledgement serves several purposes that promote effective tax administration.²⁹³ First, it forces the individuals signing such a form to acknowledge their position as a trustee of the IRS. Second, it provides them

with knowledge that the liability of the entity for collected taxes has a different character than other liabilities that the entity owes, because this liability extends to individuals responsible for non-payment who have the protection of the corporate shield from almost all other debts of the entity.²⁹⁴ Third, it informs the individual of the seriousness of this obligation which, in turn, should cause that individual to prioritize which creditors to pay when cash flow problems occur.²⁹⁵

This proposal has two components. One is acknowledgment by the individual that he or she has responsibility for the payment of the collected tax. The second component has equal value and it concerns the information provided to these self-identifying individuals. The acknowledgment will take place at or near the time of incorporation when the entity has not yet had cash flow problems. This should be a teachable moment for the individuals running the entity. This teachable moment should not pass without an effort to teach the individuals the duties of a trustee and the consequences of the failure to carry out those duties.²⁹⁶ To accomplish the teaching of these principles, the IRS should create a detailed handout and provide it to the individuals as a part of a package they receive with the acknowledgement form.²⁹⁷

The handout should explain the reasons why the IRS uses business entities to collect taxes for it, the way the collected tax system works, and the proper method for paying over collected employment and excise taxes. The booklet should further explain the civil and criminal penalties applicable to individuals who breach those duties. Finally, it should explain the bankruptcy consequences of the liability for collected taxes and the fact that this liability, unlike all other tax liabilities, can never result in a discharge of this debt through bankruptcy filed by the entity or a responsible officer.²⁹⁸ This type of information will allow individuals embarking on this trust relationship to enter it with their eyes open rather than discovering years later that their decisions to pay trade creditors rather than the IRS created disastrous financial results. By being better informed, the individuals responsible for the collection of the monies held in trust should take compliance with the payment of the trust taxes more seriously.²⁹⁹

No matter how often the individuals associated with an entity receive reminders concerning the need to accurately identify responsible officers of the entity, it is certain that either the wrong individuals will be identified initially or no one will update the information as the entity business changes over time. For this reason a third component to this proposal exists. This component concerns the consequences for failing to update the information to the IRS as new individuals become responsible for the payment of the collected taxes.

The directive requiring entities to identify responsible officers at the time of the EIN application needs to contain a further directive requiring identification of individuals as changes occur. While the IRS can administratively order that the list of responsible officers initially contain all of the responsible individuals and that any additional individuals inform the IRS as they become responsible,

these administrative directions will have few teeth without some consequence for failure to provide this information. To ensure that the initial group contains all of the responsible persons and that necessary changes to the group are provided to the IRS as the business changes, legislation may become necessary to enact a penalty structure for failure to register changes with the IRS. This penalty structure should be a penalty separate from the section 6672 penalty. The penalty would need to be significant enough to deter individuals from trying to hide from the section 6672 liability by refusing or neglecting to identify themselves to the IRS at incorporation or as newly responsible individuals joined the entity.

Many small companies contract out their employment tax compliance work to payroll provider companies.³⁰⁰ These companies offer a range of services concerning payroll and payroll tax compliance. A typical contract between a payroll tax provider and a small business entity might have the payroll tax provider preparing payroll, paying payroll, preparing the quarterly Form 941 form, and paying the Form 941 taxes. The payroll provider typically has an agreement allowing it to withdraw the necessary funds from the entity's bank account. Problems have arisen with payroll provider companies.³⁰¹ Entities contracting with payroll provider companies and the responsible officers of these entities may think that the hiring of these type companies resolves all employment tax issues, but it does not. The hiring of such a company does not absolve the entity and its officers of their duties regarding the trust fund taxes. Michigan specifically addresses this issue with a form it requires.³⁰² The IRS should adopt something similar to the Michigan form because so many small companies use payroll providers and may not realize that the use of these entities does not absolve them from liability.

Individuals seeking to hide from the IRS by refusing or neglecting to self-identify as a responsible officer should bear a cost for that behavior. At present, no penalty exists beyond that for failure to pay for individuals who cause the collected taxes to go unpaid. The section 6672 liability, while labeled a penalty, simply serves as a collection device for retrieving the unpaid collected taxes. Arguably, all individuals responsible for the failure to pay over the collected taxes should have true penalties assessed against them in addition to the liability for the unpaid collected tax. This proposal does not go that far and seeks only to impose a "true" penalty on those individuals who fail to identify themselves as responsible for the payment of the collected taxes, and thereby cause the IRS to do additional work and take additional time in determining who should have the section 6672 liability assessed against them.³⁰³ The clearly willful failure to self-identify should serve as a factor in determining whether to prosecute someone for failure to pay the trust fund taxes since, coupled with the failure to pay the liability, the failure to self-identify could demonstrate an intent to evade the payment of the liability both at the corporate and individual level.

In addition to a penalty for failing to self-identify as a responsible officer, the statute of limitations for assessment should be suspended with respect to anyone

who has not self-identified as a responsible officer because the IRS will be misled by the names on file and need time to recover the correct information. A statutory change should treat the statute of limitations on assessment of the section 6672 liability as not beginning until a person identified himself or herself to the IRS as a responsible person of an entity. If the person never provides the necessary self-identification, then the statute of limitations would never run, similar to the situation with unfiled returns.

This proposal does impose an additional burden on small businesses because it causes more information to be provided at the time of the application for the EIN, and because of the ongoing obligation to update the names of the responsible officers. It imposes additional burdens on the IRS to keep track of the responsible officer information provided through this process. The information sought, however, is consistent with the type of information generally available about trustees and should allow the IRS to move much more quickly to assess section 6672 liabilities, which should in turn, promote compliance. Also, the targeted information provided to responsible officers at the time of incorporation should also enhance compliance.

Most of the changes needed to implement this proposal fall within the administrative powers of the IRS. It controls the EIN process and can change it with its own authority. The aspects of the proposal imposing a penalty on persons who do not update the responsible person information and tolling the statute of limitations on assessment for those persons require a legislative change.

Incentives for Small Businesses to Timely Pay Collected Taxes

Businesses do not have a choice whether to become trustees for the IRS.³⁰⁴ If a business has employees or if it engages in an industry in which excise taxes exist, a business must become a trustee for the IRS to the extent that it engages in conduct that has these aspects.³⁰⁵ Becoming a trustee imposes burdens on businesses, particularly small businesses, which are not currently compensated by the IRS.³⁰⁶ Many small businesses with payroll obligations hire companies called payroll providers to assist them through the thicket of rules and regulations necessary to comply with the employment tax rules—particularly the withholding rules.³⁰⁷

About half of the states have addressed the cost of administering the sales tax receipts by carving out from the payment of sales taxes a small fraction of the cost which the business entity may keep as an acknowledgement of the cost of administering the tax system for their state government.³⁰⁸ A similar system could be adopted for the IRS to compensate small businesses for the cost of handling the withholding or the excises taxes they must collect.³⁰⁹ The system would be built using incentives that reward compliance, creating a carrot for entities that timely

complied with their handling of collected taxes.³¹⁰ As the early years of a small business are challenging both financially and educationally, it is recommended that the incentive be limited in time to the first three years of the new entity's existence. These are the years the incentive would do the most good to aid the business over a difficult financial time and to train the business leaders in good management of the money held in trust.

At present, penalties serve as the only motivator to timely pay collected taxes over to the IRS. While penalties may have a deterrent effect, they do not provide a motivating influence on small businesses struggling to meet the cash demands placed upon them.³¹¹ The duty to collect and pay excise and employment taxes is an expense that falls most heavily on small businesses. Providing some relief from this expense while simultaneously providing a financial incentive to timely file and pay should improve compliance.³¹²

Using *ABC, Inc.* as the model again, an illustration of the way the incentive would work may be seen. Assume that *ABC* was a small business and it timely filed its employment tax returns for all quarters of 2008. *ABC* would qualify for a small discount on its employment tax liability for each of those quarters. If, in a future quarter, it failed to timely file or timely pay its employment tax for a quarter, it would lose the ability to receive a discount for that quarter.

Providing a small incentive to pay collected taxes not only follows policy considerations for effective tax administration but also relieves the cost burden imposed on small business by the current structure.³¹³ Compliance with the employment and excise tax rules concerning collecting taxes for the IRS simply imposes a duty on small companies to aid in governmental function without compensation.³¹⁴ This proposal would recognize that cost to the entities while withholding such payments if the business entity did not meet its collected tax obligations.³¹⁵

This proposal limits itself to the costs incurred by small businesses and does not provide any monetary incentive for large and mid-size businesses. The reason for that limitation has two bases. First, the vast majority of unpaid collected taxes occur in small businesses and not large or mid-size businesses. Larger businesses have legal counsel who advise the owners on the potential individual liability which exists in failing to pay over the collected taxes. Individuals running these businesses may have a large equity stake in the businesses but usually they do not. In these businesses the entity does not serve as an extension of the individual; rather the individuals responsible for running the entity have a separate identity from the entity. These individuals know the severe risk to their personal finances that exists if the collected taxes are not timely paid over to the IRS. Rewarding these individuals with a small monetary incentive to pay the taxes does nothing to provide them with a true incentive to pay. Those incentives already exist. Second, the cost to the small business of compliance with the regime of holding taxes in trust is much higher on a percentage basis than the cost to a large business.³¹⁶

On the contrary, with small businesses, where the entity often serves merely as an extension of the individual, incentives of this type could provide a meaningful alternative to the individual and the entity. These small businesses typically have thin capitalization and a constant need for ready cash. Providing these businesses with a tangible monetary benefit for timely paying their taxes serves not only to provide an incentive to them to timely pay the taxes, but also to remind them of the responsibility to do so.

This proposal distinguishes between businesses based on size and age to target the entities most likely have compliance problems with payment of collected taxes and most likely to experience financial burdens in complying. Through the carrot of this financial assistance these fragile entities may learn good habits at the outset with the hope that the good habits will remain once the incentive is removed. The proposal would increase the administrative burden on the IRS by causing it to create and run the incentive program, but the expectation is that the overall administrative burden may be decreased by higher compliance.

Implementation of this proposal would require a legislative change to permit incentive payments as well as administrative rules to implement the system.

Require Bonds of Individuals or Entities with History of Failure to Pay Collected Taxes

The trustor in creating a trust can make whatever provision with respect to the duties, powers, and requirements of the trustee as he or she may deem wise.³¹⁷ This concept crossed over into the area of trustees for collected taxes, but only at the state level and essentially only for sales taxes.³¹⁸ This proposal suggests that the concept of bonding trustees should migrate to the collected federal tax regime to provide protection for the IRS and an incentive for prompt payment for the entities and their responsible officers acting as trustees. As state laws on this subject essentially only impose the bonding requirement on sales taxes and because the primary federal tax situation in which bonding would arise is employment taxes, a brief discussion of the differences in those situations is necessary.

This proposal permits the IRS to require a bond from an entity if the entity failed to pay collected taxes on a timely basis or if one of the principals of the entity was previously assessed a responsible officer penalty. Together with the power to require a bond, the IRS needs an enforcement mechanism when an entity continues to operate without posting the required bond. That enforcement mechanism should include quick access to the federal district court or Tax Court to enjoin the entity from continued operation without the posting of the bond. Without the ability to enjoin the entity, the bond requirement will have little effect.³¹⁹

Using *ABC, Inc.* again, an example of how the bonding provisions would work can be shown. When *ABC* begins its business, the IRS would not require a bond

unless one of the persons responsible for payment of *ABC*'s collected taxes was someone who was previously assessed a responsible officer penalty. As long as *ABC* continued to timely file and pay its collected tax obligations, the IRS would not request a bond from *ABC*. However, if at some point *ABC* fell behind in filing or paying its collected tax returns, then the IRS could require that *ABC* post a bond to ensure payment of collected taxes in the future. The amount of the bond would relate to the quarterly liability incurred by *ABC*.

The state laws cited above almost uniformly impose the bonding requirement only in sales tax situations.³²⁰ State sales taxes operate in a manner essentially identical to excise taxes on the federal level. In these situations a customer comes to the entity seeking to purchase goods or services. A sales or excise tax exists on the goods or services purchased. The entity selling the goods or services collects the sales or excise tax at the time of the purchase of the goods or services, and then holds the tax so collected for the governmental unit to which it relates.

In these situations the entity actually received money from a third party that it holds in trust. Cold hard cash, or its electronic equivalent, exists in the bank account of the entity collecting such payments. In contrast, employment taxes do not involve the receipt of a payment from any outside source. In the employment tax context, the entity makes payroll and pays its employees wages in the contracted amount at the contracted time. At the time of the payment of the wages, the entity takes on an obligation to pay over to the appropriate governmental unit an amount equal to the withheld income and social security taxes credited to each employee at the time of the payroll payment. The entity holds the withheld income and social security taxes in trust for the governmental unit; however, there may or may not actually be any "cold hard cash" associated with the trust the entity holds for the governmental unit. In some situations, entities will set up separate trust bank accounts and deposit into those accounts the amount of money necessary to fund the employment tax trust. In many situations, the entity simply has an entry on its books that it owes the governmental unit a sum certain for the withheld income and social security taxes, but no actual dollars are set aside and the entity may have no cash reserves with which to pay the collected taxes.

The sales tax situation involves the entity actually holding a third party's money paid to the entity to hold in trust, whereas the payroll tax situation involves a sometimes fictional trust in which the entity never actually deposited dollars and certainly does not hold money belonging to third parties for the payment of the trust liability.³²¹ Therefore, a question exists as to whether a distinction can be drawn between the two types of collected tax situations for purposes of imposing a bond or requiring other actions. States seem to have drawn a distinction between collected taxes that a business entity receives in hand, e.g., a sales tax, and a collected tax a business entity should establish, e.g., employment taxes. The distinctions states have drawn contain no discussion of why states do not require a bond

for unpaid employment taxes. States have simply created laws only applicable to sales taxes even in states in which both sales and employment taxes exist.³²² This proposal does not recognize the distinction between sales and employment taxes for purposes of setting up a bond requirement. Both situations involve taxes collected for a governmental unit. The fact that in one situation the entity holds money coming from third parties for the governmental unit and in the other it holds money the entity itself must set aside does not seem an adequate basis for distinguishing between the two situations for purposes of determining whether a bond requirement advances the collection of the unpaid collected tax.

Section 6672 has a rarely used provision that an individual tagged with the liability under that section can use a bond to forestall collection on the liability while a lawsuit for refund takes place.^{323,324} The bond described in section 6672 (c) occurs totally at the discretion of the individual allegedly responsible and occurs after non-payment of the collected tax has resulted in a section 6672 assessment. Almost no one used this provision before 1998 because the IRS had a policy of generally not collecting on the section 6672 liability while the refund action played out. However, with the passage of IRC section 6331 (i) as a part of the Revenue Reform Act of 1998, collection action during a refund proceeding for a divisible tax essentially became impossible absent jeopardy or consent by the taxpayer.^{325,326} Nothing in section 6672 or the employment or excise tax provisions allows the IRS to require a bond of certain individuals or entities, even if those individuals or entities have demonstrated in the past that they do not timely file the appropriate returns and pay the collected taxes.³²⁷

The bonding requirement provides incentives for entities to remain current on their payments to the IRS for collected taxes since no bond is needed for entities that remain current. A new entity would not need to post a bond to ensure payment of its collected taxes unless the IRS had concerns about the entity's ability to timely pay the collected taxes. Such a concern, in a new entity, would arise if one or more of the individuals identified as responsible for that entity had a previous section 6672 assessment. Assuming none of the responsible officers had a previous section 6672 assessment and the entity had no history of noncompliance with payment of collected taxes, the IRS would generally not seek to impose a bond unless some demonstrated concern about payment of the collected taxes existed.³²⁸

If an entity fell behind in filing the returns for collected taxes or paying the collected taxes, then the IRS could impose a bond on the entity to ensure payment of the taxes. The decision to require the posting of a bond would belong solely to the IRS. The amount of the bond should relate to the amount of the collected tax exposure the IRS faces. Current section 6672 (c)(3) sets a good limit on the bond. It requires a person assessed a section 6672 liability to post a bond equal to one and one-half times the amount of the assessed section 6672 liability. A similar

limit of one and one-half of the unpaid collected taxes due from the entity for past quarters and projected due from the entity in the quarter in which the bond imposition occurs would serve as an adequate safety net for the IRS. The trigger for the imposition of the bond could be a letter from the IRS to the entity notifying the entity of the unpaid collected taxes, calculating the necessary amount of the bond, and giving the taxpayer fifteen days to obtain the bond and provide proof to the IRS of its existence. The failure to obtain and present the bond within fifteen days after notification could trigger the right of the IRS to obtain an injunction requiring cessation of all business activities to avoid further increases in the amount of the unpaid collected taxes.³²⁹

Another aspect of the bonding requirement concerns termination of the bond upon timely performance of the taxpaying obligations over a period of time. At least one state that requires the posting of a bond in certain circumstances allows the bonding requirement to lapse after the entity has met its collected tax obligations for a specified period.³³⁰ The federal statute should adopt a similar lapsing provision to provide an incentive to entities to meet their obligations and thereby reduce their operating costs.

The bonding statute should have a triggering mechanism tailored to the overriding concern in the collected tax arena—pyramiding of liabilities. Frequently, the IRS has no basis for closing a business that engages in pyramiding and it can do nothing to collect from the entity as the entity continues operations but does not pay over its collected tax obligation. This means that the government subsidizes the continuation of the entity with little or no expectation of ever receiving payment on the collected taxes.

Entities that do not pay their employment taxes for more than one quarter or that have an outstanding collected tax liability in excess of \$10,000 (or some other number sufficiently high to raise concerns about pyramiding) should be subjected to the bonding requirement. If the bonding requirement applies the IRS can contact the entity in person or by certified mail and request the posting of a bond. The taxpayer would have fifteen days (or some other relatively short period of time) to obtain the bond and notify the IRS of its procurement.

The bond would remain in place until the taxpayer cured the outstanding liability and kept current on its collected tax liability for two consecutive quarters. If the liability was satisfied and the taxpayer kept current, then the IRS would release the taxpayer from the bond obligation. If the taxpayer incurred further collected tax liabilities while the bond was in place, then the IRS could call the bond and liquidate it to satisfy all outstanding federal tax liabilities of the entity. To continue operations the taxpayer would need to post a new bond, within fifteen days after liquidation of the first bond, equal to twice the first bond.

In situations in which the taxpayer was notified by the IRS of the need to post a bond or in which a bond was liquidated, the failure of the taxpayer to purchase

a bond as required would trigger for the IRS the right to seek an injunction. The injunction would prohibit the business from incurring further collected tax liability without first paying the outstanding balance on the current collected tax liability and posting a bond to insure proper payment in the future.³³¹

For the injunction process to be effective, it should involve a summary proceeding similar to a summons enforcement action.³³² The proof required to obtain the injunction should require merely a transcript of account demonstrating a collected tax liability in more than one quarter or an outstanding collected tax liability in excess of \$10,000 together with proof of the mailing or hand delivery of the request for a bond and the refusal or failure to procure the bond. Once the IRS proved the existence of the liability, the request for the bond and the failure on the taxpayer's part to procure the bond, the federal district court should enjoin the taxpayer from further operation until the payment of the liability or the posting of an appropriate bond. In this manner the IRS would have the tools necessary to stop further pyramiding of the collected tax liability.

The bonding requirement conforms not only with current trust law but also with the literature on incentives. As mentioned above, many trustees, particularly trustees having control over large amounts of money, must post a bond even if they operate within a bank that has handled trust matters for hundreds of years. Requiring a bond for tax collection trustees who have demonstrated a problem with timely meeting their obligations seems only logical as a method for controlling a group of trustees that the IRS has no choice in selecting. The existence of bonding requirements for entities also provides an incentive for entities collecting taxes to meet their obligations to avoid the bonding requirement, or to rid themselves of the bonding requirement if already imposed.³³³ Coupling the bonding requirement with the ability of the IRS to obtain an injunction provides teeth to the bonding requirement. The goal of this provision is to stop pyramiding at the earliest possible point and to avoid having to seek collection from an entity that probably has nothing from which to collect.

This requirement will impose burdens on both the taxpayer and the IRS. Entities hit with the bonding requirement will face a significant burden because of the cost of posting a bond. This burden may lead to some business closures at an earlier point than would otherwise occur. The implementation of the bonding requirement will also impose additional administrative duties on the IRS although the increased compliance brought about by the bonds may, on the whole, decrease the administrative burden the IRS faces with respect to collected taxes.

The bonding proposal requires legislative action both to create the bond and to create an enforcement mechanism through the injunction. Significant administrative rules as well as structure will also be necessary to implement this proposal.

Eliminate the Withholding and Social Security Credit for Responsible Individuals Who Fail to Pay the Entity's Collected Employment Taxes

The current system rewards individuals who make decisions causing the entities they control to fail to pay over collected employment taxes. While the reward received by these individuals may not itself create an incentive to fail to pay the employment taxes, the manner in which the failure manifests itself on the individual's return certainly does not deter future failures. A change is needed in the system for crediting individuals for withheld income and social security taxes to eliminate the benefits available to those who cause these taxes to go unpaid.

This proposal seeks to eliminate the credit for income and social security tax payments received by employees of an entity if those employees were responsible for the failure of the entity to pay over the collected taxes. Currently, IRC section 31 grants a credit to all employees for the amount of income and social security taxes withheld from their paychecks.³³⁴ The credit should not extend to individuals who caused the collected taxes not to be paid. This proposal would eliminate the credit for responsible officers if the return on which the collected taxes are reported is not timely filed and all taxes shown thereon are not timely paid.

Perhaps the best way to illustrate the current system is through an example. The circumstances at *ABC, Inc.*, introduced above, can also work for this illustration.

Assume that George serves as the President and Chief Executive Officer of *ABC* during all quarters of 2008, and that George holds one-hundred percent of the stock of *ABC*. No one other than George has responsibility for the decision of whether to pay the taxes collected for the IRS over to it. When the IRC section 6672 assessment occurs for *ABC*'s unpaid collected taxes, the assessment will only be made against George.³³⁵ In addition to his ownership of the company, George also serves as one of the twenty-five employees of *ABC* making \$500 per week for his work.

During each week in 2008, *ABC* holds out \$50 of income tax and \$25 of social security tax from George. The total amount of income tax withheld during 2008 is \$2,600, and the total amount of social security tax withheld is \$1,300. *ABC* issues George a Form W-2 at the conclusion of 2008 showing his wage income of \$26,000 together with his withheld income and social security taxes. George files his return for 2008 showing the income reported on the W-2 and claiming credit for the withheld income tax. A report goes to the Social Security Administration (SSA) showing the total amount of compensation George received in 2008 together with the social security contribution made by him through his employer. George

receives credit from SSA for the four quarters he worked in 2008 and he also receives credit on his 2008 income tax return for the withheld income taxes.^{336,337} George individually receives credit from SSA and from the IRS even if *ABC* never ends up paying the collected taxes to the IRS and the IRS never collects these taxes from George pursuant to section 6672.

In this situation, George receives a significant benefit from the government, the government receives nothing, and George created the situation in which the government receives nothing. Imagine further that most individuals who hold the position of President and Chief Executive Officer of an entity do not receive the same compensation as the other workers. Usually, the individual who caused the failure to pay the collected taxes receives the highest compensation of all of the employees. While it makes sense to credit all of the non-responsible employees whose taxes the company withheld, it does not make sense to provide this benefit to the very individual (or individuals in the case of more than one responsible officer) who caused the problem in the first place. For the “innocent” employees, they had no choice concerning the withholding of the tax from their paychecks and no choice concerning the failure of the company to properly remit the collected amount to the IRS. The company served as the agent of the IRS and not of the individual “innocent” employees.

In contrast, the individual responsible for failing to pay over the collected taxes had total control. That individual, acting through the entity, served in a position of trustee. That individual breached the trust. That individual made the decisions causing the failure to remit the collected taxes to the IRS. That individual should not receive a reward for these failures by having the unpaid collected taxes credited to his or her account. Instead, that individual should bear the burden of the loss as a consequence of the actions. How can that individual properly bear the burden created by their actions? Eliminate IRC section 31(a) with respect to the responsible person for withholding taxes and eliminate the parallel provision with respect to the withheld social security taxes.^{338,339} Make the individual personally responsible for payment of these taxes prior to delivery of any benefits under social security for those quarters or any benefits for withheld income taxes.

These benefits should be eliminated for each quarter in which the entity does not timely file the appropriate return and remit the full amount of the collected taxes. Any shortfall in remission of the collected taxes should be treated as the failure to pay the taxes withheld from the responsible officer(s). As a consequence, the late filing of the employment tax return by the entity (absent reasonable cause) or the late payment of the taxes reflected on the return (absent reasonable cause) will result in the loss of the credit for withheld income taxes on the return of the individual responsible officer(s), and will result in the loss of any social security benefits for the individual responsible officer(s) for the quarter for which the return was late or unpaid.³⁴⁰

Receiving credit for the withheld taxes not remitted to the IRS provides a significant benefit to those individuals whose actions cause the problem. Eliminating this benefit places consequences on the actions of the individual responsible officer that have immediate and tangible effects. The responsible officer will immediately need to find the funds to pay the personal income tax liability or the IRS will have the right to begin collection of that liability as soon as the assessment occurs on the income tax return. While the first proposal, above, seeks to collapse the long waiting period before collection begins on responsible officers, this proposal will have that effect with respect to a portion of the liability, assuming that the individual timely files an income tax return.

This provision also creates a real penalty for those individuals who fail in their responsibilities to see that collected employment taxes are remitted to the IRS. The current situation provides no penalty for the failure to ensure the payment of the collected taxes and actually provides a perverse incentive since the individual committing the bad act receives the full tax benefit, and the IRS must bear the full brunt of the loss where the tax goes uncollected. Reversing that equation eliminates the inequity of having responsible officers benefit from their actions. With this approach, the responsible officer may never pay the income tax liability and the section 6672 liability may never get paid, but, at least the responsible officer remains liable for both. Further, the elimination of the social security benefits may impact the responsible officer in a tangible way. It reduces the amount of eligible quarters the individual can accumulate. It potentially reduces from the equation "phantom" high earning quarters in which the individual gets credit for high earnings yet the taxes themselves never make it to the social security fund.

These tangible and immediate impacts on an individual may have a benefit in driving the individual's behavior with respect to the collected tax of the entity. The current system, which insulates the individual from their own bad acts at the entity, further fosters a culture of treating the collected taxes as just another liability instead of a liability held in trust. This proposal may cause potentially responsible persons to ensure the payment of the collected taxes because of the direct impact payment has on their personal income tax liability.

If the collected taxes never get paid, this proposal creates logical symmetry between the unpaid collected taxes on the employment tax return and the individual's income and social security taxes. The current system can hardly be justified by anything other than administrative convenience. Allowing the persons who breached their duties as trustees to receive the tangible benefit of a credit for the very taxes they caused to go unpaid is almost impossible to justify.

Even in situations in which the collected taxes eventually get paid, this proposal simply serves as a penalty that seeks to modify behavior and impose a true penalty on inappropriate conduct. The potential loss of the credit on their personal return should create a very tangible incentive to insure timely payment of collected

taxes. The administrative burden on the IRS of administering this penalty should not be great.

This proposal will require a legislative change to section 31 to prevent the crediting of the withheld tax to the responsible officer's individual income tax liability. It will also require a change to the social security laws.

Create an Incentive for the Responsible Officers to Pay the Internal Revenue Code Section 6672 Liability Where More Than One Responsible Officer Exists

A truly perverse system exists today when multiple individuals owe the liability under IRC section 6672.³⁴¹ The system provides exactly the opposite incentive that one would want for a tax collection system. The system can best be described through an illustration. Again, *ABC, Inc.* will supply the background for the illustration.

Assume that three individuals bear responsibility for the payment of the collected taxes at *ABC*. During the first quarter of 2008, *ABC* fails to pay its employment taxes. During the entire quarter, George, Mary, and Bob each had the requisite responsibility and willfulness to make them liable for the section 6672 assessment. A section 6672 liability of \$24,375 is made against each of them on April 1, 2009, and notice and demand made to each of them pursuant to IRC section 6303.³⁴² Then collection begins.

Because of policy statement P-5-14, the IRS treats the section 6672 liability as an alternative means of collecting the unpaid collected taxes and not as a penalty.^{343,344} Therefore, it seeks to collect the liability only once.³⁴⁵ In seeking to collect the liability once, however, it will seek to collect it from each of the three individuals until it obtains full satisfaction of the liability.³⁴⁶

Assume that George sends the IRS \$24,375 which it receives on April 6, 2009; that Mary sends the IRS \$24,375 which it receives on April 7, 2009; and that Bob sends the IRS \$24,375 which it receives on April 8, 2009. Setting aside for purposes of this example the issue of interest and penalties and assuming that \$24,375 provides full remittance, the IRS now has three times the amount it seeks to collect. Since it seeks to collect the tax only once, it will return the excess to the responsible officers, and it has a protocol for returning the excess proceeds.³⁴⁷ The IRS protocol calls for it to send Mary and Bob back the full amount that they paid to the IRS because it keeps the first money that it collects. George has the right, pursuant to section 6672 (d) to sue Mary and Bob

for the right of contribution but no right to refund from the IRS (assuming that he was correctly assessed).

The application of Internal Revenue Manual (IRM) 5.17.7.1.9 creates precisely the wrong type of incentive for people in this situation. This provision essentially states to multiple responsible officers that you are a chump if you choose to pay the liability and you should do everything in your power to avoid paying the liability before your fellow responsible officers do so. Presumably, IRM 5.17.7.1.9 seeks to foster the rule of only collecting once as set forth in Policy Statement P-5-14; however, it promotes in responsible officers a strong desire to do everything in their power to avoid paying the section 6672 liability in hopes that the IRS will collect first from one or more of the other responsible officers. If the reason for adopting IRM 5.17.7.1.9 was to foster the rule of only collecting once, that rule can be honored while still promoting the prompt payment of the collected taxes.

Instead of driving people away from payment, the IRS should adopt a policy that promotes prompt payment of the collected taxes. To do this it could adopt a policy somewhat parallel to the whistleblower provisions that promote individuals to come forward to the IRS with information by providing rewards. Here the goal would be to promote the responsible officers to come forward with early payment in return for a potential reward.³⁴⁸ The potential reward in the multiple responsible officer contexts is the refund of the money paid by the earliest responsible officer to step forward and pay the liability. The IRS should seek to reverse the scenario described in the example above in which George, the first to pay, lost all rights to the money while Mary and Bob, who paid later, had their money returned to them in full.

This proposal suggests that the IRS treat the first person to pay as someone who is eligible for a reward of having all or a portion of the money returned to them should the IRS succeed in collecting from one or more of the other responsible officers.³⁴⁹ This proposal contemplates that the IRS would continue to collect the responsible officer liability from everyone against whom it was assessed. Collection efforts in this regard could be fairly passive such as filing the notice of federal tax lien and making offsets. Even these relatively passive efforts have the result of bringing a fair amount of money into the IRS coffers. The goal of continued collection allows the money recovered from the responsible officers who did not pay first to be refunded to the responsible officer who paid first. Through this mechanism the responsible officer paying first has the potential to fully recover and the IRS stands indemnified from the time of the payment by the first responsible officer. A further incentive could be created if the late payment penalties recovered from the later paying responsible officers were given to the first paying responsible officer as a bonus for paying first.

All of this could be accomplished without significant collection effort by the IRS other than filing the notice of federal tax lien and making available offsets. The IRS has no responsibility to take enforced collection action against the later paying

responsible officers, although the IRS could take such action if it so chose. The IRS could also file claims in bankruptcy if one or more of the responsible officers filed bankruptcy petitions. The responsible person paying first has no guarantee that the other responsible officers will pay and that through such payments some or all of the money paid over will be returned as a refund, but at least the first paying responsible officer has a chance for that to happen and an incentive to pay quickly to reap that potential benefit. This proposal maintains the ability of the first responsible office to seek contributions from the other responsible officers as an alternative to seeking a refund from the IRS as it collects their payments. This proposal does not change the policy of only collecting the unpaid collected tax once. It simply modifies the manner in which the one payment is achieved by providing an incentive for one of the responsible officers to pay quickly and serve a role that is essentially that of guarantor.

The early payment proposal should effectively guarantee the IRS payment of the collected taxes in those situations in which someone steps forward. By providing an incentive to pay and removing a significant impediment to payment, this system should greatly increase collection effectiveness. This proposal should not present a significant burden to either the responsible officers or the IRS. This proposal merely requires a change in the administrative rule concerning the posting of payments.

Conclusion of Structural Change Section

Having created a largely successful structural system of using business entities to collect federal taxes directly from the parties subject to the tax, Congress and the IRS have failed to devise a structure that will insure the business entities that collect these taxes actually pay them over to the IRS. The proposals herein seek to begin a discussion designed to create an appropriate structural system that ensures the IRS ultimately receives payment. The variety of the proposals addresses the variety of reasons for non-payment. Giving thought to creating the proper structure to ensure payment should help in reducing this corner of the tax gap.

Charge Interest and Penalties to Responsible Officers Based on the Liability of the Entity for Unpaid Collected Taxes—Accountability

As will be discussed in more detail below, almost 100 years ago Congress reacted to the circumstance of entities that collected customs duties for the United States and failed to pay those collected taxes over to the United States by enacting a criminal penalty for such behavior. The criminal penalties soon expanded to include civil penalties as well. Those civil penalties permit the IRS to assert a liability against all parties responsible for failing to pay over the collected taxes. This “civil penalty” is

not a true penalty but rather a collection device designed to permit recovery of the unpaid collected taxes. As a result of the placement of this responsible person liability in the Internal Revenue Code during the 1954 codification process, interest does not run on this liability due from the responsible persons until the separate assessment occurs with respect to each responsible person. The uncoupling of interest and penalties from the liability of the entity liable for the payment of the collected taxes creates incentives harmful to the effectiveness of this provision.

Proposal

Charge interest and penalties to responsible persons of entities that fail to pay over collected taxes equal to the interest and penalties for which the entity itself is liable. By charging interest and penalties to responsible persons equal to the amounts charged to the business entity, the purpose of the statute to recover the unpaid collected taxes receives fulfillment. Additionally, incentives for responsible persons to delay assessment are removed as well as incentives to pay state taxing authorities who currently charge interest and penalties back to the business entity due date for collected taxes.

Operation of 6672

Sections 3102(a) and 3402(a) obligate every employer to withhold (or collect) from its employees' wages income and social security taxes.³⁵⁰ The statutes require the employers to pay over to the Treasury these collected taxes and section 7501 (a) provides that these collected taxes constitute a special trust fund for the benefit of the United States.³⁵¹ The term "person" used in 7501 (a) means the employer and "person" for this purpose is defined by 7701 (a)(1) to mean an individual, a trust, estate, partnership, association, company or corporation.

Section 7501 (b) provides that persons violating the trust established in 7501 (a) bring into play the penalties imposed in 6672 and 7202. Section 7202 provides criminal sanctions for failure to pay over collected taxes in certain circumstances.³⁵² IRC 6672 lays out what the code describes as a civil penalty but which acts as a collection device.³⁵³

Section 6672 is sometimes called the Trust Fund Recovery Penalty (TFRP) and in other instances the responsible officer penalty or 100 percent penalty. The TFRP label derives from the fact that the taxes collected by the company constitute a trust for the United States and that 6672 seeks to provide an alternate means of recovering the trust fund when the company does not pay over the monies held in that trust. This article will use the term "collected tax" rather than trust fund to describe the taxes collected by the company and not paid over to the United States. While the article will focus its discussion on income taxes withheld by employers,

the types of taxes in which the government uses third parties to collect spans a broad range making collected tax a more appropriate term than simply withheld taxes or trust fund taxes.³⁵⁴ Also, the term trust fund tax implies that a trust exists when, in fact, it often does not because the trust res does not exist or has not been identified.

The responsible officer penalty label comes from the person to whom the penalty applies. This article will use the term responsible officer to describe the persons who meet the tests in section 6672 for piercing the corporate veil and imposing derivative, personal liability. The term responsible officer penalty will not be used to describe 6672 except as its use comes from specific case language. Similarly, the term 100 percent penalty derives from the imposition of a liability upon responsible officers equal to 100 percent of the unpaid collected tax. Except for occasions when use of that term comes from specific case language, this article will not refer to 6672 with the term 100 percent penalty.

Collection of taxes through withholding operates as an efficient and effective means of collecting taxes; however, when the business collecting the taxes has cash flow problems, the collected taxes which the business should hold in trust for the government become a potential source of salvation that proves too tempting for some to resist.³⁵⁵ Typically, the business owner faced with an inability to meet ongoing expenses and a bank unwilling to extend further credit seeks a “short” term solution by not paying over to the government the funds it holds or should be holding in trust.³⁵⁶ Unlike other creditors who know the taxpayer’s business and who are generally quick to react to nonpayment, the government responds slowly to nonpayment. This slowness may encourage the business to continue the practice of nonpayment of the trust fund taxes in the mistaken belief that either the business will soon turn around or the government does not care about the nonpayment. When the government finally arrives to recover the taxes due to it, the unpaid tax bill for collected taxes has reached levels the business cannot repay. The business ceases to exist leaving a large unpaid bill to the government for the taxes it “held” in trust.

It may help in the overall understanding of what happens in these cases to look at the situation briefly from the government’s perspective. The IRS does not know how much income tax each company withholds during a specific quarter until the company files its quarterly employment tax return. With the possible exception of some very large corporations or corporations with past delinquencies, no one at the IRS monitors the daily, weekly, monthly or quarterly practices of a particular company with regard to the payment of the income taxes collected from its employees. If a company files a tax return and on that return it lists a liability for which it does not remit payment, the IRS will assess the liability reported on the return and initiate the collection process. If a company fails to file a return, the IRS will usually notice that failure within a few months and initiate the collection process. Even the initiation of the collection process does not mean that an

actual person will make contact with the company for weeks or months after the collection process begins because correspondence will usually occur first followed afterward by the assignment of a human.³⁵⁷ This explanation of the typical process merely shows how a company that has collected taxes for payment over to the IRS could fail to pay the collected taxes over to the IRS for a reasonable period of time before the IRS will enter the scene and demand its money. It is easy to contrast the IRS action with trade creditors and commercial creditors who usually notice non-payment much sooner. Consequently, a company experiencing cash flow problems may naturally tend to keep current with trade and commercial creditors and delay on payment of the collected taxes.

At this point IRC 6672 comes into play. Section 6672 allows the IRS to impose a liability, labeled a penalty, equal to the unpaid collected taxes on those persons who were (a) responsible for the payment of the collected taxes to the government and (b) willful in their failure to pay the trust fund taxes over to the government. The IRS may assess more than one person if more than one person meets the statutory tests.³⁵⁸ The IRS policy takes the view that the unpaid trust fund taxes should be collected only once.³⁵⁹ Even though it is possible for several people to be assessed the 6672 liability, the IRS will usually first attempt to collect from the entity that incurred the liability.³⁶⁰ In circumstances in which the IRS cannot collect from that entity, it will turn its enforcement mechanisms toward the responsible officers usually collecting from the responsible officer who presents that easiest case for collection.³⁶¹ If the IRS collects full payment from the entity or from one of the responsible officers, then it will stop and not seek collection further.³⁶² If the IRS collects from more than one responsible officer and collects more than the total liability for collected taxes, then it will refund the excess to the person(s) from whom it collected after it received full payment.³⁶³

It is not uncommon for the inquiry into the liability under IRC 6672 to take several months after the taxes were due and the inquiry itself lasts several months longer. So by the time the IRS makes an assessment against a responsible officer, one or two years have passed since the return for the collected taxes was due and since interest (and penalties) began accruing on the underlying tax obligation of the entity.³⁶⁴

This paper presumes collected taxes went unpaid by the entity and that one or more persons were responsible for that underpayment. As mentioned above the tests for who is liable for the IRC 6672 penalty involve both responsibility and willfulness. Much has been written on these tests and on other aspects of this liability; however, for purposes of the discussion in this paper, liability exists leaving the question of payment and more precisely the payment of interest on the obligation.³⁶⁵

An Example

The example below illustrates the manner in which collection of the 6672 liability is collected in the current system.

ABC, Inc. employs 50 people. It has a quarterly payroll of \$300,000. *ABC's* management is led by Bob Smith, President; Mary Jones, Vice President and John Doe, Treasurer. For the first quarter of 2008, *ABC* experienced a sharp dip in orders due to a recession in the U.S. economy. The dip in orders led to cash flow problems at *ABC*. Bob, Mary and John met to discuss the cash flow problems. They decided that *ABC* could keep afloat without incurring significant additional bank debt if it delayed paying the payroll taxes to the IRS. So, instead of paying the \$75,000 in payroll taxes to the IRS, *ABC* mailed in its quarterly Form 941 reporting this amount of liability with no remittance. The \$75,000 in payroll taxes consist of three parts: the employer liability, withheld social security taxes and withheld income taxes. For purposes of this example, the withheld income taxes make up \$50,000 of this amount in each of the quarters and the amount of the withheld social security taxes, also a collected tax subject to 6672, is ignored.

Although *ABC's* management expected an upturn in the second quarter that would allow them to catch up with the missed payment, things only got worse. Consequently, they again decided not to send into the IRS the payroll tax payment for the second quarter which again would have totaled \$75,000. The IRS continued not to bother the company. Management knew things would get better and that in the 3rd quarter, they would catch up. Unfortunately, orders continued to decline as the year progressed. *ABC* was again unable in the 3rd quarter to pay its payroll taxes of \$75,000. Other bills were also being delayed or being left unpaid. Creditors were calling at an ever increasing pace. Finally, in late September, *ABC* heard from the IRS asking where the payroll taxes were for the first three quarters. When *ABC* did not immediately pay the back payroll taxes, the IRS filed a notice of federal tax lien on September 25, 2008. The filing of that notice triggered the termination of the company's line of credit with the bank. Without that line of credit and with no ability to replace it, *ABC* could no longer meet payroll or pay for new goods. *ABC* closed its doors on September 30, 2008.

At that time, it owed \$225,000 in payroll taxes of which \$150,000 stemmed from income taxes that it withheld from its employees.

In March 2009, having concluded that *ABC* could not pay the back payroll taxes, the IRS investigated *ABC* to determine why it did not pay its payroll taxes. The IRS determined that the failure to pay was due to decisions made by John, Mary and Bob. The IRS asked John, Mary and Bob to consent to the assessment of the 6672 penalty against them. Each of them told the IRS that they were not responsible for failing to pay over the withheld income and social security taxes withheld from the wages of the employees of *ABC* and that the problem was a direct result of decisions made by the other two parties. Each officer appealed the IRS determination of responsibility to the Appeals Office. In October 2009 a conference was held in the IRS appeals office with respect to each of their cases. The information exchange with the appeals officer and the time it took him to reach a conclusion meant that the decision to hold Bob, Mary and John liable under IRC 6672 came in February, 2010. The assessment against each of them for \$150,000 was made on April 30, 2010, two years after the due date of the return for the first quarter for which the withheld payroll taxes were not paid.

Interest Analysis

Interest begins running on each of Bob, Mary and John's 6672 liabilities on April 30, 2010, the day of the assessment of the 6672 liability. The liability of *ABC* for these employment taxes arose on the payment of the employee wages. A failure to deposit penalty could be imposed against *ABC* beginning on the due date of the payment of the employment tax. That due date depends on the amount of the payroll. The due date of the return for each quarter marks the day on which interest begins to run against *ABC* on the outstanding employment taxes. The quarterly return is due on the last day of the month following the end of the quarter. For the quarter ending March 31, 2008, the liability for interest began running on April 30, 2008.

For purposes of this illustration, the amount of interest reflects only interest on the withheld income tax portion of the employment tax liability. Interest on \$50,000 from April 30, 2008 to April 30, 2010, at the applicable rate (using 5 percent simple interest for all quarters) would be \$5,000.³⁶⁶ Interest on the liability for the second quarter would run from July 31, 2008 and at the applicable rate would be \$4,380. Interest on the liability for the third quarter would run from October 31, 2008 at the applicable rate would be \$3,760. The total amount of interest due from *ABC* on the employment tax liabilities for these three quarters as of April 30,

2010, would be \$13,140. As of April 30, 2010, Bob, Mary and John owe \$0 in interest for the employment tax liabilities assessed against them with respect to the first three quarters of 2008 because the 6672 liability is treated as an assessable penalty for which interest does not begin until the liability is assessed.

The tax and interest liabilities in table form are as follows:

TABLE 2

Period	Unpaid Employment Taxes	Withheld Income Tax Portion of Employment Taxes	Interest on Withheld Tax, Due Date of Return to Assessment of 6672 Liability
1st Q 2008	\$75,000	\$50,000	\$5,000
2nd Q 2008	\$75,000	\$50,000	\$4,380
3rd Q 2008	\$75,000	\$50,000	\$3,760
Total	\$225,000 ¹	\$150,000 ²	\$13,140 ³

¹ Total unpaid employment taxes due from ABC.

² Total amount of unpaid employment taxes due from ABC that represents collected taxes. This is the amount for which responsible persons may be held liable pursuant to I.R.C. § 6672.

³ Total interest owed on the unpaid collected taxes between date the liability arose—the due dates of the employment tax returns—and the date of the responsible officer assessments—April 30, 2010. This amount represents the amount owed by the entity for failing to pay over the collected taxes that is not charged under current federal law to the responsible officers because the liability of responsible officers for interest does not start until the date of the 6672 assessment while the liability of the entity for interest runs from the due date of the return. This chart does not display other liabilities that would be due from the corporation that are not charged to the individual responsible officers under existing federal law but are charged to the individual responsible officers under the laws of most states. These liabilities are the failure to deposit penalty and the failure to pay penalty. The failure to deposit penalty arises under I.R.C. § 6656(a). The failure to pay penalty arises under I.R.C. § 6651(a)(2). In the aggregate these penalties would almost always exceed the amount of unpaid interest.

As is seen in this example, the savings to the responsible officers resulting from the delay equals \$13,140. The current system not only causes the Treasury to forego revenue for the time value of money on the unpaid taxes, it also makes the administration of the laws much more difficult because the IRS must use its investigative powers to identify the individuals responsible for the failure to pay the employment taxes while those individuals do little to work with the IRS to resolve the matter.³⁶⁷ Instead, they will do everything in their power to avoid resolving the matter since resolution not only means they have been tagged with the liability but also that the liability no longer exists in an interest-free setting.

Purpose of 6672

The legislative history of 6672 traces back to a penal statute. The penal nature displays itself in both civil and criminal manifestations. This history supports a reasonable inference that 6672's location in the 1954 Code in the assessable penalty

provisions followed, or at least did not contradict, the purpose of the statute as developed in the decades prior to codification. In contrast to the legislative history, the purpose of 6672 as expressed in Congressional policy, in IRS policy and in court decisions is simply that 6672 serves as a backup mechanism for insuring payment of collected taxes. Furthermore, the Congressional, IRS and court expressions on the policy of 6672 make clear that this statute does not create a separate liability.

Legislative History

Penal provisions imposing criminal liability for failure to pay over collected taxes were created in the Corporate Excise Tax Act of 1909.³⁶⁸ Section 6672's history flows though the Revenue Act of 1916 shortly after the establishment of the modern tax system following the passage of the 16th Amendment.³⁶⁹ Like many tax provisions it traces this part of its history directly to a war—in this case World War I. Congress passed a criminal penalty which applied to violations relating to the failure to pay of certain excise taxes.³⁷⁰ At that time withholding of income taxes did not exist and excise taxes provided a substantial portion of the total federal tax revenues. Because this segment of 6672's history manifests itself as a criminal provision, interest did not come into play.

The statute provided:

“That whoever fails to make any return required ... or who makes any false or fraudulent return, and whoever evades, or attempts to evade any tax ... or fails to collect or truly to account for and pay over any such tax, shall be subject to a penalty of not more than \$1,000, or to imprisonment for not more than one year or both, at the discretion of the court, and in addition thereto a penalty of double the tax evaded, or not collected, or accounted for and paid over, to be assessed and collected in the same manner as taxes are assessed and collected in any case in which the punishment is not otherwise specifically provided.”³⁷¹

In the Revenue Act of 1918, Congress enacted section 1308 creating three tiers of civil and criminal penalties applicable to non-compliance with excise taxes.³⁷² The first tier, the civil tier, provided for a monetary penalty of up to \$1,000. The statute does not specifically tie the penalty to an amount of unpaid tax and in that respect looks more like a “regular” penalty.³⁷³ The second tier began the criminal sanctions by creating a misdemeanor liability.³⁷⁴ The third tier most closely resembles the current 6672 except that this third tier imposed a criminal liability. It hit the offending party with a “penalty of the amount of the tax evaded, or not paid, collected or accounted for and paid over....”³⁷⁵

The Revenue Act of 1924 made further changes.³⁷⁶ The changes continued to move the language toward the current language and “except for the minor phrase reversal from ‘any person who willfully fails’ of the 1924 Revenue Act to ‘any person required to collect, ... who willfully fails to collect’ of present section 6672, the Revenue Act of 1924 represents the last substantive amendment to the language of what became section 6672.”³⁷⁷

In 1935, the passage of the Social Security Act expanded the scope of the penalty for failure to pay collected taxes making it applicable to unpaid Social Security taxes collected at the source in addition to excise taxes.³⁷⁸ This penalty was codified in 1939 and “remained intimately and exclusively related to the criminal sanctions until its ‘civil’ pigeonholing in the 1954 Code.”³⁷⁹

In the same year it passed the Social Security Act, 1935, Congress brought into the Internal Revenue Code the predecessor of current section 7501.³⁸⁰ Section 7501 provides that “the amount of tax so collected or withheld shall be held to be a special fund in trust for the United States.” The goal behind the statute centered on a desire to make administrative assessment and collection provisions available and to provide further protection for the collected funds.³⁸¹

Just as World War I caused Congress to create the criminal penalty predecessor of 6672, World War II inspired another change which significantly impacted the penalty for failure to pay over collected taxes. The Current Tax Payment Act of 1943 created the regime of tax collection from employees that still exists today.³⁸² Congress once again grafted the withholding tax provisions into the penalty regime initially set up for excise taxes expanding this collected tax penalty provision to reach essentially the same provisions it currently covers.³⁸³

The next act in the progression of the collected tax penalty to its modern provision occurred in the codification effort in 1954.³⁸⁴ In this effort the penalty for collected taxes moved into Subtitle F, subpart B—Assessable Penalties of the newly revised Internal Revenue Code.³⁸⁵ The legislative history of 6672 contains basically no explanation concerning the placement of the civil liability creating personal liability for failure to pay collected taxes in the assessable penalty section of the newly revised Code.³⁸⁶ The positioning of 6672 in the assessable penalty subpart of the Code together with the absence of any specific language in 6672 concerning interest has led to the current state of affairs in which interest does not accrue until the liability is assessed. None of the changes to 6672 since 1954 have addressed the issue of interest. Its placement within subpart B of Subtitle F has remained unchanged.

Assessable penalties generally exist separate from taxes imposed under the Internal Revenue Code. Because these penalties do not relate to a specific tax, they do not relate back to a specific return due date or taxable event.³⁸⁷ Assessable penalties generally stand alone as their own separate liability with the exception of 6672. Consequently, a separate interest provision imposes interest from the time these penalties arise—at the time of their assessment.³⁸⁸

Congressional Policy

The expression of Congressional policy concerning 6672 discussed here will focus on the bankruptcy provisions concerning the liability for collected taxes. Congressional policy expressed through the bankruptcy code demonstrates that almost no liability shares the importance of collected taxes.

Creditors in bankruptcy cases basically belong to one of two groups: secured or unsecured. Generally, secured creditors who do not sleep on their rights have little concern about bankruptcy because they look to their security rather than the debtor's solvency for repayment. Unsecured creditors, however, have much to fear from bankruptcy since so many debtors have little or no unencumbered assets with which to repay their unsecured debts. Congressional policy addresses the plight of the unsecured creditors by making some of them more equal than others. The provisions that differentiate unsecured creditors come in two forms: priority status and exceptions to discharge.

Bankruptcy code section 507 (a) sets forth a list of unsecured creditors that Congress has designated as entitled to payment before other unsecured creditors. Placement of an unsecured creditor on this list significantly improves its chances of receiving payment through the bankruptcy proceeding. The higher on the list created by 507 (a) an unsecured creditor achieves, the more likely it will receive payment.³⁸⁹

In a similar manner bankruptcy code section 523 (a) creates a list of unsecured creditors whose debts Congress has determined receive an exception to discharge. Creditors on this list may continue to seek collection from individual debtors even after the individual debtor has obtained a discharge from the bankruptcy court.³⁹⁰ Every unsecured creditor wants recognition on this list because the "next best thing" to receiving payment through the bankruptcy estate is having the continued ability to pursue collection after discharge. Some unsecured creditors have sufficient fortune or influence to have their debt recognized as both a priority debt and one excepted from discharge.³⁹¹

With the exception of the liability imposed by 6672, assessable tax penalties do not make the priority list in bankruptcy code section 507 (a).³⁹² An unsecured claim for an assessable penalty receives general unsecured classification rather than receiving any priority. Assessable penalties and tax penalties in general receive even worse treatment than a general unsecured classification for cases administered under chapter 7.³⁹³ In chapter 7 cases, these penalties only receive payment after all general unsecured claims have been paid.³⁹⁴ This subgeneral unsecured classification even applies to penalty claims for which a notice of federal tax lien was filed and would, except for their origin in the penalty provisions, receive secured status.³⁹⁵

Although assessable penalties do not receive priority claim classification, they do receive an exception to discharge pursuant to B.C. 523 (a)(7).³⁹⁶ To qualify for

an exception to discharge, an assessable penalty must relate to an act or a return due date that occurred within three years before the filing of the bankruptcy petition. The exception to discharge that applies to assessable penalties arises under a different subparagraph than the exception to discharge applicable to 6672. The exception to discharge applicable to 6672 is much preferred because of the lack of a time limitation.

As further discussed below, the treatment of the liability imposed by 6672 is not only different and more favorable than the treatment of other assessable penalties, it is more favorable than the treatment of almost any other unsecured liability. This special treatment appears to result from Congressional recognition of the importance of the payment of collected taxes.³⁹⁷

A debate concerning the treatment of 6672 in bankruptcy occurred in the late 1950s and early 1960s when proposals were pending in Congress to reform the discharge provisions to reduce or eliminate the broad exception to discharge then available to taxes.³⁹⁸ In 1961, Assistant Secretary of the Treasury Stanley S. Surrey wrote to Senator Eastland, the Chairman of the Senate Committee on the Judiciary:

“Delinquency in this area has increased in recent years, and the Department considers it most undesirable to permit persons who are charged with the responsibility of paying over to the Federal Government monies collected from third persons to be relieved of their obligations in bankruptcy when they have converted such monies for their own use.”³⁹⁹

In 1966 Congress did scale back the discharge exception previously granted for taxes but added subsection (e) to Section 17a(1) of the Bankruptcy Act.⁴⁰⁰ Prior to the 1966 amendments, all taxes basically benefited from the exception to discharge in bankruptcy. This broad exception provoked significant complaints from the bankruptcy bar and certain commercial interests. With the passage of the amendments in 1966, the exception to discharge for taxes took on a form similar to that carried into the current Bankruptcy Code, that is, the exception primarily applies to taxes incurred within three years of the filing of the bankruptcy petition.⁴⁰¹

A new section 17a(1)(e) provided: “That a discharge in bankruptcy shall not release a bankrupt from any taxes..., which the bankrupt has collected or withheld from others as required by the laws of the United States ... but has not paid over...” As the House Committee explained in reporting out the measure, the purpose of the amendment was “to exempt from the provisions of this bill taxes which the bankrupt has collected or withheld from others under Federal or State law.”⁴⁰² In the House Committee’s view, “[t]he objection of Treasury to the discharge of so-called trust fund taxes has been met by the amendment to this bill.”⁴⁰³ Likewise, the Senate Reports confirm that the purpose of Section 17a(1)(e) was to render trust fund taxes nondischargeable in bankruptcy.⁴⁰⁴

In the 1970s Congress spent several years creating a new bankruptcy code to replace the Bankruptcy Act of 1898.⁴⁰⁵ In creating the new bankruptcy code, Congress reviewed, *inter alia*, the types of unsecured debts that should receive priority status and that should receive an exception to discharge.⁴⁰⁶ Ultimately, the type of debt it singled out for an exception to discharge in 1966, collected and withheld taxes including the 6672 liability, received special recognition in the new bankruptcy code as a priority tax claim and as a claim excepted from discharge.⁴⁰⁷ Not only did 6672 receive priority status under the bankruptcy code enacted in 1978 when no other assessable penalty achieved such status, the liability imposed under 6672, and for any unpaid collected tax, also received better treatment under the bankruptcy code than any other tax of any type.⁴⁰⁸

A taxpayer entering bankruptcy with unpaid income, employment or excise taxes, other than taxes of those types collected from others, essentially has a time limit cap on the life of that liability before it loses its status as an unsecured priority claim.⁴⁰⁹ The time limit essentially makes income, employment or excise taxes older than three years at the time of the bankruptcy petition, general unsecured claims rather than claims entitled to unsecured priority status. Contrast that with the treatment of the 6672 liability and the liability for unpaid collected taxes. A taxpayer entering bankruptcy with unpaid 6672 liabilities has a liability that will receive unsecured priority status no matter how old the 6672 liability is at the time of the bankruptcy petition.

Granting the 6672 liability unsecured priority status no matter its age provides significant recognition of the importance of this liability from Congress' viewpoint. Priority status gives the government a much greater chance to receive payment on this liability from the bankruptcy estate that it would have as a general unsecured claim. The unlimited time period for priority status also means that the 6672 liability will always receive the exception to discharge under B.C. 523(a)(1) while other taxes lose their exception to discharge with age. The combination essentially makes it impossible to get rid of the 6672 liability through bankruptcy. This total protection from bankruptcy evinces a significant policy statement by Congress concerning the importance of this liability. No other tax and almost no other liability receive this type of protection.

In 2005 Congress addressed the protection for the 6672 liability again in order to close a loophole that had arisen through case law. The change in 2005 once again demonstrated Congress' view of the importance of this type of liability. The change occurred in the discharge provisions of chapter 13.⁴¹⁰ Persons liable under 6672 are not always known to the IRS at the time they file a bankruptcy petition because the liability is a derivative liability. Generally, the IRS does not know who has liability under 6672 until it investigates a company after it has failed to pay over the collected taxes. Because the identity of the debtor as a responsible officer is not known by the IRS prior to the bar date, it fails to file a timely proof of claim. The failure to file a timely proof of claim does not affect the exception to discharge in

chapter 7 and 11 cases of individuals because the exception ties itself to the status of the IRS claim and not whether the IRS timely filed such a claim.

The IRS argued for a similar result in chapter 13 but lost that argument in *Tomlan v. United States*.⁴¹¹ The IRS failed to timely file its claim in *Tomlan*. The debtor's plan proposed to pay in full all timely filed priority claims. The District Court found that the plan discharged the debtor's liability under 6672 because of the finality of the plan and the wording of B.C. 1328 (a).⁴¹² The IRS essentially acquiesced in the decision in the publication of its litigation position on the issue; however, it sought to change 1328 (a) when Congress appointed a Commission in 1994 to look into changes to the bankruptcy code.^{413,414} When Congress ultimately passed the laws resulting primarily from the proposals of the Commission in the 2005, those bankruptcy amendments included a provision addressing this concern of the IRS.⁴¹⁵ The result of this process is a change to 1328 (a) that prevents discharge of the liability imposed under 6672 in a chapter 13, whether or not the IRS files a timely claim.

Congressional policy toward 6672 as expressed in bankruptcy code provisions from 1966 to 2005 could not more strongly suggest how important Congress views the requirement to pay the collected taxes and how different 6672 is from any other assessable penalty. Its difference comes from its status as an alternate means for the government to collect those taxes which have been collected for it and which should be held in trust and paid over to the government.

IRS Policy

The principal IRS position concerning 6672 comes in policy statement P-5-14.⁴¹⁶ This policy statement currently provides that "[t]he withheld employment and income taxes or collected excise taxes will be collected only once, whether from the business, or from one or more of its responsible persons."⁴¹⁷ This policy statement goes back to 1956.⁴¹⁸ The Supreme Court has cited to the policy statement and to a Comptroller General Opinion based on this policy statement in describing the purpose of 6672.^{419,420}

The policy of the IRS regarding 6672 has remained constant for over fifty years.⁴²¹ The IRS imposes the 6672 liability against all of the persons responsible for the failure to pay a collected tax. Consequently, it may have assessments on its books for the original liability due from a corporation plus one or more assessments of the amount of the unpaid collected taxes against persons responsible for the corporation's failure to pay those collected taxes over to the IRS. Despite having numerous assessments and despite the apparent ability under 6672 to collect the full amount from each party, the IRS has consistently said that it will not use 6672 as a mechanism for collecting the full amount of the unpaid collected taxes from each party assessed. Rather, it takes the view that 6672 is simply a device for

the collection of the unpaid taxes collected by the corporation. It is not a separate liability. As such, the IRS seeks to collect only once from either the corporation or any of the responsible persons.⁴²²

Using the example of Bob, Mary, and John as responsible officers of ABC for three quarters of 2008 for a total of \$150,000 in unpaid collected taxes, an illustration is possible. Once the IRS makes the responsible officer assessments against Bob, Mary and John it will have four assessments on its books for the recovery of this same \$150,000. Because of the policy statement, the IRS links these four accounts in order to insure that it only collects \$150,000 in tax (plus any applicable penalties and interest).⁴²³ This policy leads to the IRS position on repayment of proceeds received in excess of one full payment of the tax. If Bob, Mary and John are each assessed a \$150,000 6672 liability on March 10, 2010, each owes \$150,000 at that moment. Suppose Bob pays the \$150,000 that day at 10 a.m., Mary pays the \$150,000 at 11 a.m. and John pays the \$150,000 at noon. After a thorough investigation to ascertain when the payments were received, the IRS would refund to Mary and John their entire payments leaving Bob as the person who paid it all. If Bob wishes to have Mary and John contribute to 6672 liability, he must bring a separate suit against each of them for that purpose, obtain a judgment and successfully collect on the judgment.⁴²⁴

The IRS policy toward 6672 does not match its policy with respect to any of the other assessable penalties. For all other assessable penalties, the IRS seeks to collect the total amount of the taxes assessed. Unlike 6672, the other assessable penalties are separate and distinct from any taxes to which they may relate. The other assessable penalties perform a penal function rather than a function to recover unpaid taxes.

Court Decisions

Two court decisions provide significant insight into the view courts take toward 6672. These decisions adopt the IRS policy that 6672 exists as a collection device and, in one, reinforce the Congressional policy view concerning the importance of 6672.

*United States v. Sotelo*⁴²⁵

Arising in bankruptcy, *Sotelo* presented the Supreme Court with the opportunity to consider the nature and purpose of 6672. Mr. Sotelo filed his bankruptcy petition in 1973 when the Bankruptcy Act (rather than the current Bankruptcy Code) was in effect. He initially contested the determination that he owed the government pursuant to 6672; however, he did not appeal the determination that he was liable. Instead, he shifted his argument to one based on discharge arguing that the

Bankruptcy Act 17a(1)(e) discharged penalties imposed under 6672. Although he lost at the bankruptcy court and district court level, he prevailed on this argument before the Seventh Circuit.⁴²⁶

First, Mr. Sotelo argued that “the liability described in 6672 itself as a ‘penalty’ and as such had been discharged in bankruptcy.”⁴²⁷ Second, he argued that section 17a(1)(e) of the Bankruptcy Act did not except from discharge the penalty imposed under 6672 but rather excepted from discharge only the liability for collected taxes due from the corporation that incurred the debt.⁴²⁸

The Supreme Court examined both the history of the 1966 amendments to the Bankruptcy Act as well as the purpose of 6672 as it related to the 1966 amendments. Through that examination it determined that the Mr. Sotelo’s 6672 liability was excepted from discharge by section 17a(1)(e) of the Bankruptcy Act.⁴²⁹ It further determined that the penalty label placed on 6672 by the Internal Revenue Code did not matter when the Court analyzed the language and purpose of Bankruptcy Act 17a(1)(3).⁴³⁰ Through this analysis, the Court determined that 6672 acted as a device for collecting the types of taxes described in 17a(1)(e).⁴³¹ As such, simply seeking to label 6672 as a penalty did not advance the taxpayer’s argument because the label did not control the true purpose of 6672 as it related to the discharge provisions in Bankruptcy Act 17a(1)(e).⁴³²

The Court did not explicitly say that 6672 is not a penalty. Instead, it focused on how 6672 operated with respect to the language of the discharge provision. In doing so, the Court did quote from a letter prepared in 1976 by the Comptroller General concerning IRS practices with regard to 6672: “IRS uses the 100-percent penalty only when all other means of securing the delinquent taxes have been exhausted. It is generally used against responsible officials of corporations that have gone out of business.... [I]t is IRS policy that the amount of the tax will be collected only once. After the tax liability is satisfied, no collection action is taken on the remaining 100-percent penalties.”⁴³³

The dissent in this 5–4 decision disagreed strongly that the “taxes” excepted from discharge in Bankruptcy Act 17a(1)(e) equated to the “penalty” imposed by 6672.⁴³⁴ The dissent pointed to the legislative history of 6672 in support of the penal underpinnings of the statute.⁴³⁵ The harsh result that the majority opinion created for the individual business owner by holding the 6672 liability as an exception to discharge was cited as support for the wrong policy direction taken by the majority. In stark terms the dissent described the same bankruptcy result, made much clearer in the legislative history of the Bankruptcy Code that is described above in Section 3.B.⁴³⁶ While the dissent expresses its significant concerns that neither the language of the Bankruptcy Act nor the policies behind it could support the majority’s decision, Senator DeConcini made it clear just a few months later in his explanation of the Bankruptcy Code that the position adopted by the majority in *Sotelo* was the position adopted for the new legislation.⁴³⁷

*Lauckner v. United States*⁴³⁸

The government discovered that Mr. Lauckner met the tests as a responsible officer of AAA Trucking Corporation. The discovery, however, came after the previously presumed date on which the statute of limitations expired for making a 6672. Prior to Lauckner, the government used as the statute of limitation for the 6672 liability the date on which the statute expired with respect to additional assessments against the corporation that failed to pay the collected taxes. In support of its assessment after the date on which one could be made against the corporation, the government argued that 6672 was an assessable penalty and, as such, did not have a statute of limitations on assessment. Mr. Lauckner argued that the assessment was time barred citing the previous position of the IRS concerning the statute of limitations for the 6672 liability.

The only Circuit Court addressing the issue of the statute of limitations on assessment of the liability imposed by 6672 determined that the Government does not have an unlimited amount of time to assess this liability, as with other assessable penalties, but has a limitations period established by the underlying liability with respect to the corporation that collected the unpaid tax.⁴³⁹ This determination, having nothing specifically to do with interest on the 6672 liability, aligns perfectly with the position that interest on the 6672 liability should not look to the interest provisions applicable to assessable penalties but rather to should run from the due date of the return giving rise to the liability.

No specific code section sets out a statute of limitations for the assessment of the 6672 liability.⁴⁴⁰ For many years the IRS took the position that the statute of limitations on assessment of the 6672 liability mirrored the statute of limitations for the underlying tax and ran for three years from April 15th of the year following the end of the quarter in question.⁴⁴¹ This position followed the general rule found in 6501. Section 6501, however, applies to liabilities based on tax returns.

Probably because of a series of victories regarding the statute of limitations in cases under 6700 and 6701, in 1994 the IRS suddenly seemed to come to the realization that 6672 was placed into the Code as an assessable penalty that was not based on a tax return.⁴⁴² It then concluded that 6672 was a statute without a controlling provision with respect to the statute of limitations and made an assessment that would have been time barred under its previous interpretation of the statute of limitations as it applied to 6672.⁴⁴³

To support its “new” position, the IRS made numerous arguments, all of which were rejected. First, the IRS argued that the 6672 liability constitutes a “separate and distinct” liability from the IRC 3403 liability imposed on the employer.⁴⁴⁴ The opening paragraph of the *Lauckner* opinion sets the tone for the court’s view of the Government position; however, its rejection of the Government’s position stems from exactly the reasoning that supports imposing interest on the responsible officer equal to the interest on the entity. In describing the nature of

the liability under 6672, the court stated “[a]s of the moment payment was due and not made, both the employer and any responsible officer became liable.”⁴⁴⁵

The court found that “it seems clear that courts have based the lower standard of conduct necessary to trigger § 6672 liability [for willfulness] on their understanding, unchallenged until now, that § 6672 functions only as a collection device, not as a truly ‘separate and distinct’ penalty.”⁴⁴⁶ The court went on to hold that the 6672 assessment is separate only for purposes of collection.

The Government argued that “because the responsible person assessed under § 6672 files no return with respect to the assessment, the assessment is not made with respect to any return, and the § 6501 (a) limitations period on assessments is never triggered.”⁴⁴⁷ On this issue the court found, however, that the 6672 liability was in fact based on the employment tax return triggering the running of the statute of limitations under 6501. It examined several cases that had noted ‘no return’ is filed concerning 6672 liabilities and determined that “[t]hese cases do not stand for the proposition that § 6672 penalties are not assessed with respect to any return.”⁴⁴⁸ Therefore, it concluded that to the extent that there was something about 6672 that was “separate and distinct” from the employer liability it was “only for purposes of collection.”⁴⁴⁹ Important for purposes of this article, the court held that “the assessment itself is based on the underlying liability of the employer.”⁴⁵⁰

If the assessment is based on the underlying liability of the employer and is not a separate and distinct liability, then separating the two for purposes of assessing interest makes little sense. The logical point for imposing interest against the responsible officer is the same point when it arises with respect to the corporation since the liabilities are separate and distinct only for purposes of collection.⁴⁵¹ The separateness for purposes of collection describes the separateness of the actual assessment. The IRS creates an assessment for each individual or entity liable for the 6672 liability and has a separate assessment for the person liable for the underlying tax which includes not only the collected taxes but also the employer portion of the liability as well.⁴⁵²

In an Action on Decision dated July, 15, 1996, the IRS acquiesced in the result in *Lauckner*.⁴⁵³ While the sudden change in the IRS position on the statute of limitations seemed to also influence the court’s decision in *Lauckner*,⁴⁵⁴ the basis for its conclusion supports the policy behind the position that the 6672 liability should result in interest running with the employment tax liability to which it is so closely aligned. While the decision in *Lauckner* did not leave the IRS in any worse position than it was in before it realized that 6672 was an assessable penalty just like 6701, the picture now clearly presents 6672 as an assessable penalty with the worst of both worlds. It does not have the unlimited statute of limitations enjoyed by other assessable penalties since it is viewed as being tied to a return; however it does have the interest provisions of 6601 (e), discussed *infra*, with other assessable penalties, denying the running of interest

until the assessment occurs. This is an odd combination of handicaps to place on a liability protecting the funds held in trust for the United States and a liability so important that, unlike any other assessable penalty, Congress gives it not only priority status in bankruptcy but priority status for the life of the collection statute.

The Problem of Interest

As alluded to above, the placement of 6672 in the assessable penalty provisions positions it for treatment with respect to interest that contradicts the purpose of 6672 and that creates a lack of parallel structure with similarly situated taxpayers. To understand how this works requires analyzing the interest provisions.

The Mechanics of the Interest Provisions in IRC 6601

Section 6601 sets out the rules, not the rates, for interest on liabilities imposed in Title 26. The rule for taxes found in 6601 (a) provides that interest runs “from the last date prescribed for payment of the tax to the date on which payment is received.”⁴⁵⁵ The last date prescribed for payment of taxes generally coincides with the due date of the tax return for that tax without taking into account extensions of the date for filing.⁴⁵⁶ For example, the due date for individual income taxes falls on the 15th day of the fourth month following the close of the tax year.⁴⁵⁷ That date, April 15th, starts the running of interest for individual taxpayers for the calendar year that ended immediately prior to that April. If an individual remits payment for a income tax prior to April 15th either by withholding, estimated payments or payment with the return, then no interest accrues with respect to that year’s tax liability (unless a subsequent assessment occurs). If an individual does not remit sufficient funds by April 15th to cover the tax liability for the preceding year, then interest begins to run on April 16th and runs until full remittance reaches the IRS or the IRS abates the tax.

The general rule for interest on income taxes described above also applies to employment taxes. The employment tax return due date comes at the end of the month immediately following the end of the quarter, e.g., April 30th for the first quarter. If the employment taxes due for the first quarter remain unpaid as of the April 30th immediately following the end of the quarter then interest begins to run and continues running until paid.

The rule for interest on assessable penalties follows a different path. The Treasury Regulation interpreting IRC 6601 (e)(2) provides that “interest will not be imposed on any assessable penalty, ... if the amount is paid within 21 calendar days ... from the date of the notice and demand. If interest is imposed, it will be imposed only for the period from the date of the notice and demand to the date on

which payment is received.”⁴⁵⁸ Notice and demand occurs simultaneously with or immediately following the assessment of a liability.⁴⁵⁹ Since 6672 falls into the assessable penalty section of the Code, this provision and not the provision for taxes applies to the running of interest on assessments made pursuant to this statute. That difference appears to result solely from the placement of 6672 in the Code and no explanation for its placement with respect to interest exists in the legislative history of 6672 or 6601.

Problems Created by the Interest Provisions Applicable to 6672

Because of 6672's placement as an assessable penalty and the consequent application of IRC 6601 (e) rather than IRC 6601 (a), three problems exist with respect to the application of 6672. First, the delay in the running of interest against responsible officers treats similarly situated taxpayers in a disparate manner. This creates a fairness issue. Second, the treatment of interest for those liable pursuant to the derivative liability of 6672 works differently than the interest charged to those derivatively liable under similar statutes. This highlights a lack of a consistent approach with respect to parties held liable when the initial taxpayer did not fulfill its obligation. Third, the delay in the running of interest creates problems for the IRS. It loses the time value of money for the period between the return due date and the date of assessment of the responsible officer. This interest free period also harms the IRS because it creates an incentive for responsible officers to delay and burden the system of administration to gain the benefit of the time value of money. The postponement of interest also puts the federal government at odds with its state counterparts providing an incentive for responsible officers to satisfy their state obligations for unpaid collected taxes first.

The Disparate Treatment of Similarly Situated Taxpayers

That the form of an entity or a transaction can control the outcome in a tax matter needs no citations. Nonetheless, in certain matters varying results based simply on form can create cries for fairness.⁴⁶⁰ Section 6672 creates a lack of fairness with respect to the imposition of interest between those individuals who incorporate their business and those who do not. Changing the statute to charge persons liable under 6672 with interest back to the due date of the entity's return would eliminate that inequality.

The form of the entity definitely matters to the person who decides not to pay over collected taxes. If the person has employed corporate form, then the collection against that individual will take place through 6672 with no interest accruing

and no penalties until the point of assessment. If, however, the person does business as a sole proprietorship or a single member LLC treated as a disregarded entity, then that person is liable for interest on the unpaid employment taxes from the due date of the return.

Looking at the original example used in this article can provide some insight into this problem:

Assume that Bob, Mary and John ran *ABC* as a partnership in which they were general partners rather than a corporation. If *ABC* fails to pay \$50,000 in withheld income taxes for the first quarter of 2008 over to the government by April 30, 2008, the due date of the employment tax return for the first quarter, interest will run from April 30, 2008. Each of them as general partners is liable for the full amount of the unpaid withheld income taxes (\$50,000) plus interest from April 30, 2008. If Bob ran *ABC* as a sole proprietorship instead he would also be liable for the full amount of the tax plus interest from April 30, 2008. If, however, *ABC* were incorporated, interest would not run against Bob, Mary and John as responsible officers until the 6672 was made against them. Assuming 5 percent simple interest and an assessment on April 30, 2010, two years after the return due date, the savings in interest would be approximately \$5,000.

Senator Ervin in his floor statements concerning the amendment of the Bankruptcy Act to include section 17a(1)(e) and the majority of the Supreme Court in *Sotelo* both expressed concerns about the equality of treatment persons liable for collected taxes who had incorporated versus those who ran their businesses as a sole proprietorship. The two parties addressed the subject from the perspective of the discharge in bankruptcy at issue in *Sotelo*; however, the reasoning could apply to the difference created with respect to the running of interest. The Court in *Sotelo* quoted Senator Ervin's statements made during the consideration of the amendment to the Bankruptcy Act of section 17a(1)(e) "The inequity between a corporate officer and an individual entrepreneur, both of whom have a similar liability to the Government, frequently would turn on nothing more than whether the individual was 'sophisticated' enough 'to, in effect, incorporate himself.'" ⁴⁶¹

Justice Marshall, writing for the majority in *Sotelo*, expressed similar concerns of fairness as a basis for the majority's decision.

"The dissenting opinion recognizes Congress' unquestioned concern about eliminating corporations' 'unfair' advantage over individual entrepreneurs. Elsewhere our Brother Rehnquist appears to concede that Congress meant 'to ameliorate the lot' of only 'some bankrupts' when it passed the 1966 amendment to the Bankruptcy

Act. There is every indication that the 1966 amendment was not intended ‘to ameliorate the lot’ of corporations and their principal officers, at least with regard to taxes collected from employees. And the dissenting opinion has not even attempted to explain how a Congress concerned about ‘[discrimination] against the private individual or the unincorporated small businessman,’ could have thought it just to relieve corporate officers of § 6672 liability in bankruptcy, as the dissent’s approach would do, while leaving other owners of ‘small family [businesses],’ those who happen to operate through non corporate entities—subject to the same kind of liability.”⁴⁶²

While slightly different in nature, the same type of disparity that concerned Senator Ervin and Justice Marshall still exists in the application of 6672 because of the manner in which interest and penalties are treated. Those who fail to incorporate and fail to pay collected taxes pay the higher price even though the policy for collecting the tax seems identical in both instances. This disparity prevents a parallel result between similarly situated taxpayers. This lack of parallelism does not promote effective tax administration and fails to achieve a sense of fairness desired in tax legislation.⁴⁶³ The disparity also fosters the wrong incentive to promote prompt payment and compliance.⁴⁶⁴

The Misalignment with Similar Statutes

Section 6672 provides a mechanism for holding third parties liable for the payment of a tax for which a corporate entity has primary liability. The derivative nature of the liability imposed by 6672 creates an exception to the normal rule for liability but not a unique situation. Other statutes also create derivative tax liabilities for third parties not primarily liable for the tax. The executor provision of 31 U.S.C. 3713, the transferee liability provisions of 6901, and the lender liability provisions of 3505 each provide a parallel situation to 6672. These statutes offer another view regarding the accrual of interest against third parties. Of these three, 3505 deserves the most attention since it sprang from perceived inadequacies in 6672.

The so-called insolvency statute found in 31 U.S.C. 3713 applies to situations broader than just tax. Essentially, it holds someone like an executor personally liable for the payment of the taxes of an estate when the executor distributes assets to beneficiaries or pays out lower priority creditors without satisfying the taxes of the estate. The person liable under the insolvency statute must pay interest (and penalties) on their personal liability stemming from misapplication of estate assets to the extent that the value of the assets distributed exceeds the amount of the outstanding liability.⁴⁶⁵

A transferee under 6901 also must pay interest depending on the value of the property transferred. The extent of the liability is the transferor's unpaid taxes (including interest and penalties) for the transfer year and prior years to the extent of the value of the assets plus interest.⁴⁶⁶ Whether a transferee is liable to the full extent of the transferor generally depends on the value of the asset(s) transferred together with the amount of the liability at issue. Where the transferred assets exceed in value the amount of the liability, the transferee will generally be liable for interest and penalties on the transferor's taxes.⁴⁶⁷ If the transferred assets are less than the amount of the liability, the transferee's liability is generally capped at the value of the assets received with the possibility that under state law interest might accrue on the value of the assets received.⁴⁶⁸ If a notice of transferee liability is sent, the transferee is liable for interest on the amount assessed pursuant to that notice. The interest runs from the date of the notice of transferee liability.⁴⁶⁹

Someone tagged with liability under the insolvency or the transferee statutes must pay interest back to the due date of the return of the person primarily liable. This general rule is tempered in some situations by the amount of assets the third party received vis-a-vis the amount of the total tax liability. If the value of assets in the estate or the value of assets transferred are below the amount of the primary liability, the liability of the third party is capped at the value of the assets. 6672 does not have a direct parallel to this provision limiting interest; however, the manner in which the taxpayer whose tax is collected receives full credit for that payment provides a basis for viewing the 6672 situation as one in which the corporation and the responsible officer received assets equal in value to the unpaid liability.⁴⁷⁰ The policies leading to imposition of interest against these third parties support the imposition of interest back to the due date of the underlying return for those persons responsible under 6672.

The most significant of the three derivative liability provisions with respect to the treatment of interest is 3505 because it developed out of a loophole in 6672 and deals with a subset of the same liability that 6672 does.

In the 1950s and early 1960s, lending practices in the construction industry exposed a gap in the coverage of 6672 with respect to income and social security taxes withheld from employees of troubled businesses in that employment sector. In closing that gap, Congress created a new statute that specifically provides that the third party liable under the new statute has liability for the interest from the due date of the return of the party primarily liable for the unpaid tax. While the legislative history of the new statute does not provide any insight as to why the interest provision appears in this new statute (and not in 6672), the adoption of the interest provision in 3505 supports the imposition of interest for all collected tax situations.

Section 3505 was enacted as part of the Federal Tax Lien Act of 1966 at the request of the Government to plug what it perceived to be a loophole in the collection of withheld employment taxes.⁴⁷¹ The specific loophole 3505 sought to address concerned third parties who paid, either directly or indirectly, the wages for an employer

in such a manner that the withheld employment taxes did not get paid over to the Government.⁴⁷² Section 3505 does not address all types of collected taxes. It imposes liability on lenders, sureties, and others who lend net payroll in a manner that causes a failure to pay over to the Government withheld federal income tax, FICA tax and railroad retirement tax. The statute has two components: 3505 (a) imposes liability for the full amount of the unpaid tax on third parties who pay net wages directly to the employees, and 3505 (b) imposes a limited personal liability on third parties who provide the funds used to make net payroll payments of no more than 25 percent of the unpaid employment taxes.⁴⁷³ As mentioned above, the collection problem the IRS primarily sought to address through this legislation involved the construction industry.⁴⁷⁴

Prior to the enactment of 3505, the IRS lost several cases in which it attempted to assert the 6672 penalty against the type of third parties described in 3505.⁴⁷⁵ Courts determined that such individuals were willful but not responsible. At the same time, the alleged responsible persons would win their cases under 6672 because they were responsible but not willful. These responsible persons would testify, usually quite correctly, that the lender would not permit them to pay the employment taxes even though they had tried to do so. Section 3505 filled the gap caused by the circumstances of the lender who essentially controlled the finances of a cash-poor entity but whose role did not neatly fit the statutory scheme of 6672.

Two common situations occurred that posed problems for the IRS in attaching the 6672 penalty where employment taxes were not paid. The first, and perhaps most common, scenario involved companies with cash flow problems. These companies would negotiate a line of credit with a bank. As business worsened the bank's involvement increased. At some point in the relationship, a loan officer at the bank essentially took over the duty of approving every check written by the company. The loan officer then made decisions to pay employees their wages but also refused to allow the company to write the employment tax check to the IRS. The company would eventually fail and the IRS would come looking for the employment taxes.

The second variation on this theme usually occurred in the construction industry.⁴⁷⁶ A general contractor would hire a subcontractor to complete a specific task on a larger job. The subcontractor would encounter financial difficulty. The general contractor needed the subcontractor to complete the task for which it had been hired or the entire project would fall behind with all of the attendant consequences. The employees of the subcontractor who were not getting paid would refuse to work without pay. So, the general contractor or its surety would step into the breach and pay the net wages of the employees of the subcontractor. At some point the subcontractor would fail before the employment taxes were paid.

As mentioned above, 3505 has two components which attempt to address problems presented by both direct payment of net payroll by a third party and indirect payment of net payroll. Section 3505 (a) holds a person liable in an amount equal

to the entire amount of the payroll taxes required to be withheld and paid over in those situations in which the third party directly pays the wages of the employees of the company that fails to pay its employment taxes. The 3505(a) liability arises upon the payment of the wages whether or not the third party knows taxes should be paid or withheld.⁴⁷⁷

Section 3505(a) prevents third parties from taking over a company's payroll and paying net wages. The third party becomes liable not only for taxes on the wages from the date the wages are paid but the third party is liable also for interest back to the due date of the return. Imposing liability on a third party in this situation was viewed as "fair" because the third party knows the finances of the employer.⁴⁷⁸

The liability under 3505(a) is not imposed by way of assessment as with 6672. In order to hold a third party liable under 3505 the Government must bring a suit against the third party. The statute of limitations for the suit is the statute of limitations on collection of the underlying liability.⁴⁷⁹ The Government bears the burden of proof in the litigation to show that the third party directly made net payroll payments to the employer.

The existence of 3505(a) has undoubtedly caused lenders to change their practices to avoid this pitfall.⁴⁸⁰ Very few 3505(a) cases exist.⁴⁸¹ A lender directly paying net payroll has little room to hide. This provision serves an important role in prevention but receives little enforcement attention because of the straightforward and predictable outcomes it creates.

Section 3505(b) does not impose the broad liability set out in subparagraph (a). Nor does 3505(b) involve the relatively easy to identify direct payment of net wages. Instead, 3505(b) concerns the actions of those who provide funds to the employer knowing that the funds will be used to meet payroll and that the employment taxes will not be paid.

As with 3505(a) the liability under subsection (b) does not occur through an administrative assessment but rather the Government must bring a suit to establish the liability. The Government has the burden of proof in the suit. The liability under 3505(b) has a limitation of 25 percent of the amounts paid to the employer for the purpose of making net wage payments. The statute provides for interest back to the due date of the return; however, case law has limited the amount of interest recoverable by treating it as a part of the 25 percent cap and not an addition to that amount.⁴⁸²

A lender has knowledge for purposes of 3505(b) from (1) the time the lender receives notice of this fact or (2) the time the lender would have known if exercising due diligence.^{483,484} Because the liability under 3505(b) requires the Government to show this knowledge, the Government can experience difficulty establishing this liability. The Government does not need to prove, however, that a formal loan agreement existed. Honoring overdrafts over a period of time can also trigger this liability.⁴⁸⁵

An exception to 3505 (b) liability for lending for net payroll occurs for working capital loans. Perhaps the exception need not have been explicitly stated in the statute because of the knowledge provision of the statute, nonetheless it exists as a stated exception. Lenders must take care when making working capital loans if they learn that the loans finance net payroll.⁴⁸⁶ Likewise, lenders pursuing remedies upon default of a loan do not enter 3505 (b) territory unless they become too entwined in the business of the distressed entity.⁴⁸⁷

Because the liability under 3505 is not considered a tax liability, the interest component referred to in the statutes does not represent interest on the employment taxes themselves.⁴⁸⁸ The liability of the lender is for a sum equal to the unpaid trust fund portion of the employment taxes rather than the taxes due from the employer.⁴⁸⁹ Depending on the type of 3505 liability, the third party may have no interest liability because of the interpretation of the 25 percent cap in 3505 (b). Nonetheless, the statute does contemplate in general that the third party engaged in the actions described by 3505 is liable for interest on the delinquent employment taxes. Two examples demonstrate how the interest component of 3505 works:

Example 1: ABC Inc. experiences financial difficulty during 2007 and XYZ Bank becomes increasingly involved in its finances. It looks like ABC might get a contract that will pull it out of the tailspin but it is totally out of gas pending the award of that contract. It must keep the business going, however, to remain competitive. During the first quarter of 2008 XYZ Bank directly pays the payroll of ABC. Neither the bank nor the company pays the withholding taxes of \$25 over to the IRS. ABC dissolves without making any payments on the employment tax liability for the first quarter of 2008. The IRS cannot pursue Bob, Mary and John because XYZ bank had assumed financial control of ABC making Bob, Mary and John either not responsible or not willful or both. The IRS pursues XYZ pursuant to 3505 (a) and obtains a judgment for \$25 for the full amount of the unpaid withholding taxes plus interest from April 30, 2008, the due date of the employment tax return.

Example 2: ABC Inc. experiences financial difficulty in 2007 and XYZ Bank becomes increasingly involved as in Example 1. During the first quarter of 2008 XYZ lends to ABC \$80 so that ABC can pay net payroll. XYZ knows the finances of ABC and knows that ABC does not have sufficient funds to pay over the withholding taxes. ABC dissolves without making any payment on the employment tax liability for the first quarter of 2008. The withholding tax obligation of ABC for the first quarter of 2008 is \$25. Again, the IRS would probably fail if

it pursued a 6672 liability against Bob, Mary or John. The IRS pursues XYZ pursuant to 3505 (b) and obtains a judgment for \$20 equal to 25 percent of the net payroll lending. The IRS cannot obtain interest on this amount because it is limited to a 25 percent recovery.⁴⁹⁰

One case that highlights the differences between 6672 and 3505 and explores the reach of the term “responsible person” in 6672 is *Pacific National Insurance, Co., v. United States*.⁴⁹¹ Pacific National, a surety, loaned money to Central States Construction and Equipment Company (Central) from May to September, 1955. This time period predated the enactment of 3505 even though the 9th Circuit’s opinion followed the passage. Because of the period in issue, the IRS had to argue for the assessment against Pacific National under 6672. Naturally, Pacific National argued that 3505 applied to its circumstances, albeit not literally since it did not exist in 1955, and 6672 did not reach the situation presented by this case.

The court examined the legislative history and found little aid in determining the scope of persons who were included. It determined that Pacific National met the language of responsible person set forth in 6672 and sustained the decision of the District court holding Pacific National liable for taxes under 6672. The case points out that 3505 and 6672 overlap. In fact, the Government recommends looking to hold parties liable under both provisions when possible.⁴⁹² The result in *Pacific National*, displaying the overlap between 3505 and 6672 on collected employment taxes, points out the possibility that the Government could obtain interest from a responsible party back to the due date of the return by pursuing one statute, 3505, while a parallel result remains unavailable if it pursues the responsible officer under 6672.⁴⁹³

Did Congress intend to provide interest on collected taxes back to the due date of the return only for that narrow class of collected taxes represented by “net lenders” of wages? Does this class of responsible officers have some special responsibility not borne by all others who convert funds held in trust to some other purpose? Since 3505 updates 6672 and closes a narrow loophole on one aspect, could Congress have included interest in 3505 without realizing that interest back to the due date of the return did not apply in other responsible officer situations? Answers to these questions do not exist in the legislative history of 3505. One possible answer, the answer that Congress simply did not think about the lack of symmetry on the interest issue between the two statutes imposing liability on responsible persons, provides support for seeking symmetry now to close the gap between the two statutes. While 3505 came into existence to close one loophole in 6672, Congress inadvertently exposed a fundamental flaw in 6672. The fixing of that flaw requires imposing interest on the responsible officers back to the due date of the return.

The Problems Created for the IRS

The first problem that the failure to charge interest under 6672 creates for the IRS is the loss of the time value of money. As the example with *ABC* shows, the amount of interest that runs between the time the employment tax return is due and an assessment occurs with respect to one or more responsible officers can be significant. When that example multiples across a system, the lost revenue begins to mount. Of course, the IRS will not collect all of the interest that runs on its 6672 assessments but it certainly would collect some of the money were it allowed to charge interest back to the due date of the return.

The second problem for the IRS concerns resources. Many of the individuals identified by the IRS as responsible officers subject to the 6672 liability know that they satisfy the statutory tests for liability under 6672. These individuals, who know they are liable, can agree to that liability at the first moment the IRS revenue officer appears seeking to investigate the liability; however, they have no incentive to do so. The minute they agree to the liability, an assessment will occur and interest will start to run. Consequently, the system provides an incentive for even the individuals who know they owe to exhaust their administrative remedies.⁴⁹⁴ This places a burden on IRS resources that might significantly diminish if liable individuals lost their incentive to delay.

The third problem created for the IRS results from the approach that most states have taken with respect to individuals liable for collected taxes not paid by the corporation that had primary responsibility. The significant majority of states have adopted an approach similar to the one suggested for the federal government in this article. These states hit individual responsible officers with the same liability, including interest and penalties, that are due from the corporation. They do not build in a period of delay for interest and penalties. Consequently, knowledgeable individuals faced with responsible officer liability to both the state and the federal government, which is often the case, will pay their money first to the states to stop the running of further penalties and interest while they continue to exhaust their administrative remedies with the IRS. This situation obviously puts the federal government at a competitive disadvantage in seeking to collect from these individuals.

All states with the exception of Wyoming have responsible officer statutes that work with many similarities to section 6672. Most state statutes draw directly from 6672 and, even if indirectly, certainly draw from the same policy framework that drove the creation of 6672. Despite their similar origins, the overwhelming majority of states have specifically written into their responsible officer statutes or have judicially interpreted their statutes in such a manner that their responsible officers are charged interest from the due date of the underlying return (and penalties as well). The manner in which the states have chosen to treat interest with respect to individuals responsible for paying over collected taxes supports the recommendation of this article.

While not controlling, viewing the manner in which states treat their delinquent trust fund obligations vis-a-vis responsible officers provides some insight from which the federal government can draw. As discussed previously, IRC 6672 covers a variety of taxes.⁴⁹⁵ Employment taxes offer the best known example of trust fund taxes in the federal system under IRC 6672 but the excise tax on telephone service which is collected by the phone company on behalf of the federal government actually touches more people.⁴⁹⁶ Because the number of telephone companies is relatively small and they typically do not have financial difficulties at the same rate as “regular” businesses, this particular trust fund tax has received little attention. The excise tax on telephone service, like the one on airplane tickets and motor fuel, behaves much like a sales or use tax common in state taxing schemes.⁴⁹⁷⁻⁴⁹⁹ So, in looking at states for comparative purposes, both state withholding and sales tax provisions must be analyzed.

Because some states have no income tax and some states have no sales tax, there exists at times only one type of tax for comparison within a specific state.^{500,501} Surprisingly, some states with both sales and income taxes treat failures with respect to the payment of each of these taxes differently when imposing the liabilities on individuals responsible for the trust fund taxes.⁵⁰² Those differences merit further exploration because within those states exist two models for trust fund treatment.

The vast majority of states with trust fund tax regimes choose to impose upon the individual trustees (responsible officers) the precise liability imposed upon the entity that failed to meet its trust fund obligation.^{503,504} Stated another way, these states have adopted, with respect to interest, the same result advocated herein. These states also uniformly impose penalties on unpaid trust fund taxes against the responsible officers going back to the due date of the entity’s return.⁵⁰⁵ The combination of imposing the penalty and interest due from the entity against the responsible persons creates a significant additional liability against these individuals compared to the liability imposed using the current federal regime under IRC 6672.⁵⁰⁶ This additional liability for interest and penalty charged to the responsible officer could, if collected, reduce the tax gap; however, the stronger reason for imposing interest, as argued herein, is the removal of the incentive to delay the assessment.^{507,508}

Some states explicitly provide for interest in the flush language of their statutes creating responsibility.⁵⁰⁹ Other states have reached the same result by judicial decision.⁵¹⁰ States reaching the result by judicial decision with the courts referencing the fact that the responsible officer liability is an alternative means of collecting the trust fund tax is yet another model.⁵¹¹ Based upon that reason for the liability of the responsible officer, the courts conclude the officer is liable for everything for which the entity is liable.⁵¹²

A minority of states treat interest in the same manner as the federal government.⁵¹³ These states have adopted statutes imposing the responsible officer liability that essentially mirror the language of IRC 6672.⁵¹⁴ In interpreting their statutes, these states follow the federal interpretation and do not impose liability until the assessment against the responsible officer occurs.⁵¹⁵

A still smaller minority of states chooses to impose a larger liability against the individuals liable for the trust fund liability than simply the amount of the unpaid trust fund taxes.⁵¹⁶ These states impose the liability by means of a penalty. In Colorado the trust fund penalty is 150 percent of the collected tax.⁵¹⁷ In Florida the trust fund penalty is 200 percent of the collected tax.⁵¹⁸ Penalties at these levels cause the responsible officer to have a liability that reflects something close to the liability imposed by those states hitting the taxpayer with the interest and penalty imposed on the entity. By adopting a scheme that imposes a penalty for late payment of collected taxes rather than one which simply seeks to collect the unpaid tax, plus interest, these states are at a disadvantage in bankruptcy proceedings.⁵¹⁹

The state provisions for treating interest on the liability for collected taxes imposed upon responsible officers provide an interesting window from which to view the federal statutes. Most states impose liability upon individuals because they build on the federal model. Yet, almost all states go past the federal model to cause their statutes to work in a manner that, with respect to interest, is philosophically consistent with the underlying reason for the statute.⁵²⁰ The most interesting states are the states that “split the baby.”⁵²¹ These states charge responsible officers with interest back to the due date of the entity’s liability for sales taxes but charge interest only from the assessment date of the responsible officer’s liability for unpaid withholding taxes. This division in approach, adopted by a small but diverse set of states, suggests a statutory scheme built upon placement rather than consistent philosophy similar to the federal model. These states all have different language in different sections of their codes for dealing with persons responsible for collecting sales taxes versus persons responsible for withholding employment taxes. In both circumstances the money is to be collected and held by the employer for the state yet the code sections, adopted at different times for the different specific purposes, fail to take into account the essentially identical trust fund situation created in each situation.

The fact that the overwhelming majority of states choose to impose interest on responsible officers from the due date of the return of the entity suggests that the states see the direct link between the liability of the responsible officers and the liability of the entity. The state statutes reaching this result contain diverse language. The position adopted by a majority of the states has happened without the apparent benefit of any model other than 6672 itself. The laws adopted by the majority of the states represent a significant expression of how the derivative liability imposed upon responsible officers should be structured with respect to interest and validates the legal reasons expressed herein for modifying the federal statute.

Conclusion of Accountability

The current system using business entities to collect taxes and turn them over to the IRS works efficiently and effectively for the vast majority of business entities.

The business entities that fail to pay over collected taxes are almost always relatively young, small businesses run by entrepreneurs who “need” the collected taxes for operating capital and who may not appreciate the special nature of the collected tax funds which they hold. By better informing the public of the practices of those handling collected taxes, better informing the business entities of their responsibilities, creating more structure and incentives for the payment of these collected taxes, this corner of the tax gap can be reduced.

Overall Conclusion

Collecting collected taxes requires a thoughtful plan that does not currently exist. The need for transparency, structure and accountability in the related provisions provides an opportunity for both the IRS and Congress to step in to create a system that will significantly reduce the current tax gap in this area.

Appendices

Appendix A—States with Shaming Laws and Their Websites (as of August 2010)

State	Statute
Alabama	Ala. Code §40-5-23 (LexisNexis 2010) The tax collector must publish twice during the month of July a list of delinquent taxpayers. The publication shall be made in a daily newspaper printed and published in the county in which the taxpayer lives. If no such paper is published, a weekly paper will suffice. If there is neither a daily nor a weekly newspaper of any sort published in said county, the tax collector shall publish the list in the courthouse and in other conspicuous places in said county. The tax collector must keep said posting available for the public during the entire month of July.
Alaska	Alaska does not have a shaming statute.
Arizona	Arizona does not have a shaming statute.
Arkansas	Ark. Code Ann. §26-36-203 (2010) No later than December 1 of each year, the county tax collector shall prepare a list of delinquent personal property taxes and deliver a copy of the list to a legal newspaper in the county. The newspaper shall publish the list within seven days. The list must be in at least seven-point font. The list shall show the name of the taxpayer, the taxpayer's school district, and the total amount of taxes delinquent.

California	Cal. Rev. & Tax. Code § 19195 (Deering 2010)
	The Franchise Tax Board shall make available as a matter of public record each calendar year a list of the 250 largest delinquencies in excess of \$100,000 as of December 31 of the preceding year.
Colorado	Colo. Rev. Stat. §24-35-117 (2010)
	The executive director of the department of revenue shall annually disclose a list of all taxpayers delinquent in the payment of tax liabilities collected by the department. The list shall include only those taxpayers with total delinquent final liabilities for all taxes collected by the department in an amount greater than \$20,000 for a period of six months from the time that a distraint warrant issues or may issue. The list shall contain the name, address, types of taxes, month and year in which each tax liability was assessed, the amount of each tax outstanding of each delinquent taxpayer, and, in the case of a corporate taxpayer, the name of the current president of the corporation.
Connecticut	Conn. Gen. Stat. § 12-7a (2010)
	The Commissioner of Revenue Services shall prepare and maintain a list related to each type of tax levied by the state, containing the name and address of any person or corporation liable for payment of any such tax and the amount thereof which tax is unpaid and a period in excess of ninety days has elapsed following the date on which such tax was due. Such lists shall be available to the public for inspection by any person.
Delaware	Del. Code Ann. tit. 30, § 359(b) (2010)
	The Secretary of Finance shall prepare, maintain, and publish on the Division of Revenue Internet Website, two lists of taxpayers owing unpaid tax and additions to tax finally determined to be due under Title 30 for personal income tax and business taxes administered by the Department of Finance. Each list shall consist of the 100 taxpayers owing to Delaware the greatest amount of unpaid tax and shall contain the name and address of each such taxpayer, the total type and amount of tax and additions to tax due and the date the amount was finally determined to be due. In the case of entities other than natural persons, the list may also name any persons who were at least 25% owners or beneficial owners or who were responsible officers of such entity at or after the time the liability was created.
District of Columbia	District of Columbia Office of Tax and Revenue, Delinquent Taxpayers, http://otr.cfo.dc.gov/otr/cwp/view,a,1330,q,593715,otrNav_gid,1679, 33288 .asp (last visited August 9, 2010).
	The District of Columbia publishes a list of its delinquent taxpayers as part of an overall program to encourage voluntary compliance with the District's tax laws. The list contains the taxpayer's name, address, and amount owed. In the case of a business, the responsible officer and his/her address is listed.
Florida	Florida does not have a shaming statute.
Georgia	Ga. Code Ann. §48-3-29 (2010)
	The commissioner may publish in the media or on the internet for public access any or all information with respect to executions issued for the collection of any tax, fee, license, penalty, interest, or collection costs due the state which are recorded on the public records of any county.

Hawaii	Haw. Rev. Stat. Ann. § 231-32 (LexisNexis 2010)
	Hawaii Department of Taxation, List of Delinquent Taxpayers With Large Balances, http://www6.hawaii.gov/tax/a2_b2_2delinq.htm (last visited August 9, 2010).
	The department of taxation shall prepare and maintain, open to public inspection, a complete record of the amounts of taxes assessed in each district that have become delinquent with the name of the delinquent taxpayer in each case. This list may be published on the Internet after taxpayers have had a final opportunity to settle their debt.
Idaho	Idaho does not have a shaming statute.
Illinois	20 Ill. Comp. Stat. Ann. 2505/2505-425 (LexisNexis 2010)
	State of Illinois Department of Revenue Public List of Delinquent Taxpayers, http://www.revenue.state.il.us/AboutIdor/DelinquentList.html (last visited August 9, 2010).
	The Director may annually disclose a list of all taxpayers that are delinquent in the payment of tax liabilities collected by the Department. The list shall include only those taxpayers with total final liabilities for all taxes collected by the Department in an amount greater than \$1,000 for a period of six months from the time that the taxes were assessed. The list shall contain the name, address, types of taxes, month and year in which each tax liability was assessed, the amount of each tax outstanding of each delinquent taxpayer, and, in the case of a corporate taxpayer, the name of the current president. Illinois is in the process of creating a website for publication of this list.
Indiana	Ind. Code Ann. § 6-8.1-3-16 (LexisNexis 2010)
	The Department shall compile each month a list of the taxpayers subject to tax warrants that were issued at least twenty-four months before the date of the list and are for amounts that exceed \$1,000. The list must identify each taxpayer liable for a warrant by name, address, and amount of tax. The department shall publish the list on accessIndiana and make the list available for public inspection and copying. The department may not publish a list that identifies a particular taxpayer unless at least two weeks before the publication of the list the department sends notice to the taxpayer.
Iowa	Iowa does not have a shaming statute.
Kansas	Kansas does not have a shaming statute.
Kentucky	Ky. Rev. Stat. Ann. § 131.650 (LexisNexis 2010)
	The department may publish a list or lists of taxpayers that owe delinquent taxes of fees administered by the Department of Revenue. A taxpayer may be included on the list if the taxes owed remain unpaid at least forty-five days after the dates they became due and payable and a tax lien or judgment has been filed of public record against the taxpayer. If the listed taxpayers are business entities, the Department of Revenue may also list the names of responsible persons assessed. Notice must be given to the affected taxpayers before any list is published.

Louisiana	La. Rev. Stat. Ann. §47:1508 (2010) The secretary may disclose the name and address of the taxpayer, the type of delinquent taxes due, and the total amount of tax, penalty, and interest due. If the taxpayer is a business entity, the secretary may additionally name any owner who owns at least a fifty percent ownership interest in the entity. The disclosure may be made in a newspaper, magazine, or in electronic media, such as television or the Internet. The secretary must provide written notice by registered mail to the taxpayer.
Maine	Maine does not have a shaming statute.
Maryland	Comptroller of Maryland Caught In the Web, http://compnet.comp.state.md.us/Compliance_Division/Collections/General_Collections_Information/Caught_in_the_Web.shtml (last visited August 9, 2010) Maryland publishes the names of businesses, individuals and corporate officers having large unresolved liabilities (including individuals who have large unresolved personal income tax liabilities). All of the information is public, because liens and judgments have been recorded in the judgment dockets of one or more circuit courts of Maryland.
Massachusetts	Mass. Ann. Laws ch. 62C, § 21(b)(11) (LexisNexis 2010) Massachusetts Department of Revenue, Public Disclosure, https://wfb.dor.state.ma.us/dorcommon/PublicDisclosure/disclosure.aspx (last visited August 9, 2010). Massachusetts allows disclosure by the commissioner of a list of all taxpayers that are delinquent in the payment of their tax liabilities in an amount greater than \$25,000 for a period of six months from the time the taxes were assessed. The list shall contain the names, address, types of taxes, month and year assessed, and amounts outstanding of said delinquent taxpayer. Massachusetts publishes this list online.
Michigan	Michigan does not have a shaming statute.
Minnesota	Minnesota no longer has a shaming statute.
Mississippi	Mississippi does not have a shaming statute.
Missouri	Email from Kathy Mantle, Collections and Tax Assistance, State of Missouri, to Fleming Ware, Research Assistant, Villanova University School of Law (July 8, 2009, 14:11 EST) (on file with author). Missouri publishes a list of businesses that have had their sales licenses revoked for failure to remit sales tax, but does not publish a list of the state's largest delinquent taxpayers.
Montana	Email from Russ Hyatt, Accounts Receivable and Collections Bureau, Business and Income Tax Division, State of Montana, to Fleming Ware, Research Assistant, Villanova University School of Law (July 8, 2009, 14:09 EST) (on file with author); Mont. Code Ann. §§3-5-508-09 (2010). The Montana Department of Revenue publishes a list of the state's delinquent taxpayers. The list includes only taxpayer's names for tax debts that Montana has filed a warrant for distraint against them for the tax debt they owe. Authority is derived from cited statute.
Nebraska	Nebraska does not have a shaming statute.

Nevada	<p>Nev. Rev. Stat. Ann. §361.300 (LexisNexis 2010)</p> <p>On or before January 1 of each year, the county assessor shall transmit to the county clerk, post at the front door of the courthouse and publish in a newspaper published in the county a notice that the tax roll is complete and open for public inspection. Additionally, the list may be posted in public areas of public libraries, in public areas of courthouses, and on a website.</p>
New Hampshire	New Hampshire does not have a shaming statute.
New Jersey	<p>Email from New Jersey Taxation, to Fleming Ware, Research Assistant, Villanova University School of Law (July 8, 2009, 13:00 EST) (on file with author); New Jersey Division of Taxation's Largest Judgmented Taxpayer Listing, http://www.state.nj.us/treasury/taxation/jdgdisc.html (last visited August 9, 2010).</p> <p>New Jersey publishes a list of delinquent taxpayers; however, the website is currently under construction.</p>
New Mexico	New Mexico no longer has a shaming website.
New York	New York does not have a shaming statute.
North Carolina	<p>North Carolina Tax Debtors, http://www.dor.state.nc.us/collect/debtor_info.html (last visited August 9, 2010).</p> <p>North Carolina publishes a list of delinquent taxpayers names, the type of tax owed, and the amount of the tax.</p>
North Dakota	North Dakota does not have a shaming statute.
Ohio	<p>Ohio Rev. Code Ann. §5719.04 (LexisNexis 2010)</p> <p>Ohio prepares a tax list containing the name of the person charged and the amount of such taxes and the penalty. The auditor shall cause a copy of the delinquent personal and classified property tax list to be published twice within sixty days in a newspaper published in the English language in the county and of general circulation thereof.</p>
Oklahoma	<p>Email from Tim Rudek, Oklahoma Tax Division - Account Maintenance Division, to Fleming Ware, Research Assistant, Villanova University School of Law (July 13, 2009, 08:25) (on file with author). Oklahoma Tax Commission, http://www.tax.ok.gov/top100.html (last visited August 9, 2010).</p> <p>Oklahoma publishes a hard list of delinquent taxpayers owing taxes for which a warrant has been issued.</p>
Oregon	Oregon does not have a shaming statute.
Pennsylvania	Pennsylvania no longer has a shaming website.
Rhode Island	<p>R.I. Gen. Laws §44-1-34 (2010); Rhode Island Division of Taxation, Top 100 Tax Delinquents, http://www.tax.ri.gov/misc/top100.php (last visited August 9, 2010).</p> <p>The tax administrator is authorized by statute to prepare a list of names of the 100 delinquent taxpayers who owe the largest amount of state tax and whose taxes have been unpaid for a period in excess of ninety days following the date their tax was due.</p>

South Carolina	<p>South Carolina's Debtor's Corner, http://www.sctax.org/delinquent/delinquent.shtml (last visited August 9, 2010).</p> <p>The South Carolina Department of Revenue publishes information pertaining to some of the largest uncollected liabilities owed to the citizens of South Carolina. All of the information provided on the list is public information as a result of the Department of Revenue's having filed a tax lien with the Clerk of Court/Register of Deeds in the county of residence. Debt information may also be obtained directly for the Department of Revenue. The list includes the name of the taxpayer, the taxpayer's address, and the amount owed.</p>
South Dakota	South Dakota does not have a shaming statute.
Tennessee	Tennessee does not have a shaming statute.
Texas	Texas does not have a shaming statute.
Utah	Utah does not have a shaming statute.
Vermont	Vermont does not have a shaming statute.
Virginia	<p>Email from VA Tax Customer Service, to Fleming Ware, Research Assistant, Villanova University School of Law (July 9, 2009, 09:19 EST) (on file with author); Virginia Delinquent Taxpayer List, http://www.tax.virginia.gov/site.cfm?alias=delinquentdebtors (last visited August 9, 2010).</p> <p>Virginia publishes the names of businesses having unresolved tax liabilities. The list includes the name of the business, address, and amount of tax owed. The information contained in the list is public information as a Memorandum of Lien has been filed on the debts listed in the Circuit Court.</p>
Washington	<p>Wash. Rev. Code Ann. § 82.32.330(3)(c) (LexisNexis 2010)</p> <p>Washington may publish the names of taxpayers against whom a warrant has been either issued or filed and remains outstanding for a period of at least ten working days.</p>
West Virginia	West Virginia does not have a shaming statute.
Wisconsin	<p>Wis. Stat. § 73.03(62) (2010).</p> <p>It shall be the duty of the department of revenue, and it shall have the power and authority to prepare and maintain a list of all persons who owe delinquent taxes to the department, in excess of \$5,000, which are unpaid for more than ninety days after all appeal rights have expired. The department shall post the names of persons from this list on the internet at a site that is created and maintained by the department for this purpose. The department shall distribute the posted information to Internet search engines so the information is searchable. The Internet site shall list the name, address, type of tax due, and amount of tax due, and the Internet site shall contain a special a special page for the 100 largest delinquent taxpayer accounts.</p>
Wyoming	Wyoming does not have a shaming statute.

Appendix B—States Requiring Identification of Responsible Parties

ALABAMA

Alabama Department of Revenue Combined Registration/Application, <http://www.excel-pay.com/files/file/tax%20forms/ALCom101%20-%20CombinedRegistrationApplication.pdf>; Alabama Department of Revenue Starting a New Business Educational Brochure, www.revenue.alabama.gov/taxpayerassist/newbus.pdf.

Alabama requires identification of current owners, partners, corporate officers, and employers. The Alabama *Starting A New Business* brochure discusses trust fund taxes; it clearly states that if owners, partners, or corporate officers occupy positions within a business in which they have authority and control over the payment of creditors, and they choose to pay other creditors over the government, the owner, partner, or corporate officer can be held personally liable for the tax. The brochure further states that bankruptcy cannot waive this debt.

ALASKA

ALASKA ADMIN. CODE tit. 8, § 85.020 (2009); Alaska Employer Registration Form (2009), www.payroll.com/support/PDFs/State/AK_erf.pdf; Alaska Employer Resource Manual (2009), www.jobs.state.ak.us/handbook/aerm.pdf; Alaska First Time Filers Form (2009), labor.state.ak.us/estax/forms/2009FirstTimeFilerForm.pdf.

Alaska has no income or sales tax, but employment security tax, administered by the Department of Labor, requires withholding and remittance by employers. The Department of Labor requires disclosure of corporate officers and there is a duty to notify the Department of changes; however, there is no duty to specifically identify responsible officers.

ARIZONA

ARIZ. REV. STAT. § 43-414-435 (2009); Arizona Joint Tax Application, www.revenue.state.az.us/ADOR_Forms/70.../74-4002_fillable.pdf; Arizona Withholding Tax Basics, <http://www.azdor.gov/Business/WithholdingTax.aspx> (last visited February 13, 2010).

Arizona requires identification of owners, partners, and corporate officers, but does not require designation of a responsible party for taxation purposes. Arizona statute simply states that the employer is liable.

ARKANSAS

26-51-916 ARK. CODE R. (Weil 2009); State of Arkansas Withholding Registration, <https://www.ark.org/dfa/withholding/index.php> (last visited August 1, 2009).

Arkansas requires the signature of the owner or responsible party when registering to withhold wages.

CALIFORNIA

California Seller's Permit Application (2009), *available at* www.boe.ca.gov/pdf/boe400spa.pdf; California Publication 73—Your California Seller's Permit (2009), *available at* www.boe.ca.gov/pdf/pub73.pdf; Registration for Commercial Employers (2009), *available at* www.edd.ca.gov/pdf_pub_ctr/del.pdf.

California requires identification of corporate officers for withheld income taxes. For sales taxes, California requires identification of corporate officers, cautioning that failure to update will cause the listed corporate officers to be personally liable for unpaid taxes.

COLORADO

COLO. REV. STAT. § 39-22-604 (2009); Colorado Business Registration, <https://secure.cdle.state.co.us/CR100/> (last visited August 1, 2009); Colorado Income Withholding for Employers, <http://www.colorado.gov/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1191399221944&ssbinary=true> (last visited August 1, 2009).

Colorado requires disclosure of owners, partners, and corporate officers, but does not require designation of a responsible party.

CONNECTICUT

CONN. GEN. STAT. §§ 12-705-06 (2009); Connecticut Form REG-1 & Instructions (2009), *available at* <http://www.ct.gov/drs/lib/drs/forms/2006forms/applications/reg-linstructions.pdf>; Business Tax Registration Application (2009), *available at* www.ct.gov/drs/cwp/view.asp?a=1433&q=265880.

Connecticut requires disclosure of owners, partners, and corporate officers, but does not require disclosure of a responsible party.

DELAWARE

30-11-VII DEL. CODE REGS. § 1151-1156 (Weil 2009); Delaware Combined Registration Application (2009), *available at* revenue.delaware.gov/services/current_bt/cra.pdf; Email from Margaret Boyle, Delaware Division of Revenue, to Fleming Ware, Research Assistant, Villanova University School of Law (June 23, 2009, 07:02 EST) (on file with author).

Delaware requires disclosure of owners, partners, and corporate officers, but does not require identification of a responsible party.

DISTRICT OF COLUMBIA

D.C. CODE § 47-4491 (2009); Combined Business Tax Registration Application (2009), *available at* <https://www.taxpayerservicecenter.com/fr500/>.

The District of Columbia requires disclosure of owners, partners, and principal officers. Statutes state that an officer or director of a corporation, general partner of a partnership, or similar principal of business shall be liable for a penalty equal to the tax not paid over to the state.

FLORIDA

Florida Tax Guide (2009), *available at* www.stateofflorida.com/flortaxguid.html. Florida does not collect personal income tax.

GEORGIA

GA. COMP. R. & REGS. 560-7-8-.33 (2009); Georgia State Tax Registration and Application Instructions (2009), *available at* <https://etax.dor.ga.gov/ctr/formsreg.aspx>.

Georgia requires either disclosure of an important person in the business, including that person's SSN or ITIN, or disclosure of all owners, partners, or corporate officers.

HAWAII

Employer's Withholding Guide, http://hawaii.gov/ag/csea/main/info_for_employers/hawaii_empl_guide_iw (last visited August 1, 2009); Hawaii Form BB-1 and Instructions (2009), *available at* hawaii.gov/labor/forms/bb1_04.pdf.

Hawaii requires identification of the corporate officers but not responsible officers.

IDAHO

Idaho Business Registration Form IBR-1 (2009), *available at* http://tax.idaho.gov/forms/EFO00147_06-09-2004.pdf.

Idaho requires identification of corporate officers but not responsible officers.

ILLINOIS

Illinois Business Registration Application (2009), *available at* www.revenue.state.il.us/taxforms/Reg/REG1.PDF. Illinois's Business Registration Form requires responsible party information.

INDIANA

IND. CODE § 4-1-8-1 (2009); Indiana Business Tax Application (2009), *available at* <http://www.in.gov/dor/files/bt-1.pdf>. Indiana requires identification of corporate officers but not responsible officers.

IOWA

IOWA CODE §§ 701-38.1(8), 46.3(422), 46.3(1) (2009); The Iowa Business Tax Registration Form requires identification of responsible parties.

KANSAS

Kansas Business Tax Application (2009), *available at* <http://www.ksrevenue.org/pdf/forms/cr16.pdf>; Kansas Withholding Tax Guide (2009), *available at* www.ksrevenue.org/pdf/forms/kw100.pdf.

Kansas requires identification of all owners, partners, corporate officers, and directors. The Kansas Withholding Tax Guide states that officers and directors of corporations, sole proprietors, and partners are personally liable for any unpaid withheld tax, along with any other person determined to be a responsible party.

KENTUCKY

KY. REV. STAT. ANN. §141.340 (2009); Kentucky Tax Registration Application (2009), *available at* <http://revenue.ky.gov/NR/rdonlyres/4A9BEB16-844E-4F8B-B095-8825257E54B5/0/10A100409.pdf>.

Kentucky requires identification of owners and responsible parties. A Kentucky statute states that parties such as the president, vice president, secretary, treasurer, or any other person holding a equivalent corporate office shall be held personally liable, joint and severally, for any tax required to be withheld.

LOUISIANA

LA. ADMIN. CODE tit. 61, § 1511 (2009); Louisiana Application for Revenue Account Number and Instructions (2009), *available at* revenue.louisiana.gov/sections/business/intro.aspx; Louisiana Withholding Brochure.

Louisiana requires identification of corporate officers, partners, or owners. Administrative law states that a withholding agent is personally liable for amounts required to be withheld.

MAINE

Revenue Services and Department of Labor Application for Tax Registration (2009), *available at* www.maineboats.com/files/MEApplicationTaxRegistration.pdf; Email from Maine Revenue Service, Compliance Division, to Fleming Ware, Research Assistant, Villanova University School of Law (June 18, 2009, 10:51 EST) (on file with author).

Maine requires disclosure of the person responsible for the finances of the corporation and all directors, partners, and officers. Any or all listed individuals may be held individually liable for any taxes withheld.

MARYLAND

Maryland Combined Business Application (2009), *available at* http://forms.marylandtaxes.com/current_forms/cra.pdf.

Maryland requires identification of the person(s) responsible for remitting taxes.

MASSACHUSETTS

830 MASS. CODE REGS. 62B.2.1 (2009); Massachusetts Department of Revenue: A Guide to Employer Tax Obligations, <http://www.mass.gov/?pageID=dorsubtopic&L=4&L0=Home&L1=Businesses&L2=Current+Tax+Year+Information&L3=Guide+to+Employer+Tax+Obligations&sid=Ador> (last visited August 1, 2009); Massachusetts Department of Revenue: A Guide to Withholding of Taxes on Wages, http://www.mass.gov/?pageID=dorterminal&L=6&L0=Home&L1=Individuals+and+Families&L2=Personal+Income+Tax&L3=Forms+%26+Publications&L4=Publications&L5=Publications+Index&sid=Ador&b=terminalcontent&f=dor_publ_withholding&csid=Ador (last visited August 1, 2009); Email from Massachusetts Department of Revenue, to Fleming Ware, Research Assistant, Villanova University School of Law, July 1, 2009, 14:50 EST) (on file with author).

Massachusetts requires new businesses to designate someone as the Master Business Administrator. This individual receives authority over all electronic business. Massachusetts Department of Revenue requires all withholding forms be completed online.

MICHIGAN

Michigan Business Taxes Registration Booklet (2009), *available at* www.michigan.gov/uia/0,1607,7-118-1360-78056--,00.html; Michigan Tax Form 3683 (2009), *available at* www.michigan.gov/documents/3683f_2906_7.pdf.

Michigan requires identification of corporate officers. Listed corporate officers can be personally liable for unpaid taxes. If the corporation hires a payroll provider, the corporation must file Form 3683, which has to be signed by the corporate officer responsible for paying taxes acknowledging the personal liability for unpaid taxes. There is a duty to update this form if the responsible person changes.

MINNESOTA

MINN. STAT. §§ 270C.56, 290.92 (2007); Minnesota Application for Business Registration Instruction Booklet (2009), *available at* http://www.taxes.state.mn.us/instructions/abr_in.pdf. Minnesota requires identification of corporate officers.

Minnesota further states that the supplied information will be used for assessment of unpaid taxes.

MISSISSIPPI

MISS. CODE ANN. § 27-7-307 (2008). Mississippi requires a list of the officers, directors, managing partners, or members who have any responsibility for fiscal management.

MISSOURI

MO. REV. STAT. § 143.241.1-2 (2008); Missouri Employer Tax Guide (2005), *available at* <http://dor.mo.gov/tax/business/withhold/forms/2005/4282.pdf>; Missouri Tax Registration Application (2009), *available at* <http://dor.mo.gov/tax/business/register/forms/2643f.pdf>.

Missouri requires identification of all officers, partners, and sole proprietors, but not of responsible parties.

MONTANA

MONT. CODE ANN. §§ 15-30-203, 207.

The Registration Application requires listing of the President or Partner, Secretary or Partner, and Treasurer or Partner but not specifically the partner whom is responsible for remitting withholding taxes. The Montana Annual Wage Withholding Tax Reconciliation requires a name and address when filing the form.

NEBRASKA

NEB. ADMIN. CODE § 316–33 (2009); Nebraska Circular EN (2008), *available at* http://www.revenue.ne.gov/circ-en/2008/circ_en_2008.htm; Nebraska Tax Application (2009), *available at* Nebraska Tax Application.

Nebraska requires identification of all corporate officers but does not require disclosure of the responsible party.

NEVADA

NEV. REV. STAT. §§ 360.780, 360.784 (2009); Nevada Business Registration Form and Instructions (2005), *available at* <http://tax.state.nv.us/documents/APP-01.00%20Nevada%20Business%20Registration%202002-17-05.doc>.

Nevada requires identification of corporate officers but not responsible officers.

NEW HAMPSHIRE

New Hampshire Department of Revenue Administration, <http://www.nh.gov/revenue/> (last visited August 1, 2009).

New Hampshire does not collect personal income tax.

NEW JERSEY

Cooperstein v. Director, Division of Taxation, 13 NJ Tax 68 (1993); New Jersey Business Registration Application & Instructions (2009), *available at* www.state.nj.us/treasury/taxation/pdf/other_forms/git-er/njwt.pdf; New Jersey Gross Income Tax Instruction Booklet (2008), *available at* <http://www.docstoc.com/docs/766762/2007-New-Jersey-Gross-Income-Tax>; State of New Jersey, Division of Taxation, Responsible Persons, www.state.nj.us/treasury/taxation/respons.shtml (last visited August 1, 2009).

New Jersey requires taxpayers to disclose the name and SSN of all owners, partners, or responsible corporate officers. The New Jersey Department of the Treasury states that a responsible party may be any officer or employee of a corporation who is under the duty to collect and remit trust fund taxes to the State on behalf of the corporation. The Tax Court of New Jersey looks to factors laid out in *Cooperstein* to determine who is a responsible party.

NEW MEXICO

N.M. CODE R. § 3.3.2.8–10 (Weil 2009); Application for Business Tax Identification Number (2009, *available at* www.tax.state.nm.us/forms/year98/acd31015.pdf); New

Mexico Withholding Tax Pamphlet (2009), *available at* www.tax.state.nm.us/forms/year99/crsforms.htm.

New Mexico requires disclosure of owners, partners, corporate officers, and shareholders, but does not require disclosure of a responsible party.

NEW YORK

N.Y. TAX LAW §§ 50, 100 (Gould 2009); New York State Tax Guide for New Businesses (2009), *available at* www.tax.state.ny.us/pdf/publications/multi/pub20_1007.pdf; Business Tax Account Update (October 2004), *available at* www.tax.state.ny.us/pdf/2004/fillin/misc/df95_1004_fill_in.pdf.

The Department of Taxation and Finance requires identification of corporate officers. Businesses are required to update corporate officer information. The update form references responsible persons.

NORTH CAROLINA

17 N.C. ADMIN. CODE 6C.0204 (2009); North Carolina Income Tax Withholding Tables and Instructions for Employers (2009), *available at* www.dorncc.com/downloads/nc30.pdf; North Carolina Business Registration Application for Income Tax Withholding (2009), *available at* www.dorncc.com/downloads/fillin/NCBR_webfill.pdf.

The North Carolina Department of Revenue requires taxpayers register for withholding. Taxpayers must disclose responsible persons on the withholding registration form.

NORTH DAKOTA

N.D. CENT. CODE §57-38-60.1-2; N.D. ADMIN. CODE 81-03-03.1-02 (2009); Application to Register for Income Tax Withholding and Sales and Use Tax Permit (2009), *available at* <http://www.nd.gov/tax/salesanduse/forms/withholdsalesapplication-enabled.pdf>; Income Tax Withholding Guidelines, www.nd.gov/tax/indwithhold/pubs/guide/index.html.

The State Tax Department requires identification of corporate officers for registration. Guidelines warn of potential personal liability of corporate officers if the entity fails to remit taxes; however, corporate officers can completely elect out of personal responsibility if the entity posts a bond.

OHIO

OHIO REV. CODE ANN. §5747.13 (2009); OHIO ADMIN. CODE 5703:7-15 (2009); Ohio Employer Withholding Tax General Guidelines (2009), *available at* http://www.tax.ohio.gov/documents/forms/employer_withholding/2006/WTH_GeneralGuidelines_2006_BW_081006.pdf.

Ohio Withholding Tax Registration requires disclosure of the name and title of individuals responsible for remitting Ohio withholding tax.

OKLAHOMA

OKLA. STAT. ANN. tit. 68, §253; OKLA. ADMIN. CODE 710:90 (2009); Oklahoma Business Registration Packet (2009), *available at* www.tax.ok.gov/forms/busregpk.pdf.

All managers and members of any LLC shall be liable for the failed remittance of any withholding tax, unless, during the period for which the assessment was made, a manager(s) or member(s) was specified as a responsible party for withholding tax purposes.

OREGON

Oregon Combined Employers Registration (2008), *available at* www.oregon.gov/DOR/BUS/docs/211-055.pdf; Oregon Combined Payroll Tax Report (2008), *available at* <http://www.doc.state.or.us/DOR/BUS/docs/2008Forms/211-155-2-08fill.pdf>.

The Oregon Employment Department requires all employers to disclose all corporate officers and for what each officer is responsible (filing tax returns, paying taxes, hiring/firing, determining which creditors to pay first).

PENNSYLVANIA

61 PA. CODE §13.3b (2009); Pennsylvania Enterprise Registration Form and Instructions (2009), *available at* www.revenue.state.pa.us/revenue/lib/revenue/pa-100.pdf.

Pennsylvania requires identification of responsible parties on the Enterprise Registration Form and identification of the type of tax each person is responsible for remitting. The Enterprise Registration Form also states that responsible parties can be personally assessed if the entity does not pay.

RHODE ISLAND

State of Rhode Island Business Registration, <https://www.ri.gov/taxation/BAR/> (last visited August 1, 2009).

Rhode Island requires identification of corporate officers but not identification of responsible officers.

SOUTH CAROLINA

South Carolina Tax Form 111 and Instructions, *available at* <http://www.sctax.org/Forms+and+Instructions/Current+Years+Forms+and+Instructions/default.htm>.

South Carolina requires identification of corporate officers on its registration form but not responsible officers.

SOUTH DAKOTA

S.D. CODIFIED LAWS §10–45–24 (2009); S.D. ADMIN. R. 64:06:01:07:01 (2009); South Dakota License Requirements For Sales, Use, and Exise Tax (2009), *available at* <http://www.state.sd.us/drr2/businesstax/publications/taxfacts/basic.pdf>.

South Dakota requires businesses to register for a sales tax permit with the Department of Revenue. The online application requires identification of corporate officers, but not responsible parties. A related publication warns against personal liability of corporate officers.

TENNESSEE

TENN. CODE. ANN. § 67–6–601–02 (2009); Tennessee Application for Business Registration (2009), *available at* http://state.tn.us/revenue/forms/general/fl3005_1.pdf. Tennessee requires identification of corporate officers but not responsible officers.

TEXAS

TEX. TAX CODE ANN. § 151.202 (Vernon 2009); Texas Sales and Use Tax Permit Application (2009), *available at* www.window.state.tx.us/taxinfo/taxforms/ap-201.pdf.

The Comptroller of Public Accounts requires identification and signature of corporate officers for sales tax registration.

UTAH

UTAH CODE ANN. § 59–10–405.5 (2009); Utah State Business and Tax Registration, TC–69 (2009), *available at* tax.utah.gov/forms/current/tc-69.pdf; Utah Business Guide, www.utah.gov/services/business.html (last visited August 1, 2009).

Utah requires identification of corporate officers on its registration form, but not responsible parties. The form states that all officers will be reviewed by the Department of Revenue for past unpaid tax debts and may be required to post a bond. The form also requires acknowledgment of potential personal liability of officers and the requirement to update corporate officer status.

VERMONT

Application for Business Tax Account (2009), *available at* <http://tax.vermont.gov/pdf.word.excel/forms/business/s-1&instr.pdf>; Guide to Vermont Business Taxes (2009), *available at* tax.vermont.gov/pdf.word.excel/business/guidetobustaxes.pdf.

The Department of Taxes requires businesses open a Vermont Business Account. Businesses must identify all business principals with fiscal responsibility on this account.

VIRGINIA

Virginia Business Registration Application (2009), *available at* www.tax.virginia.gov/web_pdfs/busforms/fr199.pdf; Virginia Business Registration Application Instructions (2009), *available at* www.payroll.com/support/PDFs/State/VA_r-1Inst.pdf.

The Department of Taxation requires business to register with the State. The registration form includes a separate section for listing responsible persons.

WASHINGTON

WASH. REV. CODE §§ 50.12.070, 82.32.030, 82.32.210 (2009); WASH. ADMIN. CODE § 458–20–101 (2009).

Washington requires identification of all owners and spouses, but does not require designation of responsible officers.

WEST VIRGINIA

W.VA. CODE R. §§ 11–12–3, 11–12–4 (2009); West Virginia State Tax Department Publication TSD–100 (2009), *available at* www.state.wv.us/taxrev/taxdoc/tsd100.pdf; West Virginia Working to Serve You Better! Publication (2009), *available at* www.state.wv.us/taxrev/uploads/busapp.pdf.

The Tax Commissioner requires identification of corporate officers to obtain the required business registration certificate. Responsible parties do not have to be identified.

WISCONSIN

Wis. STAT. §§ 71.67(6), 73.03(50)(a) (2009); Application for Business Tax Registration (2009), *available at* <http://www.dor.state.wi.us/forms/sales/index.html>. Wisconsin requires identification of corporate officers but not responsible officers.

WYOMING

Wyoming Sales/Use Tax License Application (2009), *available at* <http://revenue.state.wy.us/PortalVBVS/uploads/ETS%20Form%20001.pdf>; Wyoming Multi-Level Marketer's Sales/Use Tax Application (2009), *available at* <http://revenue.state.wy.us/PortalVBVS/uploads/ETS%20Form%20001ML.pdf>. Wyoming has no trust fund regime, but requires identification of corporate officers of out-of-state businesses applying for a sales tax permit to cover more than one independent sales contractor.

Appendix C—State Bonding Requirements

ALABAMA

Alabama does not have a bonding requirement.

ALASKA

Alaska does not have a bonding requirement.

ARIZONA

ARIZ. REV. STAT. ANN. §§ 42-1102, 42-5006-07 (2009); ARIZ. ADMIN. CODE §§ R15-5-2207, R15-5-601 (2009). Arizona may require a bond to secure the payment of any tax if the taxpayer has not previously paid taxes. A bond may be required if a licensee, filing monthly, has been delinquent four times within two years, if an applicant had its prior license revoked, if an applicant had delinquencies under a previous license, or if the Department concludes that an applicant would be unable to remit taxes. A contractor licensed by the Registrar of Contractors and a dealer of manufactured housing that has not had a principal

place of business in Arizona for over one year is generally required to furnish a bond. Any person who has not had a principal place of business in Arizona for over one year who enters a prime construction contract in excess of \$50,000 must furnish a bond equal to transaction privilege tax on the contract price and obtain a certificate from the Director.

ARKANSAS

Arkansas does not have a bonding requirement.

CALIFORNIA

CAL. REV. & TAX. CODE § 6701 (Deering 2009). California allows the Board, whenever it deems it necessary to ensure compliance, to require any person to place with it any security that the Board determines. Security held by the Board shall be released after a three-year period in which the person has timely filed all returns and paid all taxes to California.

COLORADO

Colorado does not have a bonding requirement.

CONNECTICUT

CONN. GEN. STAT. § 12-430 (1) (2009). The Commissioner of Revenue can require any person subject to sales or use tax to deposit security for payment. Security can be in any form and amount the Commissioner determines, up to six times the taxpayers estimated tax liability for the applicable reporting period.

DELAWARE

Delaware does not have a bonding requirement.

DISTRICT OF COLUMBIA

D.C. CODE § 47-2208 (2009). The Office of Tax and Revenue may require a security bond from vendors engaged in business in the District to ensure payment of tax. A bond can also be required from vendors not engaged in business in the District, but authorized to pay the tax and collect reimbursement from it.

FLORIDA

FLA. STAT. § 221.16 (2) (2009). The Department of Revenue can require a bond to ensure payment of the tax prior to issuing a certificate of registration. In determining if a bond is needed, and the amount thereof, the Department must consider: (1) applicant's prior compliance history; (2) type of business; (3) type of inventory; (4) business location; (5) applicant's financial status; and (6) anticipated volume of business. The Department may also require the posting of a bond to guarantee the payment of the taxes before issuing an importer's permit to a person importing taxable personal property in its own trucks in connection with that person's business.

GEORGIA

GA. CODE ANN. §§ 48-8-57 (a), 48-2-51, 48-2-59 (c), 48-8-63 (e) (2009); Ga. Comp. R. & Regs. 560-12-1-.16, 560-12-2-.26 (8) (2009); Georgia provides for the posting of a bond in the following situations: (1) chronically delinquent dealers; (2) direct payment permit holders; (3) jeopardy assessments; (4) appeals to superior court; and (5) subcontractors.

HAWAII

HAW. REV. STAT. § 231-24 (d) (2009). Collection of a tax pursuant to a jeopardy bond can be stayed by filing with the Department a bond in whatever amount and with whatever surety the Department deems appropriate, together with any further security the department deems necessary to ensure the collection of taxes.

IDAHO

IDAHO CODE ANN. § 63-3625 (2009). Idaho may require security if the State Tax Commissioner believes a retailer is not complying with applicable tax statutes. The Commissioner may require security from habitual delinquents.

ILLINOIS

35 ILL. COMP. STAT. 120/12 (2009). Any person filing an action under the Administrative Review Law to review a final assessment or revised final assessment issued by the Department must post security within twenty days after filing the complaint.

INDIANA

IND. CODE §§ 6-2.5-6-12 (a), 6-2.5-7-8 (2009). The Department of Revenue may require a retail merchant to post security if it determines the bond is necessary to insure payment of sales and use tax. The department may also require a motor fuel distributor to file a bond.

IOWA

IOWA CODE § 421.27, 423.35 (2009); IOWA ADMIN. CODE r. 701-11-10 (2009). The Director may require any person subject to tax to file a bond in order to secure the collection of the tax due. A bond is required under the following situations: (1) when the Director determines that certain segments of the business community are experiencing above average financial failures which might jeopardize the collection of the tax; (2) when an applicant for a new sales tax permit, after a complete investigation of the applicant's financial status, would be unable to timely remit the tax; (3) when a new applicant's record under a permit for a prior business shows delinquencies; (4) when the department experienced collection problems while a new applicant was engaged in a prior business; (5) when a new applicant is substantially similar to a person who would have been required to post a bond under the certain set guidelines. Existing permit holders may be required to file a bond if they have: (1) one or more delinquencies in remitting sales tax or filing timely returns in the last 24 months; (2) two or more delinquencies remitting sales tax or filing timely returns during the last 24 months if filing quarterly; (3) four or more delinquencies in remitting sales tax or filing timely deposits or returns during the last 24 months if filing returns on a monthly basis; and (5) eight or more delinquencies during the last 24 months if filing on a semimonthly basis.

KANSAS

KAN. STAT. ANN. § 79-3616 (2009). Any person subject to tax may be required to post a bond if the Director of Taxation determines that the collection of taxes needs to be secure. Corporations applying for a registration certification must post a bond.

KENTUCKY

KY. REV. STAT. ANN. § 139.660 (1) (2009). Security may be required of any taxpayer subject to state sales and use taxes.

LOUISIANA

LA. REV. STAT. ANN. §§ 47.9, 47.306(D)(1) (2009); LA. ADMIN. CODE tit. 61I, § 4373(C)(1). Contractors and subcontractors who are nonresidents must file a surety bond for all contracts.

MAINE

ME. REV. STAT. ANN. tit. 36, §§ 5231(2), 145A (2009). A bond may be required when an extension of time to pay the tax is granted. A bond is required to stay collection following a jeopardy assessment.

MARYLAND

CODE ANN. TAX-GEN. § 13-825(g) (West 2009). To protect tax revenue, the comptroller can set an amount to secure payment of tax that is due or may become due and required acceptable security to be posted.

MASSACHUSETTS

MASS. GEN. LAWS ch. 64H, § 30A (2009); MASS. GEN. LAWS ch. 64I, § 31A (2009); 830 MASS. CODE REGS. 62C.66.1, 64H.3.1(5) (2009); Massachusetts DOR Directive 06-6, 11/20/2006. Nonresident contractors must deposit with the Department of Revenue an amount equal to five percent of the total amount of the contract or furnish a guarantee bond to ensure payment of the tax unless the project is less than \$20,000 or the owner of the real estate being constructed is a tax-exempt organization or a government agency exempt from tax. Transient vendors are required to post and maintain a bond to ensure payment of the tax if: (1) the transient vendor solicits taxable sales without first registering as a vendor; or (2) a notice of assessment is issued to the transient vendor and the vendor fails to pay the assessed amount. The Commissioner may require a purchaser with direct payment authority to post a bond in an amount acceptable to the Commissioner as a condition of receiving a Form ST-14, Direct Payment Certificate. Taxpayers must post security if the Commissioner assesses the tax for failing to file a return, for filing a false return, or if the Commissioner determines that: 1) the collection of the tax will be jeopardized by delay; 2) the return filing or payment history of the taxpayer raises doubt as to the collection of the tax if delayed; or 3) an abatement application or petition is frivolous and has been filed primarily to avoid prompt payment of the tax.

MICHIGAN

MICH. COMP. LAWS § 205.53 (2009). If a person engages in a business for which a privilege tax is imposed, the person shall apply for and obtain a license from the Department for the current tax year. If the Department considers it necessary in order to secure collection of the tax, if a taxpayer has at any time failed, refused, or neglected to pay any tax or interest or penalty upon a tax or has attempted to evade the payment of any tax, or if the applicant is a corporation and the Department has reason to believe that the management or control of the corporation is under persons who have failed to pay any tax or interest or penalty upon a tax under this act, the Department shall require a surety bond payable to the state.

MINNESOTA

MINN. STAT. § 297A.92 (2009). The commissioner may require a retailer to deposit security with the commissioner. In lieu of the security, the commissioner may require a retailer to file a bond.

MISSISSIPPI

MISS. CODE ANN. §§ 27-65-21, 23, 33, 61 (2009); IV-1-03 MISS. CODE R. § 35 (2009). The commissioner may require taxpayers to file a bond in an amount double the aggregate tax liability of the taxpayer for any previous three months period within the last calendar year or estimated three-month tax liability. The bond is to be conditioned for the prompt payment of taxes that are due for each return. The Commissioner may require a taxpayer to post a bond for other circumstances where the Commissioner feels it is necessary. Any taxpayer operating a business from their home or from a temporary location must post a cash or surety bond sufficient to cover the estimated tax liability for a six-month period. Persons in the business of selling mobile homes must post a cash or surety bond in an amount not less than two times estimated liability for three months or prepay the tax before a sales tax permit may be issued. Any person who fails to comply with all the provisions of the sales tax law forfeits his right to do business in the state until the person complies with all the provisions, posts an adequate bond, and pays all taxes due. A surety bond is required of persons who: (1) fail to obtain a sales tax permit before going into business; (2) continues to operate a business after revocation of the sales tax permit; (3) fails to keep adequate records and invoices as required by the state sales tax laws; (4) fails or refuses to permit inspection of records; or (5) fails to pay any taxes due under the state sales tax laws. Resident contractors and nonresident contractors subject to the contractor's tax must either prepay the estimated contractor's tax or file a bond with sufficient sureties approved by the

Commissioner conditioned on the payment of all sales, use, income, withholding, and motor fuels tax.

MISSOURI

MO. REV. STAT. §§ 144.087 (1), 144.625 (2009); MO. CODE REGS. ANN. tit. 12, § 10-104.020 (1) (2009). Taxpayers must pay tax owed plus interest and penalties before a license may be issued. A taxpayer who has defaulted on the filling of payment of sales or use tax may obtain or reinstate their retail sales license by filling a bond with the Department of Revenue. The Department may also require vendors to file bonds where necessary to secure payment of use tax.

MONTANA

MONT. CODE ANN. § 15-68-512 (2009). The Department of Revenue may require a retailer to deposit security in a form and amount that the Department determines is appropriate. In lieu of security, the Department may require a seller to file a bond to guarantee solvency and responsibility.

NEBRASKA

Neb. Rev. Stat. § 77-2710 (2009). Transient and itinerant vendors are required to post a bond. Nonresident contractors may be required to post a bond.

NEVADA

NEV. REV. STAT. §§ 372.510, 372.825 (2009). The Department, whenever it deems it necessary to insure compliance with this chapter, may require any person subject to tax to place with it such security as the Department deems necessary. A person who obtains a permit to collect sales tax after July 1, 1985, shall deposit with the Department security in an amount equal to twice the estimated yearly tax due quarterly, or three times the estimated average tax due monthly if filing monthly returns, but not less than \$100. Any person holding a permit in good standing on July 1, 1985, who becomes delinquent, files a late return, or whose check tendered as payment is dishonored shall deposit additional security with the Department. The Department shall require an organization which is habitually delinquent to deposit with the Department security in an amount equal to three times the average actual tax due quarterly if the organization files its returns quarterly or five times the average actual tax due monthly if the organization files its returns for monthly periods.

NEW HAMPSHIRE

New Hampshire does not have a bonding requirement.

NEW JERSEY

N.J. REV. STAT. §§ 54:32B-18, 54:49-2 (2009). If the Director deems it necessary to protect the revenues to be obtained under the state sales and use tax law, he or she may require any person required to collect the tax to file a bond to secure the payment of any tax due or which may become due.

NEW MEXICO

N.M. STAT. § 7-1-54 (2009). Whenever it is necessary to ensure payment of any tax, the Department is authorized to require or allow any person to furnish an acceptable surety bond in an appropriate amount. If any person neglects to comply with a notice to furnish security, the Department may demand compliance. If a risk exists that the tax due will not be paid, the Secretary may require any person liable to furnish security. The Secretary may require taxpayers who protest an assessment or the payment of tax to furnish security for amounts greater than \$200,000.

NEW YORK

N.Y. TAX LAW §§ 1137-38, 1252 (Gould 2009); N.Y. COMP. CODES R. & REGS. tit. 20, § IV(A)(539.5) (2009). The Department of Taxation and Finance can require persons who are required to collect tax to file a bond to secure payment of any tax, interest, or penalties. The collection of any jeopardy assessment may be stayed by filing a bond with the Department. Where the Department of Taxation and Finance deems it necessary to protect the revenues to be collected, it has the power to require a bond under the procedures set forth in the state sales and compensating use tax law. Whenever the Department deems it necessary to protect the revenues due, it may require any holder of a certificate of authority who is required to collect tax to file a bond in such amount as may be determined by the department to secure payment of the tax, penalties, or interest due or which may become due.

NORTH CAROLINA

N.C. GEN. STAT. § 105-164.40 (2009). The Secretary can require a taxpayer to file an indemnity bond sufficient to protect the interest of the state when a jeopardy assessment is made.

NORTH DAKOTA

N.D. CENT. CODE § 57-39.2-12(3); N.D. ADMIN. CODE 81-04.1-04-05 (2009). The Commissioner can require a taxpayer to file a bond when it is necessary to secure the collection of tax. Security must be posted by operators of carnivals, circuses, show troupes, and similar organizations.

OHIO

OHIO REV. CODE ANN. §§ 5739.05, 5739.15, 5739.30, 5741.06 (LexisNexis 2009); OHIO ADMIN. CODE 5703:9-08 (2009). The Tax Commissioner may require a bond under the following circumstances: (1) if a vendor or seller is authorized to prepay the tax; (2) failure to file two consecutive monthly returns, or three or more returns in a twelve month period; or (3) if a person issued a jeopardy assessment wishes to stay execution by filing a petition for reassessment.

OKLAHOMA

OKLA. STAT. tit. 68, § 1368 (2009); OKLA. ADMIN. CODE § 710: 65-9-2 (a)(1) (2009). The Tax Commissioner may require every person who holds a sales tax permit and who is a delinquent taxpayer to furnish to the Commission a cash bond or other security as the Commission deems necessary to secure payment of taxes. Group three vendors must make a sufficient cash deposit or sufficient bond with the Tax Commission as to secure payment of semiannual tax liability before doing business in Oklahoma.

OREGON

Oregon does not have a bonding requirement.

PENNSYLVANIA

PA. CONS. STAT. § 7277 (2009). The Department of Revenue can require a bond to be filed by a nonresident individual or foreign business entity that is subject to the Pennsylvania sales-use tax and is not authorized to do business in Pennsylvania or does not have an established place of business in the state. If such out-of-state individual is a building contractor or a supplier delivering materials for work in Pennsylvania, a bond is required. The Department can require a bond to be filed by a person who petitions it for reassessment if the assessment exceeds \$500. A transient vendor must post a bond in the amount of \$500.

RHODE ISLAND

R.I. GEN. LAWS § 44-19-23 (2009). The Tax Administrator may require any person subject to the taxes imposed by Rhode Island to file with the Administrator a bond to secure the payment of taxes due or which may become due.

SOUTH CAROLINA

S.C. CODE ANN. § 12-54-200 (A). The Department of Revenue may, at its discretion, require taxpayers to post a cash or surety bond upon the taxpayers' failure to file a timely return or pay any tax for as many as two tax filing periods during a twelve-month period.

SOUTH DAKOTA

South Dakota does not have a bonding requirement.

TENNESSEE

TENN. CODE ANN. § 67-6-522 (2009). Dealers who become delinquent for more than ninety days in the payment of any sales or use tax due to Tennessee must post with the Commissioner cash or an indemnity bond with good and solvent surety to secure proper payment of sales and use taxes for which the dealers may become liable.

TEXAS

TEX. TAX CODE ANN. § 151.251 (Vernon 2009); 34 TEX. ADMN. CODE § 3.327 (a) (2009). Applicants for sales tax permits and those required to register as retainers must furnish a bond or security.

UTAH

Utah does not have a bonding requirement.

VERMONT

VT. STAT. ANN. tit. 32, § 8916 (2009). When deemed necessary to protect motor vehicle purchase and use tax revenues, the Commissioner of Motor Vehicles may require a rental company to file a bond issued by a surety company in an amount

fixed by the Commissioner that does not exceed the total potential tax liability of the company to secure payment of any tax, penalties, or interest due.

VIRGINIA

VA. CODE ANN. § 58.1-630 (2009). The Commissioner may require any person subject to the tax to file a bond.

WASHINGTON

Washington does not have a bonding requirement.

WEST VIRGINIA

W. VA. CODE R. §§ 11-15-8b, 11-12-20-21, 11-15A-12 (2009); West Virginia Taxpayer Services Division Publications TSD-330, 11/01/1999, TSD-317, 4/00/1993. Nonresident contractors are required to post a cash bond, a corporate surety bond, or an umbrella surety bond prior to performing any contracting activity in West Virginia. Transient vendors are required to post a \$500 bond with the Tax Commissioner. The Tax Commissioner is authorized to require any taxpayer or retailer required to collect tax to file a bond as security for payment of the tax.

WISCONSIN

WIS. STAT. § 77.61 (2009). The Department may require any person who is or will be liable to it for tax to place with it a security that the Department determines. In determining the amount of the security, the taxpayer's payment of other taxes administered and any other relevant facts may be considered. A certified service provider who has contracted with a seller and filed an application to collect and remit sales and use taxes on behalf of the seller must submit a surety bond to the Department to guarantee payment of the taxes.

WYOMING

WYO. STAT. ANN. § 39-15-306(b) (2009). To secure payment of sales taxes by nonresident prime or general contractors, each nonresident contractor must file a surety bond.

Appendix D—States Imposing Interest on Responsible Officers From Due Date of Return

ALABAMA

Ala Code §§ 40–29–72, 40–29–73; *Arthur W. McPhillips, Jr. v. State of Alabama Department of Revenue*, No. P–04–377 (Ala. Dept. of Rev. April 5, 2006) (RIA Checkpoint, Ala. Case Law) (Sales taxes); *O. Hugh Campbell v. State of Alabama Dep’t of Revenue*, No. P–04–359, 2005 Ala. Tax LEXIS 81 (Ala. Dept. of Rev. Nov. 10, 2005) (Withholding tax); *State of Alabama v. King*, No. CV 91–B–2121–S, 1995 WL 423171 (N.D. Ala. 1995) (comparing Alabama law with IRC 6672 side by side in B.C. 505 case)

ALASKA

Alaska Stat. 23.20.240 (2006); *Breck v. State*, 862 P.2d 854, 856 n.1 (Alaska 1993)

ARIZONA

Ariz. Rev. Stat. Ann. § 42–5028 (2006) (Sales tax); Ariz. Rev. Stat. Ann. § 43–435 (2006) (Withholding tax); but see *Arizona Dep’t of Revenue v. Action Marine*, 161 P.3d 1248 (Ariz. Ct. App. 2007); *In re Inselman*, 334 B.R. 267 (Bankr. D. Ariz. 2005) (There does, however, appear to be some controversy about how the Arizona statute operates Compare *Action Marine* and *Inselman* with state cases decided by administrative law judges after *Inselman*.)

CALIFORNIA

Cal. Rev. & Tax. Code § 6829 (West 1998) (Sales tax); Cal. Unemp. Ins. Code § 1735 (West 1986) (Withholding tax); *State Bd. of Equalization v. Wirick*, 112 Cal. Rptr. 2d 919, 924 (Cal. Ct. App. 2001).

CONNECTICUT

Conn. Gen. Stat. Ann. § 12–414a (West 2000) (Sales); Conn. Gen. Stat. Ann. § 12–736 (West 2000) (Withholding); (Sales tax statute is clear that interest applies back to corporate due date on responsible officer. Withholding tax statute mirrors 6672 and is unclear.)

GEORGIA

Ga. Code Ann. § 48-2-52 (Supp. 2007) (Withholding); Ga. Code Ann. § 34-8-167 (2004); E-mail from Warren R. Calvert, Senior Assistant Attorney General, Georgia Department of Law, to T. Keith Fogg, Visiting Associate Professor of Law, Villanova University School of Law (Mar. 18, 2008, 18:13:54 EST)

HAWAII

Haw. Rev. Stat. § 235-64(b) (Supp. 2007).

IDAHO

Idaho Code Ann. § 63-3078 (2007) (Withholding); Idaho Code Ann. § 63-3627 (2007) (Sales); Idaho State Tax Commission Ruling, No. 19641, 2007 WL 2297072 (Idaho Tax. Comm. April 3, 2007); Idaho State Tax Commission Ruling, No. 17949, 17950, 2004 WL 5215791 (Idaho Tax. Comm. Oct. 7, 2004)

ILLINOIS

35 Ill. Comp. Stat. Ann. 735/3-7 (West 2006) (All trust fund taxes)

INDIANA

Ind. Code § 6-3-4-8(g) (West 2006) (Withholding); Ind. Code § 6-2.5-2-1(b), 6-2.5-9-3 (West 2006) (Sales); *Russell v. Indiana*, No. 49T10-0103-SC-31, 2001 Ind. Tax Lexis 68 (Dec. 6, 2001)

IOWA

Iowa Code Ann. § 422.16.4, 10 (West Supp. 2008); Iowa Code Ann. § 422.4.19 (West 2006) (Withholding); Iowa Code Ann. § 421.26 (West Supp. 2008) (Sales)

KANSAS

Kan. Stat. Ann. § 79-3643 (Supp. 2007) (Sales); Kan. Stat. Ann. § 79-2971 (Supp. 2007) (Excise); Kan. Stat. Ann. § 79-32,107(e) (1997) (Withholding); Kan. Stat. Ann. § 79-32,100(b), (c) (Supp. 2007)

KENTUCKY

Ky. Rev. Stat. Ann. §141.340(2) (LexisNexis Supp. 2007) (Withholding); Ky. Rev. Stat. Ann. §139.185 (LexisNexis 2007) (Sales); *Koppel v. Revenue Cabinet, Commonwealth of Kentucky*, 777 S.W.2d 938 (Ky. Ct. App. 1989); *Nienaber v. Revenue Cabinet, Commonwealth of Kentucky*, No. K92-R-71, 1996 Ky. Tax LEXIS 379 (Bd. Tax App. March 13, 1996)

LOUISIANA

La. Rev. Stat. Ann. § 47:1561.1 (2006) (Withholding and Sales)

MAINE

Me. Rev. Stat. Ann. Tit. 36, § 177.1 (Supp. 2007) (Withholding and Sales); *Prescott v. State Assessor*, 721 A.2d 169 (Me. 1998)

MARYLAND

Md. Code Ann., [Tax-General] §10-906(d) (LexisNexis 2004) (Withholding); Md. Code Ann., [Tax-General] §11-601(d) (LexisNexis 2004) (Sales); *Nissenbaum v. Comptroller of the Treasury*, No. 3374, 1991 WL 322992 (Md. Tax 1991); *Fox v. Comptroller of Treasury*, 728 A.2d 776 (Md. Ct. Spec. App. 1999), cert. denied, 735 A.2d 1106 (Md. 1999)(Sales)

MASSACHUSETTS

Mass. Gen. Laws Ann. ch. 62B, §5 (West Supp. 2008) (Withholding); Mass. Gen. Laws Ann. ch. 62C, §31A (West Supp. 2008); Mass. Gen. Laws Ann. ch. 64H, §16 (West Supp. 2008) (Sales); *Berenson v. Comm'r*, 604 N.E.2d 704 (Mass. 1992)(Sales); *Hazard v. Comm'r of Revenue*, No. C261103, 2006 WL 724543 (Mass. App. Tax. Bd. 2006)(Withholding)

MICHIGAN

Mich. Comp. Laws Ann. §205.27a(5) (West 2007); Mich. Comp. Laws Ann. §205.65 (West 2007) (Sales and Withholding); *Jamian v. Department of Treasury*, No. 256522, 2005 Mich. App. LEXIS 2601 (Mich. Ct. App. Oct. 10, 2005); *Dickow v. Department of Treasury*, No. 0329530, 2007 Mich. Tax LEXIS 38 (Mich. Tax Tribunal Nov. 27, 2007)

MINNESOTA

Minn. Stat. Ann. § 270C.56 (West 2007); Minn. Stat. Ann. § 290.92 subdiv. 1(4) (West 2007) (Withholding); Minn. Stat. Ann. § 297A.61 subdiv. 2 (West 2007) (Sales)

MISSISSIPPI

Miss. Code Ann. § 27-7-307 (West 2006) (Withholding)

MISSOURI

(The failure to file the sales or withholding tax return is a prerequisite to trigger the imposition of tax against the responsible officer; however, if triggered, interest is charged back to the due date of the entity's return); Mo. Ann. Stat. § 143.241.2 (West 2006) (Withholding); Mo. Ann. Stat. § 144.157.1 (West 2006) (Sales); Jones v. Director of Revenue, 981 S.W.2d 571 (Mo.1998); *see also* Garland v. Director of Revenue, 961 S.W. 2d 824 (Mo. 1998)

MONTANA

Mont. Code Ann. § 15-68-811 (2007) (Sales); Mont. Code Ann. § 15-30-203 (2007).

NEBRASKA

Neb. Rev. Stat. § 77-1783.01 (2003); Neb. Dep't. of Revenue, 4-787-1989 Rev. 10-2007, Statutory Responsibilities for Collecting, Reporting, and Remitting Nebraska Taxes (2007)

NEVADA

Nev. Rev. Stat. Ann. § 360.297 (LexisNexis 2007) (Sales)

NEW HAMPSHIRE

N.H. Rev. Stat. Ann. § 78-A:7 (LexisNexis Supp. 2006); N.H. Rev. Stat. Ann. § 78-A:20 (LexisNexis 2001)

NEW JERSEY

N.J. Stat. Ann. §54A:9-6(f), (g), (l) (West Supp. 2008) (Withholding); N.J. Stat. Ann. §54:32B-14 (West Supp. 2008); N.J. Stat. Ann. §54-32B-2(w) (West Supp. 2008) (Sales); *Skaperdas v. Director, Division of Taxation*, 14 N.J. Tax 103 (1994), *aff'd*, 685 A.2d 18 (N.J. Super. Ct. App. Div. 1996)(Sales)(It is possible that New Jersey follows New York and is split on income taxes where interest does not accrue.)

NEW MEXICO

N.M. Stat. Ann. §7-3-5 (LexisNexis 2004) (Withholding); *In re Baker*, No. 2001-30, 2001 WL 35723190 (N.M. Tax. Rev. Dept. Nov. 1, 2001)

NEW YORK

N.Y. [Tax] Law §1133 (McKinney 2008) (Sales); *Lorenz v. Dep't of Taxation*, 623 N.Y.S.2d 455 (N.Y. App. Div. 1995)(Sales); N.Y. [Tax] Law §685(g) (McKinney Supp. 2008); *Yellin v. N.Y. Tax Commission*, 81 A.D.2d 196 (N.Y. App. Div. 1981) (As mentioned above, New York imposes interest back to the due date of the entity return for unpaid sales taxes but not for unpaid withholding taxes.)

NORTH CAROLINA

N.C. GEN. STAT. ANN. §105-253 (West 2007) (Withholding and Sales); *In re Jonas*, 318 S.E.2d 869 (N.C. App. 1984); *In re Proposed Assessments*, No. 2000-70, 2000 N.C. Tax LEXIS 23 (N.C. Dept. Rev. Oct. 10, 2000); *In re Proposed Assessments*, No. 2004-45, 2004 N.C. Tax LEXIS 28 (N.C. Dept. Rev. June 25, 2004); N.C. Dep't of Revenue, *Individual Income Tax Gift Tax Estate Tax Rules and Bulletins Taxable Years 2007 and 2008* (2008)

NORTH DAKOTA

N.D. Cent. Code §57-38-60.1 (2000) (Withholding); N.D. Cent. Code 57-39.2-18.1 (2000) (Sales)

OHIO

Ohio Rev. Code Ann. §5747.07 (LexisNexis 2005) (Withholding); Ohio Rev. Code Ann. §5739.33 (LexisNexis 2005) (Sales); *Soltesiz v. Tracy*, Tax Comm'r, 663 N.E.2d 1273 (Ohio 1996)

OKLAHOMA

Okla. Stat. Ann. tit. 68, § 2385.3(E) (West Supp. 2008) (Withholding); Okla. Stat. Ann. tit. 68, § 2385.6(A) (West Supp. 2008); Okla. Stat. Ann. tit. 68, § 1361(A) (West 2008) (Sales); Oklahoma Tax Commission Decision, 2005-08-16-15, 2005 Okla. Tax LEXIS 15 (Okla. Tax Comm. Aug. 16, 2005)

OREGON

Or. Rev. Stat. § 316.207(3) (2007) (Withholding); *see also* Or. Rev. Stat. § 316.162(3)(b) (2007); (No sales tax in Oregon)

PENNSYLVANIA

72 Pa. Stat. Ann. § 7320 (West 2000) (Withholding); 72 Pa. Stat. Ann. § 7201(e) (West Supp. 2008) (Sales); *In re Hartman*, 375 B.R. 740 (W.D. Pa. 2007)

RHODE ISLAND

R.I. Gen. Laws § 44-30-76, 85 (2005) (Withholding); *In re Payroll Tax*, No. 98-14, 1998 R.I. Tax LEXIS 12 (R.I. Div. of Tax. Aug. 20, 1998); *In re Payroll Tax*, No. 93-22, 1993 R.I. Tax LEXIS 24 (R.I. Div. of Tax. July 14, 1993); *In re Withholding Tax*, No. 94-18, 1994 R.I. Tax LEXIS 17 (R.I. Div. of Tax. June 2, 1994); R.I. Gen. Laws § 44-19-35 (2005)

SOUTH CAROLINA

S.C. Code Ann. § 12-8-2010 (2000) (Withholding); S.C. Code Ann. § 12-54-195 (Supp. 2007) (Sales)

SOUTH DAKOTA

S.D. Codified Laws § 10-45-55 (2004); S.D. Codified Laws § 10-59-1, 6 (2004, Supp. 2008)

TENNESSEE

Tenn. Code Ann. § 67-1-1443(a) (2006) (Sales) (No state income tax)

TEXAS

Tex. [Tax] Code Ann. § 111.016 (Vernon 2008) (Sales); *Dixon v. State*, 808 S.W.2d 721 (Tex. App. 1991); (No state income tax)

VERMONT

Vt. Stat. Ann. tit. 32, § 5844 (2007) (Withholding); Vt. Stat. Ann. tit. 32, § 9703 (Supp. 2007) (Sales); *Rock v. Dep't of Taxes*, 742 A.2d 1211 (Vt. 1999) (Rock says withholding and sales tax provisions are treated the same even though they have slight variation. Withholding statute silent on interest while sales tax statute explicit)

VIRGINIA

Va. Code Ann. § 58.1-1813 (2004) (Withholding and Sales); *In re Individual Income Tax*, No. 05-132, 2005 Va. Tax LEXIS 159 (Va. Dept. of Tax. Aug. 10, 2005)

WASHINGTON

Wash. Rev. Code Ann. § 82.32.145 (West 2000) (Sales); *In re Petition for Correction of Trust Fund Accountability*, No. 05-0066, 24 Wash. Tax. Dec. 454 (Wash. Dept. of Revenue Appeals Div. Mar. 30, 2005); (Washington has no income tax)

WASHINGTON, D.C.

D.C. Code Ann. 47-4491 (Withholding and Sales); *Michael v. District of Columbia*, No. 5490-93 (D.C. Super. Ct. Tax Div. Dec. 30, 1997)

WEST VIRGINIA

W. Va. Code Ann. § 11-15-17 (LexisNexis 2005) (Sales); W.Va. Code Ann. § 11-10-19 (LexisNexis 2003) (Withholding); *Frymier-Halloran v. Paige*, 458 S.E.2d 780 (W.Va. 1995); *In re Bowen*, 116 B.R. 477 (S.D. W. Va. 1990); *In re Audia*, Nos. 93-384 CS, 93-385 WS, 1994 W. Va. Tax LEXIS 81 (W. Va. Dept. Tax and Revenue May 27, July 7, 1994) (West Virginia imposes interest back to the due date of the return for sales taxes but not for income taxes.)

WISCONSIN

Wis. Stat. Ann. §71–83(1)(b) (West 2004) (Withholding); Wis. Stat. Ann. §77.60(9) (West 2004) (Sales); *Omegbu v. Wisconsin Dept. of Rev.*, No. 97–W–342, 1999 Wisc. Tax LEXIS 46 (Tax App. Comm. Oct. 14, 1999)

Appendix E—International Law Treatment of Responsible Officers

The concept of using businesses to collect taxes for the government exists in other countries. A brief survey of English speaking countries suggests that even more support exists for the concept of charging interest back to the due date of the corporate return relating to the collected tax. While these countries all have systems that differ from the responsible officer system used in the United States, their systems also have much in common with the United States. The concept of holding individual corporate officers responsible for the failure to pay over taxes collected by a corporation for the government is one which the countries share even if their systems of affecting the liability differ.

CANADA

Canada has a provision similar to that of the United States for withholding income taxes. Persons paying salary, wages or other remuneration must withhold taxes and remit them to the Receiver General at the time prescribed by regulation.⁵²² The amounts withheld pursuant to this provision are held “in trust for Her Majesty and for payment to Her Majesty in the manner and at the time provided under this Act.”⁵²³ Corporate directors of the entity that fails to withhold or remit such taxes are jointly and severally liable to pay that amount *plus any interest and penalties relating to it*.⁵²⁴ The *Soper* case discusses the objective and subjective tests applied with respect to any director to determine if the director meets the exception for liability.⁵²⁵

In addition to the liability for the unpaid withholding taxes, the director may be liable for a 10 percent or 20 percent penalty for a knowing failure to remit the withheld taxes or gross negligence in the failure to remit.⁵²⁶ The Canadian statute holding directors liable developed in the 1980s when Canada felt too many companies were failing to pay collected employment taxes.⁵²⁷ The current Canadian law makes clear that the directors of a company that does not pay over withheld employment taxes are personally liable for not only the taxes but the penalties and interest as well that are due from the company.⁵²⁸

ENGLAND

England requires an employer to withhold its mandated social security contribution from wages. Corporate officers incur liability if the “failure [to pay] appears to the [Inland Revenue] to be attributable to fraud or neglect on the part of one or more individuals who, at the time of the fraud or neglect, were officers of the body corporate.”⁵²⁹ Unless only one corporate officer exists, England apportions the liability among the officers based on relative responsibility.⁵³⁰ The amount of liability asserted against the officers(s) includes interest and penalty amounts due from the corporation.⁵³¹ Interest then runs on the amount of the liability Inland Revenue specifies as due from the individual.⁵³²

AUSTRALIA

Corporate directors face personal liability for failure of the corporation to withhold income taxes.⁵³³ The directors also face personal liability for failure of the corporation to timely pay the withheld taxes over to the Government.⁵³⁴ The liability for failure to collect and pay over can equal the full amount of the taxes not paid. Interest on the unpaid liability is subject to the discretion of the tribunal imposing the liability.⁵³⁵

Endnotes

- ¹ “The tax imposed by section 3101 shall be collected by the employer of the taxpayer, by deducting the amount of the tax from the wages as and when paid.” IRC § 3101 (a).

“Except as otherwise provided in this section, every employer making payment of wages shall deduct and withhold upon such wages a tax.” IRC § 3402 (a).
- ² The term “collected taxes” will be used in this Article to describe taxes that an individual or entity must collect on behalf of the United States and hold for payment over to the United States at some future point. The most common collected taxes are employment taxes that consist of two parts: withheld income taxes and withheld social security taxes.
- ³ See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 19 (2008).
- ⁴ See *id.*
- ⁵ See *id.*
- ⁶ See *id.* at 5.
- ⁷ See *id.*
- ⁸ These recommendations are drawn from *Transparency in Private Collection of Federal Taxes*, __FLORIDA TAX REVIEW__ (2011). They are reprinted here with permission from Florida Tax Review.
- ⁹ These recommendations are drawn from *In Whom We Trust*, 43 CREIGHTON L. REV. 357 (2010). They are reprinted here with permission from Creighton Law Review.
- ¹⁰ These recommendations are drawn from *Leaving Money on the Table and Providing an Incentive not to Pay—A Failed Collection Device*, 5 HASTINGS BUSINESS LAW JOURNAL 1 (2009). They are reprinted here with permission from the Hastings Business Law Journal.
- ¹¹ Take, for example, the Form 941 which reports three different types of information: withheld income taxes (trust information); withheld social security taxes (trust information) and the employer’s portion of the social security taxes (not trust information). Similarly, Form 720 sets out a reporting mechanism for a variety of excise taxes some of which result from a trust relationship where the entity filing the Form 720 has collected the excise taxes from third parties and some of which result from excise taxes directly imposed on the entity.
- ¹² See Joint Committee on Taxation, *Study of Present-Law Taxpayer Confidentiality and Disclosure Provision as Required by Section 3802 of the*

Internal Revenue Service Restructuring and Reform Act of 1998, Volume I: Study of General Disclosure Provisions (JCS-1-00), 246-79, January 28, 2000 for a comprehensive discussion of the history of the disclosure laws. In 1998 Congress mandated in Section 3802 of the Revenue Reform Act that the Joint Committee on Taxation and the Treasury Department prepare reports on disclosure law. The Joint Committee on Taxation report (JCT Report) was issued in three volumes: Volume I covers more general issues, Volume II discusses issues involving exempt organizations and Volume III contains letters from states and tax authorities on the costs and benefits of disclosure. The report prepared by the Joint Committee on Taxation contains a thorough history of disclosure laws in the United States in Volume I at pages 246-79. While some disclosure history will be briefly summarized below, a more detailed summary of the history exists in the JCT Report. See Staff of the Joint Committee on Taxation, *Study of Present-Law Taxpayer Confidentiality and Disclosure Provision as Required by Section 3802 of the Internal Revenue Service Restructuring and Reform Act of 1998, Volume I: Study of General Disclosure Provisions* (JCS-1-00) January 28, 2000. Although Volume I of the Treasury Department report (Treasury Report) notes that a Volume II will be published focusing on IRC § 6104, no Volume II was published by the Treasury Department. Documented in email dated July 7, 2010 from Channprett Singh, IRS Office of the Chief Counsel (on file with the author). Department of the Treasury, Office of Tax Policy, *Report to the Congress on Scope and Use of Taxpayer Confidentiality and Disclosure Provisions* (October 2000) (Treasury Report). Therefore, all references to the Treasury Report herein are to this Volume I. This section does not seek to provide comprehensive information concerning this history but only to assist the reader in understanding the policy debates that have occurred concerning disclosure of tax information.

- ¹³ See, e.g., IRC § 1 (imposing income tax on individuals); IRC § 11 (imposing income tax on corporations); IRC § 1201 (outlining capital gains tax); IRC § 2001 (a) (imposing tax on transfers of estates); IRC § 2501 (imposing tax on gifts); IRC § 4001 (imposing tax on luxury vehicles); IRC § 4051 (imposing tax on heavy trucks and trailers); IRC § 4064 (imposing tax on gas guzzlers); IRC § 4191 (imposing tax on medical devices); IRC § 4261 (a) (imposing tax on air travel); IRC § 4261 (b) (imposing tax on transportation); IRC § 4375 (imposing fee on health insurance); IRC § 4401 (imposing tax on wagers); IRC § 4471 (imposing tax on covered voyages); IRC § 4611 (imposing tax on petroleum); IRC § 5701 (imposing tax on cigarettes).
- ¹⁴ The general rule of nondisclosure of tax information is set out in IRC 6103 (a) which provides in part that “[r]eturns and return information shall be confidential,” and except as provided in 6103 the information cannot be disclosed.”

- ¹⁵ See Robert P. Strauss, *State Disclosure of Tax Return Information: Taxpayer Privacy vs. The Public's Right to Know*, 5 STATE TAX NOTES MAGAZINE 24, 25 (July 5, 1993).
- ¹⁶ *Id.* at 25–26.
- ¹⁷ *Id.* at 26.
- ¹⁸ *Id.*; David Lenter, Joel Slemrod, Douglas Shackelford, *Public Disclosure of Corporate Tax Return Information: Accounting, Economics, and Legal Perspectives*, NATIONAL TAX JOURNAL VOLUME LVI, No. 4, December 2003, at 813.
- ¹⁹ The Privacy Protection Study Commission, created as part of the Privacy Act of 1974, recommended that Congress make major changes to the disclosure of federal tax information. The Watergate scandal and ensuing disclosure policy recommendations caused Congress to evaluate access to taxpayer records. JCT Report (Vol. I), at 256.
- ²⁰ Pub. L. No. 94–455 sec. 1202 (a)(1), 90 Stat. 1667 (1976); IRC § 6103 (a).
- ²¹ Compare IRC 6103 as it existed in 1976 with the new revised version effective in 1977.
- ²² Lenter, Slemrod & Shackelford, *supra* note 18, at 807.
- ²³ Act of July 14, 1870, 16 Stat. 256, 259 (“[N]o collector, deputy collector, assessor or assistant assessor, shall permit to be published in any manner such income return, or any part thereof, except such general statistics not specifying the names of individuals or firms, as he may make public, under such rules and regulations as the Commissioner of Internal Revenue shall prescribe”).
- ²⁴ 28 Stat. 509, c. 349. (“By section 34, sections 3167, 3172, 3173, and 3176 of the Revised Statutes of the United States as amended were amended so as to provide that it should be unlawful for the collector and other officers to make known, or to publish, amount or source of income, under penalty”).
- ²⁵ See JCT Report (Vol. I), at 248–49. The Joint Committee on Taxation Report does not discuss any debate concerning disclosure of these types of returns, suggesting that returns filed by business entities did not become an issue until later.
- ²⁶ Act approved Aug. 5, 1909, ch. 6, § 38, 36 Stat. 11, 112.
- ²⁷ Section 38 of the legislation read as follows:
- Sixth*—When the assessment shall be made, as provided in this section, the returns, together with any corrections thereof which may have been made by the Commissioner, shall be filed in the office of the commissioner of Internal revenue and shall constitute public records and be open to inspection as such.

Seventh—It shall be unlawful for any collector, deputy collector, agent, clerk, or other officer or employee of the United States to divulge or make known in any manner whatever not provided by law to any person any information obtained by him in the discharge of his official duty, or to divulge or make known in any manner not provided by law any document received, evidence taken, or report made under this section except upon the special direction of the President; and any offense against the foregoing provision shall be a misdemeanor and be punished by a fine not exceeding on thousand dollars, or by imprisonment not exceeding one year, or both, at the discretion of the court.

²⁸ Appropriations Act of 1910, Act of June 17, 1910, ch. 197, 36 Stat. 468, 494.

²⁹ Disclosure and Privacy Law Reference Guide, 1-3-1-4, *available at*: <http://www.irs.gov/pub/irs-pdf/p4639.pdf>

³⁰ *Id.*

³¹ The Sixteenth Amendment states that “[t]he Congress shall have the power to lay and collect taxes on incomes from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.”

³² Section G.(d)1. of the Tariff Act of 1913 provided: When the assessment shall be made, as provided in this section, the returns, together with any corrections thereof which may have been made by the Commissioner, shall be filed in the office of the Commissioner of Internal Revenue and shall constitute public records and be open to inspection as such: Provided, That any and all such returns shall be open to inspection only upon the order of the President, under rules and regulations to be prescribed by the Secretary of the Treasury and approved by the President. 38 Stat. 177.

³³ *Compare* the statement of former President Benjamin Harrison before the Union League Club of Chicago in 1898:

Each citizen has a personal interest, a pecuniary interest in the tax return of his neighbor. We are members of a great partnership, and it is the right of each to know what every other member is contributing to the partnership and what he is taking from it.

With the statement of Secretary of the Treasury—Mellon:

[w]hile the government does not know every source of income of a taxpayer and must rely upon the good faith of those reporting income, still in the great majority of cases this reliance is entirely justifiable, principally because the taxpayer knows that in making a truthful disclosure of the sources of his income, information stops with the government. It is like confiding in one’s lawyer.

- ³⁴ Lenter, Slemrod & Shackelford, *supra* note 18 (citing Revenue Act of June 2, 1924, Ch. 234, § 257 (b), 43 Stat. 293 (1924)).
- ³⁵ Section 55 (b) of Revenue Act of 1934, 48 Stat. 680, provided:
- “Every person required to file an income return shall file with his return, upon a form prescribed by the commissioner; a correct statement of the following items shown upon return: (1) name and address, (2) total gross income, (3) total deductions, (4) net income, (5) total credits against net income for purposes of normal tax, and tax payable.... Such statements or copies thereof shall as soon as practicable be made available to public examination and inspection in such manner as the Commissioner, with the approval of the Secretary, may determine, in the office of the collector with which they are filed, for period of not less than three years from the date they are required to be filed.”
- ³⁶ Act of April 19, 1935, Ch. 74; 49 Stat. 158 (repealing the pink slips).
- ³⁷ JCT Report (Vol. I), at 254 & n.1056 (“In 1939, the disclosure provisions were codified at section 55 of the Internal Revenue Code. In 1954, the disclosure provisions moved to their present location in section 6103. No material change was made from existing law”).
- ³⁸ See JCT Report (Vol. I), at 255–56.
- ³⁹ Tax Reform Act of 1976 (P.L. 94–455).
- ⁴⁰ See generally Staff of Joint Committee on Taxation, 94th Cong., 2d Sess., General Explanation of the Tax Reform Act of 1976, 313–316 (Comm. Print 1976), reprinted in 1976–3 C.B. (Vol. 2) 325–328.
- ⁴¹ “The Joint Committee on Taxation and the Secretary of the Treasury shall each conduct a separate study on the scope and use of provisions regarding taxpayer confidentiality and shall report the findings of such study ... to Congress.”
- ⁴² The JCT Report and the Treasury Report are so thorough that they must be read by anyone with an interest in this area. As discussed below, this Article takes off from the point of many of the disclosure policies stated in the Joint Committee Report.
- ⁴³ Pub. L. No. 81–814, sec. 341 (1950). The provision sec. 153 (c) of the 1939 Code, was the earliest version of Section 6104. Section 153 (c) was later codified as Section 6104 (a) of the 1954 Code, without amendment. JCT Report (Vol. II), at 124 (citing Pub. L. No. 83–591 (1954)).
- ⁴⁴ Unlike IRC 6103 which starts with a blanket statement prohibiting disclosure without an exception, IRC 6104 outlines what will be open to the public, addressing first tax exempt organizations in IRC 6104 (a)(1) and then pension plans in (a)(2).
- ⁴⁵ See JCT Report (Vol. II), at 5–6, 121.

- ⁴⁶ Public Law 89-554, 80 Stat. 383. For a discussion on disclosure, see *infra* note 88.
- ⁴⁷ See JCT Report (Vol. I), at 82 and footnote 293 thereof, citing *Tax Analysts and Advocates v. IRS*, 505 F.2d 350 (D.C. Cir. 1974); *Fruheauf Corp. v. IRS*, 75-2 U.S.T.C. 16,189 (6th Cir. 1975).
- ⁴⁸ See JCT Report (Vol. I), at 82.
- ⁴⁹ Treasury Report, at 27.
- ⁵⁰ Internal Revenue Service Restructuring and Reform Act of 1998, Pub. L. No. 105-206, § 3509, 112 Stat. 685, 772-74 (codified at IRC § 6110 (i) (2000)); H.R. Rep. No. 105-599, at 298-99 (1998) (Conf. Rep.), *reprinted* in 1998 U.S.C.C.A.N. See Mitchell Rogovin and Donald Korb, *Four R's Revisited: Regulations, Rulings, Reliance, and Retroactivity in the 21st century*, 46 DUG. L. REV. 357 (2007-2008) ("The Act also added Chief Counsel Advice to the definition of a "written determination" in IRC § 6110 (b). By including Chief Counsel Advice within the disclosure framework of IRC § 6110, Congress intended to remove the advice from disclosure under the Freedom of Information Act, 5 U.S.C. § 552 (2000 & Supp. V 2005). See IRC § 6110 (m) (2000) (providing that "written determinations" are not subject to mandatory disclosure); H.R. REP. NO. 105-599, at 302 (1998) (Conf. Rep.), *reprinted* in 1998 U.S.C.C.A.N.).
- ⁵¹ *Tax Analysts v. IRS*, 350 F.3d 100 (D.C. Cir. 2003).
- ⁵² See *Written Testimony of IRS Deputy Commissioner Linda Stiff Before the Senate Committee on Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations of the collection of federal Employment Taxes*, 2 (July 29, 2008) ("Today employment taxes represent the largest portion of total tax dollars collected by the IRS. In FY 2007 for example, of the \$2.7 trillion in taxes collected by the IRS, \$1.7 trillion was payroll taxes. This means that approximately two out of every three dollars collected by the IRS are from required withholding on employment tax returns. Of this \$1.7 trillion collected in withholding and FICA taxes, approximately \$778 billion was collected for Social Security and Medicare and approximately \$992 billion was collected for individual withholding taxes").
- ⁵³ See Edward K. Cheng, *Structural Laws and the Puzzle of Regulating Behavior*, 100 NW. U.L. REV. 655 (2006); Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. 695 (2007); Richard Thaler & Cass Sunstein, *Nudge: Improving Decisions About Health, Wealth and Happiness* (Yale University Press 2008); Erich Kirchler, *The Economic Psychology of Tax Behavior* (Cambridge 2007).
- ⁵⁴ See IRC § 4251 (imposing tax on communication, including local telephone service, toll telephone service, and teletypewriter exchange service).

- ⁵⁵ IRC § 4291 (“Every person receiving any payment for facilities or services on which a tax is imposed upon the payor thereof under this chapter shall collect the amount of the tax from the person making such payment.”) Airlines use a similar system as they collect the airline excise tax from their customers. The amount of the excise tax is added to the cost of the ticket and collected at the time of purchase.
- ⁵⁶ Instructions for Form 720 (Rev. January 2010) (“Use Form 720 and attachments to report liability by IRS No. and pay the excise taxes listed on the form”).
- ⁵⁷ Publication 15, (Circular E), Employer’s Tax Guide, Internal Revenue Service, available at <http://www.irs.gov/pub/irs-pdf/p15.pdf>.
- ⁵⁸ *Id.* There may be instances when the entity need not set this money aside in a separate account but can continue to hold it in the entity’s general account.
- ⁵⁹ See discussion of *Begier v. IRS*, 496 U.S. 53 (1990) *infra* at note 165.
- ⁶⁰ IRC § 6672, 7501 (addressing collected taxes, but neither provision specifying which type of collected taxes.) States do make distinctions between sales taxes and withholding taxes which can ultimately only be attributed to this difference. See Appendix C (listing states which have adopted bonding laws for unpaid sales taxes with no complimentary bonding laws for unpaid withholding taxes). For a discussion of how certain states charge interest to responsible officers from due date of sales tax return but not due date of withholding tax return, see *infra* part three, Charge Interest and Penalties to Responsible Officers Based on the Liability of the Entity for Unpaid Collected Taxes—Accountability.
- ⁶¹ IRC § 31(a)(1) provides that “the amount withheld as tax under chapter 24 shall be allowed to the recipient of the income as a credit against the tax imposed by this subtitle.” No parallel credit provision exists for excise taxes such as the communication or airline excise taxes; however, the same rules of principal and agent govern the transaction. When a taxpayer pays their phone bill, including the communication excise tax, that taxpayer expects credit for such payment and would not welcome an appearance by the IRS seeking to collect the tax from the taxpayer for a second time. This circumstance is acknowledged by Charles Schriebman in his text *IRS Tax Collection Procedures* where he stated that “[i]f a collecting agency (other than a partnership or sole proprietorship) has failed to pay over excise taxes it had collected from patrons or members, the IRS will explore the possibility of asserting the trust fund recovery penalty against the collecting agency’s responsible persons.” P. 9132 (CCH 3d. 2002). His statement acknowledges the liability of the collecting entity for the excise tax.

- ⁶² IRC § 31(a)(1) (“The amount withheld as tax under chapter 24 shall be allowed to the recipient of the income as a credit against the tax imposed by this subtitle”).
- ⁶³ See IRC § 7501.
- ⁶⁴ See discussion of *Begier v. IRS*, 496 U.S. 53 (1990), *infra* note 165.
- ⁶⁵ JCT Report (Vol. II), at 6.
- ⁶⁶ Tax exempt organizations also must comply with the employment tax provisions. Many tax exempt organizations have large employee bases and collect vast amounts of taxes from their employees.
- ⁶⁷ The payment of excise taxes generally occurs semimonthly, with several narrow exceptions. IRS Publication 510, Ch. 11 (*available at*: <http://www.irs.gov/publications/p510/ch11.html>).
- ⁶⁸ The IRC currently provides for eleven public trust funds: IRC § 9501 Black Lung Disability Trust Fund, IRC § 9502 Airport and Airway Trust Fund, IRC § 9503 Highway Trust Fund, IRC § 9504 Sport Fish Restoration and Boating Trust Fund, IRC § 9505 Harbor Maintenance Trust Fund, IRC § 9506 Inland Waterways Trust Fund, IRC § 9507 Hazardous Substance Superfund, IRC § 9508 Leaking Underground Storage Tank Trust Fund, IRC § 9509 Oil Spill Liability Trust Fund, IRC § 9510 Vaccine Injury Compensation Trust Fund, and IRC § 9511 Patient-Centered Outcomes Research Trust Fund. The Treasury website contains monthly financial reports for trust funds administered by the Treasury Department. *Available at*: <http://www.treasurydirect.gov/govt/reports/tfmp/tfmp.htm>.
- ⁶⁹ Because of the “trusting” nature of taxpayers who rely on payroll providers, a number of these providers have perpetrated Ponzi style schemes in which they take the money from the taxpayers’ accounts and use some of it for personal gain rather than using the money to pay the taxes. By the time the schemes collapse, potentially thousands of taxpayers who actually had money drawn out of their accounts to pay over the collected taxes find themselves with a tax bill for these taxes. See, e.g., *In re FirstPay, Inc.*, Nos. 09–1076, 09–1107, 2010 WL 3199858 (4th Cir. Aug. 13, 2010). See *infra* note 301.
- ⁷⁰ See GAO 2005 report (U.S. Gov’t Accountability Office, GAO–05–637, *Financial Management: Thousands of Civilian Agency Contractors Abuse the Federal Tax System with Little Consequence*, 2 (2005)).
- ⁷¹ See Doc 2010–1397; see also Michael Joe, *Obama Seeks to Block Tax Debtors from Receiving Federal Contracts*, TAX NOTES TODAY, January 21, 2010.
- ⁷² GAO 2005 report (U.S. Gov’t Accountability Office, GAO–05–637, *Financial Management: Thousands of Civilian Agency Contractors Abuse the Federal Tax System with Little Consequence*, 2 (2005)).

- ⁷³ See Christopher S. Rizek, *Taxpayer Privacy and Disclosure Issues Will Continue to Touch Us All*, in *The Future of American Taxation: Essays Commemorating the 30th Anniversary of Tax Notes*, 81, 89 (“The short answer is, unfortunately, that no one really knows as a factual matter what the link is between the confidentiality of taxpayer information and voluntary compliance. The claim that confidentiality fosters compliance is rather, something like an article of faith, for or against which only anecdotal and not particularly conclusive evidence can be offered”).
- ⁷⁴ See Treasury Report (Vol. I), which makes the concern for collateral non-reporting a basis for its recommendations concerning correct policy in this area placing much more emphasis on this factor than the JCT Report.
- ⁷⁵ See JCT Report (Vol. I), at 127–33 and Treasury Report, at 33–37 for a policy discussion. On the last two points, *see also* 2006 TNT 115–18 for a discussion by Mark Boyle, writing as President of Tax Executives, Inc. to Senators Grassley and Baucus. Mr. Boyle strongly opposed disclosure of corporate tax returns citing many reasons for his opposition. Interestingly, one reason was that “public disclosure of corporate tax returns would effectively represent the outsourcing of a core governmental function—the examination of tax returns—to the public or the media.” That comment provides an interesting bookend to the discussion of disclosure surrounding private tax collectors, *infra*.
- ⁷⁶ On these three points, *see* the policy discussions in the JCT Report (Vol. II), at 5–9.
- ⁷⁷ For example, the Department of Justice may access returns and return information for use in tax administration proceedings. IRC § 6103 (h)(3). The Department of the Treasury may access returns and return information when a need to know is demonstrated. IRC § 6103 (h)(1). The Department of Commerce, the Federal Trade Commission, and the Department of Agriculture all may access returns and return information upon written request to the IRS. *See* JCT Report (Vol. I) at 43–44; *see also* Rizek, *supra* note 73, at 86–87 (discussing ever-present pull from outside sources at incredible database maintained by IRS which each claimant for exception sees as important resource).
- ⁷⁸ *Compare* JCT Report (Vol. I), at 5 (discussing IRC 6103), *with* JCT Report (Vol. II), at 6 (discussing IRC 6104).
- ⁷⁹ JCT Report (Vol. I), at 6. Emphasis added to the word “agency” because the JCT’s use of that word makes an important statement as a part of this policy. That term basically speaks of disclosures to government entities and not to individuals. Yet, two of the exceptions contained in IRC 6103 concern disclosures to individuals and not to government entities. IRC § 6103 (c), (e). The essential exclusion of these two exceptions in the JCT Report’s

conclusion concerning disclosure policy reflects, as discussed below, that disclosures to individuals almost always occur only in the absence of privacy interests.

⁸⁰ JCT Report (Vol. II), at 6.

⁸¹ Perhaps the better view of the second principle is that it is simply a broad exception to the first and not really a second principle unto its own. Many exceptions to the general rule of nondisclosure exist in IRC 6103, and the disclosure of tax exempt returns in IRC 6104 simply represents one of those exceptions, albeit a broad one.

⁸² Act of April 19, 1935, Ch. 74; 49 Stat. 158.

⁸³ Although privacy has a strong foundation in this country, individuals arguably have severely diminished privacy expectations due to the advances of the Internet Age. A simple search in a search engine of an individual's name may produce results detailing that individual's political party affiliation, locations where the individual owns property and how much each is worth, phone numbers and even relatives of the individual, and a link to the individual's Facebook profile. With all of this information "floating" around and easily accessible by the public, privacy considerations for tax return information, which may reveal less than what an internet search may uncover, are potentially worth less than they used to be.

⁸⁴ JCT Report, (Vol. I), at 5; Treasury Report, at 34; *see also* Rizek, *supra* note 73, at 89.

⁸⁵ JCT Report (Vol. I), at 238.

⁸⁶ The rules listed here do not include the disclosure exceptions carved out in IRC 6104 which will be discussed separately below.

- 1) The entity receives substantial subsidies from the government such as tax exempt organizations.
- 2) The entity exists to hold funds in trust for the public such as pension plans.
- 3) The entity exerts political influence without adequate accountability such as the political organizations described in IRC 527.

⁸⁷ These terms are defined in IRC § 6103 (b)(1) & (2) and are discussed *infra* at note 92.

⁸⁸ Around the same time Congress amended the disclosure provisions in the Internal Revenue Code in 1976 to usher in the modern era, it was also looking at similar issues from a broader perspective. In 1966, Congress passed the Freedom of Information Act (FOIA) (5 U.S.C. 552) and in 1974 it passed the Privacy Act (5 U.S.C. 552(a)). FOIA established a right to access certain information held by the federal government. The purpose was to

allow citizens of the United States to be better informed so they could fight corruption and hold those governing accountable. *NLRB v. Robbins Tire & Rubber Co.*, 437 U.S. 214, 242 (1978). The Privacy Act created rules to govern the use of personnel information concerning individuals working for the federal government. All of these changes occurred as the government recognized the massive databases that it maintained and the good or evil that could result from the dissemination of information in those databases.

⁸⁹ *United States v. Dickey*, 268 U.S. 378, 387 (1925).

⁹⁰ Reading the letters from the state taxing authorities to the Joint Committee provides an easy source of the benefits which stem from disclosing tax information to state taxing authorities. Study of Present-Law Taxpayer Confidentiality and Disclosure Provisions as Required by Section 3802 of the Internal Revenue Service Restructuring and Reform Act of 1998, Volume III: Public Comments and General Accounting Office Reports (JCS-1-00), January 28, 2000.

⁹¹ “The IRS maintains standing agreements with the States and the District of Columbia for disclosure of returns and return information. The basic agreement, Agreement on Coordination of Tax Administration, provides for the mutual exchange of returns and return information between a specific State tax agency and the IRS.” JCT Report (Vol. I), at 28.

⁹² The limiting language requires an explanation of terms. The terms “return” and “return information” are defined terms in the statute. IRC § 6103(b)(1)–(2). A “return” is “any tax or information return, declaration of estimated tax, or claim for refund required by, or provided for or permitted under” title 26 of the United States Code. The term “return information” is much longer, comprising four subparts. Essentially, return information encompasses all of the data associated with a taxpayers file for a particular return.

⁹³ While the policy issue here presents little challenge, the administration of this provision does provide some challenges for the IRS. It must determine the form of adequate consent and the execution of such consent. See *Huckaby v. IRS*, 794 F.2d 1041 (5th Cir. 1986) (unlawful disclosure based on oral consent); *Olsen v. Egger*, 594 F. Supp. 644 (S.D.N.Y. 1984) (consent in divorce decree not binding on IRS); *Tierney v. Schweiker*, 718 F.2d 449 (D.C. Cir. 1983) (open ended consent for “all years” not valid; consents were coerced based on fear of losing social security benefits); *Hefti v. Loeb et al.*, 1992 U.S. Dist. LEXIS 12644 (C.C. Ill. 1992) (disclosure to one spouse permitted with respect to joint return); *Ward v. United States*, 973 F. Supp. 996 (D. Colo. 1997) (disclosure in public form during radio broadcast unauthorized because consent did not designate persons to whom disclosure could be made).

- ⁹⁴ IRC § 6103 (d)(1) (“[S]uch return information shall not be disclosed to the extent that the Secretary determines that such disclosure would identify a confidential informant or seriously impair any civil or criminal tax investigation.”) Another concern is disruption if taxpayer invites persons to participate in a meeting whose goal in the meeting might be to impair tax administration. See *United States v. Finch*, 434 F. Supp. 1085 (D. Colo. 1977); Treas. Reg. 301.6103 (c)–1(c) and Delegation Order No. 156.
- ⁹⁵ It includes return information “if the Secretary determines that such disclosure would not seriously impair Federal tax administration.” IRC § 6103 (e)(7).
- ⁹⁶ With respect to joint returns filed by the spouses but not other returns. IRC § 6103 (e)(1)(A)(ii).
- ⁹⁷ With respect to those portions returns filed by the child’s parents which contain information necessary for the child to comply with IRC § 1 (g). IRC § 6103 (e)(1)(A)(iii).
- ⁹⁸ IRC § 6103 (d)(1)(E). Heirs can also obtain tax information from an estate tax return to the extent that the heirs demonstrate a material interest in the estate to the IRS.
- ⁹⁹ IRC § 6103 (d)(1)(F). Beneficiaries of trusts can also obtain tax information from a trust tax return to the extent that the beneficiaries demonstrate a material interest in the trust to the IRS.
- ¹⁰⁰ IRC § 6103 (e)(2).
- ¹⁰¹ IRC § 6103 (e)(3). Heirs can also obtain tax information concerning deceased individuals to the extent that the heirs demonstrate a material interest in the information contained in those income tax returns.
- ¹⁰² IRC § 6103 (e)(4) & (5). These individuals can receive the returns filed by the estate being administered or prior returns of the individual or entity whose estate they administer if they can demonstrate a material interest in the information contained in the prior returns.
- ¹⁰³ IRC § 6103 (e)(6).
- ¹⁰⁴ IRC § 6103 (e)(8). This exception allows a former spouse to receive information concerning collection action with regard to a tax liability for which the former spouse is jointly liable with the taxpayer.
- ¹⁰⁵ IRC § 6103 (e)(9). This exception allows a person responsible for taxes pursuant to IRC § 6672 to learn if others have also been held liable for the same penalty and, if so, the collection actions taken with respect to the other responsible officers.
- ¹⁰⁶ This last basis applies to responsible officers. The 6672 liability does not strictly relate to a tax return. No return is filed that reports such a liability.

Rather, the liability is derivative resulting from a failure of certain persons to meet their statutory obligations to collect and pay over certain taxes. This provision, like IRC § 6103 (e)(8) that addresses collection information on former spouses, was added to IRC § 6103 in 1996. By adding this provision, Congress acknowledged that joint liability creates a need to know that overrides individual privacy concerns. The policy reasons behind this provision are distinct from most other material disclosures in that the need for information actually outweighs the individual's policy concerns, rather than the requesting party eliminating privacy concerns by stepping into the taxpayer's shoes. While the information disclosure is based on a material interest, the nature of the material interest here differs from that of most of the persons on this list. (Disclosure to a child for compliance with IRC § 1 (g) and disclosure to a spouse concerning collection on a joint return also fall within this basis for an exception.)

- ¹⁰⁷ See 2000 Disclosure Lit. Reference Book at 8-2-8-5 for cases and details on form of disclosure; see also JCT REPORT (Vol. I) at 163.
- ¹⁰⁸ *Long v. United States*, 972 F.2d 1174 (10th Cir. 1992); *Smith v. United States*, 964 F.2d 630 (7th Cir. 1992), *reh'g en banc, denied*, 1992 U.S. App. LEXIS 19344 (7th Cir. 1992), *cert. denied* 506 U.S. 1067 (1993); *Bator v. Internal Revenue Service*, 89-1 U.S.T.C. 9138 (D. Nev. 1988), *aff'd without published opinion sub nom, Bator v. United States*, 899 F.2d 1224 (9th Cir. 1990), *cert. denied*, 498 U.S. 893 (1990); *Rueckert v. Internal Revenue Service*, 775 F.2d 208 (7th Cir. 1985); *Taylor v. United States* 106 F.3d 833 (8th Cir. 1997), *aff'g* 915 F. Supp. 10115 (N.D. Iowa 1996); *White v. Commissioner*, 537 F. Supp. 679 (D. Colo. 1982); *Loomis v. Internal Revenue Service*, 81-1 U.S.T.C. 9341 (D. Colo. 1981); *Davis v. United States*, 80-2 U.S.T.C. 9794 (D. Mass. 1980), *aff'd* 81-1 U.S.T.C. 9458 (1st Cir. 1981).
- ¹⁰⁹ See IRS, *Electronic Data Exchange Pilot Project (EDS)*, <http://www.irs.gov/privacy/article/0,,id=132017,00.html>.
- ¹¹⁰ California uses federal tax information to locate tax debtors, especially those who are out of state and cannot be located through the post office or other skip tracing methods, to identify the amount and sources of tax debtors' assets, [and] to verify the accuracy of taxpayer-supplied information..." JCT Report (Vol. III), at 66. Colorado stated that the federal tax information is the "cornerstone of our income tax compliance program" and that it is used for statistical analysis for informed economic decision-making. *Id.* at 69. Hawaii also states that it uses federal tax information on individuals and businesses for "statistical and compliance purposes." *Id.* at 72.
- ¹¹¹ See preceding footnote. In addition to the letters from the individual states, the Federation of Tax Administrators submitted a detailed letter addressing the need for states to "use tax return information and the adequacy of

- present-law protections governing taxpayer privacy.” See JCT Report (Vol. III), ¶ 98.
- ¹¹² Letter from Federation of Tax Administrations, JCT Report (Vol. III), ¶ 100.
- ¹¹³ *Id.*, ¶ 101.
- ¹¹⁴ *See id.*
- ¹¹⁵ IRC § 6103 (d)(6). Those safeguards are detailed in IRS Publication 1075, Tax Information Security Guidelines for State, Local and Federal Agencies. States safeguard confidential taxpayer data in accordance with IRS guidelines. Many states implement training and education programs to instruct employees on proper procedures to protect this data. *See, e.g.*, JCT Report (Vol. III), at Paragraph 83, 339, 347, 363, 387, 422, 505, 519, 533.
- ¹¹⁶ IRC § 6103 (d)(1).
- ¹¹⁷ “A prerequisite to disclosure is a written request by the head of the agency, body or commission. The IRS maintains standing agreements with the States and the District of Columbia for disclosure of returns and return information. The basic agreement, Agreement on Coordination of Tax Administration, provides for the mutual exchange of returns and return information between a specific State tax agency and the IRS.” JCT Report (Vol. I), at 28.
- ¹¹⁸ For a general discussion of these provisions see General Accounting Office, *Taxpayer Confidentiality: Federal, State, and Local Agencies Receiving Taxpayer Information*, GAO-GDD-99-164 (August 1999); *see also* JCT REPORT (Vol. I), at 43-45.
- ¹¹⁹ Compare the disclosure to the Department of Commerce for the Bureau of the Census which allows both return and return information *with* the disclosure to Commerce’s Bureau of Economic Analysis which only releases return information. IRC § 6103 (j)(1)(A) (Census Bureau) with 6103 (j)(1)(B) (Economic Analysis Bureau).
- ¹²⁰ These agencies consist of the Commerce Department, the Congressional Budget Office, the Federal Trade Commission, the Treasury Department and the Agriculture Department. The exceptions granted here do not reach all federal agencies but only agencies that demonstrated a specific need related to the statutorily mandated tasks governed by that agency’s directives.
- ¹²¹ To the Commerce Department the statute says “for the purpose of, but only to the extent necessary in, the structuring of censuses and national economic accounts and conducting related statistical activities authorized by law.” IRC § 6103 (j)(1). To the Treasury Department the statute says “only to the extent necessary in, preparing economic or financial forecast, projections, analyses, and statistical studies and conducting related activities.” IRC § 6103 (j)(3). Each grant to an agency has similar limiting language.

- ¹²² IRC § 6103 (j)(4) provides that “[n]o person who receives a return or return information under this subsection shall disclose such return or return information to any person other than the taxpayer to whom it relates except in a form which cannot be associated with or otherwise identify, directly or indirectly, a particular taxpayer.”
- ¹²³ IRC § 6103 (k)(2).
- ¹²⁴ IRM EXH 1.2.49–2.
- ¹²⁵ National Taxpayer Advocate, Report to Congress Fiscal Year 2011 Objectives, 14 (“[T]he filing of the NFTL in the public record might actually prevent the taxpayer from borrowing money to fully pay the outstanding tax liability”) available at <http://www.irs.gov/pub/irs-utl/nta2011objectivesfinal.pdf>. National Taxpayer Advocate, Report to Congress Fiscal Year 2010 Objectives, 54 (“Filing an NFTL on outstanding liabilities may create serious consequences for a taxpayer, including making it more difficult to obtain credit”) available at http://www.irs.gov/pub/irs-utl/fy2010_objectivesreport.pdf.
- ¹²⁶ See WILLIAM T. PLUMB, JR., *FEDERAL TAX LIENS* 53–54 (The American Law Institute 1981) (1962).
- ¹²⁷ See *id.*
- ¹²⁸ IRC § 6323 (f); Reg §301.6323 (f)–1 (d) (“A Form 668 must identify the taxpayer, the tax liability giving rise to the lien, and the date the assessment arose regardless of the method used to file the notice of Federal tax lien”).
- ¹²⁹ File a Notice of Federal Tax Lien, <http://www.irs.gov/businesses/small/article/0,,id=108339,00.html> (last visited July 21, 2010).
- ¹³⁰ A vulnerability of this type currently exists with respect to liens for unpaid real estate taxes. In most, if not all, jurisdictions, these liens can jump ahead of mortgages and other liens created prior in time. To protect themselves, mortgage lenders require borrowers to escrow their real estate taxes. In this manner, mortgage lenders protect themselves from nasty surprises. If federal tax liens could, without notice, similarly defeat lenders, lenders would either be required to fashion some type of protective mechanism as with mortgage liens, be exposed to defeat or forego lending. The problem with fashioning a protective mechanism is that unlike real estate taxes, which are relatively easily ascertained and predicted, federal taxes could be assessed for very unpredictable amounts.
- ¹³¹ JCT REPORT (Vol. I), at 238–242. The specific proposal before the JCT staff concerned publication of the names of persons who did not file tax returns. The JCT staff’s concerns extended beyond whether such a proposal would reap collection benefits and into the area of the reliability of the data concerning who had not filed a return. The combination of both concerns effected the view of the staff on the failure of such a shaming provision to

demonstrate a compelling interest for disclosure. The concerns about the reliability of the data listing persons with unfiled returns raises issues on the benefits side of the test since disclosure of incorrect data could destroy any benefits received even if collection from some persons increased as a result of the disclosure.

¹³² See Joshua Blank, *What's Wrong With Shaming Corporate Tax Abuse*, 62 TAX L. REV. 539, 563 (2009).

¹³³ The way shaming laws can meet the tests necessary to qualify as an exception to the rule of nondisclosure is to ride on the back of the exception allowing the publication of the notice of lien. Several of the states that permit shaming have explicitly stated this as their basis for publishing the shaming lists. See, e.g., Maryland, South Carolina and Virginia, listed in Appendix A. Essentially, these states have determined that the taxpayer has little or no privacy interest in the information because the information already exists in the public domain. Since it exists in the public domain and no privacy interest are implicated, the benefits derived by publishing the information need not be as great in order to move the needle over to the disclosure side. These states view the shaming provision as merely a formatting issue more than a disclosure issue.

The reasoning used some by states, an absence of privacy interests in the disclosed information, in adopting shaming laws would not work for corporate shaming provisions. With corporate shaming, the taxpayer's privacy interests have not been removed by the public filing of an NFTL. While the corporate interests in privacy may not equal those of individuals, these interests remain substantial. The benefits side of the equation would need to pull full weight in order to move the needle on the dial over to the disclosure side.

¹³⁴ See JCT REPORT (Vol. II), at 6.

¹³⁵ "The present law rules requiring disclosure of returns and return information relating to tax-exempt organizations reflect a determination that, because such organizations are supported by the public, both through the tax benefits associated with tax-exempt status and, in some cases, direct contributions, such organizations have a different expectation of privacy than taxable persons and the public has a strong interest in information regarding such organizations." JCT Report (Vol. II), at 63.

¹³⁶ For a general discussion of the history of IRC § 6104, see JCT Report (Vol. II, Appendix A), at 120–129.

¹³⁷ See Section 101 of the Internal Revenue Code of 1939.

¹³⁸ Revenue Act of 1943, Pub. L. No. 78–235, ch. 63, sec. 117, 58 Stat. 21, 36–37.

- ¹³⁹ Revenue Act of 1950, Pub. L. No. 81-814 (1950). S. Rep. No. 81-2375, 125 (1950).
- ¹⁴⁰ Form 990, already in existence at that time, was opened to public inspection. Obtaining the form required a written request to the IRS. Public Law 81-814 became Section 153 (c) of the 1939 Code which then became Section 6104 of the 1954 Code. Pub. L. No. 83-591 (1954).
- ¹⁴¹ Pub. L. No. 85-866, sec. 75. “The committee believes that making these applications available to the public will provide substantial additional aid to the Internal Revenue Service in determining whether organizations are actually operating in the manner in which they have stated in their applications for exemption.” H.R. Rep. No. 85-262, at 41-42 (1957).
- ¹⁴² Pub. L. No. 93-406, sec. 1022 (g)(1) effective for applications filed after September 2, 1974.
- ¹⁴³ Pub. L. No. 106-230, 1(b)(a)(A)(i) – (vi) amended IRC § 6104 to include political organizations, effective July 1, 2000.
- ¹⁴⁴ Volume II of the JCT Report which specifically deals with IRC § 6104 did not address issues concerning pension plans or political organizations but only tax exempt organizations. The reasons for pension plans may not mirror those of exempt organizations because of the trust nature of the pension plans. The JCT Report also did not discuss the Black Lung Trust information made public under IRC § 6104, which is discussed elsewhere in this report.
- ¹⁴⁵ JCT Report (Vol. II), at 6.
- ¹⁴⁶ The benefits are discussed briefly *supra* at footnotes 67– 68 and accompanying text.
- ¹⁴⁷ See generally Bruce Hopkins, *The Law of Tax-Exempt Organizations* 406, 408 (8th Ed. 2003) (discussing the tax exempt organizations created under IRC 501 (c)(21) called “Black Lung Benefits Trusts”); see also John Lopatto III, *The Federal Black Lung Program: A 1983 Primer*, 85 W. VA. L. REV. 677 (1983) (discussing the general law of black lung benefits with a discussion in Section XI of the creation of the public trust under IRC § 9501).
- ¹⁴⁸ Hopkins, *supra* note 147, at 406.
- ¹⁴⁹ IRC § 4121 imposes the excise tax on extraction of coal. See also 30 U.S.C. § 934 for creation of the trust into which the excise is paid.
- ¹⁵⁰ Money paid into BLBTs is not considered a collected tax because Black Lung Benefits Trusts are not funded by taxes. Rather, the mine operators pay this money as an alternative to commercial insurance coverage or state workman’s compensation for pneumoconiosis. The payments by the mine operator to this trust are deductible under IRC § 192. See Hopkins, *supra* note 165, at 406–08.

- ¹⁵¹ IRC § 9501. The Black Lung Disability Trust Fund was established on the books of the Treasury in fiscal year 1978 according to the Black Lung Benefits Revenue Act of 1977 (Public Law 95–227). The Black Lung Benefits Revenue Act of 1981 (Public Law 97–119) reestablished the fund in the IRC § 9501. The Black Lung Disability Trust Fund is one of 10 public trusts created in the Internal Revenue Code. See IRC § 9501 to 9510. It is the only one of these 10 to accept a portion of its contributions from a tax exempt organization. IRC § 9501(a)(2)(C) provides that a portion of the receipts of this trust fund can come from Black Lung Disability Trust Funds described in IRC § 501(c)(21).
- ¹⁵² “Congress established this form of self-insurance program, with similar tax consequences (from the point of view of the operator) as would result if the operator had purchased non-cancellable accident and health insurance.” Hopkins, *supra* note 147, at 406–07, citing S. Rep. No. 95–336, 95th Cong., 2d Sess. 11–12 (1978).
- ¹⁵³ Pension plans are subject to public inspection so that participants may comment on employer plan submissions and to ensure compliance with certain antidiscrimination rules. See David S. Preminger, E. Judson Jennings, and John Alexander, *What Do You Get with the Gold Watch—An Analysis of the Employee Retirement Income Security Act of 1974*, 17 Ariz. L. Rev. 426 (1975).
- ¹⁵⁴ Some overlap exists between disclosing pension plan information under IRC § 6104 and the disclosure exception under IRC § 6103(c)(1)(F) to beneficiaries of trusts. See *Duncan v. Northern Alaska Carpenters Retirement Fund*, 1991 WL 165052 (W.D. Wash. 1991).
- ¹⁵⁵ <http://www.pbgc.gov/about/operation.html>; <http://www.pbgc.gov/docs/egovrept2008.pdf>
- ¹⁵⁶ For a general description of political organizations, see Hopkins, *supra* note 147, at 411–17.
- ¹⁵⁷ IRC § 6104(a)(1)(A).
- ¹⁵⁸ Pub. L. No. 106–230, 1(b)(a)(A)(i) – (vi) amended IRC § 6104 to include political organizations, effective July 1, 2000.
- ¹⁵⁹ The information required to be made public is set out in IRC § 527(j). For a general discussion of the history of IRC § 527 and the history leading to its inclusion in the list of organizations subject to the disclosure rules of IRC § 6104, see Donald Tobin, *Anonymous Speech and Section 527 of the Internal Revenue Code*, 37 GA. L. REV. 611 (2003). The political organization provision of 527 came into existence in 1974 as a recognition that organizations engaged strictly in political activity did not fit under IRC § 501, but were also not traditional taxable entities. By 2000 these organizations had morphed into something very different than Congress initially envisioned.

¹⁶⁰ See *Buckley v. Valeo*, 424 U.S. 1 (1976).

¹⁶¹ Senator Lieberman, a sponsor of the changes to IRC §§ 527 and 6104 to permit disclosure of information about the political organizations stated:

“None of us should doubt that the proliferation of these groups with their potential to serve as secret slush funds for candidates and parties, their ability to run difficult to trace attack ads, and their promise of anonymity to those seeking to spend huge amounts of money to influence our elections poses a real and significant threat to the integrity and fairness of our elections...”

146 Cong. Rec. S5995 (daily ed. June 28, 2000) (statement of Sen. Lieberman).

¹⁶² Some have criticized this distinction, arguing that some 501(c) organizations can engage in limited political activity and the inability to see the donors of those organizations leaves the public in the same place it was before IRC § 6104 required publication of the donors of political organizations. See *Recent Legislation: Campaign Finance Reform—Issue Advocacy Organizations—Congress Mandates Contributions and Expenditure Requirements for Section 527 Organizations*, 114 HARV. L. REV. 2209 (2001) and Note, *The Political Activity of Think Tanks: The Case for Mandatory Contributor Disclosure*, 115 HARV. L. REV. 1502 (2002).

¹⁶³ JCT Report, (Vol. II), at 63

¹⁶⁴ Statement of Senator Carl T. Curtis, Cong. Rec. S15646 (Daily Ed. December 4, 1969)

¹⁶⁵ The language of 7501 describes what can fairly be described as a public trust in function but it does not lay out the terms of that trust. The Supreme Court tried to do that in *Begier v. IRS*, 496 U.S. 53 (1990). The Court sought to describe the res of the trust created under IRC § 7501 where the monies paid to the IRS for the collected taxes came from the general account of the entity that collected the tax rather than from a specifically designated trust account. This inquiry was important because the payment to the IRS came less than 90 days before bankruptcy. If the payment represented trust funds held for the United States then the payment would not get pulled back into the bankruptcy estate under the preference rules. On the other hand, if the payment came from the taxpayer's money rather than a trust, then a preference payment would exist. The Court held the receipt of the collected taxes created the trust res at the moment of payment. The fact that the funds were held in the corporation's general account did not destroy the trust res and payment of the money to the IRS for purposes of satisfying the collected tax obligation identified the trust res. Therefore, it held that the payment to the IRS was not a preferential payment.

As mentioned above, the Internal Revenue Code does specifically establish eleven trust funds in IRC § 9501 through 9511 that definitely fit the description of public trusts. One of these trusts is the Black Lung disability Trust, described above. Three of these trusts are funded in whole or in part with collected taxes—the Airport and Airway Trust Fund of IRC 9502; the Highway Trust Fund of IRC 9503; and the Sports Fish Restoration and Boating Trust Fund of IRC 9504. These public trusts are managed by Treasury’s Office of Public Debt Accounting—Trust Funds Management Branch which maintains a website where it discloses the management of these funds. The fact that some collected taxes end up in public trust managed by the Treasury Department, some taxes with Social Security and some taxes go into the general fund of the Treasury Department does not change the fact that entities collecting this tax hold it in trust as described in IRC § 7501 and in *Begier*.

¹⁶⁶ IRC § 7501 (a).

¹⁶⁷ See IRC § 31 (a)(1), *supra* note 61.

¹⁶⁸ *Id.*

¹⁶⁹ For a general overview of private debt collection see Gary Guenther, *CRS Updates Report on Private Debt Collection Program*, 2007 TNT 236–21.

¹⁷⁰ See *Hearing on the Internal Revenue Service’s Use of Private Debt Collection Companies to Collect Federal Income Taxes: Hearing Before the H. Comm. on Ways & Means*, 110th Cong. 43 (2007) (statement of Nina E. Olson, the National Taxpayer Advocate). See also *Internal Revenue Service Budget for FY 2008: Hearing Before the H. Appropriations Subcomm. on Financial Serv. & General Government*, 110th Cong. (2007) (statement submitted by Colleen Kelley, President of the National Treasury Employees’ Union); *Use of Private Collection Agencies to Improve IRS Debt Collection: Hearing Before the H. Subcomm. on Oversight of the Comm. on Ways & Means*, 108th Cong. 21 (2003) (statement of Earl Pomeroy, Member, H. Comm. on Ways and Means).

¹⁷¹ Guenther, *supra* note 169 (stating that “all revenue collected through the efforts of PCAs has to go into a revolving fund. PCAs are not allowed to receive or process any of this money; only the IRS can do so. The IRS may use up to 25 percent of the money in the fund to compensate PCAs for their services—though *IRC section 6306* offers no guidance on the factors the IRS should consider in compensating a PCA for its services. In addition, the IRS may transfer up to 25 percent of the revenue in the revolving fund to its budget for tax law enforcement”).

¹⁷² David Lawder, *U.S. IRS to End Contracts with Private Tax Debt Collectors*, Reuters (Mar. 2009), available at <http://www.reuters.com/article/idUSN0536345520090306>, quoting Sen. Richard Durbin, “Until private

debt collectors can prove they can do the job ... more efficiently at a lower cost than the IRS, there is no reason we should continue this program.”

Senator Durbin agreed with the IRS decision not to renew contracts with the private tax debt collectors, arguing that tax collection is a “core government function.”

¹⁷³ See Statement of Deputy Commissioner Linda Stiff, *supra* note 60.

¹⁷⁴ JCT Report (Vol. II) at 64.

¹⁷⁵ See *infra* note 226; U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-742T, *Tax Compliance Thousands of Federal Contractors Abuse the Federal Tax System*, at 3-4; U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-05-637, *Financial Management: Thousands of Civilian Agency Contractors Abuse the Federal Tax System with Little Consequence*, 2 (2005).

¹⁷⁶ ARK. CODE ANN. § 26-18-303 (b)(18) (West 2010) (“For the purpose of the timely and accurate collection of local sales and use tax and state income tax withholding for employees, disclosure of the name and address of a taxpayer that has failed three (3) times within any consecutive twenty-four-month period to either report or remit state or local gross receipts or compensating use tax or state income tax withholding for employees and has been served with a business closure order under § 26-18-1001 et seq.”); FLA. STAT. § 213.053 (8)(d) (2010) (“the department may provide ... [n]ames, addresses, and sales tax registration information, and information relating to a hotel or restaurant having an outstanding tax warrant, notice of lien, or judgment lien certificate, to the Division of Hotels and Restaurants of the Department of Business and Professional Regulation in the conduct of its official duties.”); IND. CODE § 6-8.1-7-1 (n) (2010); MASS. GEN. LAWS Ch. 62C § 21 (b)(3); NEV. REV. STAT. § 366.160 (1) (“All records of mileage operated, origin and destination points within Nevada, equipment operated in this state, gallons or cubic feet consumed, and tax paid must at all reasonable times be open to the public.”); UTAH CODE ANN. § 59-1-403 (3)(e) (“[A]t the request of any person, the commission shall provide that person sales and purchase volume data reported to the commission on a report, return, or other information filed with the commission under ... Motor Fuel or ... Aviation Fuel”).

¹⁷⁷ 1923 Wis. Laws 39.

¹⁷⁸ 1953 Wis. Laws 303.

¹⁷⁹ WIS. STAT. ANN. § 71.78 (2) (West 2010).

¹⁸⁰ 32 V.S.A. § 3102 (providing that “the commissioner shall disclose a return or return information ... to any person who inquires, provided that the information is limited to whether a person is registered to collect Vermont income withholding, sales and use, or meals and rooms tax; whether a person

is in good standing with respect to the payment of these taxes; whether a person is authorized to buy or sell property free of tax; or whether a person holds a valid license...”). The practical explanation of Vermont’s application of this provision is based on a conversation between the author and Molly Bachman, Vermont’s General Counsel for the Tax Department. Telephone conversation with Molly Bachman, Vermont’s General Counsel for the Tax Department (Aug. 18, 2010).

¹⁸¹ MASS. GEN. L. ch. 62C, § 83 (c) (1992); currently Mass. Gen. Laws Ann. Ch. 62C, § 83 (c) (West 2010).

¹⁸² *Id.*

¹⁸³ Not only is there little data that evidences any negative impact, but there is little data concerning the beneficial effects of the disclosure. See Richard Pomp, *The Disclosure of State Corporate Income Tax Data: Turning the Clock Back to the Future*, 22 CAP. U. L. REV. 373 (discussing benefits of disclosure at state level).

¹⁸⁴ Current employment tax returns do reflect the liability of the employer portion of the social security tax. As discussed below, this Article recommends removing that section from returns reporting collected taxes.

¹⁸⁵ In some ways the debate on disclosure of tax information has become less important since 1976 when the last great debate occurred. Tax information no longer exists as the single greatest source of information about an individual or an entity. Tax information has been replaced by a host of other information sources including but not limited to the Bank Secrecy Act, the SEC rules and other broad rules seeking transparency in corporate affairs. Interestingly, the IRS even uses third party data gathering sources such as ChoicePoint which is built upon publicly available data as it tries to gather information about taxpayers. The IRS’ use of this information provider serves as a poignant statement of where much information lies today—it lies in a wide array of public venues available to those who know how to mine such data. Additionally, other rich sources of information about individuals and entities exist in the public domain, provided by the federal government through such sources as PACER, which provides public information on individuals filing bankruptcy or other court proceedings. Again, far more data about an individual can readily be accessed electronically through PACER than is found on the individual’s income tax return.

¹⁸⁶ While disclosure policy provides no basis for distinguishing among different taxpayers whose information will be disclosed, collection policy with respect to collected taxes suggests that the most likely taxpayers to fail to pay over collected taxes are small and newly formed businesses. With this in mind, an alternate proposal, discussed below, addresses the disclosure of collected

tax returns for certain smaller entities or entities that have experienced difficulties fulfilling their collected tax obligations.

- ¹⁸⁷ Take, for example, the Form 941 which reports three different types of information: withheld income taxes (trust information); withheld social security taxes (trust information) and the employer's portion of the social security taxes (not trust information). Similarly, Form 720 sets out a reporting mechanism for a variety of excise taxes, some of which result from a trust relationship where the entity filing the Form 720 has collected the excise taxes from third parties and some of which result from excise taxes directly imposed on the entity.
- ¹⁸⁸ This article focuses on policy reasons for changing the disclosure laws to provide for disclosure of the returns reporting collected taxes. For a discussion of these policy reasons, see *supra* notes 174–186 and accompanying text.
- ¹⁸⁹ See following discussion for what should be included on the collected tax return.
- ¹⁹⁰ IRS Form 941 and instructions.
- ¹⁹¹ Form 5500 used for returns of pensions requires extensive information; however, the information sought on the Form 5500 seems irrelevant to the information that would make the Form 941T and Form 720T useful.
- ¹⁹² As discussed above, the Form 990–BL concerns the type of tax most closely related to collected taxes of all of the returns made public pursuant to IRC 6104 at present.
- ¹⁹³ See JCT Report (Vol. II), at 65 and accompanying footnotes. See also Rizek, *supra* note 73, at 88–90 for a pragmatic view that may represent the only realistic point of view on this subject in the absence of credible supporting data for either point.
- ¹⁹⁴ IRM 1.15.19, 1.15.35 (available at http://www.irs.gov/irm/part1/irm_01-015-019.html; http://www.irs.gov/irm/part1/irm_01-015-035.html.) The Combined Annual Wage Reporting (CAWR) falls under the division of Small Business/Self-Employed (SB/SE). CAWR ensures that employers accurately report annual wage data on IR Forms in the 940 series to IRS and Form W-3 to Social Security Administration (SSA). When there is a discrepancy between the two forms, a case is created and worked within the SB/SE campuses. The CAWR system consists of five Tier 1 sub-projects maintained by National Office Modernization and Information Technology Services (MITS) and one Tier 2 system maintained by Ogden Development Center MITS. CAWR runs on both the Tier 1 IBM platform and on the Teir 2 Sun platform. The Tier 1 processing is known as Combined Annual Wage Reporting Mainframe (CAWR MAINFRAME). The Tier 2 processing is known as the Combined Annual Wage Reporting Automation Program (CAP).

The CAP system houses the CAWR for cases for a three year period, it allows notice/letter generation and user updates, monitors cases for responses/no responses etc. and creates reports.

- ¹⁹⁵ See *Lipsig v. United States*, 187 F. Supp. 826. (E.D.N.Y. 1960); MICHAEL I. SALTZMAN, *IRS PRACTICE AND PROCEDURE*, ¶17.09[4] (Warren Gorham Lamont, 2nd ed. 2002).
- ¹⁹⁶ Publishing all returns of collected taxes, as recommended in this Article, does go further in disseminating information than allowed under IRC § 6103(k)(2). In some ways such disclosure mirrors the disclosure exception in IRC § 6103(e)(1)(F) which permits disclosure of information to trust beneficiaries. Here the disclosure of information benefits the beneficiaries of the trust on collected taxes created under IRC 7501. The beneficiaries are the people of the United States. The exception to disclosure concerning the NFTL is discussed in notes 141–48 and accompanying text.
- ¹⁹⁷ Collected taxes fall outside the deficiency tax procedure of IRC 6213. When collected taxes go unpaid, the IRS can, if it has not already done so based on a return with insufficient remittance, assess the taxes due on the collected tax return and almost immediately begin collection. Because these taxes can go immediately or almost immediately into the collection stream, the federal tax lien exists once the liability goes unpaid. The existence of the federal tax lien occurs when a federal tax assessment has taken place, followed by notice and demand pursuant to IRC 6303, followed by 10 days (the usual period the IRS gives taxpayers to pay as a policy matter) in which the taxes remain unpaid. If this sequence occurs, a federal tax lien exists as described in IRC sections 6321 and 6322. If a federal tax lien exists, then the IRS can make the liability public when it wants by filing an NFTL pursuant to IRC § 6323(f). The publication of the liability to the world through the NFTL represents one of the many exceptions promulgated in IRC 6103. See IRC § 6103(k)(2). Since the collected tax liabilities in almost all instances fit this disclosure exception, publishing these liabilities presents few hurdles from a disclosure perspective if a liability exists.
- ¹⁹⁸ Based on correspondence to clients of the Villanova Federal Tax Clinic for whom federal tax liens are filed, a number of business organizations track federal tax lien filings in order to offer taxpayers assistance in working out their debts with the IRS.
- ¹⁹⁹ IRC § 6323(f)(1)(A).
- ²⁰⁰ IRC § 6323(f)(1)(A); IRM 5.12.2.8 (“The principal executive office is deemed to be the residence of the corporation or partnership. It is the place where the major management decisions are made. Do not confuse the principal executive office with the principal place of business”).

- ²⁰¹ As discussed in note 197, *supra*, assessment triggers issuance of the notice and demand letter under IRC 6303 giving the taxpayer 10 days to pay. If the taxpayer does not pay within the 10 days, the assessment lien arises automatically. Once the assessment lien exists, it is up to the IRS to decide when to make that lien public with the filing of an NFTL.
- ²⁰² Section 3802 of the Revenue Reform Act of 1998 directed the Joint Committee on Taxation and the Treasury Department to comment on the feasibility of shaming among many other disclosure issues. The JCT Report addresses shaming, recommending against federal shaming program for non-filers and expresses concern that publishing non-filer information might incorrectly identify individuals with no filing requirement. See JCT Report (Vol. I), at 238–40. As of 2000 only five jurisdictions had adopted shaming provisions. Contrast that number with the twenty-six states and the District of Columbia that now use shaming, listed in Appendix A.
- ²⁰³ See Blank, *supra* note 132, at 539, 547–48.
- ²⁰⁴ *Id.*
- ²⁰⁵ See Appendix A.
- ²⁰⁶ JCT Report (Vol. I), at 238.
- ²⁰⁷ The failure to pay collected taxes creates a competitive advantage for the company that fails to pay over related companies that do pay these taxes. This competitive advantage creates a strong reason for publishing this information. If competitors learn of the failure to pay, they may be able to publicize that fact and potentially remove the advantage. Some discussion of the competitive advantage has surfaced although little has been written on the scope of this advantage.
- ²⁰⁸ The disclosure under IRC § 6039G is the disclosure of the taxpayer’s name. Although the filing of the IRC § 6039G information return acts as the triggering mechanism for the disclosure, the disclosure itself simply consists of the listing of the taxpayer’s name with no identifying tax information. In this respect, the IRC § 6039G disclosure differs from other disclosure exceptions described in IRC 6103, 6104 or 6110.
- ²⁰⁹ IRC § 6039G provides that any individual to whom section 877 (b) or 877A applies for any taxable year shall provide a statement for such taxable year which includes the following information: (1) the taxpayer’s TIN, (2) the mailing address of such individual’s principal foreign residence, (3) the foreign country in which such individual is residing, (4) the foreign country of which such individual is a citizen, (5) information detailing the income, assets, and liabilities of such individual, (6) the number of days during any portion of which that the individual was physically present in the United States during the taxable year, and (7) such other information as the Secretary

may prescribe. The statute also provides that an individual who is required to file a statement under subsection (a) for any taxable year, and fails to file such a statement, fails to include all required information, or includes incorrect information, must pay a penalty of \$10,000 unless it is shown that such failure is due to reasonable cause and not to willful neglect. Finally, the statute provides that any Federal agency or court which collects the statement under subsection (a) shall provide to the Secretary a copy of any such statement, and the name (and any other identifying information) of any individual refusing to comply with the provisions of subsection (a). The Secretary of State shall provide to the Secretary a copy of each certificate as to the loss of American nationality under section 358 of the Immigration and Nationality Act which is approved by the Secretary of State, and the Federal agency primarily responsible for administering the immigration laws shall provide to the Secretary the name of each lawful permanent resident of the United States whose status has been revoked or abandoned. No later than 30 days after the close of each calendar quarter, the Secretary shall publish in the Federal Register the name of each individual losing United States citizenship with respect to whom the Secretary receives information under the preceding sentence during such quarter.

- ²¹⁰ See Michael S. Kirsch, *Alternative Sanctions and the Federal Tax Law: Symbols, Shaming, and Social Norm Management As a Substitute For Effective Tax Policy*, 89 Iowa L. Rev. 863 (2004) for a detailed discussion of this law and of the policies behind the law as well as the shortcomings of the law.
- ²¹¹ The remedy also appears ineffective, as more and more American citizens renounce their citizenships in order to avoid this taxation. See Ellen Kelleher, *Americans Forfeit Citizenship to Avoid Tax*, Financial Times, July 17, 2010, available at <http://www.ft.com/cms/s/0/bab42a32-9126-11df-b297-00144feab49a.html>.
- ²¹² Kirsch, *supra* at note 210, at 888 (discussing the effectiveness of shaming sanctions).
- ²¹³ The IRS and the Department of Justice use a form of shaming in some of their information releases and website postings. The IRS publishes a “dirty dozen” list of transactions it finds abhorrent and contrary to the law. The list serves both to “shame” the promoters and investors in the promotion as well as to inform prospective investors of the toxic tax nature of the transaction. Internal Revenue Service, *Beware of IRS’ “Dirty Dozen” Tax Scams*, <http://www.irs.gov/newsroom/article/0,,id=220238,00.html>. Similarly, but in less of a shaming mode, the IRS publishes “listed transactions” in an effort to let people know that certain transactions have gain the attention of the IRS in such a way that settlement of the cases is no longer an option. The listing of a transaction serves to shame those engaged in that transaction

although not by name as well as to inform. Internal Revenue Service, *Recognized Abusive and Listed Transactions*, <http://www.irs.gov/businesses/corporations/article/0,,id=120633,00.html>. The Service sometimes back-ends the shaming provisions on these transactions by requiring a disclosure waiver in settlements it reaches with taxpayers engaged in such transactions so it can publicize the concession by the offending taxpayer. See Blank, *supra* note 132, at 82–85. The Department of Justice regularly publicizes the convictions that it obtains and the civil injunctions that it obtains in promoter and return preparer cases. See, e.g. Press Release, U.S. Department of Justice, Cincinnati Area Return Preparer Pleads Guilty to Tax Crimes (June 8, 2010) (*available at* <http://www.justice.gov/tax/txdvl0671.htm>); Press Release, U.S. Department of Justice, Federal Jury Convicts Local Tax Preparer—Faces up to 33 Years in Federal Prison (Mar. 12, 2010) (*available at* http://www.justice.gov/usao/txn/PressRel10/watson_tax_convict_pr.html). The publication of the name of the person convicted or enjoined serves not only to shame the individual so named but to deter others who might engage in similar behavior. Here, the shaming comes after enforcement so the shaming does not motivate the convicted or enjoined individual to change their behavior. The enforcement activity, hopefully, accomplishes that purpose.

²¹⁴ Jumpstart Our Business Strength (JOBS) Act, S. 1637, 108th Cong. 402, 150 Cong. Rec. S. 5622, 5643 (May 18, 2004). For a detailed discussion of this provision, see Blank, *supra* note 132, at 553 & n.74. Blank argues that shaming corporations that use tax shelters would not promote tax compliance for a variety of reasons. In many ways the proposal to shame corporations in this context carries many of the symbolic but ineffective concerns expressed by Kirsch about expatriate shaming. Kirsch, *supra* note 210, at 921. Congress feels a need to express displeasure about certain behavior but chooses to make its expression in a manner that does not affect future behavior in the manner in which it seeks.

²¹⁵ See Appendix A for a listing of states with shaming laws and, where used, their websites. All of the state shaming provisions focus on collection of unpaid taxes rather than corporate shaming.

²¹⁶ See Dennis J. Ventry, Jr., *Cooperative Tax Regulations*, 41 Conn. L. Rev. 431 (2009); Maryann Richardson and Adrian Sawyer, *A Taxonomy of the Tax Compliance Literature: Further Findings, Problems and Perspectives*, 16 Australia Tax F. 137, 168 (2001); Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 Ohio St. L. J. 1453, 1493 (2003); Susan Cleary Morse, *Using Salience and Influence to Narrow the Tax Gap*, 40 Loyola University Chicago Law Journal 483 (2009); Dan Kahan, *The Logic of Reciprocity*, 102 Mich. L. R. 71 (2003); Marjorie Kornhauser, *Tax Compliance and the Education of John (and Jane) Q. Taxpayer*, 121 Tax Notes

737 (Nov. 10, 2008); Joshua Rosenberg, *Narrowing the Tax Gap: Behavioral Options*, 117 Tax Notes 517 (Oct. 29, 2007); Jay Soled and Dennis Ventry, Jr., *A Little Shame Might Just Deter Tax Cheaters*, USA Today April 10, 2008.

- ²¹⁷ Toni M. Massaro, *Shame, Culture, and American Criminal Law*, 89 Mich. L. Rev. 1880 (1991); Dan M. Kahan & Eric A. Posner, *Shaming White Collar Criminals: A Proposal for Reform of the Federal Sentencing Guidelines*, 42 J.L. & Econ. 365 (1999); John B. Owens, *Have We No Shame?; Thoughts on Shaming, "White Collar" Criminals, and the Federal Sentencing Guidelines*, 49 Am. U. L. Rev. 1047 (2000); James Q. Whitman, *What is Wrong with Inflicting Shame Sanctions?*, 107 Yale L.J. 1055 (1998). For more recent discussion continuing this debate see Dan Kahan, *What's Really Wrong with Shaming Sanctions*, 84 Tex. L. Rev. 2015 (2006) and the articles cited therein.
- ²¹⁸ Massaro, *supra* note 217, at 1883.
- ²¹⁹ One concern with shaming provisions is that shaming not publicize a general failure of society to comply with the tax law. Shaming should not cause less compliance by alerting the compliant to the fact they may constitute a disadvantaged minority of individuals complying with present laws. This circumstance graphically displayed itself in bankruptcy courts around the country in the 1980s and 1990s as the IRS and Department of Justice sought to hold up plan confirmation of individuals who had not filed their tax returns. It did so by objecting to every chapter 13 plan in which the debtor had outstanding tax returns. The Bankruptcy Judge in Richmond, Virginia before whom the author practiced initially took the time to publicly berate each chapter 13 debtor coming before him who failed to file their tax returns explaining to the individual how the failure to file the tax returns was a federal crime for which the individual could be sent to jail, etc. After seeing these motions in case after case, the judge eventually gave up on the failure to file return lecture almost undoubtedly after realizing the extent of the problem and the lack of effect his lectures were having. The problem eventually led to changes in the bankruptcy law in 2005 theoretically preventing debtors from moving forward in chapter 13 cases without the submission of the prior four years returns. 11 U.S.C.A. § 1308.
- ²²⁰ The IRS engages in some publication that could be classified as shaming as it publicizes the "dirty dozen" most offensive tax shelters which plays the dual role of shaming the transaction and warning people away from the transaction. The IRS listed transactions could be viewed as a similar type of shaming as is the IRS publication of certain settlements with corporations engaged in tax shelters. See Blank, *supra* note 132, at 554. The Department of Justice regularly publicizes the names of individuals it successfully prosecutes or whom it successfully enjoins from promoting tax shelters or improperly preparing tax returns. *Supra* note 213.

- ²²¹ Kirsch, *supra* note 210, at 908–12.
- ²²² Massaro, *supra* note 217, at 1930–32.
- ²²³ Kirsch, *supra* note 210, at 889–90.
- ²²⁴ The manner in which states publish the names of the individuals and entities provides a good insight into effective use of publication of non-payment. Some states, such as Wisconsin, create an easy to use link right on the front page of their website. This model makes it quite easy to locate entities that fail to pay. Other states bury the listing of names well into the website making it very difficult, if not impossible to locate the names. For the same reason that publication only in the Federal Register does not make much sense in this context, neither does publication on a website that is relatively inaccessible.
- ²²⁵ The uncertainty of the liability created one of the concerns expressed by Joshua Blank in his article. See Blank, note 132, at 544. With corporate tax shelters, the Government may believe that the claims abuse the tax code but until case law settles the issue, the alleged abuse lacks certainty. Uncertainty is also one of the problems with the publication of the names of the expatriates since the list sweeps up all expatriates and even if it were targeting only those who left for tax motivated reasons, it would be difficult to determine those situations in which the tax motive was the sole or primary reason for renouncing citizenship. None of that uncertainty exists with unpaid collected taxes. The liability is almost always a certainty usually stemming from self-assessment but even when it results from adjustments by the IRS the dollar amount of the assessment is rarely at issue.
- ²²⁶ The failure of federal contractors to pay their collected taxes was the subject of a GAO report “Thousands of Federal Contractors Abuse the Federal Tax System” GAO–07–742T, April 19, 2007. This report not only found that entities contracting with the United States owed billions of dollars in unpaid employment taxes but determined that the United States had not previously requested information that would allow it to factor such behavior into its decision making process. As a result of this GAO report, the Federal Government proposed to revise the information that contractors must disclose as they seek to contract with the Federal Government. This caused proposed changes to the Federal Acquisition Regulation (FAR)—Representations and Certifications—Tax Delinquency, 72 Fed. Reg. 15093 (proposed Mar. 30, 2007). The GAO report represents a clear example of how knowledge of the failure to pay collected taxes impacts a potential customer. With that type of customer reaction, one would expect that in the area of federal contractors the incidence of failure to pay collected taxes should significantly decrease.

This GAO report was one of several on a similar theme. A follow up report was issued later in 2007. U.S. Gov't Accountability Office, GAO-07-563, *Thousands of Organizations Exempt from Federal Income Tax Owe Nearly \$1 Billion in Payroll and Other Taxes* (June 2007). This report shows how the failure to pay collected taxes could impact charitable organizations and the entities making donations to those organizations. This is yet another example of how knowledge of the failure to pay the collected taxes could impact behavior. See, e.g., Farah Stockman, *Shell companies in Cayman Islands allow KBR to avoid Medicare, Social Security Deductions*, *The Boston Globe*, March 6, 2008, available at http://www.boston.com/news/world/articles/2008/03/06/top_iraq_contractor_skirts_us_taxes_offshore/ ("Payroll taxes can be a significant cost, he said, speaking on the condition of anonymity. If you are bidding against [rival construction firms] Fluor and Bechtel, it might give you a competitive advantage.") The issue in this article is not so much Brown & Roots' failure to pay employment taxes as its setting up a foreign entity to employ individuals in a manner in which it would have no employment tax obligation whatsoever; see also U.S. Gov't Accountability Office, GAO-07-742T, *Tax Compliance Thousands of Federal Contractors Abuse the Federal Tax System*, at 3-4 ("[F]or wage-based businesses that provide goods and services, federal contractors with unpaid federal taxes have an unfair advantage in price competition when competing against other businesses for federal contracts. Companies that do not pay their payroll tax, which is typically over 15 percent of the employees' wages, would have a significantly lower costs advantage and therefore have a substantive competitive advantage over similarly situation businesses that pay their taxes. For example, we identified instances in which companies that had unpaid payroll taxes were competitively awarded contracts over companies that had paid their federal taxes").

²²⁷ The author knows of one situation in which knowledge that the entity had outstanding collected tax obligations had a direct impact on a potential customer's decision and drove the customer away. The potential customer was the IRS. The IRS sought to contract with a hotel in which it would hold a continuing professional education conference for its employees in one state. The contracting officer chose a hotel that had a longstanding problem with the payment of its collected taxes. When the revenue officers knowledgeable about the outstanding taxes learned of the potential contract with the hotel, they became quite vocal about how improper contracting with that hotel would be. Their voices were heard and another location was selected. Perhaps this example is extreme because of the close nature between the potential customer and the unpaid collected taxes; however, it is not hard to imagine other circumstances in which a potential customer would make

a decision not to contact with an entity that did not pay its collected taxes. Indeed, the hope in publicizing this information is to assist in creating a culture in which not paying these taxes makes the entity somewhat of a pariah and causes entities in general to want to pay these taxes in order to avoid the stigma that would come from failure to pay.

²²⁸ While slightly different in its factual underpinnings, the actions of Kellogg, Brown & Root (KBR) with respect to its workers in Iraq provides some insight into how information can impact customer and competitor decisions. Based on the information provided in an article in *The Boston Globe* on March 6, 2008, by Farah Stockman, KBR apparently avoided paying employment taxes altogether with respect to approximately 20,000 employees it had in Iraq by treating the individuals as employees of a Cayman Island subsidiary. KBR's customer, the Defense Department, knew "since at least 2004 that KBR was avoiding taxes by declaring its American workers as employees of Cayman Islands shell companies, and officials said the more allowed KBR to perform the work more cheaply, saving Defense dollars." The reaction of KBR's customer is somewhat surprising because of the overall losses to the United States and its citizens from the employment tax maneuver executed by KBR but at least it shows a reaction from a customer aware of the situation. A former executive at Halliburton, the parent of KBR, said "Payroll taxes can be a significant cost, ... speaking on the condition of anonymity. 'If you are bidding against [rival construction firms] Fluor and Bechtel, it might give you a competitive advantage.'" The article did not contain statements from the competitors but one can imagine what they might say. Farah Stockman, *Shell companies in Cayman Islands allow KBR to avoid Medicare, Social Security Deductions*, *The Boston Globe*, March 6, 2008, available at http://www.boston.com/news/world/articles/2008/03/06/top_iraq_contractor_skirts_us_taxes_offshore/.

²²⁹ See Appendix A for a list of states that have shaming provisions.

²³⁰ Compare the currently list of states engaged in shaming from Appendix A with the five states that had adopted this practice in 1999 at the time the Joint Committee on Taxation report to Congress was prepared in 2000. See pp— of that report; see also U.S. Gov't Accountability Office, GOA-GDD 99-164, *Few State and Local Government Publicly Disclose Delinquent Taxpayers*. Like the Joint Committee Report, this GAO report was ordered by Congress as a result of the Revenue Reform Act of 1998, Section 3802. While the states felt the disclosure of delinquent taxpayers was aiding in the collection of outstanding taxes, no studies quantified the impact of the disclosure.

²³¹ Several states have provisions that disclose the greatest delinquent accounts: California, Delaware, Rhode Island. See Appendix A. Several other states

have provisions that disclose accounts exceeding a certain dollar amount: Colorado, Illinois, Indiana, Massachusetts, Wisconsin. *See* Appendix A.

- ²³² The IRS can file an NFTL against any taxpayer with an assessed liability which is unpaid. Upon assessment of a tax, the IRS computer searches a taxpayer's account for credits with which to satisfy the assessed liability. If insufficient credits exist on the account, the IRS sends the taxpayer a notice and demand letter pursuant to IRC 6303 demanding payment of the outstanding liability within 10 days. If payment is not forthcoming within the 10 day period, IRC 6321 and 6322 cause the creation of a lien against all of the taxpayer's property and rights to property. This lien, known only to the taxpayer and the IRS, is sometimes called the secret lien or assessment lien. In order for this secret lien to defeat certain creditors described in IRC 6323 (a), the IRS must file a public notice of the lien pursuant to IRC 6323 (f). That notice is available to the world. The filing of an NFTL has serious consequences for credit and financial well-being.
- ²³³ R.I. Gen. Laws § 44-1-34 (2010). Rhode Island's Division of Taxation website lists the top 100 delinquent taxpayers which includes all types of state tax delinquencies, including personal, sales, withholding, corporate and inheritance taxes.
- ²³⁴ Although articulated almost solely on the unproven aspect of the success of shaming, the Joint Committee on Taxation reached the same conclusion in its 2000 report. *See* JCT Report (Vol. I), at 238-40. At the time of that report only five states had shaming laws. Obviously, the allure of shaming to states has grown since that time. Because of the difficulty of separating the positive effect that shaming has on compliance from other causes, the empirical case for shaming still lacks a strong underpinning. The concerns voiced by the Joint Committee and others as cited above, still raise a cautionary flag to this approach. It also has some disconnects with the policy reasons underlying disclosure unless you view the shaming provisions solely as an extension of the lien filing as discussed further below.
- ²³⁵ Shaming serves as an unlikely deterrent to those setting out to cheat. For those persons strong enforcement measures must deter.
- ²³⁶ The stress of these types of situations also leads to the loss of relationships. Financial difficulties of the type encountered by those running failing business frequently lead to the dissolution of marriages which further serves to drag individuals in this circumstance down a financial and emotional hole. In this situation shaming will not cause the person to pay over the money. It simply puts more fuel on the fire of a life situation going up in flames.
- ²³⁷ The publication of returns of collected taxes comes at this early stage and would seem a much more effective mechanism for effecting behavior of

those making decisions about this money than the much later publications of shaming lists.

- ²³⁸ Not everyone would agree with this point. See Blank, *supra* note 132, at 540. Here, it serves merely as an illustration in contrast.
- ²³⁹ ARK. CODE ANN. § 26–18–303 (b)(18) (“For the purpose of the timely and accurate collection of local sales and use tax and state income tax withholding for employees, disclosure of the name and address of a taxpayer that has failed three (3) times within any consecutive twenty-four-month period to either report or remit state or local gross receipts or compensating use tax or state income tax withholding for employees and has been served with a business closure order under § 26–18–1001 et seq.”) See Arkansas Department of Finance & Administration Revenue Division, *Sales Tax Business Closures Update*, State Revenue Tax Quarterly, Volume XI, No. 1 (2005), at 3–4 (describing this provision with respect to sales taxes).
- ²⁴⁰ There are some distinctions concerning the publication of pension plan information which leaves out some of the information of the smaller plans in an apparent recognition that the smaller plans do not raise the same overall concerns as the large ones. IRM 11.3.10.3. (“Documents relating to plans with 25 or fewer participants are available only to plan participants, the plan sponsor, or their authorized representatives.”)
- ²⁴¹ As discussed above in notes 128–31 and accompanying text, the IRS can decide to make public the outstanding liability on any collected tax by simply filing an NFTL. IRC §§ 6323 (f), 6103 (k)(2). Filing an NFTL notifies the “world” that a taxpayer has an unpaid federal tax liability. Because credit reporting agencies almost always search for filings of the NFTL, these filings generally have significant negative consequences to the taxpayers against whom the liens are filed. See 2010 NTA Annual Report, at 54 (discussing effect of filing an NFTL and urging for more measured approach to filing of NFTL). Despite that fact that the “world” knows about the lien when the NFTL occurs, many people do not know because of where lien filing occurs. Section 6323 (f) requires filing of the notice in the place where the taxpayer resides in order to perfect the lien as to personalty and in the location of any real property with respect to such property. Unless one frequents courthouses or their online databases, where available, knowledge of the filing of the NFTL would require some searching. Public knowledge would come easier if a national tax lien registry were adopted. T. Keith Fogg, *National Tax Lien Registry*, 120 Tax Notes 783 (August 25, 2008). Still, even a national registry would lump all types of taxes together not highlighting collected taxes. Some states take the position that the existence of a published lien allows them to highlight liabilities in their shaming websites. E-mail from VA Tax Customer Service, to Fleming Ware, Research Assistant,

Villanova University School of Law (July 9, 2009, 09:19 EST) (on file with author). The IRS could not take that approach because of the uncertain state of the law regarding the public records exception. The Circuits have split on the issue of whether allowable public disclosure of information in one setting allows publication of that same information by the IRS in other settings. See JCT Report (Vol. I), at 70–81 (citing *Lampert v. United States*, 854 F.2d 335, 338 (9th Cir. 1988), *cert. denied*, 490 U.S. 1034 (1989) (holding that “if a taxpayer’s return is lawfully disclosed in a judicial proceeding . . . [t]he information is no longer confidential and may be disclosed again without regard to section 6103”); *Rowley v. United States*, 76 F.3d 796 (6th Cir. 1996) (holding that once return information becomes public through filing and recording of judicial lien, it is no longer confidential); *Mallas v. United States*, 993 F.2d 1111 (4th Cir. 1993) (holding that the United States is liable when it discloses return information that was previously made part of public records)).

- ²⁴² The debate over the public disclosure exception seems like a “small” policy issue of the format and procedure for disclosure rather than the larger policy decision of whether to disclose.
- ²⁴³ See Cheng, *supra* note 53 (“[t]he use of structure to encourage tax compliance has been an unqualified success”); see also Lederman, *supra* note 53 (arguing that substantive federal income tax law can, and often does, foster compliance by harnessing the structural incentives of third parties).
- ²⁴⁴ *Id.* at 657; see also Thaler & Sunstein, *supra* note 53 (arguing a similar approach but from the perspective of behavioral psychologists).
- ²⁴⁵ See Cheng, *supra* note 53, at 659 (discussing fiat and its problems); see also ERICH KIRCHLER, *THE ECONOMIC PSYCHOLOGY OF TAX BEHAVIOR* (Cambridge 2007) (discussing why such structures may be needed given taxpayer perceptions and attitudes). Non-compliant taxpayers who owed VAT were younger, more egotistical, and less knowledgeable about VAT. Many thought money received from others in payment of VAT was coming from their own business and did not appreciate they were holding the money in trust. People put money in different boxes mentally and if they do so it affects how they are willing to spend it. Most people surveyed believed that VAT money was theirs. *Id.* at 164–65.
- ²⁴⁶ See Cheng, *supra* note 53, at 662 (arguing that structural laws offer a more effective alternative for influencing everyday behavior than statutory prohibitions).
- ²⁴⁷ *Id.* at 664.
- ²⁴⁸ *Id.*
- ²⁴⁹ Perhaps the greatest tax example of a structural law is the withholding provisions that underlie the collected tax issue that is the subject of this

- paper. The withholding tax laws require employees to have a portion of their salary taken each pay period resulting, usually, in full payment of their income taxes over the course of the year. Payment, and compliance, is achieved because of the structure of the withholding provisions. The withholding tax provisions make it difficult for employees to fail in their tax paying obligations and provide an incentive for them to file their taxes. See generally Piroska Soos, *Self-Employed Evasion and Tax Withholding: A Comparative Study and Analysis of the Issues*, 24 U.C. DAVIS L. REV. 107 (Fall 1990) (discussing the non-compliance of withholding agents).
- ²⁵⁰ See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES 15 (2008) (finding a significant number of businesses are not paying payroll taxes).
- ²⁵¹ James M. Bickley, *Tax Gap and Tax Enforcement*, Report for Congress No. RL33882 (2008), available at <http://opencrs.com/document/RL33882/>.
- ²⁵² See ROBERT B. CIALDINI, SOCIAL MOTIVATIONS TO COMPLY: NORMS, VALUES AND PRINCIPLES IN 2 TAXPAYER COMPLIANCE: SOCIAL SCIENCE PERSPECTIVES 200 (Jeffrey A. Roth & John T. Scholz, eds., University of Pennsylvania Press 1989) (1989) (establishing six sets of principles that most powerfully and regularly influence compliance decisions: 1) be consistent with prior commitments; 2) return an earlier fit, favor or service; 3) follow the lead of similar others; 4) conform to the directives of legitimate authority; 5) seize opportunities that are scarce or dwindling in availability; and 6) accede to the requests of those we like).
- ²⁵³ See U.S. GOV'T ACCOUNTING OFFICE, GAO-99-256, PAYROLL TAXES: BILLIONS IN DELINQUENT TAXES AND PENALTIES DUE BUT UNLIKELY TO BE COLLECTED, 13 (1999) (containing anecdotal comments from IRS revenue officers on why the collected taxes do not get paid).
- ²⁵⁴ See Margaret McKerchar, *Understanding Small Business Taxpayers: Their Sources of Information and Levels of Knowledge of Taxation*, 12 AUSTRALIAN TAX FORUM 25 (1995) (discussing the level of knowledge of small business taxpayers); see also Thaler, *supra* note 53, at 188 (discussing the importance of providing information as a basis for achieving desired outcomes).
- ²⁵⁵ Numerous studies have shown that the longer the delay in collecting delinquent liabilities the less likely collection becomes. See, e.g., 2004 National Taxpayer Advocate's Annual Report to Congress 233, available at <http://www.irs.gov/advocate/article/0,,id=133967,00.html> (showing success in collection based on the number of months since the assessment was made). But see U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 32-33 (2008) (finding that determining the persons responsible for the payment of

tax and assessing the liability against them typically took between two and three years); *see also* U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-05-637, FINANCIAL MANAGEMENT: THOUSANDS OF CIVILIAN AGENCY CONTRACTORS ABUSE THE FEDERAL TAX SYSTEM WITH LITTLE CONSEQUENCE, 2 (2005) (discussing civilian contractor tax abuse).

- ²⁵⁶ *See* Leslie Book, *The Poor and Tax Compliance: One Size Does Not Fit All*, 51 U. KAN. L. REV. 1145 (2003) (examining the scope of low income taxpayers' compliance problem and why the IRS vigorously directs its compliance effort toward low-income taxpayers).
- ²⁵⁷ *See* Dan Kahan, *Trust, Collective Action and Law*, 81 B. U. L. REV. 333 (2001) (noting that the level of tax compliance in a community depends on "individuals beliefs about the willingness of others to comply with tax laws: those individuals who believe that most other individuals are complying form the belief that paying taxes is an important moral duty, whereas those who believe cheating is widespread conclude that evading is not a particularly serious wrong").
- ²⁵⁸ The group of individuals or entities that fails to pay its collected taxes is drawn from the same group that exhibits the highest non-compliance with reporting of taxes—the small businesses within the IRS SBSE classification. *See* Lederman, *supra* note 216, at 1505 (2003). As Lederman discusses, the non-compliance among this group could result from a desire to remain competitive with others in the group who are also not fully paying their taxes or it could result because this group consists of entrepreneurs, a self-selected group of risk takers who would almost always be among the least compliant taxpayers. The same factors causing this group to be non-compliant in reporting their taxes could also drive their failure to pay over collected taxes. At least one study suggests that non-compliance in one aspect of paying taxes has a carryover effect to other aspects of tax compliance. The one consideration that differs in the payment mode compared to the reporting one is the existence of third parties. While the general notion that third party competitors or peers may not be properly reporting their taxes could drive the behavior of a member of this group, the interplay with third parties exists more closely in the payment situation than the reporting one. When deciding whether to pay collected taxes over to the government, the individual or entity often faces a dilemma of whom to pay when insufficient funds exists. The resolution of that dilemma often results in payment of creditors with whom the individual or entity has a close or reciprocal relationship that does not exist between the individual or entity and the government. *See* Book, *supra* note 256 (examining the scope of low income taxpayers' compliance problem and why the IRS vigorously directs its compliance effort toward low-income taxpayers).

- ²⁵⁹ See Lederman, *supra* note 216, at 1500 (describing three types of taxpayers: 1) those committed to compliance; 2) those susceptible to influence (the largest group); and 3) those committed to non-compliance). The government wants to enact provisions with the greatest impact on the second group but it also wants compliance actions that will keep the third group in check.
- ²⁶⁰ 26 U.S.C. § 6672 (2010).
- ²⁶¹ See Gerald P. Moran, *Willfulness: The Inner Sanctum or Unnecessary Element of Section 6672*, 11 U. Tol. L. Rev. 709, 723–751 (1980) (discussing the legislative history of section 6672). For a discussion of the legislative history of section 6672, see *infra* notes 368–88 and accompanying text.
- ²⁶² 26 U.S.C. § 7202 (2010); This section provides “[a]ny person required under this title to collect, account for, and pay over any tax imposed by this title who willfully fails to collect or truthfully account for and pay over such tax shall, in addition to other penalties provided by law, be guilty of a felony and, upon conviction thereof, shall be fined not more than \$10,000, or imprisoned not more than 5 years, or both, together with the costs of prosecution.” IRC § 7202 (2010). This section has existed in its current form since 1954 with no changes.
- ²⁶³ See Moran, *supra* note 261, at 750 (discussing the legislative history of section 6672). For further discussion of the legislative history and purpose of section 6672, see *infra* notes 368–88 and accompanying text.
- ²⁶⁴ The Department of Justice, Tax Division, Criminal Tax Manual (CTM) reports that section 7202 is rarely used. See Department of Justice: Tax Division, Criminal Tax Manual 9.03 (2009), available at <http://www.usdoj.gov/tax/readingroom/2001ctm/titlepg.htm>; see also Ian Comisky et al., Tax Fraud and Evasion ¶ 2.08 (RIA 2009) (“IRC 7202, a rarely used statute...”); U.S. GOV’T ACCOUNTABILITY OFFICE, GAO–08–617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 15 (2008). Twenty reported cases exist: (1) *United States v. Adam*, 296 F.3d 327 (5th Cir. Tex. 2002); (2) *United States v. Anglin*, 999 F. Supp. 1378 (D. Haw. 1998); (3) *United States v. Bailey*, 789 F. Supp. 788 (D. Tex. 1992), *aff’d*, 996 F.2d 305 (5th Cir. Tex. 1993); (4) *United States v. Blanchard*, 2007–2 U.S. Tax Cas. (CCH) P50596 (E.D. Mich. 2007); (5) *United States v. Brennick*, 134 F.3d 10 (1st Cir. 1998); (6) *United States v. Cordell*, 237 Fed. Appx. 998 (5th Cir. 2007); (7) *United States v. Creamer*, 370 F. Supp. 2d 715 (D. Ill. 2005), *vacated in part*, 370 F. Supp. 2d 715 (N.D. Ill. 2005); (8) *United States v. Easterday*, 564 F.3d 1004 (9th Cir. 2009); (9) *United States v. Ellis*, 2007 U.S. Dist. LEXIS 58453 (D. Ind. 2007); (10) *United States v. Evangelista*, 122 F.3d 112 (2d Cir. 1997), *aff’d*, *Evangelista v. Ashcroft*, 359 F.3d 145 (2d Cir. N.Y. 2004); (11) *United States v. Gilbert*, 266 F.3d 1180 (9th Cir. 2001); (12) *United States v. Goins*, 593 F.2d 88 (8th Cir. 1979); (13) *United States v. Gollapudi*, 947 F. Supp. 768

(D.N.J. 1996), *aff'd*, 130 F.3d 66 (3d Cir. N.J. (1997)); (14) *United States v. Hovind*, 305 Fed. Appx. 615 (11th Cir. 2008); (15) *United States v. Lombardo*, 281 Fed. Appx. 78 (3d Cir. 2008); (16) *United States v. Mussacchia*, 900 F.2d 493 (2d Cir. N.Y. 1990); (17) *United States v. Pflum*, 2004 U.S. Dist. LEXIS 26217 (D. Kan. Dec. 7, 2004); (18) *United States v. Poll*, 521 F.2d 329 (9th Cir. 1975), *overruled by*, *United States v. Easterday*, 539 F.3d 1176 (9th Cir. Cal. 2008); (19) *United States v. Porth*, 426 F.2d 519 (10th Cir. 1970); (20) *United States v. Ramirez*, 92 A.F.T.R.2d (RIA) 7378 (W.D. Tex. 2003). The trend for prosecutions of employment cases is up. See IRS Examples of Employment Tax Investigations FY2008, www.irs.gov/compliance/enforcement/article/0,,id=174631,00.html (last visited August 9, 2009) (reporting recent employment tax investigations).

²⁶⁵ See Jeffrey A. Dubin, *Criminal Investigation Enforcement Activities and Taxpayer Noncompliance*, 35 PUB. FIN. R. 500 (2007) (discussing the effectiveness of criminal tax enforcement in raising overall compliance). Of course with so few prosecutions under IRC section 7202 the effect of criminal enforcement in this area is extremely limited.

²⁶⁶ Department of Justice: Tax Division, *Criminal Tax Manual 9.03* (2009), available at <http://www.usdoj.gov/tax/readingroom/2001ctm/titlepg.htm>; *United States v. Poll*, 521 F.2d 329 (9th Cir. 1975), *overruled by* *United States v. Easterday*, 539 F.3d 1176 (9th Cir. Cal. 2008). *Poll* is no longer good law. The court in *Poll* gave a jury instruction putting wrong limitations on willfulness based on the money in the corporate bank account. It is not cited for its legal correctness but rather to demonstrate an attitude that has pervaded regarding prosecutions for failure to pay over collected taxes—particularly employment taxes. That attitude may be shifting and there has been an uptick in the number of prosecutions for failure to pay collected taxes but the uptick is simply a circumstance of going from almost none to several each year in recent years. This number of prosecutions is still unlikely to generate significant compliance. For a discussion of the correct legal standard in a case that makes clear *Poll* has been overturned see *United States v. Easterday*, 564 F.3d 1004, 1007 (9th Cir. 2009) (“The statute under which *Easterday* was found guilty is 26 U.S.C. § 7202, a fairly rarely invoked provision that criminalizes a willful failure to pay over employees federal income tax withholding on wages”). See U.S. GOV'T ACCOUNTING OFFICE, GAO-99-256, PAYROLL TAXES: BILLIONS IN DELINQUENT TAXES AND PENALTIES DUE BUT UNLIKELY TO BE COLLECTED, 16 (1999) (containing observations of IRS field collection personnel on the likelihood of criminal tax prosecutions for the failure to pay collected taxes).

²⁶⁷ Perhaps it could be argued that so few prosecutions occur under this statute because the statute has achieved its intended result of modifying behavior so that prosecution is unnecessary. That does not appear to be the case here

given the discussion in the recent GAO report, the discussion in the Criminal Tax Manual, the amount of the unpaid collected tax liability and the passage of section 7215 in a later attempt to address the problem. More prosecution of employment tax issues, though not necessarily under section 7202 or section 7215, has occurred in recent years and the IRS is doing a good job of publicizing these prosecutions on its web site for those who go there to look. See IRS Examples of Employment Tax Investigations FY2008, www.irs.gov/compliance/enforcement/article/0,,id=174631,00.html (last visited August 9, 2009) (providing examples of recent employment tax investigations).

²⁶⁸ 26 U.S.C. § 7215 (2010).

²⁶⁹ This section provides:

“(a) *Penalty*—Any person who fails to comply with any provision of section 7512 (b) shall, in addition to any other penalties provided by law, be guilty of a misdemeanor, and, upon conviction thereof, shall be fined not more than \$5,000, or imprisoned not more than one year, or both, together with the costs of prosecution.

(b) *Exceptions*—This section shall not apply—

- (1) to any person, if such person shows that there was reasonable doubt as to (A) whether the law required collection of tax, or (B) who was required by law to collect tax, and
- (2) to any person, if such person shows that the failure to comply with the provisions of section 7512 (b) was due to circumstances beyond his control.

For purposes of paragraph (2), a lack of funds existing immediately after the payment of wages (whether or not created by the payment of such wages) shall not be considered to be circumstances beyond the control of a person.” IRC § 7215 (2009).

²⁷⁰ This section provides:

“(a) *General Rule*—Whenever any person who is required to collect, account for, and pay over any tax imposed by subtitle C, or chapter 33—at the time and in the manner prescribed by law or regulations (A) fails to collect, truthfully account for, or pay over such tax, or (B) fails to make deposits, payments, or returns of such tax, and is notified, by notice delivered in hand to such person, or any such failure, than all the requirements of subsection (b) shall be complied with. In the case of a corporation, partnership, or trust, notice delivered in hand to an officer, partner, or trustee, shall for purposes of this section, be deemed to be notice delivered in hand to such corporation, partnership, or trust and to all officers, partners, trustees, and employees thereof.

- (b) *Requirements*—Any person who is required to collect, account for, and pay over any tax imposed by subtitle C, or chapter 33, if notice has been delivered to such person in accordance with subsection (a), shall collect the taxes imposed by subtitle C, or chapter 33 which become collectible after delivery of such notice, shall (not later than the end of the second banking day after any amount of such taxes is collected) deposit such amount in a separate account in a bank (as defined in section 581), and shall keep the amount of such taxes in such account until payment over to the United States. Any such account shall be designated as a special fund in trust for the United States, payable to the United States by such person as trustee.
- (c) *Relief From Further Compliance with Subsection (b)*—Whenever the Secretary is satisfied with respect to any notification made under subsection (a), that all requirements of law and regulations with respect to the taxes imposed by subtitle C, or chapter 33, as the case may be will be henceforth be complied with, he may cancel such notification. Such cancellation shall take effect at such time as is specified in the notice of such cancellation.” IRC § 7512 (2009).

²⁷¹ The twelve reported decisions are: *United States v. Christopher*, 1 Fed. Appx. 533 (7th Cir. Ill. 2001); *United States v. Dreske*, 536 F.2d 188 (7th Cir. 1976); *United States v. Erne*, 576 F.2d 212 (9th Cir. 1978); *United States v. Gay*, 576 F.2d 1134 (5th Cir. Fla. 1978); *United States v. Gordon*, 495 F.2d 308 (7th Cir. Ill. 1974); *United States v. Hemphill*, 544 F.2d 341 (8th Cir. Mo. 1976); *United States v. Meriwether*, 329 F. Supp. 1156 (D. Ala. 1971), *aff'd*, 469 F.2d 1406 (5th Cir. Ala. 1972); *United States v. Paulton*, 540 F.2d 886 (8th Cir. 1976); *United States v. Plotkin*, 239 F. Supp. 129 (E.D. Wis. 1965); *United States v. Polk*, 550 F.2d 566 (9th Cir. 1977); *United States v. Randolph*, 588 F.2d 931 (5th Cir. Ga. 1979).

²⁷² Edward Cheng aptly described the reaction of Congress to the compliance problems with collected taxes, “When faced with undesirable behavior, legislatures almost invariably turn to the criminal law to regulate.” Cheng, *supra* note 53, at 656. The system of regulation created by IRC section 7202 and section 7215 sought to control the undesirable behavior of non-payment of collected taxes but it failed because the problem was not one which criminal prohibitions could fix.

²⁷³ It should be noted that prosecution for evasion of collected taxes is also possible under IRC section 7201 and prosecution for failure to file tax returns related to collected taxes is also possible under IRC section 7203. These two provisions describe criminal sanctions that cast a broader net than just seeking to prosecute for failures with respect to collected taxes. Occasionally, a prosecution under one of these provisions will occur related to a collected tax.

²⁷⁴ 26 U.S.C. § 3505 (2010)

- (“(a) *Direct Payment by Third Parties*—For purposes of sections 3102, 3202, 3402, and 3403, if a lender, surety, or other person, who is not an employer under such sections with respect to an employee or group of employees, pays wages directly to such an employee or group of employee, employed by one or more employers, or to an agent on behalf of such employee or employees, such lender, surety, or other person shall be liable in his own person and estate to the United States in a sum equal to the taxes (together with interest) required to be deducted and withheld from such wages by such employer.
- (b) *Personal Liability Where Funds Are Supplied*—If a lender, surety or other person supplies funds to or for the account of an employer for the specific purpose of paying wages of the employees of such employer, with actual notice or knowledge (within the meaning of section 6323 (i)(1)) that such employer does not intend to or will not be able to make timely payment or deposit of the wages, such lender, surety, or other persons shall be liable in his own person and estate to the United States in a sum equal to the taxes (together with interest) which are not paid over to the United States by such employer with respect to such wages. However, the liability of such lender, surety, or other person shall be limited to an amount equal to 25 percent of the amount so supplied to or for the account of such employer for such purpose.
- (c) *Effect of Payment*—Any amounts paid to the United States pursuant to this section shall be credited against the liability of the employer”).

²⁷⁵ H.R. REP. NO. 89–1884 (1966), *reprinted in* 1966–2 C.B. 815, 828–30; S. REP. NO. 89–1708 (1966), *reprinted in* 1966 U.S.C.C.A.N. 3722, 2724, 2742–45. For further discussion of Section 3505, see *infra* notes 471–93 and accompanying text.

²⁷⁶ Net payroll lending refers to the practice of lending to permit an employer to pay the salaries of its employees as reduced by the withheld taxes while simultaneously refusing to lend the employer the funds to allow it to pay the government the tax amounts.

²⁷⁷ The Taxpayer Bill of Rights 2 in 1996 made the most changes to section 6672. Consistent with the title of the legislation, these changes did not seek to impose additional duties or obligations on responsible persons but rather to improve procedures for handling these cases in a manner that gave taxpayers more rights in the determination of their liability. New subparagraph (b) provided the requirement that a notice be issued prior to assessment and gave taxpayers a right to have a hearing in the Appeals Division prior to an

assessment. New subparagraph (d) gave responsible officers the right to seek contribution from fellow responsible officers. New subparagraph (e) made it more difficult to hold volunteer members of the board of directors of a tax-exempt organization liable as responsible officers. The IRS Restructuring and Reform Act of 1998 (some parts of which are referred to as Taxpayer Bill of Rights 3) made minor changes to subparagraph (b) clarifying the method of delivery of the required notice. None of these changes to section 6672 had any impact, or were intended to have any impact, on the effectiveness of section 6672 as a tool to reduce the amount of unpaid collected taxes.

²⁷⁸ See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES (2008) (discussing outstanding payroll taxes).

²⁷⁹ *Id.* at 50.

²⁸⁰ *Id.* at 52.

²⁸¹ See American Bar Association, *Report and Recommendations on Taxpayer Compliance*, 41 TAX LAW. 329 (1988) (identifying four types of non-compliance: 1) underreporting of income; 2) overstating deductions; 3) failure to file returns; and 4) failure to pay established liabilities). The fourth type of non-compliance is the subject of concern here. With respect to this type of non-compliance, the ABA states "there is a persistent and difficult problem of unsuccessful businesses failing to pay over to the IRS the taxes already withheld from their employees' wages. The Commission recommends that more effective procedures be developed to allow the Service to intervene quickly in such situations, before the tax becomes unmanageable." *Id.*

²⁸² As might be expected, states vary widely in how and whether they gather this information. Included, as Appendix B, is a listing of the information required by all states regarding the identification of responsible officers at the time of incorporation. Many states do not collect information concerning who is responsible for paying over collected taxes. Those states that do collect the information do so in a variety of ways that offer several models for how this might best occur. Fourteen states require identification of persons responsible for payment of collected taxes at the time the entity seeks its business registration: Illinois, Iowa, Kansas, Kentucky, Maine, Maryland, Mississippi, New Jersey, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, and Virginia. Only Kansas appears to require the signatures of all responsible officers which means in other states seeking this information it is possible for someone to be listed as responsible without their knowledge. See Appendix B (detailing state requirements regarding identification of persons responsible for payment of collected taxes at the time the entity seeks its business registration).

²⁸³ An Employer Identification Number (EIN) is a nine-digit number that the IRS issues to certain business entities. Employers, sole proprietors, corporations, partnerships, non-profit associations, trusts, estates of decedents, government agencies, and certain individuals can apply for EINs. Applicants may apply by telephone, fax, mail, or online. If applying by fax or mail, applicants must complete Form SS-4 and submit it to the IRS. EINs are issued within four days for faxed applications and three weeks for mailed applications. The IRS prefers applicants apply online. Using the online application process, the IRS asks the applicant a series of questions (very similar to questions asked on Form SS-4), attempts to validate the information, and, if the information is validated, issues the applicant a permanent EIN. If the information is not validated, an EIN will not be issued; however, the applicant will have an opportunity to correct the information during the same session. The telephone application process is very similar to the online application process; applicants receive an EIN at the end of the conversation.

The Application for Employer Identification Number, Form SS-4, requires the applicant to disclose its legal name, trade name, and physical and mailing addresses. The applicant must designate an individual to contact regarding tax matters and identify a principal officer, general partner, grantor, owner, or trustor and that individual's social security number, taxpayer identification number (ITIN), or EIN. The applicant must disclose its type of organizational structure (sole proprietorship, partnership, corporation, etc.) and the reason the entity is applying for an EIN. The application asks approximately how many employees the entity plans to employ, if the entity expects its tax liability to be greater than \$1,000, and if the entity has received an EIN previously. The applicant must also check one of twelve boxes describing the principal activity of the entity. Finally, the applicant must sign the application.

Form SS-4 has a Third Party Designee option whereby the applicant of the EIN authorizes a named individual to receive the entity's EIN and answer questions regarding Form SS-4. If the applicant uses a third party designee, the application requires identification of the third party designee and disclosure of the third party's telephone number, fax number, and address. A third party designee may also be used to obtain an EIN by telephone, but the applying entity will need to fax the Third Party Designee section to the telephone application center. See *IRS Employer Identification Numbers*, <http://www.irs.gov/businesses/small/article/0,,id=98350,00.html> (last visited October 11, 2009) (explaining EINs generally); *IRS Application for Employer Identification Number (2009)*, available at http://www.irs.gov/site/DocServer/irs_ss4.pdf?docID=10324 (setting forth procedure to apply for an EIN).

- ²⁸⁴ 26 U.S.C. § 6672 (2010).
- ²⁸⁵ U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 32-33 (2008).
- ²⁸⁶ See Report and Recommendations, *supra* note 281 (stating “[t]here is a tendency for the media to depict the Service in such cases as somehow victimizing the business and causing it to fail. But, in fact, the business had already failed; theft of employee withholdings only postpones the day of reckoning, at a substantial cost to the public treasury”).
- ²⁸⁷ See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-742T, TAX COMPLIANCE: THOUSANDS OF FEDERAL CONTRACTORS ABUSE THE FEDERAL TAX SYSTEM (2007) (addressing noncompliance by entities who have contracts with the federal government). To address the issue of identifying these entities prior to entering into contracts, a new federal government rule has been adopted requiring companies seeking federal contracts to certify whether they have any outstanding federal tax debts over \$3,000. See Dave Rifkin, *A Primer on the ‘Tax Gap’ and Methodologies for Reducing It*, 375 QUINNIPIAC L. REV. 375, 416 (2009) (discussing shaming).
- ²⁸⁸ See *supra* note 282.
- ²⁸⁹ Willfulness under section 6672 is not defined in the Internal Revenue Code. The standard in section 6672 differs from willfulness in a criminal case. The criminal standard is “a voluntary, intentional violation of a known legal duty.” *Cheek v. United States*, 498 U.S. 192, 192, 111 S. Ct. 604, 605 (1991). The standard for willful conduct in section 6672 requires only a “voluntary, conscious, and intentional—as opposed to accidental—decision not to remit funds properly withheld to the government.” *Kalb v. United States*, 505 F.2d 506, 511 (2d Cir. 1974). Other courts have defined willfulness under section 6672 as the decision to prefer other creditors over the government. *Muck v. United States*, 3 F.3d 1378, 1381 (10th Cir. 1993). Courts will generally find willfulness present if either the responsible individual knows that other creditors are being paid when the government is not or the responsible person should have known that was happening given all of the circumstances. Usually, defenses to willfulness involve attempts to pin knowledge of the facts on others coupled with a reliance that the others were doing what they were supposed to do. The success of this type defense usually turns on the nature of the job held by the responsible person and the reasonableness of any reliance given the nature of the job and past actions by others on whom they relied.

Not all states have a willfulness component to their determination of liability. Some states also hold officers strictly liable. For these reasons

use of state law data on both responsibility and willfulness is not a perfect match for federal law.

²⁹⁰ IRS Revenue Officers begin considering the potential applicability of the trust fund recovery penalty (“TFRP”) during the first field visit to the entity taxpayer. IRS Internal Revenue Manual (August 1, 2009), § 5.1.10.3.2, available at http://www.irs.gov/irm/part5/irm_05-001-010.html#d0e227. After the first meeting with the entity taxpayer, revenue officers decide whether to pursue the TFRP, but the presumption is to pursue the TFRP. *Id.* at § 5.7.4.1. In investigating the TFRP, revenue officers follow four general procedures, establishing responsibility, establishing willfulness, conducting collectability determinations, and conducting Form 4180 interviews. *Id.* at § 5.7.3.1.2. The revenue officer identifies potential responsible persons by reviewing the corporate by-laws to determine duties of officers and determining who has the authority to hire and fire employees, determine which creditors to pay, control payroll and disbursements, sign employment tax returns, and make federal tax deposits. *Id.* at § 5.7.3.3.1. During the first field visit to the entity taxpayer, revenue officers must conduct interviews with the greatest number of potentially responsible persons possible. *Id.* at § 5.7.4.2. The revenue officer’s personal interview achieves a dual purpose, to give information and gather information. *Id.* The revenue officer discusses the TFRP and potential personal liability, while also gathering bank statements and cancelled checks to support asserting the TFRP. *Id.* The revenue officer attempts to fill out Form 4180 to record as much information about the person’s duties and authority in the entity to determine if the statutory tests for a responsible person have been met to support asserting the TFRP. *Id.* The revenue officer also must review corporate records such as articles of incorporation, minute books, payroll records, and employment tax returns to determine the duties of the officers and the responsibilities of the individuals to file and pay collected taxes. *Id.* Revenue officers also review bank records such as canceled checks, signature cards and loan applications to determine who had authority to sign checks, deposit funds, and obligate the entity by borrowing money. *Id.* The revenue officer reviews all information and documentation collected during the investigation and prepares a report on Form 4183. *Id.* at § 4.2.1. The revenue officer makes a determination as to whether each person meets the statutory tests for responsible persons and conducts a collectability inquiry for each person. *Id.* The report details the revenue officer’s recommendations for assertion or non assertion of the TFRP as to each potentially responsible person investigated by the revenue officer. *Id.*

²⁹¹ The IRS can seek to create an administrative presumption that listing your name as responsible with the IRS is treated as meeting the test for

responsibility. If section 6672 were amended to specifically provide for this presumption, it would be safer for the IRS to engage in this reliance for a part of its proof of section 6672 liability.

- ²⁹² Presently, Kansas imposes this requirement in Part II of the Kansas Business Tax Application. Part II requires that the entity “List all owners, partners, corporate officers and directors. Provide the personal information and signatures of all persons who have control or authority over how business funds or assets are spent.” Kansas Business Tax Application (2009), available at <http://www.ksrevenue.org/pdf/forms/cr16.pdf>. By requiring each responsible officer to personally sign the form, Kansas makes each of these individuals acknowledge that they are indeed responsible rather than relying on one person to list others who may, or may not, agree that they are responsible once problems occur. Requiring these signatures is an integral part of the process of proving these individuals have responsibility. The form Kansas uses could be adopted by the IRS.
- ²⁹³ Having individuals sign not only provides proof of responsibility when an issue arises but it provides the opportunity to give those self-identified individuals information about the duties of a responsible officer. Providing information to the responsible officers could impact their decision-making when the time comes for making payments to the IRS versus other creditors. Several states provide information in their registration booklets about the personal liability that may apply when collected taxes are not paid. For example, Virginia cites to its state statute holding individuals personally liable on the second page of its Business Registration Application where it requires a listing of all responsible persons, and again on the seventh page where it describes the consequences of failure to pay the collected taxes. See Virginia Business Registration Application (2009), available at www.tax.virginia.gov/web_pdfs/busforms/fr199.pdf (setting forth requirements to register a business in Virginia). The literature examining effective compliance mechanisms suggest the providing of information as one of the components of effective administration. Report and Recommendations, *supra* note 281 at 368–383.
- ²⁹⁴ See Corrie Lynn Lyle, *The Wrath of IRC 6672: The Renewed Call for Change—Is Anyone Listening? If You are a Corporate Official, You Had Better Be*, 74 S. CAL. L. REV. 1133, 1135 (2001) (“Most corporate officers ... do not realize that this [the failure to pay over the collected taxes] is a Pandora’s Box that can result in personal liability for thousands or even millions of dollars in unpaid payroll taxes”). The author of the article does not cite to any authority for the statement that most corporate officers do not realize the difference between failure to pay these collected taxes and failure to pay other corporate liabilities, but the sentiment expressed in the article is widely held by those

who have encountered individuals trying to explain why the section 6672 liability should not attach to them. Almost universally, they profess a lack of knowledge of the consequence of their action in preferring other creditors over the payment of the collected taxes to the United States.

²⁹⁵ See U.S. GOV'T ACCOUNTING OFFICE, GAO-99-256, PAYROLL TAXES: BILLIONS IN DELINQUENT TAXES AND PENALTIES DUE BUT UNLIKELY TO BE COLLECTED, 15 (1999)

("The GAO report contains a discussion of IRS efforts at taxpayer education in this area. Some collection officials observed that the persons most in need of this training did not attend. At least, the IRS offered the training; however, if the education effort is to succeed it must reach everyone who is potentially responsible").

In testimony before the Senate Committee on Homeland Security and Government Affairs on July 29, 2008, Linda Stiff recited a litany of actions taken by the IRS to inform small businesses of their employment tax responsibilities:

"One of the means to accomplish this is through the use of the Federal Tax Deposit Alert process which helps to identify, at an early stage, taxpayers classified as bi-weekly depositors who have not made federal tax deposits during the current quarter, or have made deposits in substantially lower amounts from prior quarters. Virtually all of the IRS functional and operating divisions participate in employment tax outreach and education.... Applicants for a new Employer Identification Numbers receive considerable information based on what they indicate on their Form SS-4. Those who state they have or will have employees automatically get a copy of Circular E, Employer's Tax Guide; information for making Federal Tax Deposits; and enrollment information for the Electronic Federal Tax Payment System ... The IRS also works with community partners to present Small Business Tax Workshops throughout the United States. These workshops instruct new and prospective business owners in federal tax responsibilities, including employment taxes.... Quarterly, the IRS sends out approximately seven million SSA IRS Reporter newsletters with Form 941, Employer's Quarterly Federal Tax Return. The newsletter contains information on subjects such as Social Security law, the Electronic Federal Tax Payment System, or changes in Social Security or IRS electronic filing systems. In addition, in 2007, the IRS developed a new brochure, Publication 4591—Small Business Federal Tax Responsibilities, which includes information about employment taxes."

Written Testimony of IRS Deputy Commissioner Linda Stiff Before the Senate Committee on Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations on the Collection of Federal Employment Taxes, 3–10 (July 29, 2008). Publication 4591 itself provides little information. Circular E addresses the trust fund penalty on page 24 of a 69 page publication and even then does not talk about the fact the collected taxes are held in trust or that the trust fund penalty is non-dischargeable in bankruptcy. Much information exists on the web and undoubtedly good information is transmitted in training sessions for those who attend; however, as noted in the GAO report, the persons who most need to know are the least likely to attend such sessions. This is why requiring each responsible officer to sign and acknowledge the duty at the outset is critical.

²⁹⁶ Oklahoma has a powerful statement above the signature line:

“I, the undersigned applicant or authorized representative, declare under the penalties of perjury that I have examined this application and attachments and to the best of my knowledge the facts set forth are true and correct, and that the requirements hereunder will be carried out in accordance with the laws of the State of Oklahoma and the rules and regulations of the Oklahoma Tax commission. I further acknowledge and agree that sales, withholding and motor fuel taxes are trust funds for the State of Oklahoma and that any use of these trust funds other than timely remittance to the State of Oklahoma is embezzlement and can result in criminal prosecution.”

Having the responsible person further acknowledge that the failure of the business entity to pay the funds held in trust becomes a personal liability that cannot be discharged in bankruptcy might further enhance the statement by impressing the serious personal consequences of the action. See Oklahoma Business Registration Packet (2009), available at <http://www.tax.ok.gov/forms/busregpk.pdf> (setting forth requirements to register a business in Oklahoma).

²⁹⁷ Many states do this in their business registration package. See, e.g., Alabama Department of Revenue Combined Registration/ Application (2009), available at www.excel-pay.com/.../ALCom101%20-%20CombinedRegistrationApplication.pdf (Alabama) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Kansas Business Tax Application (2009), available at <http://www.ksrevenue.org/pdf/forms/cr16.pdf> (Kansas) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Minnesota Application for Business Registration Instruction Booklet (2009), available at http://www.taxes.state.mn.us/instructions/abr_in.pdf (Minnesota) (requiring

acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Business Registration Application & Instructions (2009), *available at* www.state.nj.us/treasury/taxation/pdf/other_forms/git-er/njwt.pdf (New Jersey) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); North Carolina Business Registration Application for Income Tax Withholding (2009), *available at* www.dorncc.com/downloads/fillin/NCBR_webfill.pdf (North Carolina) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Application to Register for Income Tax Withholding and Sales and Use Tax Permit (2009), *available at* <http://www.nd.gov/tax/salesanduse/forms/withholdsalesapplication-enabled.pdf> (North Dakota) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Pennsylvania Enterprise Registration Form and Instructions (2009), *available at* www.revenue.state.pa.us/revenue/lib/revenue/pa-100.pdf (Pennsylvania) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Utah State Business and Tax Registration, TC-69 (2009), *available at* tax.utah.gov/forms/current/tc-69.pdf (Utah) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes); Virginia Business Registration Application (2009), *available at* www.tax.virginia.gov/web_pdfs/busforms/fr199.pdf (Virginia) (requiring acknowledgement by an individual that he or she has responsibility for the payment of trust fund taxes).

²⁹⁸ 11 U.S.C. §§ 507 (a)(8)(C), 523 (a)(1)(A) (2009). The liability for collected taxes receives priority status without regard to its age. Because it has priority status, the exceptions to discharge always apply to individual debtors. Because it has priority status, an entity in a Chapter 11 reorganization must provide for full payment in order to obtain plan confirmation. 11 U.S.C. § 1129 (a)(9)(C) (2009).

²⁹⁹ For a link between information and compliance see *supra* note 254 and accompanying text.

³⁰⁰ One state, Michigan, not on the list for requiring information on responsible officers, has identified the situation with payroll providers as another problem area for collected taxes, which is causing noncompliance. Michigan specifically informs entities that the hiring of a payroll provider does not remove responsible individuals from their obligation to pay over the collected taxes. See Michigan Tax Form 3683 (2009), *available at* www.michigan.gov/documents/3683f_2906_7.pdf (informing businesses that the hiring of a payroll provider does not remove responsible officers from their obligation to pay trust fund taxes). “Payroll Service Provider” is a name given to members

of an industry that manages the administrative aspects of a company's payroll. Usually, the company provides the payroll service provider (PSP) with employee names and compensation and the PSP does payroll processing, check generation and distribution, payroll tax filing, and W-2 generation. In more sophisticated arrangements, the PSP might also handle 401(k) management, employee handbook development, and direct deposit registration. Almost all PSPs handle the payroll tax filing. The IRS even has a list of approved PSPs. See IRS Payroll Service Providers, <http://www.irs.gov/efile/lists/0,,id=101120,00.html> (last visited October 12, 2009) (listing payroll service providers). The companies on that list all have web sites that detail their services. Most companies working with PSPs have little trouble meeting their collected tax obligations to the IRS as long as they have cash to make the required payments. A few PSPs have acted irresponsibly with the money from their clients. When this happens, the company suffers the loss rather than the IRS because the PSP is the agent of the company.

³⁰¹ Several payroll provider companies found their clients' money too tempting and took the money intended to pay the taxes of their clients without paying it over to the IRS. Usually, these schemes ran something like a Ponzi scheme in order for the payroll provider to keep out of trouble as long as possible. See, e.g., *Atlas Hotels v. United States*, 140 F.3d 1245 (9th Cir. Cal. 1998) (affirming summary judgment to defendant United States in plaintiffs, payroll tax service providers, action seeking a refund of late payment penalties and interest paid by the company to whom plaintiffs provided payroll tax service); *Morin v. Frontiers Business Technologies*, 288 B.R. 663 (W.D.N.Y. 2003) (affirming orders of bankruptcy court); *Pediatric Affiliates v. United States*, 230 Fed. Appx. 167 (3d Cir. N.J. 2007) (affirming the district court's order dismissing the taxpayer's complaint); *Wolff v. United States*, 372 B.R. 244 (D. Md. 2007) (affirming order of the bankruptcy court with respect to its dismissal of all counts, except avoidance of preferential transfers made within ninety days preceding the petition date and turnover of avoided preferential payments which was remanded to the bankruptcy court).

³⁰² On line 22 of Michigan's Form 518 "Registration for Michigan Taxes" Michigan requests those filling out the form to check a box "if you use a payroll service that produces your payroll checks and sends income tax withholding payments to the State." Michigan also requests that taxpayers using a payroll provider fill out and attach to their registration Michigan Form 3683 "Payroll Service Provider Combined Power of Attorney Authorization and Corporate Officer Liability (COL) Certificate for Businesses." See Michigan Tax Form 3683 (2009), available at www.michigan.gov/documents/3683f_2906_7.pdf (detailing Michigan requirements for businesses using a payroll provider to withhold and pay

- over employment taxes); *see also* IRS Outsourcing Payroll Duties, <http://www.irs.gov/businesses/small/article/0,,id=176943,00.html> (last visited October 11, 2009) (providing IRS statements on the use of payroll providers).
- ³⁰³ The penalty for failure to list oneself as a responsible officer could either be imposed irrespective of substantive compliance similar to the FBAR penalties or it could require substantive compliance as a triggering mechanism. Because the penalty should be substantial enough to inflict pain for non-compliance, requiring a substantive compliance triggering mechanism makes it easier to support a higher penalty. Alternatively, the penalty could exist for simple failure to notify with a higher penalty amount if it is coupled with non-compliance. Compliance should be made easy by having a line on the Form 941, or similar collected tax document, asking if there have been any changes in the ranks of responsible officers since the last filing (or the initial EIN request) and providing an attachment to the form for the new responsible officers to sign.
- ³⁰⁴ *See* IRC § 3102 (2009) (social security taxes); IRC § 3402 (2009) (income taxes).
- ³⁰⁵ *See* Treas. Reg. § 31.3102-1 (a) (“The employer shall collect from each of his employees, the employee tax with respect to wages for employment performed for the employer by the employee.... The employer is required to collect the tax, notwithstanding the wages are paid in something other than money, and to pay over the tax in money.”); Treas. Reg. 31.3402 (a)-1 (b) (“The employer is required to collect the tax by deducting and withholding the amount thereof from the employee’s wages....”); Treas. Reg. 49.4251-2 (c) (regarding telephone excise taxes “[t]he taxes imposed by section 4251 are payable by the person paying for the services rendered, and must be paid to the person rendering the services who is required to collect the tax and return and pay over the tax”).
- ³⁰⁶ *See* MARK CRAIN, *THE IMPACT OF REGULATORY COSTS ON SMALL FIRMS* 28, 50 (SBA Office of Advocacy 2005) (discussing the disproportionality of the burden imposed by federal regulations on small business); J. SCOTT MOODY, *THE COST OF COMPLYING WITH THE FEDERAL INCOME TAX, SPECIAL REPORT NO. 114 10* (Tax Foundation 2002) (estimating how much it costs individuals and businesses to read the rules, fill out forms, and do all the necessary things to comply with the nation’s tax laws); Francis Chittenden, et al., *Tax Regulation and Small-business in the USA, UK, Australia and New Zealand*, 21 *INT’L SMALL BUS. J.* 93, 98–99 (2002) (determining that small businesses face much higher costs per employee compared with large firms).
- ³⁰⁷ For a general explanation of this practice see Corrie Lyle, *The Wrath of IRC 6672: The Renewed Call for Change—Is Anyone Listening? If You Are a Corporate Official, You Had Better Be*, 74 *S. CAL. L. REV.* 1133, 1156–57 (Spring 2001). For a discussion of how the payroll provider business works see

generally Sandra Boncek, Yahoo Small Business How Payroll Systems Price Their Services, http://smallbusiness.yahoo.com/r-article-a-2111-m-2-sc-52-how_payroll_systems_price_their_services-i (last visited August 3, 2009); Sandra Boncek, Yahoo Small Business, What Do Payroll Providers Typically Offer?, http://smallbusiness.yahoo.com/r-article-a-2140-m-2-sc-52-what_do_payroll_companies_typically_offer-i (last visited August 3, 2009); ADP, <http://www.adp.com/> (last visited July 31, 2009).

- ³⁰⁸ See JOHN F. DUE & JOHN L. MIKESSELL, *SALES TAXATION: STATE AND LOCAL STRUCTURE AND ADMINISTRATION* 327 (John Hopkins University Press 2d ed. 1983); Phillip Mattera with Leigh McIlvaine, *Skimming the Sales Tax: How Wal-Mart and other Big Retailers (Legally) Keep a Cut of the Taxes We Pay on Everyday Purchases*, 50 STATE TAX NOTES 713 (2008). As discussed in *Skimming the Sales Tax* the manner in which states affect this carve-out varies wildly among the states. Usually, the carve-out takes the form of a percentage of sales taxes collected. The percentage varies wildly from state to state. Some states cap the amount of recovery a retailer can obtain under this statute while others have no cap. As discussed further below, this proposal suggests a modest percentage of the collected taxes be used, as the base from which to compute the incentive payment while a reasonable cap is placed on the total amount of incentive payment available to avoid creating a significant windfall to any one recipient.

The concept of paying taxpayers for collecting taxes is somewhat controversial. Certainly, real economic costs exist with the program of collecting these taxes. Some cooperation from the taxpayer may be built if the program is properly administered. Such an incentive could also assist with respect to the filing of tax returns.

- ³⁰⁹ This proposal only applies to small businesses because the incentive to pay appears much more needed for small businesses run by entrepreneurs than large business run by executives and managers. The benefit could be cut off at the point used to divide taxpayers categorized as Small Business Self Employed under the IRS scale or some other categorization pegged more closely to the compliance issues presented by nonpayment of collected taxes. If you allow all businesses to participate in this type of incentive, the types of problems that exist in those states with unlimited sales tax discounts will result. See Mattera, *supra* note 308. In states with unlimited refunds the large retailers, who would comply in any event and for whom the cost of compliance is insignificant relative to their overall operation, soak up the lion's share of the of discounts paid out under the program. See Pennsylvania Budget and Policy Center, *A Tax Windfall Whose Time Has Passed, Understanding Pennsylvania's Sales Tax vendor Discount Program* (2008) ("The sales tax discount program cost Pennsylvania nearly \$74 million

in 2007–2008. Nearly \$12 million of that went to 10 corporations with sales exceeding \$1 billion in the state. On average, each of those vendors kept \$1.16 million in sales tax they collected. Small businesses, by contrast, received only a few dollars from the program. A little more than half of the 301,000 licensed vendors in the state, with sales less than \$100,000, got average discounts of \$9, while another 21 percent got nothing”).

- ³¹⁰ Because the goal is to get the taxpayers off on the right foot, one way to hold down the cost of this incentive other than limiting it to small businesses is to limit it in time to the first two or three years of a taxpayer’s business. These early years are critical times for small businesses because over half fail within the first four years. See Rafael Efrat, *The Tax Burden and the Propensity of Small Business Entrepreneurs to File for Bankruptcy*, 4 HASTINGS BUS. L.J. 175, 204–06 (2008) (discussing the danger of failure for the self-employed and small businesses). Having learned good behavior in the early years, the surviving taxpayers would then be well trained on these tax obligations and posed to continue with good compliance.
- ³¹¹ See Dennis J. Ventry, Jr., *Cooperative Tax Regulations*, 41 CONN. L. REV. 431 (2009) (making a case for discounted rates for timely and accurate compliance); see also Joshua D. Rosenberg, *The Psychology of Taxes: Why They Drive Us Crazy, and How We Can Make Them Sane*, 16 VA. TAX REV. 155, 168 (1996) (“People are significantly more likely to actually adopt desired behaviors in response to a system that: (1) uses rewards for correct behaviors in addition to, and where possible, in place of, punishments for wrong behaviors: and (2) ensures that both positive reinforces and punishments are administered swiftly and consistently”).
- ³¹² For a discussion regarding reimbursement to taxpayers for their costs in a slightly different context see Joseph Bankman, *Tax Enforcement: Tax Shelters, The Cash Economy, and Compliance Costs*, 31 OHIO N. U. L. REV. 1, 9 (2005); Joseph Bankman, *Who Should Bear Tax Compliance Costs?* (Stanford Law School, John M. Olin Program in Law & Econ., Working Paper No. 279, 2004), available at <http://ssrn.com/abstract=519783>; Sarah Lawsky, *Fairly Random: On Compensating Audited Taxpayers*, 41 CONN. L. REV. 161 (2008). Professor Bankman proposes reimbursing taxpayers for the costs they incur in going through an audit. Professor Lawsky opposes this idea; however, at least a part of her concern is the randomness of those receiving reimbursement. The proposal here imparts all businesses, within the selected economic range, that serve as trustees for payroll taxes.
- ³¹³ As with bonds, discussed *infra*, providing some compensation for the service of acting as a trustee fits into the traditional model of serving as a trustee. The Government definitely benefits from the work done by the business entity serving as a trustee and collecting the taxes. Just as certain

trustees should be bonded to insure compliance with the trustee duties so should certain trustees be compensated for their efforts on behalf of the Government. Because this proposal excludes large entities and non-compliant entities from the incentive program, it is not a perfect match with outside trustee, but the proposal does reflect a more traditional model for interaction between the trustee and the beneficiary. Interim Report, Small Seller and Vendor Compensation Task Force of the Streamlined Sales Tax Governing Board (December 15, 2008); *see also* Sales Tax Fairness and Simplification Act, H.R. 3396, 110th Cong. § 6 (a)(14) (2007) (detailing vendor compensation); Sales Tax Fairness and Simplification Act, S. 34, 110th Cong. § 7 (a)(14) (2007).

- ³¹⁴ While merely a tangential thought, the recent debate concerning private debt collection of federal taxes raises an interesting contrast with the use of businesses to collect the bulk of federal taxes. Many commentators assailed the use of private debt collectors for what was an “inherently governmental function.” Yet, they failed to address the fact that most federal taxes are privately collected at the front end. The objections to private debt collection caused it to end. *See* IRS Private Debt Collection, <http://www.irs.gov/businesses/small/article/0,,id=155136,00.html> (last visited August 1, 2009) (discussing private debt collection); National Taxpayer Advocate’s Report to Congress, 27 (2009), *available at* <http://www.irs.gov/pub/irs-utl/fy09objectivesreport.pdf> (discussing private debt collection).
- ³¹⁵ Only trustees that timely file the returns for the collected taxes and timely pay the taxes reflected on those returns would be eligible for the incentive discount. This limitation on the discount reflects the practices of most, but not all, of the states with the incentive discount program. *See* Good Jobs First, *Skimming the Sales Tax: How Wal-Mart and Other Big Retailers (Legally) Keep a Cut of the Taxes We Pay on Everyday Purchases 20–22* (November 2008) (finding [t]wenty-six states have this feature).
- ³¹⁶ A recent national survey commissioned by the Joint Cost of Collection Study, a public/private sector group, and conducted by PricewaterhouseCoopers LLP, has shown that in fiscal year 2003 the total cost to sellers to collect state and local sales taxes was \$6.8 billion. This amount was calculated after subtractions for state vendor discounts and retailer float on the sales tax revenues.

The study showed that for fiscal year 2003, for retailers selling between \$150,000 and \$ 1 million the average cost was 13.47 percent of the sales taxes collected or approximately \$2,386; for mid-size retailer, between \$1 million and \$10 million in sales, the average cost was 5.2 percent or approximately \$5,279; and for the larger retailers, over \$10 million in sales, the average cost of collection was 2.17 percent or approximately \$18,233. *See* National

Economic Consulting, Retail Sales Tax Compliance Costs: A National Estimate 12 (PriceWaterhouseCoopers 2006). It is important to remember that these amounts, including the total cost for all retailers of \$6.8 billion, are not reimbursed to the retailer by the state or local government, these costs come out of the retailer's own pocket. See *Sales Tax Fairness and Simplification Act: Hearing on H.R. 3396 Before the Subcomm. on Admin and Commercial Law Comm. on the Judiciary*, 110th Cong. (97) (2007) (statement of Steven Rauschenberger, Past President, National Conference of State Legislatures).

³¹⁷ See Austin Wakeman Scott & Mark Ascher, 2 *THE LAW OF TRUSTS* 39 (Aspen 6th ed. 2006) (1886).

³¹⁸ Appendix C contains a list of the laws of the states concerning bonding of retailers who incur state sales tax obligations. Four out of five states have some form of bonding requirement. Some states have a list of criteria. For example, Arizona, Florida, Georgia, and Iowa have bonding requirements. Other states simply leave the decision to require a bond to the tax administrator. For example, Maryland requires a bond "to protect tax revenue", New Jersey requires a bond whenever the "director deems necessary", and New Mexico requires a bond whenever it is necessary to ensure payment of any tax. States that provide some guidance to their tax administrators concerning when a bond is necessary, create a better atmosphere for administration since both the tax administrators and the public know when to expect a bond. Some states describe in their statute when a bond should be released due to prolonged compliance. For example, California requires that security held by the Board shall be released after a three-year period in which the person has timely filed all returns and paid all taxes to California.

³¹⁹ It would have little effect because the entity could simply refuse to post the bond, continue operations and continue to add on additional unpaid employment tax liabilities. The ability to enjoin entities from continued operation arguably exists as an option for the IRS already. See U.S. GOV'T ACCOUNTING OFFICE, GAO-99-256, *PAYROLL TAXES: BILLIONS IN DELINQUENT TAXES AND PENALTIES DUE BUT UNLIKELY TO BE COLLECTED*, 16 (1999) ("A few field personnel noted that IRS could seek injunctions through the U.S. Attorney's Office to prevent taxpayers from accumulating multiple payroll tax delinquencies and that District Counsel prefer not to seek such injunctions due to the time and expense required to prosecute such cases."); See also *Written Testimony of IRS Deputy Commissioner Linda Stiff Before the Senate Committee on Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations on the Collection of Federal Employment Taxes*, 2 (July 29, 2008) (suggesting that an injunctive remedy

exists while not citing to any instances when one was actually obtained: “The IRS is developing and testing streamline procedures that will assist Field Collection when developing and requesting a suit for injunctive relief. Specifically, through an understanding with the Department of Justice, the IRS will be putting forward injunction suits that are based on more flexible standards for showing that the government is being irreparably harmed by the non-payment of employment taxes, that further administrative activity would be futile, and that no adequate remedy at law exists”). Attempts to enjoin entities have essentially gone nowhere to date because of the difficulty of bringing a traditional injunction suit, the restraint on business formation such a restraint would place, and the resource issue bringing such suits imposes on the IRS and the Department of Justice.

³²⁰ See Appendix C (listing state bonding requirements).

³²¹ See *Beiger v. United States*, 496 U.S. 53 (1990) (discussing this fiction); see also Harris J. Diamond, *Tracing Cash Proceeds in Insolvency Proceedings Under Revised Article 9*, 9 AM. BANKR. INST. L. REV. 385, 410 (2001); Christian Onsager, et al., *Trust Fund Taxes in Bankruptcy* *Beiger v. IRS Five Years Later*, 15-1 AM. BANKR. INST. L. REV. 15 (Feb, 1996); Richard Orrell-Jones, *Blinded By the Debtor's Headlights: Deer Park's Liquidation of United States v. Energy Resources*, 12 EMORY BANKR. DEV. J. 451 (1996).

³²² See Appendix B (identifying states that impose interest on responsible officers from the due date of return). Most states do have employment taxes; however, no states appear to require a bond for the payment of employment taxes. Compare Appendix B (identifying states that impose interest on responsible officers from the due date of return) with Appendix C (identifying states with bonding requirements). While most states do not distinguish how they charge interest to responsible persons based on whether the underlying tax is a sales tax or an employment tax, four states (Idaho, New York, West Virginia, and South Carolina) make that distinction. See IRS Service Center Advisory, IRS SCA 200026024, 2000 WL 33116108 (June 30, 2000). It is unclear whether states have made these distinctions knowingly based on specific policies or have simply come to these results through different legislative paths when the employment taxes and sales taxes did not move in tandem.

³²³ 26 U.S.C. § 6672 (2010).

³²⁴ See IRC § 6672 (c)(1)(C), (c)(3) (2009) (setting forth procedure if a taxpayer fails to collect and pay over tax to the IRS or attempts to evade or defeat a tax).

³²⁵ 26 U.S.C. § 6331 (i) (2010).

- ³²⁶ IRC § 6331 (i) (2009) (“(1) In General—No levy may be made under subsection (a) on the property or rights to property of any person with respect to any unpaid divisible tax during the pendency of any proceeding brought by such person to a proper Federal trial court for the recovery of any portion of such divisible tax which was paid by such person...”).
- ³²⁷ The effect of requiring a bond may terminate the business because the cash strapped entity will not have the resources to post the bond. This result could have long-term beneficial effects for tax administration by removing at an early stage those businesses that simply are not viable, but obviously, it also has the effect of placing more pressure on already vulnerable small businesses. Because many small businesses with outstanding collected taxes due to the IRS will have difficulty finding a surety willing to post a bond or because the cost of the bond will be prohibitively high, this provision is likely to result in few bonds. Taxpayers will be forced to pay the tax, go out of business, or be enjoined.
- ³²⁸ If a responsible person or officer of the entity had an outstanding liability at the time of incorporation, then a bond would be required unless the prior tax issues were resolved. See Utah State Business and Tax Registration, TC-69 (2009), available at <http://tax.utah.gov/forms/current/tc-69.pdf> (setting forth requirements to register a business in Utah). Even if the prior issues were resolved, the existence of prior liabilities by one or more of the responsible persons or officers of a newly formed entity, may provide a basis for requiring a bond since their past behavior may suggest the potential for problems with payment of the collected taxes. This is an area where the suggestion for identification of responsible persons provides the government with a basis to research the background of the individuals running the entity that seeks to become a trustee of the government and allows the government to inform itself whether a bond or some other action is needed in order to protect itself.
- ³²⁹ An entity that continually increases the amount of unpaid collected taxes as it keeps its doors open is engaged in the “pyramiding” of taxes. The pyramiding of collected taxes has long been a major problem for the IRS. Allowing the IRS a quick entrance into court to stop the pyramiding of further taxes would solve a problem for the IRS in dealing with pyramiding situations. See *Written Testimony of IRS Deputy Commissioner Linda Stiff Before the Senate Committee on Homeland Security and Governmental Affairs Permanent Subcommittee on Investigations on the Collection of Federal Employment Taxes*, 2 (July 29, 2008) (“Taxpayers often attempt to ‘pyramid’ their liabilities as a means of deferring payment or delaying enforcement action. One form of pyramiding occurs when the same business fails to remit payroll taxes for multiple quarters. The second form of pyramiding occurs when the owner of a delinquent business closes down once enforcement

action begins. The owner will then simply incorporate as another entity often selling the same products as before. If he fails to remit for that business and enforcement action begin, he will start a third business. Meanwhile, his payroll tax liabilities continue to pyramid higher”).

- ³³⁰ See Cal. Rev. & Tax. Code § 6701 (Deering 2009) (allowing bonding requirement to lapse after entity has met its collected tax obligations for a three year period).
- ³³¹ The IRS has the ability to enjoin certain noncompliance with tax laws currently using one of three provisions in the Internal Revenue Code: 1) IRC section 7402 provides a broad injunction to enforce the tax laws. It is little used because it is broad and relies on traditional equitable considerations rather than specific statutory conditions. Occasionally, the IRS has considered using this provision to seek to stop the pyramiding of collected taxes but essentially has not done so because the statute is too unwieldy for that purpose; 2) IRC section 7407 provides for an injunction against return preparers—this injunction has been routinely used during the past decade; 3) IRC section 7408 provides for an injunction against specified activities related to tax shelters and certain reportable transactions—this injunction provision has also been routinely used during the past decade. See Rifkin, *supra* note 287, at 402 (providing an overview of the injunctive remedies). These provisions do not sufficiently address the pyramiding of taxes to fit the purpose of this proposal. Only section 7402 could arguably apply and is too slow and unwieldy. A narrowly tailored provision like section 7407 or section 7408 is needed as well as an expedited path to obtaining an injunction.
- ³³² Summons enforcement occurs pursuant to IRC sections 7604 and 7402 (b). The proceeding to enforce the summons is described as a summary proceeding because of the relatively small amount of information the government must put into evidence before the burden shifts to the taxpayer and because of the expedited nature of the procedure. These are traits needed for an effective injunction procedure with respect to taxpayers who fail to timely post a bond because speed is necessary to prevent pyramiding of taxes. See Internal Revenue Manual, available at http://www.irs.gov/irm/part34/irm_34-006-003.html#d0e10 (describing summons procedures); Department of Justice Summons Enforcement Manual, available at http://www.usdoj.gov/tax/readingroom/summonsmn/SumEnfMan_May2006.pdf (describing summons enforcement).
- ³³³ Posting a bond could easily prove financially overwhelming for a small business and could cause the business to fail if imposed. Small businesses have a significant incentive not to have this requirement imposed because of the greatly increased risk of failure.

³³⁴ 26 U.S.C. § 31 (2010).

³³⁵ 26 U.S.C. § 6672 (2010).

³³⁶ *Morales v. United States*, 805 F. Supp. 1062, 1067 n.5 (D. Puerto Rico 1992) (“Where the employer withholds social security taxes but fails to pay over the funds, the employee is not liable to the government for the amount of the withheld taxes and is entitled to credit notwithstanding the employer’s default...”).

³³⁷ IRC § 31 (a) (2009); Treas. Reg. § 1.31-1. *See also* IRS Publication 505 (Rev. March 2009), *available at* www.irs.gov/pub/irs-pdf/p505.pdf (generally explaining the posting of this credit).

³³⁸ 26 U.S.C. § 31 (a) (2010).

³³⁹ *See Morales*, 805 F. Supp at 1067 n.5.

³⁴⁰ A similar loss of social security benefits exists already for self-employed individuals. A self-employed individual who fails to correctly report self-employment income before three years, three months and 15 days after the close of the tax years loses all social security benefits on the self-employment income even if it is later determined that such income exists and even if the individual must pay the self-employment tax on said income. *See* 42 U.S.C. § 405 (2009); 20 C.F.R. 404.802 (2009); *Maone v. United States*, 212 Ct. Cl. 591, 1977 WL 25823 (Ct. Cl. 1977).

To create rough parallel treatment between responsible officers, employees, and self-employed individuals, responsible officers should lose the social security taxes that are not remitted with the return when due.

³⁴¹ 26 U.S.C. § 6672 (2010).

³⁴² 26 U.S.C. § 6303 (2010).

³⁴³ Formerly, P-5-60.

³⁴⁴ P-5-14 states: “The withheld employment and income taxes or collected excise taxes will be collected only once, whether from the business, or from one or more of its responsible persons.”

³⁴⁵ *See* IRS Internal Revenue Manual § 1.2.14.1.3 (August 1, 2009), *available at* http://www.irs.gov/irm/part1/irm_01-002-014.html (“The full unpaid trust fund amount will be paid only once in a particular case...”); *id.* § 5.7.3.1 (8), *available at* http://www.irs.gov/irm/part5/irm_05-007-003.html#d0e10 (“If, after the assertion of the TFRP, the corporation pays the delinquent tax, the FFRP assessment will be abated.”); *id.* at § 5.17.7.1.9 (2), *available at* http://www.irs.gov/irm/part5/irm_05-017-007.html; *see generally* POSTN-124416-08, 2008 TNT 184-8.

³⁴⁶ See IRS Internal Revenue Manual § 5.17.7.1.9 (August 1, 2009), available at http://www.irs.gov/irm/part5/irm_05-017-007.html#d0e10, 5.7.3; IRS Service Center Advisory 200026024, 2000 WL 331116108 (April 20, 2000).

³⁴⁷ See IRS Internal Revenue Manual § 5.17.7.1.9 (August 1, 2009), available at http://www.irs.gov/irm/part5/irm_05-017-007.html.

³⁴⁸ Because the goal is to promote the responsible officers to come forward to pay the liability, this proposal does not seek to reward those responsible officers from whom the IRS collects the tax through some form of collection action, including offset. The policy here would parallel the current law concerning designation of payments. See *Ida v. Commissioner*, 108 F. Supp.2d 1181, 1183 (D. Kan. 2000) (“A taxpayer who “voluntarily” makes payments to the IRS has a right to designate the tax liability to which the payment will apply); *O’Dell v. United States*, 326 F.2d 451, 456 (10th Cir. 1964). When a taxpayer makes a voluntary payment without directing the application of the funds, the IRS may decide how to apply it. *Liddon v. United States*, 448 F.2d 509, 513 (5th Cir. 1971). However, where the taxpayer makes a payment “involuntarily,” the IRS will decide how to apply the payment. *Muntwyler v. United States*, 703 F.2d 1030, 1032 (7th Cir. 1983).

In *Amos v. Commissioner*, 47 T.C. 65, 69 (1966), the Tax Court defined “involuntary payment.” If a taxpayer voluntarily pays the liability, the taxpayer can designate how that payment is applied to any outstanding liabilities. If the taxpayer does not voluntarily pay, the IRS can apply the payment in a manner that preserves its best interest. Similarly, involuntary payments of the collected tax by responsible officers would not trigger the rewards this proposal seeks to provide to responsible officers who step forward and satisfy the liability.

³⁴⁹ In addition to the issue of voluntary vs. involuntary payment of the liability as a triggering mechanism for reaping the benefits of this statute, an issue exists concerning the treatment of a volunteer who steps forward and pays a portion but not all of the liability. The proposal suggests that responsible officers who pay a portion of the liability do not garner the full benefit of the repayment reward. These payments should post on a quarter-by-quarter basis. To the extent that a responsible officer makes a payment that fully pays one or more quarters but not the entire liability, then that individual should receive the reward for the quarters that are fully paid. To the extent that quarters are partially paid, the individual would receive no reward.

³⁵⁰ “The tax imposed by section 3101 shall be collected by the employer of the taxpayer, by deducting the amount of the tax from the wages as and when paid.” IRC § 3101 (a).

“Except as otherwise provided in this section, every employer making payment of wages shall deduct and withhold upon such wages a tax.”
IRC § 3402 (a).

³⁵¹ “Whenever any person is required to collect or withhold any internal revenue tax from any other person and to pay over such tax to the United States, the amount of tax so collected or withheld shall be held to be a special fund in trust for the United States.” IRC § 7501 (a).

³⁵² This paper does not address criminal sanctions available to the IRS for failure to pay these taxes. These criminal provisions receive so little use that a citizen of the United States stands a much greater likelihood of being struck by lightning than being prosecuted under one of these provisions. About 400 people each year are struck by lightning in the United States. <http://www.lightningsafety.noaa.gov/medical.htm>. Almost no one is prosecuted for the crime described by this section. See *Wilson v. United States*, 250 F.2d 312, 314 (9th Cir. 1957) (Court stated that there “does not appear to be a single [prior] reported decision involving a felony prosecution for failure to pay withholding taxes.”); *United States v. Poll*, 521 F.2d 329, 334 n.3 (9th Cir. 1975), *cert. denied*, 429 U.S. 977 (1976) (After citing two other cases of felony prosecution for withholding tax violations, the court stated that “[t]o our knowledge these are the sum of the reported prosecutions under 7202 as applied to withholding taxes.”).

³⁵³ 6672 serves as a collection device because of the policy adopted by the IRS regarding this liability. That policy, set out originally in P-5-60, is discussed below. However, taxpayers must be careful to properly account for withholding to ensure the withholding credit they receive matches the amount of tax owed. See *It’s Time to Adjust Withholding, but Can You Do the Calculations?*, http://mauledagain.blogspot.com/2008_04_01_archive.html (Apr. 4, 2008, 8:39 EST).

³⁵⁴ See *supra* note 350.

³⁵⁵ Numerous articles have been written on the trust fund recovery penalty of 6672. It is also the single most litigated federal tax issue litigated in the refund context. For a general overview of the statute see John W. Schmehl & Richard L. Fox, *Responsible Person and Lender Liability for Trust Fund Taxes—§§ 6672 and 3505*, 639-2d Tax Mgt. (BNA) A-45 (2000); see also P. Prestin Weidner, Note, *The Misappropriation of Trust Fund Taxes Under the Guise of Reasonable Cause*, 57 VAND. L. REV. 287 (2004); Moran, *supra* note 261, at 721-22 n.36.

³⁵⁶ As mentioned previously this article does not seek to address whether a particular individual fits the responsible officer definition. This article presumes that a responsible officer exists and moves forward from that point.

Although the discussion in this section provides background information about a “typical” situation, numerous reasons for not paying the trust fund taxes exists. Nothing in this article seeks to portray the individuals held responsible as miscreants or evil doers. Some individuals who do not pay the trust fund taxes do so with bad motives knowing that their actions seek to deprive the government of the trust fund taxes their business has collected. Many times, however, the person who ends up responsible has a good faith belief that the taxes will eventually be paid and just misjudges the economics of the situation. Numerous articles exist discussing whether someone meets the statutory criteria for assessment. See Doreen McCall, *Who is a “Responsible Person”—The Overreaching Power of the Internal Revenue Service to Collect Employer Withholding Taxes*, 18 OHIO N.U. L. REV. 905 (1992); Mary A. Bedikian, *The Pernicious Reach of 26 U.S.C. Section 6672*, 13 VA. TAX REV. 225 (1993). This article starts at a different point and concerns only how the liability should attach once the determination of liability has occurred.

- ³⁵⁷ A discussion of the collection process is provided in the U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-08-728, TAX DEBT COLLECTION: IRS HAS A COMPLEX PROCESS TO ATTEMPT TO COLLECT BILLIONS OF DOLLARS IN UNPAID TAX DEBTS, 8-13 (2008).
- ³⁵⁸ *Brown v. United States*, 591 F.2d 1136 (5th Cir. 1979); *Turner v. United States*, 423 F.2d 448, 449 (9th Cir. 1970); *Bowlen v. United States*, 956 F.2d 723, 728 (7th Cir. 1992).
- ³⁵⁹ P-5-14 states: “The withheld employment and income taxes or collected excise taxes will be collected only once, whether from the business, or from one or more of its responsible persons.” IRS Internal Revenue Manual 1.2.14.1.3 (June 9, 2003). The IRS renumbered P-5-60 in 2003 to P-5-14.
- ³⁶⁰ IRS Internal Revenue Manual 5.7.4.4 (Apr. 13, 2006), 5.7.3.1 (Oct. 30, 2007).
- ³⁶¹ Taxpayer Bill of Rights II Legislative History, Pub. L. No. 104-168, § 903, 1996 U.S.C.C.A.N. 1143, 1163.
- ³⁶² IRS Internal Revenue Manual 5.7.7.7, 5.7.7.7.2 (Apr. 13, 2006).
- ³⁶³ IRS Internal Revenue Manual 5.17.7.1.9 (Nov. 02, 2007), 5.7.7.3 (Apr. 13, 2006). IRS Service Center Advisory 200026024, 2000 WL 33116108, April 20, 2000. This policy also promotes the same tactics of running, hiding and delaying, attributed here to the failure to charge interest, when more than one responsible officer exists. A detailed discussion of the effect of this policy on compliance exceeds the scope of this article but an example demonstrates why this policy promotes delay. Assume ABC Corporation withholds \$100,000 in income taxes which it fails to pay over to the Government. ABC goes out of business without paying this debt. Bob, Mary and John are the responsible officers of ABC and on July 1 each are assessed a \$100,000 liability

based on 6672. Bob fully pays the liability on July 5. Mary fully pays the liability on July 6. John fully pays the liability on July 7. The IRS will keep Bob's money and refund to Mary and John all of the money that they paid. Since this occurred after the passage of 6672 (d) in 1996, Bob has the right to sue Mary and John for contribution. He will probably have to bear the cost of that litigation as well as the risk associated with collecting upon any judgment he obtains. This policy does not entice responsible officers to step forward with payment but rather to stand back waiting and hoping that one of the others will pay willingly or by enforced collection. For a discussion of the intersection of incentives and tax compliance see Leslie Book, *Freakonomics and the Tax Gap: An Applied Perspective*, 56 AM. U. L. REV. 1163.(2007); Lederman, *supra* note 256.

³⁶⁴ The delay in IRS entry onto the scene is spelled out in detail in U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 7 (2008). The consequences of the delay are spelled out in 2006 NAT'L TAXPAYER ADVOCATE ANN. REP. vol. 1, at 69.

³⁶⁵ See DAVID M. RICHARDSON, JEROME BORISON & STEVE JOHNSON, CIVIL TAX PROCEDURE Ch. 14 (LexisNexis 2d ed. 2008) (2005); MICHAEL I. SALTZMAN, IRS PRACTICE AND PROCEDURE, 17.07-09 (Warren Gorham Lamont 1991) (1981); Doreen McCall, *Who is a "Responsible Person"—The Overreaching Power of the Internal Revenue Service to Collect Employer Withholding Taxes*, 18 OHIO N.U. L. REV. 905 (1992); Mary A. Bedikian, *The Pernicious Reach of 26 U.S.C. Section 6672*, 13 VA. TAX REV. 225 (1993).

³⁶⁶ The current interest rate does not use simple interest but interest that compounds daily so, if the assumed interest rate is correct, the total interest in a real case would, of course, be higher. IRC § 6622 (a).

³⁶⁷ As seen below in the section discussing state laws on this issue, the administration of this issue by the IRS will also prove more difficult in most states if the taxpayer or the taxpayer's representative is well informed since the first payments will go to the state to stop the running of interest and penalties there rather than to the IRS.

³⁶⁸ "That if any cosigner, seller ... or other person ... shall be guilty of any willful act or omission by means whereof the United States shall or may be deprived of the lawful duties, or any portion thereof, accruing upon the merchandise ... such person or persons shall, upon conviction, be fined for each offense ... or be imprisoned ... or both."

Corporate Excise Tax Act of 1909, Pub. L. No. 5, 36 Stat. 11, 97 (1909).

- ³⁶⁹ Act of Sept. 8, 1916, Pub. L. No. 271 ch. 463, § 16, 39 Stat. 756, 773–75. For a detailed discussion of the legislative history of 6672 see Moran, *supra* note 261, at 723–53.
- ³⁷⁰ Act of Sept 8, 1916, Pub. L. No. 271 §§ 200,300,400,500, 39 Stat. 756, 777, 780, 783, 793.
- ³⁷¹ Act of Oct. 3, 1917, ch. 63, § 1004, 40 Stat. 300, 325–26.
- ³⁷² Revenue Act of 1918, Pub. L. No. 254 ch. 18, § 1308 (c), 40 Stat. 1057, 1143.
- ³⁷³ *Id.* § 1308 (a):
- “That any person required under Titles V, VI, VII, VII, IX, X, or Xii, to pay, or to collect, account for and pay over any tax, or required by law or regulations made under authority thereof to make a return or supply any information for the purposes of the computation, assessment or collection of any such tax, who fails to pay, collect, or truly account for and pay over any such tax, make any such return or supply any such information at the time or times required by law or regulation shall in addition to other penalties provided by law be subject to a penalty of not more than \$1,000.”
- ³⁷⁴ *Id.* § 1308 (b).
- ³⁷⁵ *Id.* § 1308 (c). The statute also contains a definitional provision similar to current section 6672:
- “The term person as used in this section includes an officer or employee of a corporation or a member or employee of a partnership, who as such officer, employee, or member is under a duty to perform the act in respect of which the violation occurs.”
- Id.* § 1308 (d).
- ³⁷⁶ Revenue Act of 1924, Pub. L. No. 176 ch. 234, 43 Stat. 253.
- ³⁷⁷ Moran, *supra* note 261, at 740–41. Revenue Act of 1928, Pub. L. No. 562 ch. 852, § 146, 45 Stat. 791, 835; *See also* Revenue Act of 1924, Pub. L. No. 176, ch. 234, § 1017 (d), 43 Stat. 253, 344. Section 1017 (d) provides:
- “Any person who willfully fails to pay, collect or truthfully account for and pay over, any tax imposed by Titles IV, V, VI, VII, and VIII, or willfully attempts in any manner to evade or defeat any such tax or the payment thereof, shall, in addition to other penalties provided by law, be liable to a penalty of the amount of the tax evaded, or not paid, collected or accounted for and paid over, to be assessed and collected in the same manner as taxes are assessed and collected.”
- ³⁷⁸ Act of Aug. 14, 1935, Pub. L. No. 271, ch.531, § 807 (c), 49 Stat. 620, 638 stating:

“All provisions of law, including penalties, applicable with respect to any tax imposed by section 600 [excise tax provisions] ... of the Revenue Act of 1926, ... shall, insofar as applicable and not inconsistent with the provisions of this title, be applicable with respect to the taxes imposed by this title.”

³⁷⁹ Moran, *supra* note 261, at 747.

³⁸⁰ Revenue Act of 1934, Pub. L. No. 216 ch. 277, § 607, 48 Stat. 680, 768.

³⁸¹ S. REP. NO. 73–558, at 53 (1934). The Supreme Court interpreted the scope of this trust and detailed the history behind the creation of the provision in *Begier v. Internal Revenue Service*, 496 U.S. 53 (1990).

³⁸² Current Tax Payment Act of 1943, Pub. L. No. 68, ch. 120, 57 Stat. 126.

³⁸³ Moran, *supra* note 261, at 748. As noted in Professor Moran’s article at footnote 261, no judicial interpretation of the penalty for collected taxes had yet occurred.

³⁸⁴ *See Regan & Co., Inc. v. United States*, 290 F.Supp. 470, 479–480 (E.D.N.Y. 1968) for a discussion of the broad scope of 6672 as it tied together more narrowly crafted statutes imposing similar liabilities in piecemeal fashion.

³⁸⁵ Int. Rev. Code of 1954, Pub. L. No. 591, 68A Stat. 3, 828. At the same time section 7202 was enacted in Subtitle F, subpart A—Crimes creating a criminal liability for similar conduct but with penalty provisions that did not incorporate the 100 percent liability for the unpaid tax. *Id.* at 851. Moran, *supra* note 261, at 750.

³⁸⁶ Moran, *supra* note 261, at 750; H.R. REP. NO. 83–1337, (1954), *as reprinted in*, 1954 U.S.C.C.A.N. 4017, 4025 “This revision includes a rearrangement of the provisions to place them in more logical sequence, the deletion of obsolete material, and an attempt to express the internal revenue laws in a more understandable manner.”

³⁸⁷ IRS Chief Counsel Advice 200112003, 2001 WL 283666 (Nov. 28, 2000); *Sage v. United States*, 908 F.2d 18 (5th Cir. 1990).

³⁸⁸ IRC § 6601 (e)(2) provides that interest is only imposed on an assessable penalty if the person assessed such penalty fails to pay the liability after receiving notice and demand.

³⁸⁹ COLLIER ON BANKRUPTCY Ch. 507 (Alan N. Resnick & Henry J. Sommer eds., 15th ed. 2008); MICHAEL HERBERT, UNDERSTANDING BANKRUPTCY, Ch. 10.04 (Bender 2000).

³⁹⁰ COLLIER ON BANKRUPTCY Ch. 523 (Alan N. Resnick & Henry J. Sommer eds., 15th ed. 2008); DAVID EPSTEIN, BANKRUPTCY AND RELATED LAW IN A NUTSHELL, Ch. XVII, Sec. B (West 2005) (2002).

- ³⁹¹ Letter from David Lindsay, Assistant to the Secretary of the Treasury, to Emanuel Celler, Chairman of the House Committee on the Judiciary (June 24, 1959) *in* H.R. REP. NO. 86-735, at 6 (1959); Letter from Stanley Surrey, Assistant Secretary of the Treasury, to James Eastland, Chairman of the Senate Committee on the Judiciary (July 14, 1961) *in* S. REP. NO. 89-114, at 7 (1965); Letter from Stanley Surrey, Assistant Secretary of the Treasury, to James Eastland, Chairman of the Senate Committee on the Judiciary (Aug. 24, 1961) *in* S. REP. NO. 89-114, at 10 (1965).
- ³⁹² B.C. 507 (a)(8)(C) provides priority status for collected taxes, “a tax required to be collected or withheld and for which the debtor is liable in whatever capacity.” 11 U.S.C.A. § 507 (a)(8)(C) (West 2004). This discussion focuses on federal tax liability; however essentially the same results would occur with respect to state tax liabilities. Subsequent references to “B.C.” refer to the Bankruptcy Code as enacted in Title 11 of the United States Code.
- ³⁹³ 11 U.S.C.A. §§ 726 (a)(4), 724 (a) (West 2004).
- ³⁹⁴ 11 U.S.C.A. § 726 (a)(4) (West 2004).
- ³⁹⁵ 11 U.S.C.A. § 724 (a) (West 2004).
- ³⁹⁶ B.C. 523 (a)(1)(A) provides an exception to discharge for collected taxes because collected taxes receive priority treatment pursuant to B.C. 507. Because assessable penalties, other than 6672, do not receive priority treatment pursuant to B.C. 507, they do not meet the test of B.C. 523 (a)(1)(A). They also do not meet the tests of B.C. 523 (a)(1)(B) or (C). Assessable penalties do meet the test of B.C. 523 (a)(7). Only one reported decision specifically addresses the application of the exception to discharge to assessable penalties other than 6672. This decision was subsequently withdrawn. *Nielsen v. United States*, No. 3-88-3164-H, 1991 WL 101552 (N.D. Tex. 1991), withdrawn, *Nielson v. United States*, No. 3-88-3164-H, 1991 WL 107412 (N.D. Tex. 1991); IRS Litigation Guideline Mem. GL-36, Effect of Bankruptcy Case upon IRC 6700, 6701, and 7408 (Apr. 24, 1998).
- ³⁹⁷ S. REP. NO. 95-989, at 14 (1978).
- ³⁹⁸ Letter from David Lindsay, Assistant to the Secretary of the Treasury, to Emanuel Celler, Chairman of the House Committee on the Judiciary (June 24, 1959) *in* H.R. REP. NO. 86-735, at 6 (1959); Letter from Stanley Surrey, Assistant Secretary of the Treasury, to James Eastland, Chairman of the Senate Committee on the Judiciary (July 14, 1961) *in* S. REP. NO. 89-114, at 7 (1965); Letter from Stanley Surrey, Assistant Secretary of the Treasury, to James Eastland, Chairman of the Senate Committee on the Judiciary (Aug. 24, 1961) *in* S. REP. NO. 89-114, at 10 (1965); H.R. 2236, 86th Cong. (1959); S. 976, 89th Cong. (1965).
- ³⁹⁹ S. REP. NO. 89-114, at 10 (1965). *See also* H.R. REP. NO. 88-372, at 6 (1963).

- ⁴⁰⁰ S. REP. NO. 89–114, at 16–18 (1965).
- ⁴⁰¹ H.R. 3438, 89th Cong., 80 Stat. 270 (1966).
- ⁴⁰² H.R. REP. NO. 88–372, at 1 (1963).
- ⁴⁰³ *Id.* at 5.
- ⁴⁰⁴ S. REP. NO. 88–1134, at 1, 6 (1964); S. REP. NO. 89–114, at 6 (1965); Brief of Petitioner-Appellant at 17–18, *United States v. Sotelo*, 436 U.S. 268 (1978) (No. 76–1800).
- ⁴⁰⁵ S. REP. NO. 95–989, at 1–4 (1978).
- ⁴⁰⁶ Congress created a commission to review the bankruptcy laws and make recommendations. S.J. RES. 88, 91st Cong., 84 Stat. 468 (1970). That commission's initial recommendation concerning taxes proposed a very limited exception to discharge for taxes including collected taxes. "The principal revisions are, first, the reduction from three years to one year of the time period for the non-dischargeability and priority of tax debts, and, second, the shift from reference to 'due and owing' and 'assessed' to special rules tailored to major categories of the debts." H.R. DOC. NO. 93–137 Part II, at 138 (1973).
- ⁴⁰⁷ S. REP. NO. 95–989, at 14 (1978); H.R. REP. NO. 95–595, at 191 (1977).
- ⁴⁰⁸ Basically, all other prepetition unsecured taxes received a time limited grant of priority status and a time limited exception to discharge. See 11 U.S.C.A. § 507 (a)(8), 523 (a)(1) (West 2004, Supp. 2008).
- ⁴⁰⁹ See 507 (a)(8)(A) for income taxes; (D) for employment taxes; and (E) for excise taxes. 11 U.S.C.A. § 507 (a)(8)(A), (D), (E) (West 2004, Supp. 2008). With respect to each type of tax the time limit is generally three years from the due date of the return or the event giving rise to the tax liability.
- ⁴¹⁰ 11 U.S.C.A. § 1328 (a) (West Supp. 2008); H.R. REP. NO. 109–31, at 101 (2005).
- ⁴¹¹ 102 B.R. 790 (E.D. Wash. 1989), *aff'd per curiam*, 907 F.2d 114 (9th Cir. 1990).
- ⁴¹² *Tomlan*, 102 B.R. at 796.
- ⁴¹³ IRS Litigation Guideline Mem. GL–37, Dischargeability of Untimely Filed Liabilities in Chapter 13 Bankruptcies (Apr. 7, 1992) (obsoleted Jan. 13, 1998).
- ⁴¹⁴ Jack Williams, *A Comment on the Tax Provisions of the National Bankruptcy Review Commission Report: The Good, The Bad and the Ugly*, 5 Am. Bank. Inst. L. Rev. 445, 455 (1997).
- ⁴¹⁵ Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, § 707, 119 Stat. 23, 126; 11 U.S.C.A. § 1328 (a) (West Supp. 2008).
- ⁴¹⁶ Policy Statement P–5–14 was renumbered and slightly rewritten in 2003. Prior to that it was Policy Statement P–5–60.
- ⁴¹⁷ IRM 1.2.14.1.3 (June 9, 2003).

- ⁴¹⁸ IRS Policy Statement P-5-60, MT 1218-56 (Approved Nov. 5, 1956); see *McCarty v. United States*, 437 F.2d 961 (Ct. Cl. 1971) (discussing related Internal Memorandum No. 56-46).
- ⁴¹⁹ *Slodov v. United States*, 436 U.S. 238, 245-46 (1978).
- ⁴²⁰ *United States v. Sotelo*, 436 U.S. 268, 280 n.12 (1978).
- ⁴²¹ IRS Service Center Advisory, 2000 WL 33116108 (June 30, 2000).
- ⁴²² See Bryan T. Camp, *Avoiding the Ex Post Facto Slippery Slope of Deer Park*, 3 Am. Bank. Inst. L. Rev. 329, 330-32 (1995) for a general discussion of the nature of the 6672 liability and how the IRS seeks to collect it.
- ⁴²³ IRS Service Center Advisory, 2000 WL 33116108 (June 30, 2000).
- ⁴²⁴ IRS Service Center Advisory, 2000 WL 33116108 (June 30, 2000).
- ⁴²⁵ *United States v. Sotelo*, 436 U.S. 268 (1978).
- ⁴²⁶ *In re Sotelo*, 551 F.2d 1090 (7th Cir. 1977).
- ⁴²⁷ *Sotelo*, 436 U.S. at 271; Brief of Respondent-Appellee at 5, *United States v. Sotelo*, 436 U.S. 268 (1978) (No. 76-1800).
- ⁴²⁸ Brief for the Respondent, *supra* note 427, at 8.
- ⁴²⁹ “The fact that respondent was found liable under 6672 necessarily means that he was ‘required to collect, truthfully account for, and pay over’ the withholding taxes, and that he willfully failed to meet one or more of these obligations.” *Sotelo*, 436 U.S. at 274; “It is therefore clear that the 6672 liability was not imposed for a failure on the part of respondent to collect taxes but was rather imposed for his failure to pay over taxes that he was required both to collect and to pay over. Under these circumstances, the most natural reading of the statutory language leads to the conclusion that respondent ‘collected or withheld’ the taxes within the meaning of Bankruptcy Act 17a (1) 9e.” *Sotelo*, 436 U.S. at 275.
- ⁴³⁰ “The funds here involved were unquestionable ‘taxes’ at the time they were ‘collected or withheld from others’.... That the funds due are referred to as a ‘penalty’ when the government later seeks to recover them does not alter their essential character as taxes for purposes of the Bankruptcy Act....” *Sotelo*, 436 U.S. at 275.
- ⁴³¹ *Id.* at 279.
- ⁴³² *Id.* at 280.
- ⁴³³ *Id.* at 280, quoting United States Comptroller General Opinion, B-137762 (May 3, 1977), in 9 Standard Federal Tax Reporter, ¶ 6614, (CCH) 71,438 (1977).
- ⁴³⁴ *Sotelo*, 436 U.S. at 287.
- ⁴³⁵ *Id.* at 288.

- ⁴³⁶ “[T]he *lifelong liability* which the Court imposes today falls on the shoulders of one who was the chief executive officer of a small family business...”
Sotelo, 436 U.S. at 290–91 (Emphasis added).
- ⁴³⁷ “Statement by the HON. Dennis DeConcini, Chairman of the subcommittee on improvements in judicial machinery of the Senate Committee on the Judiciary, upon introducing the Senate Amendment to the House Amendment to H.R. 8200 ... Taxes which the debtor was required by law to withhold or collect from others and for which he is liable in any capacity, *regardless of the age of the tax claims* ... In addition, this category includes the liability of a responsible officer under the Internal Revenue Code (sec. 6672) ... and the priority will cover the debtor’s responsible officer liability regardless of the age of the tax year to which the tax relates. The U.S. Supreme Court has interpreted present law to require the same result as will be reached under this rule. *U.S. v. Sotelo*, 436 U.S.268 (1978). This category also includes the liability under section 3505 of the Internal Revenue Code of a taxpayer who loans money for the payment of wages or other compensation.” (Emphasis added). 1978 U.S.C.C.A.N. 6505, 6566.
- ⁴³⁸ *Lauckner v. United States*, No. 93–1594, 1994 WL 837464, at *7 (D.N.J. May 4, 1994), *aff’d per curiam*, 68 F.3d 69 (3d Cir. 1995).
- ⁴³⁹ *Id.*
- ⁴⁴⁰ See IRS CCA 200112003 (March 23, 2001) for a general discussion of the statute of limitations on penalties in subchapter 68B and a specific discussion of whether a statute of limitation on assessment of the penalty imposed under 6707 exists.
- ⁴⁴¹ *United States v. Hodgekins*, 805 F. Supp. 653 (N.D. Ind. 1992); *Turk v. United States*, No. S92–307M, 1993 WL 497785, at *6 (N.D. Ind. Sept. 17, 1993); *Stallard v. United States*, 12 F.3d 489 (5th Cir. 1994).
- ⁴⁴² See *Mullikin v. United States*, 952 F.2d 920 (6th Cir. 1991); *Lamb v. United States*, 977 F.2d 1296 (8th Cir. 1992); *Capozzi v. United States*, 980 F.2d 872 (2d Cir. 1992); *Sage v. United States*, 908 F.2d 18 (5th Cir. 1990).
- ⁴⁴³ *Lauckner v. United States*, No. 93–1594, 1994 WL 837464, at *7 (D.N.J. May 4, 1994), *aff’d per curiam*, 68 F.3d 69 (3d Cir. 1995).
- ⁴⁴⁴ Numerous authorities exist for the proposition that the liability under 6672 is separate and distinct from the liability of the entity for the collected taxes. None of the authorities set the issue up in quite the way that *Bradley v. United States*, 936 F.2d 707 (2nd Cir. 1991) does. In *Bradley* the IRS assessed 6672 liabilities against two individuals, Charles Bradley and David Agnew for failure of Maxim Industries, Inc. (Maxim) to pay withheld employment and social security taxes. After the 6672 assessments were made against Bradley and Agnew they paid a portion of the tax, filed a claim for refund and then

filed suit. Also after the 6672 assessments were made, Maxim filed a chapter 11 bankruptcy petition. Because it appeared that Maxim might have sufficient funds to fully pay the outstanding employment tax liability through the bankruptcy case, the parties in the refund suit agreed to dismiss the refund suit subject to reinstatement. Maxim did pay all of the employment taxes through the bankruptcy case together with all of the interest for which it was liable; however, because interest does not accrue in chapter 11 bankruptcy cases on unsecured claims between the date of the petition and the confirmation of the plan, the IRS sought to collect the interest for this period of time from the two responsible officers. They resisted and the refund suit was reinstated setting up the issue of whether the IRS could do so.

The Second Circuit laid out the issue: “Essentially, plaintiffs contend that since Maxim has paid its tax liability and related interest, the Internal Revenue Code provides no authority for charging plaintiffs with interest for the period during which Maxim was in bankruptcy. This argument mischaracterizes the legal basis for the assessments against plaintiffs. Strictly speaking, liability under section 6672 (a) is not derived from, or dependent upon, an employer’s outstanding tax obligation. Rather, the section imposes a penalty upon persons who fail to perform a specified statutory task. We have consistently held, therefore, that the liability for such a penalty is separate and distinct from the employer’s liability for trust fund taxes.” *Id.* at 710.

⁴⁴⁵ *Lauckner*, 1994 WL 837464 at *1. The similarities noted by the Court between 6672 and 3403 parallel the similarities in the treatment of these liabilities in the bankruptcy code. These similarities form the basis for the Government’s policy decision adopting Policy Statement 5–60 in which it states the liability will only be collected once. The separateness discussed in *Bradley*, however, does seem more separate than the discussion in *Lauckner* addresses.

⁴⁴⁶ *Id.* at *4.

⁴⁴⁷ *Id.* at *5.

⁴⁴⁸ *Id.*

⁴⁴⁹ *Id.*

⁴⁵⁰ *Id.*

⁴⁵¹ See the argument in Brief of Petitioner-Appellant at 25, n.15, *United States v. Sotelo*, 436 U.S. 268 (1978) (No. 76–1800). “Liability for taxes under 6672 is deemed ‘due and owing’ on the date the person responsible for seeing the taxes are paid failed to do so—the date the corporate returns were due to be filed.”

⁴⁵² The IRS made additional arguments in *Lauckner* based on the relevant return for purposes of IRC 6501 (a) and Congressional intent. These arguments

were also rejected with the reasoning that covers matters not related to this paper.

⁴⁵³ IRS Action on Decision 1996–006, 1996–2 C.B. 1.

⁴⁵⁴ *Lauckner*, 1994 WL 837464 at *1. In the second paragraph of the opinion the court clearly expresses its concern that the IRS position reflected a reversal of its long held position concerning the applicable state of limitations. “It argues for perpetual exposure despite its long-standing position to the contrary, coupled with judicial acceptance and congressional acquiescence for more than 30 years. Such a radical change must come from the legislature and not the courts, particularly where it seeks to leave persons exposed to tax liability in perpetuity.”

⁴⁵⁵ Treas. Reg. § 301.6601–1(a) (as amended in 1997).

⁴⁵⁶ IRC § 6151(a).

⁴⁵⁷ IRC § 6072(a).

⁴⁵⁸ Treas. Reg. § 301.6601–1(f)(3) (as amended in 1997).

⁴⁵⁹ IRC 6303; Treas. Reg. 301.6303–1 (as amended in 2001).

⁴⁶⁰ See Thomas E. Fritz, *Flowthrough Entities and the Self-Employment Tax: Is it Time for a Uniform Standard?*, 17 Va. Tax Rev. 811 (1997–1998); Fred B. Brown, *Federal Income Taxation of US Branches of Foreign Corporations: Separate Entity or Separate Rules?*, 49 Tax L. Rev. 133 (1993).

⁴⁶¹ *United States v. Sotelo*, 436 U.S. 268, 281 (1978) (quoting 112 CONG. REC. 13809, 13817 (1966)).

⁴⁶² *Sotelo*, 436 U.S. at 281 n.16. (internal citations omitted).

⁴⁶³ Much has been written on the role of horizontal equity and parallelism in tax legislation. These concepts are important because taxpayer perceptions are important. Enforced compliance measures by the IRS cannot account for the level of compliance by the taxpaying public. Fairness in the system is critical. Jeffrey H. Kahn, *The Mirage of Equivalence and the Ethereal Principles of Parallelism and Horizontal Equity*, 57 HASTINGS L.J. 645 (2006). In this article, Professor Kahn devises a test to determine when parallel treatment of a specific tax circumstance is desirable and when countervailing considerations drive nonparallel treatment as the correct result. He did not test this situation. Using his tests a strong argument exists for parallel treatment with respect to interest between individuals who fail to pay over monies held in trust for the Government. These individuals whether operating as a sole proprietorship, partnership, or in corporate form have already received parallel treatment—the very reason for piercing the corporate veil. No reason exists for departing from that parallel treatment in the imposition of interest. See also Dave Elkins, *Horizontal Equity as*

- a Principle of Tax Theory*, 24 YALE L. & POL'Y REV. 43 (2006); Richard Winchester, *The Gap in the Tax Gap: What Congress Should Do About It* (Thomas Jefferson School of Law Legal Studies Research Paper No. 1151363), available at <http://ssrn.com/abstract=1151363> (addressing parallelism in employment tax issues).
- ⁴⁶⁴ Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. 1453 (2003).
- ⁴⁶⁵ See *United States v. Estate of Kime*, 950 F.Supp. 950, 954 (D. Neb. 1996) (finding the Insolvency Statute holds a representative of an estate liable for the unpaid tax liability, interest, and penalties of the estate); *United States v. Coppola*, 85 F.3d 1015, 1020–21 (2d Cir. 1996) (limiting the liability of the representative to the amount of the payment made or the value of the assets distributed before taxes are paid; importantly, the court found that the executor was liable for the unpaid taxes plus interest under 31 U.S.C. 3713).
- ⁴⁶⁶ *Papineau v. Commissioner*, 28 T.C. 54 (1957); *Yagoda v. Commissioner*, 39 T.C. 170 (1962), *aff'd*, 331 F.2d 485 (2d Cir. 1964), *cert. denied*, 379 U.S. 842 (1964). The cap on the liability described here applies to transferee cases “in equity.” Generally, no cap exists for transferee cases “at law.”
- ⁴⁶⁷ *Lowy v. Commissioner*, 35 T.C. 393 (1960). For a general discussion on the issue of interest on transferee liability see Theodore D. Peyser, *Transferee Liability*, 628–2d Tax Mgt. (BNA) A–25–27 (2003); MICHAEL I. SALTZMAN, *IRS PRACTICE AND PROCEDURE*, 17.06 (Warren Gorham Lamont 1991) (1981).
- ⁴⁶⁸ *Estate of Stein v. Commissioner*, 37 T.C. 945 (1962), *supp. op.*, 40 T.C. 275 (1963).
- ⁴⁶⁹ *Patterson v. Sims*, 281 F.2d 577 (5th Cir. 1960). The courts are split on the liability for accrued interest if the underlying tax is an estate or gift tax. Compare *Baptiste v. Commissioner*, 29 F.3d 433 (8th Cir. 1994), *cert. denied*, 513 U.S. 1190 (1995) with *Baptiste v. Commissioner*, 29 F.3d 1533 (11th Cir. 1994).
- ⁴⁷⁰ See e.g., IRC § 31. Section 31(a) provides that “the amount withheld . . . shall be allowed to the recipient of the income as a credit against the tax imposed by the subtitle.” This provision insures that a worker whose wages have been reduced by the amount of the withheld taxes will receive credit for payment of those taxes even if the company that withheld the taxes fails to pay them over to the Government. This credit extends even to the taxes withheld on the wages of individuals determined to be responsible for failure to pay over the withheld taxes. As a consequence, the Government, through this provision, grants full value for the withheld taxes whether it receives that value or not. This granting of full value provides an equivalent to the

transferee who has received from the taxpayer material equal to or greater than the value of the taxes owed by the transferor.

⁴⁷¹ See H.R. REP. NO. 89-1884, (1966), *reprinted in* 1966-2 C.B. 815, 828-30; S.REP. NO. 89-1708, (1966), *reprinted in* 1966 U.S.C.C.A.N. (80 Stat. 1125) 3722, 3724, 3742-45 (one of the statements provided in the legislative history here describes 3505 as “intended to represent a reasonable accommodation of the interests of the Government in collecting the taxes of delinquent taxpayers with the rights of taxpayers and third parties.”)

One commentator states that “prior to 1966 no lender or other institutional creditor had ever been held liable for the 6672 penalty.” Larry A. Makel & James C. Chadwick, *Lender Liability for a Borrower’s Unpaid Payroll Taxes*, 43 BUS. LAW. 507, 520 n.56 (1988).

⁴⁷² The term for this practice, net payroll financing, does not appear in the statute but found common usage during the discussion of the need for this provision as described in *United States v. Algernon Blair, Inc.*, 441 F.2d 1379, 1381 (5th Cir. 1971):

“Prior to the effective date of 3505 (b), problems arose with the construction industry’s device known as ‘net payroll financing’. Using this method, a sub-contractor-employer, who had financially overextended himself would go to a lender, in this case the prime contractor, for financial assistance. The prime contractor-lender, desirous of having the sub-contractor complete the work, but also wanting to minimize costs would provide only the net payroll funds. In many of these situations, the United States would never receive the withholding taxes due, even though the employees received credit on the records of the Treasury Department as if the taxes had been paid. While the sub-contractor-employer would still be liable for the taxes under 3102 (b) and 3404 of the Code, recourse against the employer was often fruitless, as he was financially unable to pay the taxes.”

⁴⁷³ IRC § 3505 provides:

“(a) Direct payment by third parties. For purposes of sections 3102, 3202, 3402 and 3403, if a lender, surety, or other person, who is not an employer under such sections with respect to an employee or group of employees, pays wages directly to such an employee or group of employees, employed by one or more employers, to an agent on behalf of such employee or employees, such lender, surety, or other person shall be liable in his own person and estate to the United States in a sum equal to the taxes (*together with interest*) required to be deducted and withheld from such wages by such employer.

- (b) Personal liability where funds are supplied. If a lender, surety, or other person supplies funds to or for the account of an employer for the specific purpose of paying wages of the employees of such employer, with actual notice or knowledge (within the meaning of section 6323 (i)(1) that such employer does not intend to or will not be able to make timely payment or deposit of the amounts of tax required by this subtitle to be deducted and withheld by such employer from such wages, such lender, surety, or other person shall be liable in his own person and estate to the United States in a sum equal to the taxes (*together with interest*) which are not paid over to the United States by such employer with respect to such wages. However, the liability of such lender surety, or other person shall be limited to an amount equal to 25 percent of the amount so supplied to or for the account of such employer for such purpose.
- (c) Effect of payment. Any amounts paid to the United States pursuant to this section shall be credited against the liability of the employer.” (emphasis added).

⁴⁷⁴ “As of January, 1965, the delinquent accounts in the construction industry totaled \$55,608,622.00, which was twenty-six percent of all delinquencies of this type of taxes. As of the same date, \$29,730,508.00 of the \$55,608,622.00, or fifty-three percent, had been overdue for more than one year. And according to the same Treasury figures, it had written off in 1964, as uncollectible from the construction industry, the sum of \$16,290,098.00, which was twenty-eight percent of all unpaid withholding taxes for all industries written off during that year.” Edward Gallagher, *The Good and the Bad for Surety Companies Under the Federal Tax Lien Act of 1966*, 34 INS. COUNS. J. 214, 218 (1967).

⁴⁷⁵ *United States v. Hill*, 368 F.2d 617, 623 (5th Cir. 1966)

(“[T]he bank agreed to loan to the corporation funds to complete jobs in progress. The only control which the bank exercised during this period was in connection with the funds which it loaned. Taxpayer Hill admitted at trial that he understood the bank’s refusal to honor checks for taxes drawn on these funds to be merely a statement that the bank would not loan the corporation funds for the taxes. Certainly this refusal to make a loan did not place the bank in control of the corporation’s checking account or alter appellants’ control of the corporation.”)

Girard Corn Trust Exchange Bank v. United States, 259 F.Supp. 214 (E.D. Pa. 1966); *United States v. Park Cities Bank & Trust Co.*, 481 F.2d 738 (5th Cir. 1973); *United States v. Algernon Blair, Inc.*, 441 F.2d 1379 (5th Cir. 1979); *United States v. Coconut Grove Bank*, 545 F.2d 502,505 n.2 (5th Cir. 1977)(lists the

cases). Many of the cases cited in this footnote and listed in *Coconut Grove Bank* include additional arguments by the United States in its attempts to hold the third party lenders liable. Seeking to hold the lender liable under a contract theory and seeking to hold it liable as the “true” employer were the primary additional theories. Those arguments are not important to the purpose of this article.

⁴⁷⁶ See case quoted, *supra*, note 472.

⁴⁷⁷ *Abrams v. United States*, 333 F. Supp. 1134, 1147 (S.D. W. Va. 1971); A later court set up a two part test that must be satisfied in order for a payment to be considered a direct payment of wages under 3505 (a). First, the payor must have the ability to control the funds. If the employer controls the funds then the situation would shift from 3505 (a) to some other provision such as 3505 (b) or 6672. Second, the payor must have the right and legal authority to exercise that control. *United States v. Fred A. Arnold, Inc.*, 573 F.2d 605, 608 (9th Cir. 1978). See also *United States v. Kennedy Construction Co. of NSB*, 572 F.2d 492 (5th Cir. 1978); *Derr v. United States*, 498 F. Supp. 337 (W.D. Wis. 1980).

⁴⁷⁸ H.R. REP. NO. 89-1884, (1966), reprinted in 1966-2 C.B. 815, 829; S. REP. NO. 89-1708, (1966), reprinted in 1966 U.S.C.C.A.N. (80 Stat. 1125) 3722, 3743.

⁴⁷⁹ Treas. Reg. § 31.3505-1(d) (as amended in 1995) provides: “In the event the lender, surety, or other person does not satisfy the liability imposed by Section 3505, the United States may collect the liability by appropriate civil proceedings commenced within 10 years after assessment of the tax against the employer.”

⁴⁸⁰ In fact Congress anticipated that lenders would take certain precautions to avoid the liability under this statute. “[S]ureties can protect themselves against any losses attributable to withholding taxes by including this risk of liability in establishing their premiums, and lenders by including the amounts in their loans and taking adequate security.” *Jersey Shore State Bank v. United States*, 479 U.S. 442, 449 (1987), citing, S. Rep. No. 89-1708, (1966), reprinted in 1966 U.S.C.C.A.N. 3722, 3744; H.R. Rep. 89-1884, reprinted in 1966-2 C.B. 815, 830.

⁴⁸¹ See Julius Thannhauser et al., *Lender’s Liability for Unpaid Withholding Taxes of Borrower—Employer—IRC Sections 3505 and 6672*, 80 COM. L. J. 137 (1975); See also Mark R. Hinkston, *Dealing with the Disarray: The Eighth Circuit Addresses Notice and Demand Applicability to Lenders’ Liability For Withholding Taxes Under IRC 3505 (b)*—*United States v. Messina Builders and Contractors Co.*, 20 CREIGHTON L. REV. 1093, 1099 n.26 (1987) (This article has an excellent introductory section on the legislative history of 3505).

- ⁴⁸² The IRS took the position initially that interest due from the third party under 3505 (b) added onto the 25 percent. Treas. Reg § 31.3505-1(b) (as amended in 1995); Rev. Proc. 78-13, 1978-1 C.B. 591. It lost this issue in three circuits. See *United States v. Metro Construction Co.*, 602 F.2d 879 (9th Cir. 1979); *United States v. Intercontinental Industries, Inc.*, 635 F.2d 1215 (6th Cir. 1980); *United States v. Hannan Co.*, 639 F.2d 284 (5th Cir. 1981). After these losses, the IRS abandoned the position that the person liable under 3505 (b) must pay interest in addition to the 25 percent of net payroll. See IRS Litigation Guideline Mem. GL-14 (May 4, 1994).
- ⁴⁸³ Once the fact that funds are being used for net payroll is brought to the attention of the lender, the lender is deemed to meet the knowledge part of this test. *United States v. Park Cities Bank & Trust Co.*, 481 F.2d 738, 740 (5th Cir. 1973); *United States v. Estate of Swan*, 441 F.2d 1082, 1087 (5th Cir. 1971).
- ⁴⁸⁴ The statute references 6323 (i)(1) which provides “An organization exercises due diligence if it maintains reasonable routines for communicating significant information to the person conducting the transaction and there is a reasonable compliance with the routines. Due diligence does not require an individual acting for the organization to communicate information unless such communication is part of his regular duties or unless he has reason to know of the transaction and that the transaction would be materially affected by the information.” IRC § 6323 (i).
- ⁴⁸⁵ *United States v. First Nat’l Bank of Circle*, 652 F.2d 882 (9th Cir. 1981).
- ⁴⁸⁶ *United States v. Intercontinental Industries*, 635 F.2d 1215 (6th Cir. 1980); *Fidelity Bank, N.A. v. United States*, 616 F.2d 1181 (10th Cir. 1980).
- ⁴⁸⁷ *Werner v. United States*, 374 F. Supp. 558 (D. Conn. 1974), *aff’d*, 512 F.2d 1381 (2d Cir. 1975).
- ⁴⁸⁸ See *Jersey Shore State Bank v. United States*, 479 U.S. 442, 446 (1987) (“Section 3505 does not declare that a lender is ‘liable for the unpaid tax.’ Instead, the section imposes liability the lender for all or part of ‘a sum equal to the taxes’”).
- ⁴⁸⁹ *Id.* at 446-47. Because the 3505 liability was not a tax but rather a judgment for a sum certain based on the tax, the Supreme Court held that the IRS was not required to follow all of the notice provisions set out in the Internal Revenue Code for collection of taxes. Specifically, IRC 6303 requiring notice and demand prior to collection did not apply to this situation.
- ⁴⁹⁰ See *supra* note 482.
- ⁴⁹¹ 422 F.2d 26 (9th Cir. 1970).
- ⁴⁹² “Thus, in considering the application of section 3505, the possibility of also asserting the trust fund recovery penalty against the lender or an employee of

the lender should not be overlooked.” IRS Litigation Guideline Mem. GL-14 (May 4, 1994).

⁴⁹³ See also *Commonwealth Nat’l Bank of Dallas v. United States*, 665 F.2d 743 (5th Cir. 1982); *Regan & Co. v. United States*, 290 F. Supp. 470, 479 (E.D.N.Y. 1968) (“[C]ongress sought to plug the loopholes against the limitless ingenuity of those whose métier it is to search for crevices between mortise and tenon in the infinitely complex definition and imposition of obligations in the Revenue Code”).

⁴⁹⁴ “Section 6672 does not refer to any liability of a responsible person for interest on the delinquent taxes. A responsible person has no liability for interest on the unpaid withholding taxes to the extent that it accrues between the date that the employee’s tax should have been paid and the date the IRS assesses the tax against the responsible person. Hence, a potentially responsible person has reason to pursue all good faith defenses through the administrative process.” John W. Schmehl & Richard L. Fox, *Responsible Person and Lender Liability for Trust Fund Taxes - §§ 6672 and 3505*, 639-2d Tax Mgt. (BNA) A-45 (2000) (emphasis added); see also DAVID M. RICHARDSON, JEROME BORISON & STEVE JOHNSON, *CIVIL TAX PROCEDURE* 400 (LexisNexis 2d ed. 2008) (2005). “An important advantage to protesting the penalty before it is assessed is that doing so stays the assessment of the penalty; consequently, interest does not begin to accrue.” DAVID M. RICHARDSON, JEROME BORISON & STEVE JOHNSON, *CIVIL TAX PROCEDURE TEACHER’S MANUAL* 284 (LexisNexis 2007) (emphasis added).

As seen below in the section discussing state laws on this issue, the administration of this issue by the IRS will also prove more difficult in most states if the taxpayer or the taxpayer’s representative is well informed since the first payments will go to the state to stop the running of interest and penalties there rather than to the IRS.

⁴⁹⁵ See *supra* note 353.

⁴⁹⁶ IRC § 4251. In 2006, total collections for the telephone excise tax equaled 4.6 million dollars. IRS *SOI Bulletin* Historical Table 20, Federal Excise Taxes Reported to or Collected by the Internal Revenue Service, Alcohol and Tobacco Tax and Trade Bureau, and Customs Service, by Type of Excise Tax.

⁴⁹⁷ IRC § 4261.

⁴⁹⁸ IRC § 4081.

⁴⁹⁹ These three federal excise taxes operate to charge the consumer of the item (telephone service, plane tickets or motor fuel) with a federal tax. The tax is collected by the provider of the service or item purchased. The tax is held in trust by the provider for the federal government. Similarly, a state sales tax imposes a liability on a purchaser of goods or other taxable items. The

purchaser pays the tax at the time of the purchase of the goods. The vendor receives the payment for the tax and holds that payment in trust for the state which requires payment to it at certain intervals. One major difference between the federal excise taxes and the state sales taxes is the breadth of business impacted by these taxes. The federal excise taxes fall upon a relatively small number of business entities in very specific businesses. The state sales taxes fall upon almost every retailer and the state use taxes fall upon many other types of business providing a service. The numbers of the businesses being charged with preservation of trust funds by the states makes its scope much more like the federal withholding taxes and gives rise to a larger body of law concerning the failure to pay over sales taxes than exists with the failure to pay over federal excise taxes.

⁵⁰⁰ E.g. Texas, Washington, Florida, Alaska, South Dakota, Nevada, and Wyoming. Also, New Hampshire and Tennessee limit income taxation to interest and dividends.

⁵⁰¹ E.g., Oregon, Alaska, Delaware, and New Hampshire.

⁵⁰² E.g., Idaho, New York and West Virginia; possibly also South Carolina

⁵⁰³ All states except Wyoming have some form of trust fund regime imposing personal liability on persons who fail to pay over to the state the taxes collected on its behalf.

⁵⁰⁴ See Appendix D.

⁵⁰⁵ *Id.*

⁵⁰⁶ This is best illustrated through an example. Suppose that John Smith is the responsible officer of Acme, Inc. a Pennsylvania corporation which failed to pay over the income taxes it withheld for the first quarter of 2005 in the amount of \$50,000. If we assume that the IRS takes 12 months after the due date of the Form 941 on April 30, 2005, to initiate its trust fund recovery investigation and further assume that John Smith avails himself of the full range of administrative remedies prior to assessment while responding to the IRS at a very deliberate speed, it may be two years (April 30, 2007) after the due date of the return before the IRS assesses the trust fund recovery penalty against him. Assuming John failed to pay over collected taxes to Pennsylvania of the same amount for the same period, on April 30, 2007, John Smith will owe the IRS \$50,000 and on that same date he will owe the Pennsylvania \$61,000 consisting of \$50,000 in trust fund taxes, \$5,000 in interest and \$6,000 in penalties. Moving forward from April 30, 2007, John will owe interest and failure to pay penalties on both the federal and state liabilities; however, the interest will be on the higher amount of the Pennsylvania liability causing him to accrue even more interest (and penalty) expenses compared with his federal tax liability. See U.S. Gov't

ACCOUNTABILITY OFFICE, GAO-08-617, TAX COMPLIANCE: BUSINESSES OWE BILLIONS IN FEDERAL PAYROLL TAXES, 32-33 (2008), stating that “from the time the tax debt was assessed against the business, IRS took over 2 years, on average, to assess [a 6672 liability] against the business owners/officers.”

- ⁵⁰⁷ This is money that the federal government chooses not to seek even though the parallel state statute seeks it for the most states. The fact that most states are seeking to pick up this money does not compel the result that the federal government should do likewise; however, in a time of looking about for tax gap provisions, the practice of the overwhelming majority of the states on this issue should at least provide some food for thought for those writing the federal statutes with an eye toward more revenue. Another consideration for imposing the tax could be whether this class of individuals is one deserving of a break on interest or whether it is perhaps a class most deserving of making the government whole on the time value of the revenue lost through their actions.
- ⁵⁰⁸ This also poses room for thought when comparing the state and federal provisions. If most states impose interest from the due date of the entity return and the federal government imposes interest only upon assessment of the responsible officer liability, what rational taxpayer would pay the federal government first? In addition to the general incentive provided by IRC 6672 to delay the assessment, the juxtaposition of the state and federal statutes causes the responsible officer aware of the manner in which the two statutes operate to use his first funds to pay down the state liability and stop the running of interest. By the time the federal government comes into the mix, the available funds from the responsible officer, which are generally not great to begin with, are further depleted, leaving the federal government to scramble harder to collect its trust fund liabilities once they are finally assessed.
- ⁵⁰⁹ Alaska, California, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Washington, Washington D.C., Wisconsin. See Appendix D.
- ⁵¹⁰ Alabama, Kentucky, Maryland, Massachusetts, Michigan, New Mexico, North Carolina, Ohio, Rhode Island, Vermont, Virginia. See Appendix D.
- ⁵¹¹ *Garland v. Director of Revenue*, 961 S.W. 2d 824 (Mo. 1998).
- ⁵¹² *Id.*
- ⁵¹³ Two states do not charge interest back to the due date of the corporate return and follow the Federal model:
Delaware—DEL. CODE ANN. tit. 30, § 535 (e) (1997) (Withholding): (No sales tax in Delaware); E-mail from Randy R. Weller, Manager Bankruptcy/Decedents, Delaware Division of Revenue, to T. Keith Fogg, Visiting

Associate Professor of Law, Villanova University School of Law (Mar. 10, 2008, 8:32:50 EST).

Utah—UTAH CODE ANN. § 59–1–302 (2007) (Withholding and Sales); Telephone Interview with Gale Francis, Assistant Attorney General, Utah Attorney General’s Office, in Salt Lake City, Utah, Utah (March 14, 2008).

⁵¹⁴ *Id.*

⁵¹⁵ *Id.*

⁵¹⁶ Two states do not charge interest back to the due date of the corporate return; however, they charge the responsible officer with a “penalty” equal to 150 percent or 200 percent of the unpaid trust fund taxes:

Colorado—COLO. REV. STAT. ANN. § 39–21–116.5 (West 2007) (Sales and Withholding) (150 percent).

Florida—FLA. STAT. ANN. § 213.29 (West 2005) (Sales); (Florida does not have an income tax).

⁵¹⁷ COLO. REV. STAT. ANN. § 39–21–116.5 (West 2007).

⁵¹⁸ FLA. STAT. ANN. § 213.29 (West 2005).

⁵¹⁹ The scheme used by Florida and Colorado appears to transform the liability from a collected tax which would have priority under B.C. 507 (a)(8)(C) to a general unsecured claim for a penalty.

⁵²⁰ Although not a part of this survey, liability for paying over collected taxes exists at the local level as well. One locality imposing liability for failure to pay over withholding taxes is Columbus, Ohio. Columbus charges the responsible officer with interest and penalty due from the entity that incurred the tax.

“The officer or the employee having control or supervision of or charged with the responsibility of filing the report and making payment is personally liable for failure to file the report or pay the tax due as required by this section. The dissolution of a corporation does not discharge an officer’s or employee’s liability for a prior failure of the corporation to file returns or pay tax due.”

City of Columbus v. Mid-Ohio Canopies, Inc., No. 95APG06–685, 1995 Ohio App. LEXIS 4964 (Ohio Ct. App. 1995).

⁵²¹ Idaho, New York, West Virginia, South Carolina. See Appendix D.

⁵²² Income Tax Act, R.S.C., § 153 (1) (1985).

⁵²³ Income Tax Act, R.S.C. § 227 (4) (1985).

⁵²⁴ Income Tax Act, R.S.C. § 227.1 (1) (1985) provides:

“Where a corporation has failed to deduct or withhold an amount as required..., has failed to remit such an amount or has failed to pay

an amount of tax for a taxation year as required..., the directors of the corporation at the time the corporation was required to deduct, withhold, remit or pay the amount are jointly and severally, or solidarily, liable, together with the corporation, to pay that amount and any interest or penalties relating to it.”

See *Soper v. The Queen*, [1997] 3 C.T.C. 242 (Can.) (Discussion of legislative history of 227.1); and *Veilleux v. The Queen*, [2001] 3 C.T.C. 288 (Can.).

Income Tax Act 227.1 (2) provides some limitations on this liability as does section 227.1 (3) which states “A director is not liable for a failure under subsection (1) where the director exercised the degree of care, diligence and skill to prevent the failure that a reasonably prudent person would have exercised in comparable circumstances.” Income Tax Act, R.S.C. 227.1 (2), (3) (1985).

See *Barnett v. Minister of National Revenue*, [1985] 2 C.T.C. 2336 (Can.) (Sole shareholder liable and unable to successfully interpose defense of delegation to comptroller); *Fraser v. Minister of National Revenue*, [1987] 1 C.T.C. 2311 (Can.) (Director who was vice-President liable and unable to successfully argue that another officer could more easily pay); *Beutler v. Minister of National Revenue*, [1988] 1 C.T.C. 2414 (Can.) (Director and President liable and efforts to satisfy arrearages did not relieve him of liability).

⁵²⁵ *Soper v. The Queen*, [1997] 3 C.T.C. 242 (Can.).

⁵²⁶ Income Tax Act, R.S.C. § 227 (9) (1985).

⁵²⁷ *Soper* 3 C.T.C. at 250 (Can.).

⁵²⁸ Income Tax Act, R.S.C. § 227.1 (1) (1985).

⁵²⁹ Social Security Administration Act, 1992, ch. 5, § 121C (1)(b).

⁵³⁰ Social Security Administration Act, 1992, ch. 5, § 121C (3)(b); England also imposes personal liability for evasion of Value Added Tax (VAT) if dishonest conduct played a role in its nonpayment. Sections 60 & 61. This personal liability also has a relative responsibility component. Section 61 (2).

⁵³¹ Social Security Administration Act, 1992, ch. 5, § 121C (2)(b)(i) & (9).

⁵³² Social Security Administration Act, 1992, ch. 5, § 121C (2)(b)(ii).

⁵³³ Income Tax Assessment Act, 1936, § 222AOB (Austl.).

⁵³⁴ Income Tax Assessment Act, 1936, § 222AOC (Austl.).

⁵³⁵ District Court Act, 1973, § 83A (Austl.).

Measuring and Tackling the Illicit Market for Excise Goods

Anthony Rourke, Her Majesty's Revenue and Customs

Globally, there are large price differentials in most goods due to the large variation in production costs and tax rates. Therefore, the profit margins that are available to individuals who can successfully smuggle goods from low-cost to high-price countries can be very attractive. Likewise, the revenue losses for the tax administrations of the high-price countries can be significant, in particular where tax accounts for a large portion of the retail price of the illicit goods. This problem can be exacerbated when the goods are easily portable, transportation costs are low, and border controls are less stringent between the low-cost and high-price countries, as can occur in free-trade zones. The task facing every tax administration is to reduce its revenue losses by identifying and tackling those involved in the illicit trade. However, in order to determine the appropriate response to the illicit market, it is first necessary to determine the scale of the problem.

Techniques for estimating the size of the illicit market can be separated into two general methodologies, with different methodologies used both within and between different tax administrations.^{1,2,3,4,5,6}

Bottom-up methodologies base their estimates on operational activities, such as enquiries into the tax returns submitted to HM Revenue and Customs (HMRC) or seizures of illicit goods made by HMRC. The advantage of this approach is that the calculations are not dependent on any external third-party sources and so HMRC has more control over the consistency of the data used to estimate the illicit markets. However, the disadvantage is that the calculations are dependent on operational strategies and performance. Care needs to be made with bottom-up calculations to ensure that the changes observed in the illicit market actually occur and are not reflections of operational changes.

Top-down methodologies base their estimates on high-level statistics, such as the total declarations made to HMRC or the results of national surveys of behaviour or attitudes. The advantage of this approach is that the calculations are independent of operational activity. However, the disadvantage is that it is dependent on third-party data.

HMRC uses a top-down methodology to estimate the size of the illicit markets for spirits, cigarettes, hand-rolling tobacco, and oils. As the models used for each market are well documented elsewhere, the specific methodologies will not be detailed in this paper.^{7,8} Instead, this paper focuses on fundamental considerations of a top-down methodology.

The general top-down methodology for estimating the size of any illicit market is fundamentally a simple task. It is just a comparison of the total consumption of a particular good with the legitimate consumption of that good:

$$\text{Illicit Market} = \text{Total Consumption} - \text{Legitimate Consumption}$$

where the total and legitimate consumptions are determined from a combination of independent surveys and declarations made to HMRC.

It is the appropriate selection and handling of the survey and declaration data that make the calculation complex.

Surveys

HMRC is fortunate to have a wide range of survey data available for analysis, covering not only behaviours such as consumption of or expenditure on particular goods but also attitudes towards those goods and illicit markets for them. Some of the research is funded by external bodies, whilst other questions are funded directly by HMRC.

Although surveys of attitude can be of use in understanding and tackling the illicit market for any good, it is the consumption and expenditure surveys that are of most use in estimating the size of the illicit market. However, there are strengths and weaknesses to both types of survey. These need to be carefully considered when analysing the survey data.

Ultimately, to estimate the size of the illicit market, the surveys are compared with the clearances that are declared to HMRC when the goods are released for sale and so when the duty on those goods is due. Both the volume and the duty paid of the goods released for sale are declared to HMRC, where the duty paid is based on the recommended retail price of those goods. As there can be discrepancies between the recommended retail price of a good and the price it is actually sold for, HMRC uses the volumes to determine the size of the legitimate UK markets of excise goods. Therefore, ideally, the results of the surveys used would reflect the volumes sold relatively synchronous with the clearances.

The relative strength of the consumption surveys is that these typically measure the volume of goods consumed at any moment in time but that consumption is not necessarily synchronous with the clearances. The relative strength of the expenditure surveys is that these are relatively synchronous with the clearances, as retailers will not intentionally maintain high levels of stocks in their stores for a long time, but these typically measure the amount spent on the goods and do not record the volumes. Therefore, it can be seen that neither survey fits the ideal criteria for use in the tax-gap calculation, so a compromise needs to be made when selecting the most appropriate survey to use.

Two factors that can be used to decide which type of survey to use are the domestic shelf life of the goods and any seasonality in sales or consumption of the goods.

Domestic Shelf Life

The domestic shelf life of a good in this instance refers not to the life span within which a good will no longer be fit for consumption but the length of time that a good is expected to last between when it is purchased and when it is totally consumed.

For example, in 2008, the average smoker in the UK consumed between 10 and 16 cigarettes per day, with some variation depending on age and gender.⁹ As cigarettes in the UK are typically sold in packs of 10 or 20, the average domestic shelf life for an individual pack of cigarettes is less than 2 days.

By contrast, in 2008, on average between 5 and 19 units of alcohol were consumed per week, with some variation depending on age and gender.¹ As this consumption consists of a range of alcohols including beer, wine, and spirits, of which spirits is a small component, and there are typically 30 units of alcohol in a bottle of spirits, the average domestic shelf life of a bottle of spirits is likely to be over 2 months. In addition, as spirits cover a range of substitute goods (for example, vodka, whisky, and gin) that an individual may consume in parallel (unlike the relatively homogeneous tobacco brands), the domestic shelf life of a particular brand of spirits is likely to be longer.

An extreme example of a long domestic shelf life is wine. In general, some wine is consumed within a short time of it being purchased but there is a behaviour within the wine market for “laying down” wine for a number of years before it is consumed. Indeed, some of the wine that is laid down may never be consumed.

Figure 1 illustrates the implications of the domestic shelf life for the measurement of an illicit market.

If a good has a short domestic shelf life, as tobacco has, the purchase and total consumption of that good are relatively synchronous with the clearances of that good. Therefore, either survey can be used to determine a reasonable estimate of the size of the total, legitimate, and illicit markets.

If a good has a medium domestic shelf life, as spirits have, the consumption of the good is not synchronous with the clearances. Provided that there are no large changes in the consumption trends for the good, and the total and legitimate markets are compared over a longer period (for example, comparing the overall markets for an entire year rather than on a monthly basis), the consumption surveys may still be useful for estimating the size of the illicit market.

FIGURE 1. Excise Goods with Short, Medium, and Long Domestic Shelf Lives



However, as the domestic shelf life increases, the consumption of the good cannot be regarded as synchronous, and it becomes inappropriate to compare with the clearances. The size of the illicit market can only then be reliably estimated using relatively synchronous expenditure surveys.

Seasonality

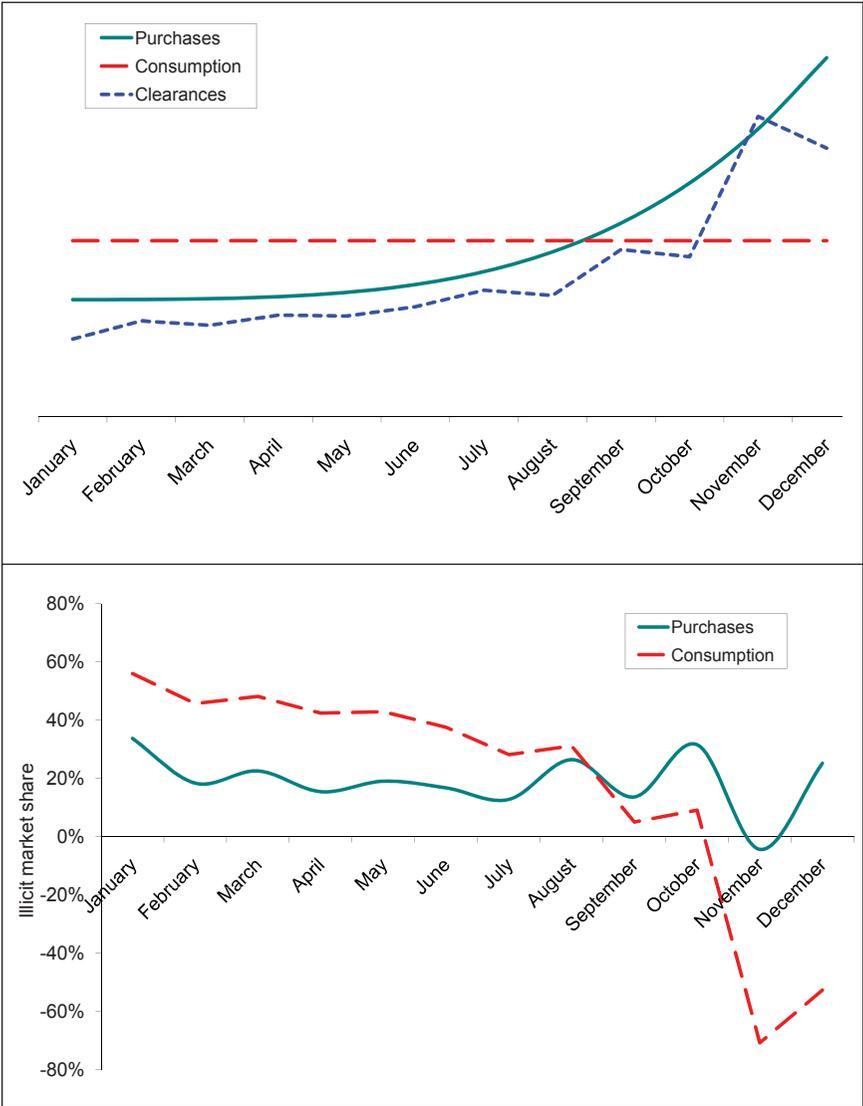
Seasonality can also be an important consideration in determining whether to use consumption or expenditure surveys. Whilst there is not much seasonality in the consumption of most excise goods, seasonality has been observed in the expenditure surveys for some goods. If there is also seasonality in the clearances, then a comparison of the consumption survey with the clearances will result in an apparent seasonal illicit market that may not exist in reality and that would not appear in a comparison of the expenditure survey with the clearances.

For example, Figure 2 (a) shows the purchases, consumption, and clearances of a good with seasonal variation in the purchases and clearances but not consumption. Figure 2 (b) shows the effect that comparing the purchases or consumption figures with the clearances in each month has on the estimate of the illicit market. It can be clearly seen that the illicit market shares based on the purchases of goods are more stable and consistent over the year.

Some seasonal behaviour has been observed in the purchases of alcohol, in particular, spirits, with more being purchased towards the end of the calendar year than the beginning.¹⁰ It is believed that this is driven by purchases either to give

as gifts at Christmas or for entertaining purposes over the holiday period, or most likely by both factors. This seasonality is also reflected in the clearances of spirits. Therefore, it is necessary to use expenditure surveys to estimate the size of the total market and the illicit market for spirits to account for both its longer domestic shelf life and the seasonality of its sales.

FIGURES 2A and 2B. Seasonal Variations in the Clearances of Spirits in the UK



Market Research Data

In addition to surveys, empirical data on the volumes and prices of the retail sales at any moment in time is also available via market research companies, which monitor the demand for many goods. As much of the illicit market is unlikely to be recorded passing through retail sites that co-operate with the research companies, for most goods, this data is more a measure of the legitimate market than the total market and so is not used as the main measure of total consumption.

However, the market research data does provide an independent estimate of the actual retail prices for those goods at any given moment in time. By combining the market research data with the expenditure surveys, a reasonable estimate for the volume of sales can be made, which reduces the relative weakness of using expenditure surveys rather than consumption surveys.

Trends

A final consideration when deciding which survey to use is the history of the surveys available. Typically, estimates of the size of an illicit market are not made in isolation. Instead, these estimates are made over a number of years so that any changes in the illicit market, including the effect of any activity to reduce the illicit market, can be detected. Therefore, it is critical that the data used to estimate any market exists over the period of interest and that either the data is consistent over the whole period, or it is clear from any supporting documents what has caused any changes to the definitions of particular data and how to make it consistent over the whole period.

This is particularly important for excise goods such as alcohol and tobacco, as various factors typically lead to surveys underreporting consumption or purchases of these goods. Therefore, it is necessary to uplift the survey results to take account of this underreporting. The most practical method to do this is to identify a time when the illicit market is negligible and to compare the total consumption observed from the surveys with the legitimate consumption observed from surveys and clearances. Any differences in this base year can then be applied to the survey results of all years. If the results of the survey are not consistent over time, the validity of this uplift factor is undermined.

Clearances

In addition to being careful to select the most appropriate survey for the different excise goods, careful consideration of what the clearance data represents also needs to be made before the survey and clearances are compared directly.

Whilst the clearance data are used in the estimates of the illicit market as a measure of the legitimate sales of a good in the UK, excise duty is not actually paid at the point of sale to the end consumer but at the point that it leaves a bonded warehouse to be supplied either to a retailer or to an intermediate wholesaler. In general, this distinction is academic, as it is in the retailer's or wholesaler's interest to maintain only low levels of stock and to sell any goods on to the end consumer as quickly as possible.

However, there are instances when there is a delay between the goods being cleared for sale and being purchased by the end consumer. Two events that introduce such a delay are forestalling by the manufacturers and overanticipation of demand by the retailers. These delays have implications for the illicit-market models that need to be taken into account.

Forestalling

Forestalling is a form of tax avoidance, in which the tax is declared early on goods or services in anticipation of an increase in the tax rate.

In the case of tobacco, forestalling operates by the tobacco manufacturers releasing more through clearances into the market than could reasonably be expected to be sold at that time. These clearances are then sold over the following months, during which time the legitimate clearances are lower than average. As there have been annual increases in tobacco duty rates since 1999, there has been an annual incentive for the tobacco manufacturers to be involved in forestalling.

Forestalling has two impacts on HMRC. The primary impact is a reduction in the amount of tax collected from sales of tobacco. The secondary impact is a distortion of the legitimate market for tobacco and, so, a distortion of the estimates of the illicit market.

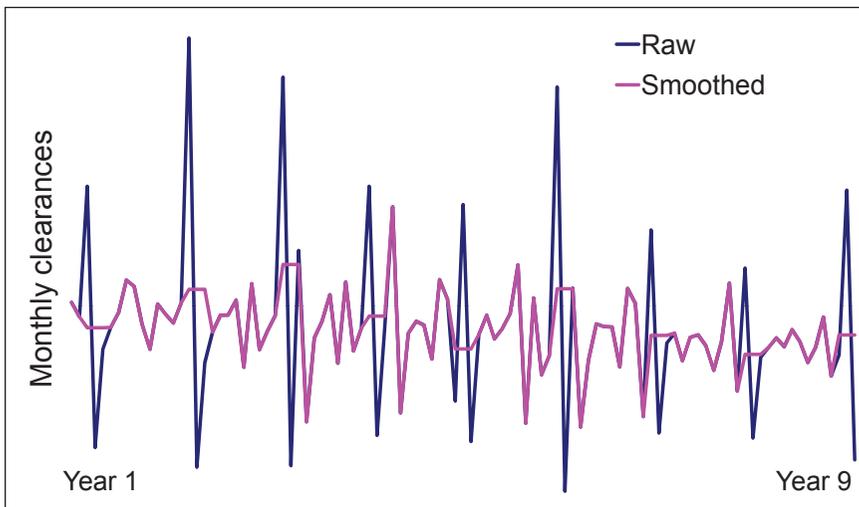
To tackle the actual avoidance of tobacco duty, HMRC has introduced restrictions on the supply of tobacco over a period leading up to a change in the duty rate. HMRC makes use of the Customs and Excise Management Act 1979, Section 128, which allows HMRC to refuse to allow clearances of goods in quantities exceeding those which appear to be reasonable.^{11,12} HMRC, by default, uses these powers to prevent all tobacco manufacturers from clearing any tobacco over the restricted period. To enable legitimate supplies, HMRC then grants manufacturers, upon application, an allocation of tobacco that can be cleared over that period.

For example, in December 2009, HMRC restricted the clearances of tobacco between January 1, 2010, and midday on Budget Day, when any changes to duty rates would be announced. HMRC then indicated that the manufacturers could apply for an allocation for that period, where the maximum volume that they could clear would be determined from their average daily clearances over the previous year and the length of the period of restriction, with an uplift factor that allowed for a growth in the legitimate demand for their product.

These restrictions do have some impact on forestalling but do not remove all of it from the tobacco manufacturers' supply chain, and so some compensation needs to be made in the estimates of the legitimate tobacco markets. As HMRC reports its estimates of the tobacco markets on an annual basis, forestalling is not necessarily a problem for the market estimates if it occurs halfway through a reporting year as the total forestalled and nonforestalled clearances would all occur within the same reporting year. However, as Budget Day is traditionally around the beginning of a financial year, and HMRC reports tobacco market estimates by financial year, any forestalling at these times may over- and underestimate the legitimate markets in the preceding and following financial years. To tackle the effect of the residual forestalling on the market estimates, HMRC simply identifies months closely preceding a Budget in which there were higher than average clearances and reallocates some of these clearances to the following 2 months.

Figure 3 shows the volumes of tobacco that have been cleared for sale on a monthly basis over the last few years.¹³ The distinct peaks, followed by sharp drops, related to Budget Day and forestalling can be clearly seen. It can also be seen that the simple 3-month averages redistribute the volumes to a level close to the average volume cleared throughout the rest of the year.

FIGURE 3. Forestalling Variation in the Monthly Clearances of Tobacco in the UK



Overanticipation of Demand

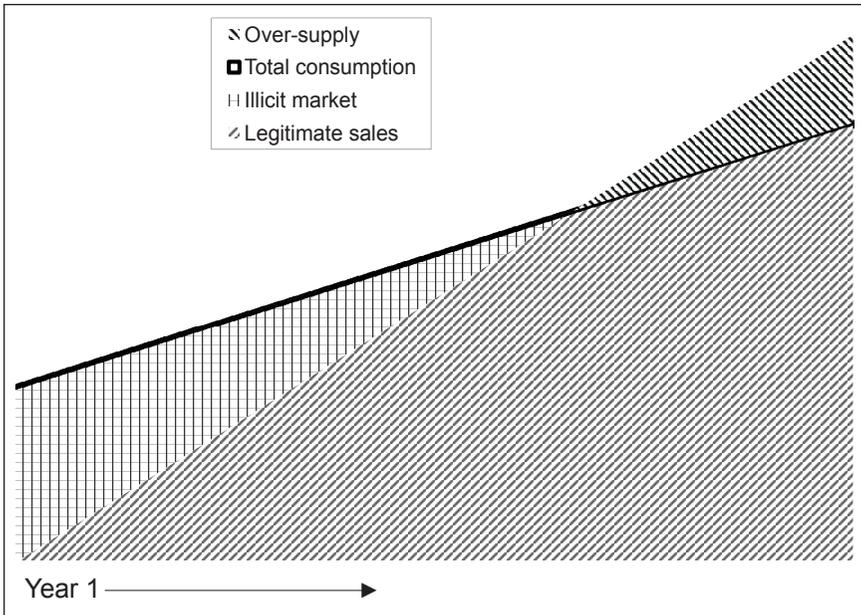
Overanticipation of demand for a good is a natural occurrence for individual retailers and wholesalers. As profit margins are often tight for retailers, they cannot afford to maintain high levels of unpaid stock, but they will be equally reluctant

to lose sales by not having enough stock available. Therefore, retailers need to accurately estimate the demand that there will be for any good far enough in advance so that they have the appropriate stock levels at the appropriate time.

If a retailer has been in operation long enough, and there are clear patterns in the demand for their product, it is possible for the retailer to forecast the demand for that product in future months and years. However, with the exception of monopolies, the demand for a particular retailer's products cannot be treated in isolation from the demand for competitors' products. If consumers switch from an existing retailer to a new retailer, the existing retailer will overanticipate their demand and so result in temporary excess stocks. Similarly, if consumers switch from a competitor to another retailer, the demand for the existing retailer will appear to grow faster than the overall demand for their combined goods and, at some point, the existing retailer may overanticipate their demand.

If the legitimate and illicit markets are treated as a pair of competitors in a duopoly, the legitimate market may overanticipate the demand in the same way that any individual retailer may overanticipate their personal demand. This is illustrated in Figure 4.

FIGURE 4. Under- and Oversupply of the Total Market by Legitimate Suppliers



In the early years, the market is dominated by the illicit market. It can be seen that, over time, both the total and legitimate demand for the good increases, with the legitimate demand increasing faster than the total demand, which either causes or is caused by a reduction in the illicit market. At some point, the illicit market disappears, and the total demand is satisfied by the legitimate market. However, as the legitimate market only has its own demand as an indicator of the size of the total market, it may be unaware of this fact and so will assume that the market will continue to grow along the trend it has observed. This will result in a temporary oversupply of goods to the market.

It is the temporary oversupply of goods to the market that is the important effect of an overanticipation of demand for a good on the estimation of the size of an illicit market.

To compensate for underreporting within the expenditure and consumption surveys that form the basis of most of the models used by HMRC, these models assume that, in a given base year, the illicit market is negligible and then scales the survey results across all years so that the total consumption of the good is equal to the legitimate consumption in that base year. If there had been an oversupply of goods in that base year, errors would be introduced into this scaling factor and so into the overall estimates of the illicit market.

In addition, as the price of most excise goods in the UK is higher than the price of the same goods in most of the UK's neighbours, it is believed that the illicit market will be strictly non-negative. The existence of an oversupply (or negative illicit market) challenges this belief and may undermine the credibility of the model, if not properly understood.

Note, the problem of over-anticipation will be greatest for those goods with seasonal trends in demand. If the level of demand remains relatively stable over the year, any overanticipation will be quickly detected and corrected for by the manufacturers. However, if there is over-anticipation in a seasonal good, it may take longer for this to be detected by the manufacturers. In addition, if the peak in demand accounts for a large portion of the demand for a seasonal good, the oversupply is likely to be greater.

Therefore, care needs to be taken to determine that the volumes released for sale in the UK via clearances could be reasonably expected to supply the demand at the time that they were released to avoid any distortions entering the estimates of the illicit market. This can be most easily achieved by monitoring the clearances both for unusual peaks and unusual troughs, typically with a trough closely following a peak. If the manufacturers have been forestalling their goods, this will be a natural part of their supply chain. If the manufacturers have inadvertently oversupplied the market, this will be a corrective factor until all the excess supply has been sold.

International Trade

The problem facing HMRC regarding illicit markets for excise goods stems largely from the international market for those goods, the fact that most are easily portable, and the relative high prices in the UK compared with much of the rest of the world. This provides a strong financial incentive for smuggling of goods into the UK. However, it also provides a strong financial incentive for legitimate international trade, which, if not accounted for in the HMRC models, would overestimate the size of the illicit market in the UK.

In addition, whilst some of the illicit market is supplied with counterfeit goods, there is also a problem of smugglers obtaining goods from legitimate international sources and that some of these sources are knowingly supplied by international manufacturers. Part of HMRC's strategy is to tackle this facilitation of the illicit market by legitimate suppliers.

Legitimate Personal Consumption

Each adult, when returning to the UK from abroad, is entitled to bring back a volume of goods for their own personal consumption. These purchases are legitimate and so should be included in the estimates of the UK markets for excise goods to avoid overestimating the size of the illicit market.

The consequences of not including legitimate cross-border shopping differs depending on the type of survey used to estimate the size of the total market for a good in the UK.

If an expenditure survey is used, and the survey only covers expenditure within the UK, the effect will be an underestimate of both the total market and the legitimate market, which in turn will result in an overestimate of the illicit market share (due to the smaller total market) but a reasonable estimate of the illicit market. Estimates of the size of legitimate cross-border shopping will need to be added to both the total market and legitimate market estimates to avoid this overestimate.

If a consumption survey is used, the effect will be an underestimate of the legitimate market but a reasonable estimate of the total market, which will result in an overestimate of both the illicit market and the illicit market share. Estimates of the size of legitimate cross-border shopping will need to be added to just the legitimate market estimates to avoid these overestimates.

Whichever type of survey is used, the effect of not including legitimate cross-border shopping in the models can be significant.

For example, in 2008, UK residents made 69 million international trips, of which 50 million were to members of the European Union.¹⁴ Considering that the total UK resident population in 2008 was 61 million, each UK resident made just over 1 trip per year, on the return from which they would be entitled to bring

tobacco into the UK.¹⁵ The duty-free limits when returning to the UK from outside the European Union is 200 cigarettes, which is what would be consumed by the average smoker over 12 to 20 days. When returning from within the European Union, there is no strict limit on what can be brought into the UK, but the assumption that it is solely for personal consumption will be challenged by UK officials if more than 3,200 cigarettes are brought back, which is what would be consumed by the average smoker over 200 to 320 days.

Therefore, if every smoker brought into the UK what they could bring back without challenge and every smoker travelled outside the UK at least once a year, the UK market would be dominated by legitimate cross-border shopping. If this cross-border shopping was not included in the market estimates, the illicit market would appear to account for over 50 percent of the total market.

Obviously, these are the upper estimates of the potential size of the legitimate cross-border shopping market and it is not expected that all smokers will bring back their limits or that all smokers will travel abroad at least once. To estimate the actual size of this market, HMRC sponsors questions on the International Passenger Survey that is carried out each year by the UK Office for National Statistics.

The UK is fortunate that, with the exception of the Irish border, it has no land boundaries with any other countries and so all legitimate international travel will have to pass through a limited number of ports and airports. Therefore, the number of UK residents returning to the UK can be easily determined and, using the results of the survey, the volume of excise goods that are brought into the UK for personal consumption can be estimated. These volumes can then be included in the market estimates.

As can be seen in Figure 5, which shows a recent estimate of the size of the legitimate and illicit markets for cigarettes in the UK, legitimate cross-border shopping cannot be over-looked in the UK market estimates, accounting for almost 10 percent of the total UK market.

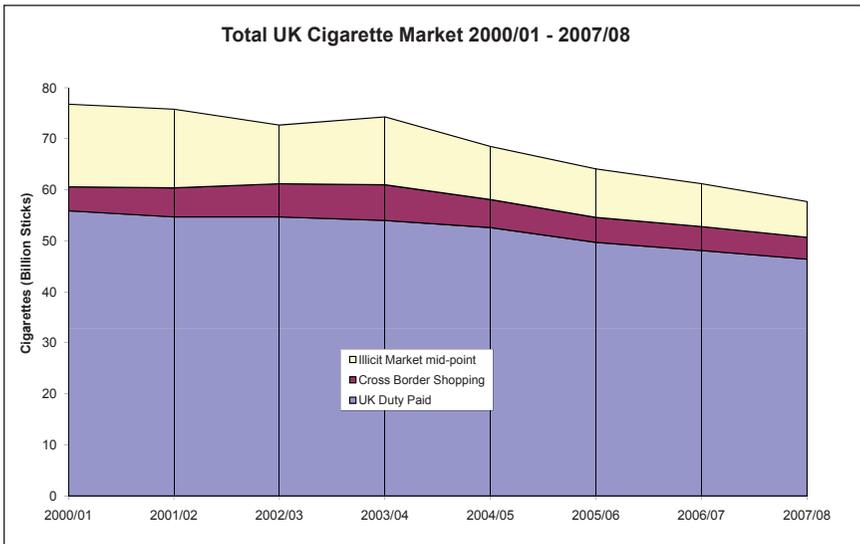
Facilitation

The less stringent controls on the movement of goods within the European Union have made cross-border shopping easier not only for the legitimate travellers but also for those who aim to smuggle goods into the UK. Whilst the illicit market will include a range of non-UK duty paid products, brand loyalty within the UK market may make smuggled versions of UK brands more attractive as there will be a larger market for those goods. Therefore, the illicit market may seek to purchase large volumes of UK brands from international markets where the price will be lower, resulting in a strong financial incentive for legitimate manufacturers to knowingly supply international markets with goods that will end up in the illicit UK market.

In response to evidence of facilitation by tobacco manufacturers, HMRC introduced legislation in the 2006 Finance Act that made the manufacturers liable to take care that any product that they supplied to international markets would not end up on the UK illicit market.^{16, 17} The legislation also made the manufacturers liable for a penalty if they knowingly oversupplied the illicit market with tobacco.

If, as has happened in the past, the manufacturers oversupplied an international market with no domestic and little legitimate UK demand for UK branded

FIGURE 5. Legitimate and Illicit Markets for Tobacco in the UK



tobacco, the manufacturers could be easily challenged over the legitimacy of their markets. However, there are some international destinations where large numbers of UK residents regularly travel to and large numbers of UK citizens have emigrated to, and so where there are credible markets for UK brands. The challenge to HMRC in these markets is to prove that the manufacturers are supplying more than the legitimate demand in those markets.

The advantage of the methodology for estimating the size of the illicit market for tobacco in the UK is that the same methodology can be applied to estimate the size of the legitimate market in any international market. From the surveys available to HMRC, the length of time UK residents spend in international destinations and, so, the average amount of tobacco they will consume outside the UK can be estimated, as can the volume of tobacco that will be brought into the UK when the UK residents return from their trips and the local demand for the UK brands. These can then be combined to form an estimate of the legitimate market

in that destination and compared with the volumes that have been supplied by the tobacco manufacturers.

If there are large differences between these two figures, HMRC can discuss these differences with the manufacturers. If no legitimate market can be identified for any excess supply, these calculations provide credible evidence of diversion into the UK illicit market and of a need for the manufacturers to exercise stronger controls of their supply chain in that international market.

Operational Effectiveness

Having combined the various surveys and clearances to estimate the size of the total and illicit markets for a good, it may be possible to use these models to estimate the effectiveness of operational activity. Not only do these estimates provide evidence of the benefits of HMRC activity, they can inform future decisions on the resources required to reduce the illicit market or maintain it below a given level.

Whilst the size of the illicit market is dependent on a wide range of factors, if operational activity has had an impact it should be observable. The simplest relationship that should be observable is:

$$\begin{aligned}
 & \textit{Illicit volume} \\
 &= \textit{Illicit proportion} * \textit{Total consumption} \\
 &\quad - \textit{Seizure impact} * \textit{Volume of seizures} \\
 &\quad + \textit{Latent illicit volume}
 \end{aligned}$$

where the Latent illicit volume should be nonpositive for the model to be credible; a positive value would indicate that an illicit market existed when there was no actual market. In addition, the illicit rate should be between 0 and 1 but the illicit rate could be greater than 1, which would indicate a serious problem in the market as any increase in the total market would lead to a reduction of the legitimate market.

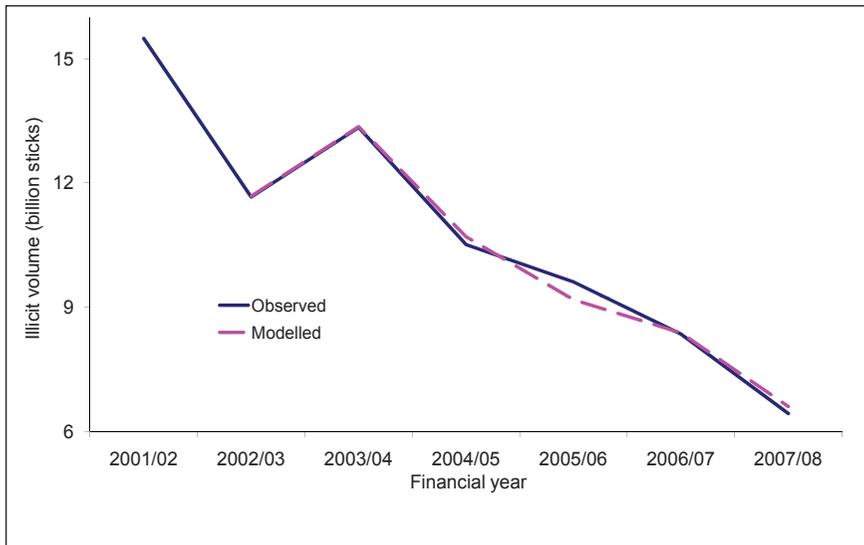
If the operational activity has had any effect, the Seizure impact will be greater than 0.

Ideally, the Seizure impact would be greater than 1, indicating that the activity not only removes the volume of goods seized from the illicit market but also prevents further goods from reaching the market. This could be achieved either by deterring further illicit activity or reducing the illicit market's financial capacity.

By contrast, if the Seizure impact is less than 1, it shows that the illicit market is resilient enough to cope with operational activity and can replace its losses with alternative supplies. If the Seizure impact is much less than 1, the operational activity is having very little effect on the illicit market.

Note, when considering the effect of the operational activity on the illicit market, it may be necessary to introduce a delay into the operational results. If the illicit market has a robust supply chain, the effect of seizures may be delayed until the existing illicit stocks have been depleted. For example, in Figure 6, a good match between the observed and modelled illicit markets was found when a six month delay in the effect of the seizures was considered.

FIGURE 6. Observed and Modelled Illicit Cigarette Volumes



Conclusion

It has been shown in this paper that estimates of the total, legitimate, and illicit markets for excise goods can be calculated using a combination of surveys and clearance data. It has been explained that care has to be taken when choosing a survey to take account of issues such as the domestic shelf life of the goods and any seasonality in their consumption or purchases. It has also been shown that similar care needs to be taken with the declared sales of goods that no distortions of the legitimate market have been introduced, either deliberately through tax avoidance schemes or inadvertently through overanticipation, and so oversupply, of the UK market. Finally, it has been explained how the same techniques can be used to estimate the international market for UK brands in an attempt to prevent the facilitation of the illicit market by legitimate manufacturers and how the efficiency of operational activity can be assessed from the illicit market estimates.

Endnotes

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- ² “Measuring the Non-observed Economy: A Handbook,” Paris, OECD, 2002.
- ³ “Reducing the Federal Tax Gap: A Report on Improving Voluntary Compliance,” Internal Revenue Service, U.S. Department of the Treasury, 2007.
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- ⁹ “Smoking and drinking among adults, 2008,” General Lifestyle Survey 2008, Office for National Statistics. http://www.statistics.gov.uk/downloads/theme_compensia/GLF08/GLFSmoking&DrinkingAmongAdults2008.pdf
- ¹⁰ HM Revenue and Customs Spirits Bulletin. <https://www.uktradeinfo.com/index.cfm?task=bullspirits>
- ¹¹ Customs and Excise Management Act 1979, UK. http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1979/cukpga_19790002_en_1
- ¹² 128 Restriction of delivery of goods
 - (1) During any period not exceeding 3 months specified at any time by order of the Commissioners for the purposes of this section, the Commissioners may refuse to allow the removal for home use on payment of duty, or the sending out for home use after the charging of duty, of goods of any class or description chargeable with a duty of excise, notwithstanding payment of that duty, in quantities exceeding those which appear to the Commissioners to be reasonable in the circumstances.
 - (2) Where the Commissioners have during any such period exercised their powers under this section with respect to goods of any class or description, then, in the case of any such goods which are removed or sent out for home use after the end of that period, the duties of excise and the rates thereof chargeable on those goods shall, notwithstanding any other provision of the

customs and excise Acts relating to the determination of those duties and rates, be those in force at the date of the removal or sending out of the goods.

¹³ HM Revenue and Customs Tobacco Bulletin. <https://www.uktradeinfo.com/index.cfm?task=bulltobacco>

¹⁴ “Travel Trends 2008, Data and commentary from the International Passenger Survey,” Office for National Statistics, UK. <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1391>

¹⁵ “Population Estimates for UK,” Office for National Statistics, UK. <http://www.statistics.gov.uk/statbase/product.asp?vlnk=601>

¹⁶ Finance Act 2006, UK. http://www.opsi.gov.uk/acts/acts2006/ukpga_20060025_en_2#pt1-pb1

¹⁷ Duty not to facilitate smuggling

(1) A manufacturer of cigarettes or hand-rolling tobacco shall so far as is reasonably practicable avoid—

- (a) supplying cigarettes or hand-rolling tobacco to persons who are likely to smuggle them into the United Kingdom,
- (b) supplying cigarettes or hand-rolling tobacco where the nature or circumstances of the supply makes it likely that they will be resupplied to persons who are likely to smuggle them into the United Kingdom, or
- (c) otherwise facilitating the smuggling into the United Kingdom of cigarettes or hand-rolling tobacco.

(2) In particular, a manufacturer—

- (a) in supplying cigarettes or hand-rolling tobacco to persons carrying on business in or in relation to a country other than the United Kingdom, shall consider whether the size or nature of the supply suggests that the products may be required for smuggling into the United Kingdom,
- (b) shall maintain a written policy about steps to be taken for the purpose of complying with the duty under subsection (1), and
- (c) shall provide a copy of the policy to the Commissioners on request.

Investing in Detection Technology as a Component of an Optimal Tax-Enforcement Policy

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For most governments, tax evasion is a problem because it threatens the equity and the efficiency of their fiscal policies. For this reason, governments react and adopt actions to assure compliance with the tax law. For example, audits are conducted to verify whether tax liabilities have been met and, if this is not the case, evaders are penalized.

However, this “enforcement approach” is not sufficient to deal with tax evasion. As the public finance literature shows, the fight against tax evasion cannot be isolated from the design of the fiscal policy; the extent of tax evasion depends not only on parameters that characterize the enforcement policy carried out by the tax administration (e.g., frequency of audits, level of fines) but also upon the structure of the tax law (e.g., tax rates). Therefore, as suggested by Allingham and Sandmo (1972) and then emphasized by Kolm (1973), the design of optimal fiscal policies or ‘optimal tax systems’ (in Slemrod’s (1990) terminology) should also include all instruments that help to enforce the tax law.

Since Sandmo (1981), many articles have analyzed, in different settings, optimal tax-enforcement policies. All these contributions share a feature: audits are perfect. In other words, when the tax administration performs an audit, it observes the taxpayer’s private information. But this assumption is far from being realistic, as already recognized by Alm (1988), Scotchmer and Slemrod (1989), and Snow and Warren Jr. (2005). Among others, Feinstein (1991) and Erard and Feinstein (2010) estimate, using data of the Internal Revenue Service (IRS), that detection rates vary between 30 percent and 50 percent. This failure to detect evaders clearly modifies the analysis of optimal tax-enforcement policies, as shown by Boadway and Sato (2000).

Once this is acknowledged, one has to address a second important issue: is the detection probability exogenous or endogenous? From a theoretical point of view, it should be clear that, if governments have the possibility to modify this detection probability, for example by investing resources to improve the detection

technology of the tax administration, they will probably undertake such kind of investments. Moreover, adopting such investment decisions is not only a theoretical possibility but, as the following paragraph illustrates, it also has a strong empirical support: governments do invest resources to improve the technology to detect evaders.

In Argentina, the *Dirección de Rentas de la Provincia de Buenos Aires* (the tax authority of the Buenos Aires province) subscribed to Google Earth, in February 2007, to download high-quality satellite images that could serve as evidence of evasion to the property tax. This technology enabled the tax agents to discover, in less than one semester, 68.844 undeclared properties, 1458 undeclared swimming-pools, and more than 13 million square meters with undeclared silos (*La Nación*, August 27th 2007). The use of Google Earth is not limited to developing countries: the Italian *Guardia di Finanza* has used it many times to discover inconsistencies between actual and declared values of luxurious villas.

Investments made by governments to improve their tax administration's detection capacity have been either mentioned informally (see Snavelly 1988) or studied empirically (see Hunter and Nelson 1996 and Cebula 2001). Here, we also incorporate them into the *formal* analysis of optimal fiscal policies. We address this issue in a simple three-stage model, with two classes of active agents: individuals and a government. Each individual can be poor or rich; the rich being the only to earn a taxable income. The government follows a social welfare criterion that incorporates aversion to inequality. In order to maximize its criterion, the government designs a fiscal policy, to be implemented by the tax administration. In the first stage of the model, the government invests resources to improve the tax administration's detection capacity. In the second stage, the government designs the tax law, which specifies the tax owed by the rich and the enforcement policy to be conducted later by the tax administration. We assume that the government has the ability to commit to this policy. Finally, in the last stage of the model, the tax administration collects taxes and enforces the tax law, as follows. As incomes are private information, individuals are requested to report them. Then, the tax administration audits reports according to the frequency pre-specified by the government, and known to individuals. As in many other contributions to the literature on tax evasion, we assume that audits are costly. But here audits discover randomly whether a taxpayer has misreported, and the probability of catching an evader (i.e., the detection probability) is an increasing function of the initial investment and its productivity. If a misreport is detected, the tax administration taxes the evader according to his true income and imposes him an additional fine. With all revenues collected (taxes and fines, net of investment and audit costs), the government finances the provision of a public good.

As a benchmark, we derive first the optimal fiscal policy under full information, when enforcement is not necessary. Then we move to asymmetric information, and we solve the model backwards. As the government can commit to the

tax and to the enforcement policy to be conducted during the third stage, in the second stage we characterize the optimal tax law adopting a mechanism design approach. Depending upon the value of the detection probability, two regimes emerge. In the first regime, when the detection probability is high, the tax administration only audits individuals that have reported to be poor. In order to attenuate the stake for evasion of the rich, the optimal tax is downwardly distorted with respect to the full-information optimal tax. We show that the optimal tax increases with the detection probability. Regarding the optimal audit probability, it can monotonically increase with detection or have an inverse U-shaped curve. As is usual in this kind of models, the optimal fine has only a deterrent role and is maximal. In the second regime, the detection probability is so low that the government prefers not to tax, and so no enforcement takes place. Anticipating these decisions, in the first stage, the government chooses whether to invest in the tax administration to improve the detection probability and, if so, by how much. This choice has an impact not only on the expected social welfare (because tax revenues are allocated to investment instead of being allocated to the public good) but can also fix under which regime the government and the tax administration will be afterwards. Although we prove that an optimal investment exists, we cannot completely characterize it in general, due to the non convexity of the problem. In fact, we can show that, when the optimal investment is strictly positive, the levels of the tax and the public good are higher than their respective levels when investments are not an option for the government. Under this circumstance, we derive some comparative statics results.

The remainder of this paper is organized as follows. Section 2 describes the model and shows the optimal fiscal policy under full information. Section 3 analyzes the optimal fiscal policy under asymmetric information. Finally, Section 4 concludes. All proofs appear in the Appendix.

The Model

There is a continuum of individuals of measure one. Each individual i has an income y_i which is a random variable that takes values in the set $\{0, y\}$, with $y > 0$. An individual with y income is henceforth called “rich”; otherwise, he is called “poor.” Each individual’s income y_i is his private information. All individual incomes are i.i.d., and the probability that $y_i = y$ for any given individual i is $\mu \in (0,1)$, which is common knowledge.

Poor individuals only benefit from a public good, provided by the government, in quantity g . Their ex-post welfare is given by

$$w_p = g.$$

Rich individuals also derive utility from consumption of a private good q , the price of which is normalized to one. Their ex-post welfare is

$$w_r = u(q) + g$$

where the function $u(\cdot)$ satisfies¹

$$u(0) = 0, u_q > 0, \lim_{q \rightarrow 0} u_q = \infty, \lim_{q \rightarrow \infty} u_q = 0, u_{qq} < 0, u_{qqq} > 0 \text{ and } \frac{u_q}{u_{qq}} < \frac{u_{qq}}{u_{qqq}}.$$

These conditions characterize rich individuals as being risk-averse, prudent and having decreasing absolute risk aversion. Although the last two conditions seem restrictive, they are in fact satisfied by most usual Von Neumann-Morgenstern utility functions: negative exponential, power, logarithmic and the families of hyperbolic absolute risk aversion (see Merton 1971) and power risk aversion (see Xie 2000).²

The government follows a welfarist criterion \mathcal{W} that can be represented by a weighted sum of the individuals' welfares, as follows

$$\begin{aligned} \mathcal{W} &= \mu w_r + (1 - \mu)w_p - \mu(1 - \alpha)(w_r - w_p) \\ &= \alpha \mu u(q) + g \end{aligned}$$

where $0 \leq \alpha \leq 1$ is a parameter that measures preferences for redistribution.³ To be more specific, the government is averse to inequality, with a degree of aversion proportional to $(1 - \alpha)$. In order to maximize its criterion, the government designs a fiscal policy, to be implemented by the tax administration.

The order of events, and relevant features of the model in more detail, are as follows.

1. In the first stage, the government invests I to improve the tax administration's capacity to detect evaders.
2. In the second stage, the government designs the tax law, which specifies the tax $t \geq 0$ due for rich individuals (hereinafter, taxpayers) and the enforcement policy to be conducted by the tax administration afterwards. The enforcement policy consists specifically of an audit probability $\pi \in [0, 1]$ and a fine for evaders $f \geq 0$. The unique restriction to the design of the tax law is taxpayers' limited liability.
3. In the third stage, the tax law is implemented. As the tax administration does not observe incomes, individuals are requested to report them, e.g., by filling in an income tax form. We

denote such reports by \tilde{y} . Then, following the enforcement policy designed by the government, the tax administration audits each report with probability $\pi_{\tilde{y}}$. Each audit costs $c > 0$.

If a taxpayer is not audited, he pays the tax that corresponds to his report.⁴ If he is audited, the tax administration discovers a misreport with probability P : in other words, audits are imperfect. In fact, the “detection probability” P is a continuous, strictly increasing and concave function $P(I, \nu)$ where $\nu > 0$. The function $P(\cdot)$ satisfies

$$\lim_{I \rightarrow 0} P = P_0 \text{ and } \lim_{I \rightarrow \infty} P = 1.$$

The initial level P_0 is exogenously determined by technology and human capital available to the tax administration at the beginning of the first stage, and by other parameters related to the difficulty in observing true incomes. The function $P(\cdot)$ also verifies $P_\nu > 0$: the higher the parameter ν , the higher the capacity of any level of investment to improve the initial detection probability P_0 . This is the reason to call ν the “investment productivity.” Its value depends, among other things, on the training skills of the people who are expected to operate the new technology.

Then, if a misreport is detected, the evader has to pay the tax that he legally owes plus the additional fine f .⁵ With all revenues collected (taxes and fines, net of investment and audit costs), the government finances the provision of the public good g , whose cost is also normalized to one.

The goal of the paper is to characterize the optimal fiscal policy, which is the 5-uple $\{\hat{I}, \hat{t}, \hat{f}, \hat{\pi}_{\tilde{y}}, \hat{g}\}$. Before doing that, and in order to have a benchmark, we present the optimal fiscal policy under full information. In this case, the tax administration observes incomes and thus audits are useless. Anticipating this, the government does not need to invest and simply solves the following problem, where private consumption has been replaced, using the taxpayers’ budget constraint, by their disposable income

$$\mathcal{P}^* \begin{cases} \underset{t, g}{Max} & \alpha \mu u(y - t) + g \\ & \text{subject to} \\ & 0 \leq t \\ & t \leq y \\ & g = \mu t \end{cases} \quad \begin{matrix} (LL) \\ (B) \end{matrix}$$

We denote by (LL) the limited-liability constraint and by (B) , the government's budget constraint. The following expressions

$$\begin{aligned} \alpha u_q(y - t^*) &= 1 & \text{if } t^* > 0 \\ \alpha u_q(y) &> 1 & \text{otherwise} \end{aligned} \tag{1}$$

characterize the optimal full-information tax t^* . On the one hand, when $u_q(y) \leq 1/\alpha$, the government taxes the rich in order to equalize their social marginal utility of consumption with the social marginal utility of the last \$ spent in the public good. On the other hand, when $u_q(y) > 1/\alpha$, taxation is too costly in welfare terms and thus $t^*=0$. We denote by $g^* = \mu t^*$ the optimal provision of the public good.

Optimal Fiscal Policy Under Asymmetric Information

In this section, we characterize the optimal fiscal policy under asymmetric information, when the tax administration tries to detect evaders by auditing income reports. As usual, we solve the model backwards.

The Optimal Tax Law

When the government designs the tax law, it can commit to the audit probability $\pi_{\tilde{y}}$. Thus, as shown in a similar setting by Mookherjee and Png (1990), the Revelation Principle applies and the optimal tax law can be characterized adopting a mechanism design approach. According to Mookherjee and Png (1989), the tax administration does not need to audit a taxpayer who has reported to be rich. Thereinafter, π will denote the probability of auditing an announcement $\tilde{y}=0$. The optimal tax law $(\hat{t}, \hat{f}, \hat{\pi}, \hat{g})$ solves the following problem, where again private consumptions have been replaced by taxpayers' disposable income, but now at each possible final state.

$$\mathcal{P}_1 \left\{ \begin{aligned} &Max_{t,f,\pi,g} \quad \alpha \mu u(y - t) + g \\ &subject \ to \\ &0 \leq t \\ &0 \leq \pi \leq 1 \\ &t + f \leq y && (LL') \\ &u(y - t) \geq (1 - \pi P) u(y) + \pi P u(y - t - f) && (IC) \\ &g = \mu t - (1 - \mu) \pi c - I && (B') \end{aligned} \right.$$

Now we denote by (LL') the after-audit limited-liability constraint⁶ and by (IC) , the incentive-compatibility constraint.⁷ With respect to the full-information setting, the government's budget constraint (B') now incorporates the aggregate audit cost $(1 - \mu)\pi c$ and the (sunk) initial investment I .⁸ As is usual in this kind of models, the fine f does not enter in the maximand of the problem \mathcal{P}_1 because it only has a deterrent role.

At the optimum, (LL') binds: increasing the fine f up to its maximal legal level $y - t$ relaxes (IC) . Moreover, this constraint also binds. Thus the government sets the audit strategy

$$\pi = \frac{1}{P} \left(1 - \frac{u(y-t)}{u(y)} \right) \quad (2)$$

such that a potential evader is indifferent between truthfully reporting his income and misreporting.⁹ We compute the first-order condition of problem \mathcal{P}_1 . Rearranging, we obtain the expression that characterizes an (interior) optimal tax

$$\alpha u_q(y - \hat{t}) = 1 - \frac{(1 - \mu)c}{(1 - \mu)c + \alpha \mu P u(y)}. \quad (3)$$

Under asymmetric information, the taxpayers' social marginal utility of consumption again equals the social marginal utility of expenditure in the public good. But now, due to the necessity of auditing reports to collect taxes, the expenditure in the public good is less than the tax collection. Therefore, by concavity of the utility function $u(\cdot)$, the optimal tax \hat{t} is downwardly distorted with respect to the optimal full-information tax t^* . In the next proposition, we completely characterize the optimal tax law. In particular, we explain in detail how the optimal tax and the audit probability vary with the detection probability P .

Proposition 1 Let $\underline{P} = \frac{(1 - \mu)c u_q(y)}{[1 - \alpha u_q(y)] \mu u(y)}$. Under asymmetric information, the following two regimes emerge.

- Regime R^{NA} : when $P \leq \underline{P}$, the government does not tax and the tax administration does not audit.
- Regime R^A : when $P > \underline{P}$, the government taxes and the tax administration audits reports $\tilde{y} = 0$ randomly. The optimal tax \hat{t} is a continuous, strictly increasing and concave function of P that satisfies

$$\lim_{P \rightarrow \underline{P}} \hat{t} = 0 \quad \text{and} \quad \lim_{P \rightarrow 1} \hat{t} = \tilde{t}.$$

The optimal audit probability $\hat{\pi}$ is a continuous function of P that satisfies

$$\lim_{P \rightarrow \underline{P}} \hat{\pi} = 0 \quad \text{and} \quad \lim_{P \rightarrow 1} \hat{\pi} = \tilde{\pi}.$$

Under some parameter configurations of the model, $\hat{\pi}$ increases with P ; under others, the profile of $\hat{\pi}$ is inverse U-shaped.

Under regime R^A , the optimal tax is below t^* and increases with the detection probability P . In order to understand why, let's assume first that $P=1$. The government sets the tax \tilde{t} , charges the tax administration to audit with probability $\tilde{\pi}$ and to impose to evaders the fine $\tilde{f} = y - \tilde{t}$, where $0 \leq \tilde{t} < t^*$ and $0 < \tilde{\pi} < 1$.¹⁰ Now consider a small decrease in the detection probability P . Ceteris paribus, π increases, and so does the aggregate audit cost $(1 - \mu)\pi c$. This causes a decrease in the provision of the public good, with its consequent welfare loss. What should be the optimal reaction of the government? To reduce the tax t and to increase the fine f , while keeping their sum constant, equal to y . Even if this change reduces the tax collection and, *a priori*, decreases further the provision of the public good, it has two other effects that attenuate the abovementioned welfare loss. First, the decrease in t reduces the stake for evasion, i.e., the gain $u(y) - u(y - t)$, countering the initial increase of the optimal audit probability π . Second, reducing the tax makes private consumption of the rich to increase. A similar argument can be used to explain why the distortion $t^* - \hat{t}$ increases when the detection probability P decreases.

Under some parameter configurations of the model, for high values of P , the abovementioned decrease in the stake for evasion $u(y) - u(y - t)$ may be lower than the decrease in P , and thus π increases. In other words, from $P=1$, the government optimally reacts to a decrease in the detection probability by auditing more frequently. But for lower values of P , $\hat{\pi}$ always increases with P . Therefore, it may be the case that the profile of $\hat{\pi}$ be inverse U-shaped.

This is not the end of the story. For a 'sufficiently low' value of the detection probability P , namely \underline{P} , the optimal tax \hat{t} converges to 0. Then, when $P \leq \underline{P}$, regime R^{NA} emerges: as the detection probability is very low, an incentive-compatible enforcement policy is prohibitively costly, and thus $\hat{\pi} = 0$. Under this regime, the unique incentive-compatible tax is 0, and the fine is irrelevant. So, no redistribution takes place because no public good is provided.

Finally, the optimal provision of public good \hat{g} is also a continuous and strictly increasing function of P , that satisfies

$$\lim_{P \rightarrow \underline{P}} \hat{g} = 0 \quad \text{and} \quad \lim_{P \rightarrow 1} \hat{g} = \tilde{g}.$$

When tax evasion is an issue, the provision of public good \hat{g} is below the full-information level g^* .

The Optimal Investment

Now, we move back to the first stage. Anticipating its future fiscal choices, the government decides whether to invest to improve the tax administration's capacity to detect evaders. This decision has two different impacts. First, it affects the expected social welfare because the government allocates tax revenues to investment I instead of using them to provide the public good g . On the other hand, as investment changes the value of the detection probability P , this decision can also fix the regime under which the government will design the tax law and the tax administration will operate afterwards. In order to address the choice of regime in terms of the variable I , let \underline{I} denote the implicit solution of the equation $P(I, \nu) = \underline{P}$.¹¹ The expected welfare can now be written as a function of investment I as follows

$$\begin{aligned} \text{if } P_0 \geq \underline{P} \quad \mathbb{E}\mathcal{W} &= \mathbb{E}\mathcal{W}^A = \alpha\mu u(y - \hat{t}) + \mu\hat{t} - (1 - \mu)\hat{\pi}c - I \quad \text{for } I \geq 0 \\ \text{if } P_0 < \underline{P} \quad \mathbb{E}\mathcal{W} &= \begin{cases} \mathbb{E}\mathcal{W}^{NA} = \alpha\mu u(y) & \text{for } I = 0 \\ \mathbb{E}\mathcal{W}^A = \alpha\mu u(y - \hat{t}) + \mu\hat{t} - (1 - \mu)\hat{\pi}c - I & \text{if } I \geq \max\{0, \underline{I}\} \end{cases} \end{aligned} \quad (4)$$

where the superscripts indicate the corresponding regime. The expression $\mathbb{E}\mathcal{W}^{NA}$ takes into account that, as the government raises no tax revenue, investment in the tax administration cannot be afforded. As we can see, the value of P_0 is important to characterize the expected welfare. When $P_0 \geq \underline{P}$, only regime R^A emerges: no matter the investment decision, $P \geq \underline{P}$. But this is not the case when $P_0 < \underline{P}$: according to the level of I , both regimes R^{NA} or R^A can occur.

In order to solve for the optimal investment \hat{I} , we proceed as follows. First, we find I_A , the investment that maximizes $\mathbb{E}\mathcal{W}^A$. Second, when it is pertinent to do so, we compare $\mathbb{E}\mathcal{W}^A(I_A)$ with $\mathbb{E}\mathcal{W}^{NA}$ to take the overall maximum \hat{I} .

Under regime R^A , the optimal investment I_A is the solution to the following problem

$$\mathcal{P}_2 \quad \begin{cases} \underset{I}{Max} & \alpha\mu u(y - \hat{t}) + \mu\hat{t} - (1 - \mu)\hat{\pi}c - I \\ & \text{subject to} \\ & \hat{t} = \hat{t}(P), \hat{\pi} = \hat{\pi}(P), P = P(I, \nu) \\ & \max\{0, \underline{I}\} \leq I \\ & I \leq \mu\hat{t} - (1 - \mu)\hat{\pi}c \end{cases}$$

where $\hat{t}(P)$ and $\hat{\pi}(P)$ are given by (3) and (2), respectively. From Proposition 1, they are uniquely defined and continuous functions of the detection probability P . The last two inequalities characterize the constraint set. The first inequality

reflects that the lowest value of I supporting regime R^A is not unique because it depends upon P_0 , as it is clear from (4). The second inequality shows the resource constraint of the government, at this initial stage.

A general characterization of the solution to \mathcal{P}_2 is difficult, for the following reasons. First, when $\{0, \underline{I}\} = \underline{I}$, the constraint set may be empty. Indeed, under some parameter configurations of the model (e.g. high audit cost c), no investment fulfills the resource constraint. Second, even if the constraint set is non-empty and we can prove that the problem \mathcal{P}_2 has a maximum, it is often difficult to find it with the usual techniques because the expected welfare $\mathbb{E}\mathcal{W}^A$ is not always concave in I and the second-order condition, evaluated at the critical points, cannot be verified analytically. Finally, even if one succeeds in identifying I_A , the comparison between $\mathbb{E}\mathcal{W}^{N^A}$ and $\mathbb{E}\mathcal{W}^A(I_A)$ is not straightforward because it is a comparison of levels. Still, we can prove the following results that apply when the optimal investment satisfies $\hat{I} > 0$.

Proposition 2. *If the government invests a strictly positive amount of money to improve the tax administration's capacity to detect evaders, the optimal tax \hat{t} and the level of public good \hat{g} are higher than when such investments are not an option for the government.*

If the optimal investment is strictly positive, the detection probability is higher than P_0 . Therefore, by Proposition 1, the optimal tax increases above the level chosen by the government when it is (exogenously) not allowed to invest in the tax administration. Intuitively, one could also have expected a similar result about g . However, this intuition must not be based on the conjecture that investment, via the increase in P , makes π to decrease, pushing downwards the aggregate audit cost and thus yielding g to increase, ceteris paribus. In fact, this conjecture can be wrong: we already know from Proposition 1 that the optimal frequency of audit may increase with P , pushing the aggregate audit cost upwards and making the provision of public good to decrease. The reason for the higher provision of the public good is the following: as \hat{t} increases when investment is realized (via the increase in P), optimality implies that the provision of the public good must increase, to compensate for the lower consumption of taxpayers.

Next, we present some comparative statics results under Regime R^A .

Proposition 3. *If the government invests a strictly positive amount of money to improve the tax administration's capacity to detect evaders and the optimal tax law specifies auditing reports $\tilde{y} = 0$ randomly, the optimal investment \hat{I} increases with taxable income y and with the degree of aversion to inequality $(1 - \alpha)$. With respect to the other parameters of the model, the change in \hat{I} is ambiguous.*

When the tax administration audits reports $\tilde{y} = 0$ randomly, an (interior) optimal investment $\hat{I} > 0$ is characterized by the following expression

$$-(1 - \mu) \hat{\pi}_{PC} P_I(\hat{I}, \nu) = 1 \quad (5)$$

where $\hat{\pi}_P = -\hat{\pi}/P$. The lhs of this expression is the marginal benefit of increasing investment, and the rhs, its marginal cost (hereinafter MCI), which is always equal to 1. By an envelope argument, the marginal benefit is formed as the product of the effect of an increase in the detection probability on the aggregate audit cost $(-(1 - \mu) \hat{\pi}_{PC})$ and the detection improvement due to a marginal increase in I ($P_I(\hat{I}, \nu)$). This product measures savings in the aggregate audit cost that obtain from a marginal increase in I . Consequently, we denote by MSAAC the lhs of (5).

From this expression, we can infer how a change in one parameter of the model affects the value of \hat{I} . The variation of \hat{I} results from the combination of two potential effects on the MSAAC. First, there is a direct effect that occurs when this parameter change affects only $(1 - \mu)$, c , $\hat{\pi}_P$ or $P_I(\hat{I}, \nu)$. Second, there is an indirect effect, which appears provided the parameter change modifies the value of the optimal tax \hat{t} , making the value of the derivative $\hat{\pi}_P$ to vary as well. So, if after a parameter change the MSAAC is greater (lesser) than the MCI, the government restores optimality by increasing (decreasing) investment. Having this in mind, we explain in detail the comparative statics results presented in the proposition.

- When taxable income y increases, the two effects have opposite signs. On the one hand, the direct effect is positive. For a given tax t , by concavity of the utility function $u(\cdot)$, the stake for evasion $u(y) - u(y - t)$ decreases when y increases. Therefore, in order to ensure incentive compatibility, it is not necessary to audit so much, and thus π_P increases. On the other hand, the indirect effect is negative: an increase in y enables the government to tax more, but also to audit more. This pushes downwards π_P . In spite of these countervailing forces, the indirect effect dominates and thus $\hat{\pi}_P$ decreases. So, as the MSAAC increases with y , the government optimally invests more.
- When the degree of aversion to inequality $(1 - \alpha)$ increases, only the indirect effect appears. Higher aversion to inequality makes the government to increase the tax. This pushes the stake for evasion upwards: π increases, making $\hat{\pi}_P$ to decrease. As a consequence of this, the MSAAC increases and thus \hat{I} also optimally increases.
- When the fraction of rich individuals in the population μ increases, the two effects go in opposite directions. The direct effect is clearly

negative. On the other hand, the indirect effect is positive: an increase in μ pushes the government to tax more. As t increases, so do π and the MSAAC. Hence, the total effect is ambiguous.

- When the audit cost c increases, the two effects go in opposite directions. The direct effect is clearly positive. On the other hand, the indirect effect is negative: an increase in c pushes the government to tax less. As t decreases, so do π and the MSAAC. Hence, the total effect is ambiguous.
- Finally, when the initial detection probability P_0 or the investment productivity ν increase, the two effects may appear. Their respective value depend upon the retained functional specification of the detection probability $P(I, \nu)$.

Conclusions

There is a large list of contributions that have analyzed optimal tax-enforcement policies under the threat of tax evasion. Surprisingly, all assume that audits are perfect. Not only audits are indeed imperfect but also, in practice, governments invest many resources to improve the capacity of their tax administration to detect evaders. This paper incorporates these investment decisions in a very simple model of an optimal fiscal policy. We have been able to characterize the optimal tax-enforcement policy, adopting a mechanism-design approach. As many other contributions to the costly-state verification literature, the optimal fine for evaders is maximal and the optimal audit probability is such that evasion is deterred. However, in order to attenuate the stake for evasion, the government optimally distorts taxes downward, distortion with respect to the fullinformation optimal tax. Then we analyze the optimal investment. Although we prove its existence, we cannot completely characterize the optimal investment in general. But we can show that, when it is strictly positive, the levels of the tax and the public good are higher than their respective levels without investment. Finally, under these circumstances, we obtain some comparative statics results concerning the optimal level of investment.

The model can be extended in several directions. First, it could be extended dynamically, to analyze the path of the different elements of the optimal fiscal policy. Second, our analysis can be generalized to incorporate more than two levels of income or more dimensions of heterogeneity (e.g., different degrees of risk aversion). Then one could think to calibrate an optimal tax-enforcement model with empirically founded parameters, and then to proceed by adding investments to modernize the tax administration into the simulations. Finally, the model generates some testable implications. All these are interesting venues for future research.

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Endnotes

- ¹ Throughout this chapter, subscripts of functions denote partial derivatives.
- ² One exception is the quadratic utility function. But, as Eeckhoudt and Gollier (1995) assert, this specification does not represent well the preferences of a risk averse individual.
- ³ This social welfare function has been studied theoretically by Ledyard and Palfrey (1999), and used, in a more applied context, by Laffont and Martimort (2005). This criterion is especially interesting because, as α adopts values between 0 and 1, it describes a family of standardly used social welfare functions. In particular, when $\alpha = 0$, the social welfare function is Rawlsian; whereas, when $\alpha = 1$, it is utilitarian.
- ⁴ For the sake of simplicity, we assume that tax collection in itself is costless, both for taxpayers and for the tax administration. If this were not the case, the model would be biased towards more investment in detection technology. We thank D. McPartland for raising this issue.
- ⁵ In this setting, it is straightforward to verify that rewards for truthful reports are worthless. Therefore, like Mookherjee and Png (1990) and Marhuenda and Ortuño-Ortín (1997), we rule them out of the model.
- ⁶ As $f \geq 0$, imposing an after-audit limited-liability constraint also ensures $t \leq y$.

- ⁷ Since the number of taxpayers is very large, none of them considers the impact of non-complying with the tax law on the amount of public good. So the public good does not appear in the incentive-compatibility constraint.
- ⁸ Without any loss of generality, we do not impose the net tax collection to be (weakly) positive because this should hold at the optimum. If this were not the case, it is straightforward to realize that not taxing the rich (and thus not enforcing the tax law) would dominate.
- ⁹ Throughout the chapter we assume that the parameters of the model ensure that $\pi < 1$. In view of, for example, the current IRS's audit policy, where audits represent near 1 percent of filed returns, this assumption is far from being unrealistic.
- ¹⁰ We assume that the parameters of the model are such that these inequalities are satisfied.
- ¹¹ Given the properties of the function $P(\cdot)$, \underline{I} is unique.

Appendix

Characterization of the Optimal Tax Law $(\hat{t}, \hat{f}, \hat{\pi})$

First-order condition

Formally, the government solves the following problem

$$\mathcal{P}_1 \left\{ \begin{array}{l} \underset{t, f, \pi, g}{Max} \quad \alpha \mu u(y - t) + g \\ \text{subject to} \\ 0 \leq t \\ 0 \leq \pi \leq 1 \\ t + f \leq y \quad (LL') \\ u(y - t) \geq (1 - \pi P) u(y) + \pi P u(y - t - f) \quad (IC) \\ g = \mu t - (1 - \mu) \pi c - I \quad (B') \end{array} \right.$$

To solve this problem, we momentarily neglect the constraints on the audit probability, as mentioned in the text. At the optimum, (LL') and (IC) bind. From these binding constraints, we obtain the optimal audit probability

$$\pi = \frac{1}{P} \left(1 - \frac{u(y-t)}{u(y)} \right).$$

Then, we obtain g from (B'). So, replacing π and g in \mathcal{W} , the maximand of \mathcal{P}_1 becomes

$$\alpha\mu u(y-t) + \mu t - (1-\mu) \frac{1}{P} \left(1 - \frac{u(y-t)}{u(y)} \right) c - I. \quad (6)$$

The first-order condition that characterizes an interior optimal tax t is

$$\alpha u_q(y-\hat{t}) = 1 - \frac{(1-\mu)c}{(1-\mu)c + \alpha\mu P u(y)} \quad (7)$$

By strict concavity of (6), (7) is also sufficient to find the unique optimal tax. Also, by strict concavity of the utility function $u(\cdot)$, the optimal tax verifies $\hat{t} \leq t^*$.

Comparative statics

By the Maximum theorem, the optimal tax \hat{t} is a continuous function of the detection probability P and so are $\hat{\pi}$ and \hat{f} . In order to completely characterize the optimal tax law $(\hat{t}, \hat{f}, \hat{\pi})$, we apply the Implicit Function theorem to (7) and we obtain

$$\begin{aligned} \frac{\partial \hat{t}}{\partial P} &= -\frac{\mu(1-\mu)u(y)c}{S} > 0, \\ \frac{\partial \hat{\pi}}{\partial P} &= -\frac{1}{P} \left(\hat{\pi} - \frac{u_q(y-\hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial P} \right) \geq 0, \end{aligned} \quad (8)$$

$$\frac{\partial \hat{g}}{\partial P} = \left(\frac{\alpha\mu^2 P u(y)}{(1-\mu)c + \alpha\mu P u(y)} \right) \frac{\partial \hat{t}}{\partial P} + \frac{(1-\mu)}{P} c \hat{\pi} > 0$$

where $S = u_{qq}(y-\hat{t})[(1-\mu)c + \alpha\mu P u(y)]^2 < 0$.

Domain of positive taxation

Replacing \hat{t} by its lowest bound in (7) and rearranging, we obtain

$$\underline{P} = \frac{(1-\mu)c u_q(y)}{[1 - \alpha u_q(y)] \mu u(y)}.$$

Hence, when $P \leq \underline{P}$, $\hat{t} = 0$, otherwise, $\hat{t} > 0$.

Non-monotonicity of the optimal audit probability

As shown in (8), the sign of $\partial\hat{\pi}/\partial P$ is ambiguous. Despite this fact, we can prove that, if there are parameter configurations of the model such that $\hat{\pi}$ is non-monotonic, the profile of $\pi(P)$ is inverse U-shaped.

Let's compute

$$\frac{\partial^2\hat{t}}{\partial P^2} = \frac{\partial\hat{t}}{\partial P} \left(\frac{u_{qqq}(y-\hat{t})}{u_{qq}(y)} \frac{\partial\hat{t}}{\partial P} - \frac{2\alpha\mu u(y)}{(1-\mu)c + \alpha\mu Pu(y)} \right) < 0$$

and

$$\begin{aligned} \left. \frac{\partial^2\hat{\pi}}{\partial P^2} \right|_{\frac{\partial\hat{\pi}}{\partial P}=0} &= \frac{1}{P} \left[\frac{u_q(y-\hat{t})}{u(y)} \frac{\partial^2\hat{t}}{\partial P^2} - \frac{u_{qq}(y-\hat{t})}{u(y)} \left(\frac{\partial\hat{t}}{\partial P} \right)^2 \right] \\ &= \frac{1}{Pu(y)} \frac{\partial\hat{t}}{\partial P} \left[\frac{\partial\hat{t}}{\partial P} \left(\frac{u_q(y-\hat{t})u_{qqq}(y-\hat{t})}{u_{qq}(y-\hat{t})} - u_{qq}(y-\hat{t}) \right) - \frac{2\alpha\mu u(y)}{(1-\mu)c + \alpha\mu Pu(y)} \right] \end{aligned}$$

By assumption, the term in brackets is negative. So this second derivative is also negative: when $\partial\hat{\pi}/\partial P=0$ the optimal audit probability $\hat{\pi}$ attains a local maximum. By contradiction, this critical value of $\hat{\pi}$ has to be a global maximum.

Characterization of an (interior) optimal investment I_A

Here, we adopt a parametric configuration such that the constraint set is not empty. Under this circumstance, this set is bounded by 0 and by μt^* (i.e. the tax collection under full information). Moreover, this set is also closed because it is defined by weak inequalities and the functions $\hat{t}(P)$ and $\hat{\pi}(P)$ are continuous in I . Hence, the constraint set is compact. In addition, the maximand in \mathcal{P}_2 is also continuous in I . So, by the Weierstrass theorem, the problem \mathcal{P}_2 has a maximum.

First-order condition

To find the (interior) optimal investment I_A , the government solves the following problem

$$\mathcal{P}_2 \begin{cases} \underset{I}{Max} & \alpha\mu u(y-\hat{t}) + \mu\hat{t} - (1-\mu)\hat{\pi}c - I \\ & \text{subject to} \\ & \hat{t} = \hat{t}(P), \hat{\pi} = \hat{\pi}(P), P = P(I, \nu) \end{cases}$$

By an envelope argument, the first-order condition for an interior solution of problem \mathcal{P}_2 is given by

$$\frac{\partial \mathbb{E}W^A}{\partial I} = \frac{\partial \hat{t}}{\partial P} P_I(\hat{I}, \nu) \underbrace{\left(-\alpha \mu u_q(y - \hat{t}) + \mu - (1 - \mu) \left(\frac{u_q(y - \hat{t})}{u(y)} \right) c \right)}_{=0} \quad (9)$$

$$-(1 - \mu) c \hat{\pi}_P P_I(\hat{I}, \nu) - 1 = 0.$$

Comparative statics

Assuming that

$$Z = \left\{ \left(\frac{u_q(y - \hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial P} - 2\hat{\pi} \right) P_I(\hat{I}, \nu)^2 + \hat{\pi} P(\hat{I}, \nu) P_{II}(\hat{I}, \nu) \right\} \frac{(1 - \mu)c}{P(\hat{I}, \nu)^2} < 0$$

(i.e. that the solution characterized by (9) verifies the second-order condition for a maximum), we apply the Implicit Function theorem to (9) and compute

$$\begin{aligned} \frac{\partial \hat{I}}{\partial P_0} &= \frac{1}{Z} \frac{(1 - \mu)\hat{\pi}c}{P(\hat{I}, \nu)} \left\{ 2P_I(\hat{I}, \nu) P_{P_0}(\hat{I}, \nu) - P_{IP_0}(\hat{I}, \nu) \right\} \geq 0 \\ \frac{\partial \hat{I}}{\partial \nu} &= \frac{1}{Z} \frac{(1 - \mu)\hat{\pi}c}{P(\hat{I}, \nu)} \left\{ 2P_I(\hat{I}, \nu) P_\nu(\hat{I}, \nu) - P_{I\nu}(\hat{I}, \nu) \right\} \geq 0 \\ \frac{\partial \hat{I}}{\partial c} &= -\frac{1}{Z} \frac{(1 - \mu)}{P(\hat{I}, \nu)^2} P_I(\hat{I}, \nu) \left(\frac{u_q(y - \hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial c} c + \hat{\pi} P(\hat{I}, \nu) \right) \geq 0 \\ \frac{\partial \hat{I}}{\partial \mu} &= -\frac{1}{Z} \frac{c}{P(\hat{I}, \nu)^2} P_I(\hat{I}, \nu) \left(\frac{u_q(y - \hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial \mu} (1 - \mu) - \hat{\pi} P(\hat{I}, \nu) \right) \geq 0 \\ \frac{\partial \hat{I}}{\partial y} &= -\frac{1}{Z} \frac{(1 - \mu)c}{P(\hat{I}, \nu)^2} P_I(\hat{I}, \nu) \left(\frac{u_q(y - \hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial y} (1 - \mu) + \frac{u(y - \hat{t})u_q(y)}{u(y)} \right) > 0 \\ \frac{\partial I}{\partial \alpha} &= -\frac{1}{Z} \frac{(1 - \mu)c}{P(\hat{I}, \nu)^2} P_I(\hat{I}, \nu) \frac{u(y - \hat{t})}{u(y)} \frac{\partial \hat{t}}{\partial \alpha} < 0 \end{aligned}$$

6



Poster Session

Hess ◆ Yeager ◆ Bourque ◆ Sriuthai

In addition to the papers presented at the main sessions of the conference, several researchers had been invited to describe their research projects at an informal poster session during the evening of the first day of the conference. These are often simple descriptive analyses, preliminary analyses, or otherwise limited research projects. The purpose was to provide an opportunity for conference attendees to talk with these researchers about their work and to exchange ideas, but did not include any input from a discussant.

A Study of Preparer Testing: Exploring the Relationship Between Preparer Testing and Tax Preparation Accuracy

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In 2009, the Internal Revenue Service (IRS) initiated a return preparer study to inform decision-makers proposing regulation of the paid preparer industry. Based on the study's results, the IRS announced in January 2010 that all paid preparers will be required to register with the Service and complete continuing education requirements.¹ In addition, paid preparers without a designation of enrolled agent (EA), certified public accountant (CPA), or attorney will be required to pass a competency test. In July 2010, the IRS announced that beginning in 2011, two competency exams will test preparers' expertise in completing basic and complex Form 1040 series tax returns.²

Background

Prior to this change, the Internal Revenue Service did not require tax return preparers to pass a certification examination or competency test to assess their ability to accurately prepare tax returns for compensation. Other than the Special Enrollment Examination (SEE) administered to candidates seeking enrolled agent status with the IRS under Treasury Department Circular No. 230, the licensing and examination of other tax practitioners, such as certified public accountants and attorneys, has been the purview of the states.³ Two States already require registration of paid preparers, Oregon since 1973 and California since 1997. New York and Maryland have recently enacted legislation requiring paid preparers to register with the state. However, only Oregon and Maryland require that licensed preparers pass a competency exam.⁴ Although these requirements may assist the government and general public in identifying professionals who have the expertise to competently prepare tax returns, the range of regulatory frameworks governing the practice of tax preparation is inconsistent across States.

There are few studies that examine the difference in tax preparation accuracy between certified and non-certified tax preparers. Recently, the Government Accountability Office (GAO) and the Treasury Inspector General for Tax

Administration (TIGTA) published reports that question the competency of preparers who have not passed a certifying exam.

This study explores the relationship between preparer testing and tax preparation accuracy by examining the adjustment rate for returns prepared by three groups of paid preparers. The paper is organized as follows: the first section will review and analyze past research detailing the role of paid preparers in tax compliance. The second section, in keeping with the main research objective, will review and analyze past research relating to the relationship between testing and competency. The third and fourth sections will discuss the research design and study results. Overall, the results are consistent with the assumption that there may be a relationship between testing and tax preparation accuracy; where differences are observed, the returns of tested preparers were more accurate than those of untested preparers.

The Role of Paid Preparers in Tax Compliance

Prior to the analysis, a review of published research studies about paid preparers was conducted to identify what is currently known about preparer accuracy and competency. There is limited research that examines the performance of a tested population of tax preparers relative to a non-tested population. However, there are a few research studies that have examined errors made on returns prepared by paid preparers. The findings suggest that errors made by paid preparers may contribute significantly to the tax gap.

GAO (August 2008) audited a sample of 2001 tax returns collected by the National Research Program (NRP) to examine the effectiveness of paid preparer regulation on compliance.⁵ Findings revealed that, when comparing the accuracy of reported income, expenses, and deductions on each return, returns prepared by paid preparers had higher error rates than self-prepared returns (GAO-08-781, p.6-7). Empirical information collected by GAO auditors supports the suggestion that paid preparers may be contributing to noncompliance. While the report did not distinguish results between the types of paid preparers, they did, however, segregate returns filed in both California and Oregon from those filed in the rest of the country. At the time of this study, California and Oregon were the only two States that required registration of paid preparers. GAO found that returns prepared by an Oregon paid preparer were more likely to be accurate compared with the rest of the country, including California. At the time, Oregon was the only State that required competency testing of paid preparers.

A TIGTA report (September 2008) independently reached similar conclusions. Using a participant-observational research method, auditors posed as taxpayers at various commercial and independently-owned tax return preparation offices to assess paid preparer accuracy and competency. Some 28 returns were prepared

with 17 containing mistakes and omissions caused by human error and/or misinterpretation of the tax law. TIGTA auditors identified six preparers who acted willfully or recklessly when determining the number of deductions for the taxpayer (TIGTA, 2008, p.2).

Holtzblatt and McCubbin (2004) examined the Earned Income Tax Credit (EITC) overclaim rate for Tax Year 1999. Almost one-third of the EITC claimants used the services of attorneys, certified public accountants, enrolled agents, or preparers affiliated with a nationally recognized tax preparation service. For these preparers, 25.2 percent of the EITC was claimed in error. An additional one-third of the EITC claimants reported using another type of paid preparer; the EITC error rate for this group was 36.2 percent. Although there was an observable difference between these two types of preparers in the amount of EITC claimed in error, the researchers could not determine the extent to which that difference was attributable to the skill of the preparer or characteristics of the clients.

Bloomquist, Albert, and Edgerton (2007) compared AUR discrepancy rates among self-prepared and paid-prepared returns and found that the latter accounted for higher numbers and larger percentages of AUR cases. The study noted that, within the paid preparer population, as firm size increased, the number of returns with AUR discrepancies tended to decrease. In order to determine the influence that paid preparers have on the outcome of a tax return, the study recommends that the intentions and quality control procedures used by tax practitioners should be examined further.

The common theme among these studies is that errors made by paid preparers may contribute to the tax gap and that additional research is needed to assess the level of tax preparation accuracy and key characteristics of the paid-preparer community. However, there is little demographic data available, making it difficult to describe the type of preparer most likely to prepare inaccurate tax returns. In addition, analysts cannot quantify the effect of mistakes made by paid preparers because there is no accurate count of active paid preparers.⁶ While there are several IRS systems that collect limited program-specific information about tax preparers, currently there is no single data source or common unique identifier to assist researchers in differentiating paid preparers. In 2009, TIGTA examined two of these systems, the Centralized Authorization File (CAF) and the Enrolled Practitioner Program System (EPPS), to assess the quality and accuracy of the data on paid preparers.⁷ The report sampled 139 preparers and found that a majority had multiple identification numbers or inconsistencies in their street addresses or locations (p. 2).

Both the GAO and TIGTA reports recommended implementing additional data collection procedures to help monitor and track paid preparer accuracy and competency. The 2009 TIGTA report urged the Service to prioritize the implementation of preparer registration to allow the IRS to identify paid preparers by the 2011 tax filing season. Additionally, this report recommended that, in order to

prepare client returns for compensation, paid preparers should be required to be compliant with their own Federal tax obligations.⁸

Certification and Performance in Business and Industry

Since this study is one of the first to explore more comprehensive measures of tax preparation accuracy to assess the competency of paid preparers, literature specific to that topic is very limited. However, empirical researchers in other disciplines, such as nursing and information technology, have conducted studies exploring the relationship of competency testing or certification to performance.

In a 1990 article, Blits and Gottfredson assessed the validity of general mental ability tests as a predictor of job performance. Although these tests have been criticized as racially biased, the authors referred to research studies that show that, regardless of race, lower test scores are often accompanied by lower job performance. Specifically, their report cited a National Academy of Sciences investigation that found a 0.3 correlation between the General Aptitude Test Battery (GATB) score and job performance. This means that with a “perfectly valid test,” 30 percent of the gains in workforce productivity could be attributed to tests like the GATB (p. 21).

A 3-year study performed by International Data Corporation (2009) examined the relationship between training and certification of information technology professionals and its impact on network administration functions.⁹ Researchers found that teams with the most certified members had 10 percent more devices in full compliance with security policies. Findings also revealed that, in organizations with greater concentrations of certified staff, applications and network capabilities were about 10 percent more likely to be deployed on time and within budget and unscheduled downtime was about 20 percent lower.

In a healthcare study, the differences in performance scores for certified and non-certified nurses (n=83) were examined based on six dimensions of nursing performance: leadership, critical care, teaching/collaboration, planning/evaluation, interpersonal relationship, and professional development. As rated by supervisors, certified nurses had consistently higher performance scores on each of the six dimensions; however, only two, teaching/collaboration and planning/evaluation, were found to be statistically significant (Redd and Alexander, 1997).

Despite suggestions from the pertinent empirical literature that testing or certification may contribute to improved accuracy or work performance, there is little basis to definitively establish a causal relationship between certification testing or training and performance. Such links may be difficult to establish due to the complex nature of human behavior. Instead, certification or testing may represent “one factor in measuring competence [but] by no means the determining factor”

(Glassie and Jacobs, 2003, p. 18). The purpose of this study was to explore the relationship between preparer testing and tax preparation accuracy by comparing error rates across different segments of the preparer population to determine if there were observable differences in return accuracy.

Research Design

This study utilizes a cross-sectional design to collect data for variables of interest during a specified period of time to compare the accuracy of tested enrolled agents and non-tested preparers (enrolled agents and others). Although it would be preferable to observe the change in accuracy before versus after testing within the population of preparers required to pass a competency test, classical experimental design of this nature was not possible since the IRS has not yet implemented mandatory preparer testing.¹⁰

Data Collection

Data from individual tax returns prepared by each preparer were extracted from three databases that reside in the IRS Compliance Data Warehouse (CDW). Data collection was limited to three tax years, 2005 to 2007. These tax years represent the most current tax returns that have been subject to review.

- The Individual Returns Transaction File (IRTF) stores transactional and entity information for each individual income tax return, including identification of the signing preparer.
- The Examination Operational Automation Database (EOAD) provides data that tracks examination results for returns by issue.¹¹ EOAD is the primary means of sharing information from Federal revenue agent reports (RARs) and consists of audit reports closed by Small Business/Self Employed and Wage and Investment business units in the field and campuses.¹² The extract for this study included issue category codes and adjustment amounts believed to reflect tax-return accuracy.¹³ An error was defined as either a negative or positive adjustment to taxes, credits, or taxable income; examinations resulting in “no change” were excluded.
- The Automated Underreporter program (AUR) matches third-party information reporting against individual income tax returns to verify that income and deductions are reported correctly. When discrepancies are found between reported data and the tax return as filed, the return is flagged with an indicator that identifies the type of income or deduction and, if necessary, the tax is adjusted. Using

tax topics covered by the Special Enrollment Examination (SEE) as a guide in choosing indicators of interest, tax records with selected discrepancy indicators were extracted from the database.¹⁴ Only records that had been selected by analysts using the AUR selection tool, and subsequently worked by tax examiners and resulted in a tax adjustment, were included.

To determine tax-return accuracy for each preparer, data was extracted for client returns that had been adjusted by AUR or EOAD. Preparer Social Security numbers and Preparer Tax Identification Numbers (PTINs) were matched to the paid-preparer identification field on client records present in the AUR and EOAD databases.

For each preparer, a count was compiled of all individual tax returns prepared for each tax year. Both adjusted and unadjusted returns were counted in IRTF by matching preparer Social Security numbers and PTINs to the paid-preparer identification field on client returns. The resulting tax-return volume was used in the analysis to calculate adjustment rates for each preparer and was also used as a proxy for preparer experience. Preparers who could not be matched to client records were considered to have prepared no returns for the purposes of this study. To avoid distortion of the adjustment rates that could skew the results, this analysis was limited to include only those preparers who prepared at least 25 individual returns for a tax year.

Target Population

There were three populations of interest for this study: two groups of enrolled agents (EAs) and one group of other tax preparers (non-EAs).

Enrolled agents are granted authority to represent taxpayers before the Internal Revenue Service to the same extent as attorneys and certified public accountants.¹⁵ The designation is awarded to practitioners who have demonstrated special tax competency by passing a rigorous written examination or who were granted exemption from the Special Enrollment Examination based on a qualifying former occupation with the IRS. All enrolled agents are subject to a 3-year renewal cycle during which they are required to earn 72 hours of continuing professional education (CPE) in order to maintain their status. The enrolled agent population in this study was limited to practitioners who were enrolled to practice between 1992 and 2004 and whose status was “active” (n=19,516). These practitioners were more likely to be actively engaged in providing tax preparation services for the tax years under study and would have experienced at least one renewal cycle. Identification and demographic information was extracted from the Enrolled Agent database which consists of registration and renewal data provided by the Office of Professional Responsibility (OPR).

This initial enrolled agent study population was reduced by 33 percent after restricting the study to enrolled agents who prepared at least 25 returns in a tax year. Of the resulting 12,996 practitioners, 12,507 achieved enrolled agent status by passing the SEE (Tested EAs), and 489 received waivers from the testing requirement by qualifying as former IRS employees (Untested EAs).

The third group, “non-EAs” (n=19,450), was selected by a simple random sample from approximately 900,000 preparers who had been assigned a Preparer Tax Identification Number (PTIN) but were not present in the Enrolled Agent database. From the data that was available, the professional status or level of education of preparers in this group could not be identified; it may include attorneys, CPAs, former IRS employees not granted EA status, as well as other preparers without certification or professional designation. After compiling return counts for this group of preparers, there were 11,157 that could not be identified as signing preparers, which reduced the group size by 57 percent to 8,293. The non-EA group was further reduced to 5,737 after eliminating those who prepared fewer than 25 returns in a tax year.

For each of the three groups of tax preparers under study, Table 1 below shows the return volume for each tax year from 2005 to 2007. The declining trend in the number of returns prepared over the 3-year period is likely due to attrition as tax preparers leave the profession.

TABLE 1: Total Number Of Returns Prepared By Preparer Type And Tax Year

Preparer Type	2005	2006	2007
Untested EAs	76,589	74,043	71,541
Tested EAs	3,262,114	3,222,342	3,183,808
Non-EAs (Unweighted Sample)	928,918	878,648	828,063
TOTAL	4,267,621	4,175,033	4,083,412

For each tax year from 2005 to 2007, Table 2 below shows the final number of preparers in each group after extracting client-adjusted return data from AUR and EOAD.

TABLE 2: Preparer Population By Type And Tax Year

Preparer Type	2005	2006	2007
Untested EAs	410	388	356
Tested EAs	11,711	11,330	10,881
Non-EAs (Unweighted Sample)	4,552	4,226	3,805
TOTAL	16,673	15,944	15,042

Limitations

The study utilized data collected during the tax administration process. Compliance data records typically contain multiple observations per taxpayer for a given tax year, which adds a layer of complexity. Efforts were made to omit any irrelevant, incorrect, or duplicative data to prevent misleading results.

Tax preparation accuracy depends on a variety of factors, and this study did not attempt to control for conditions that may impact paid-preparer performance such as the complexity of a return, reliance on tax-preparation software, or taxpayer influence. Errors may be attributed to the taxpayer, the preparer, or both. Little descriptive information is currently available that could have added depth to the findings, such as education and professional designation other than enrolled agent status (e.g., attorney or CPA) or data such as firm size or other characteristics which may influence tax return accuracy. Additionally, there was no control for selection bias, either by the taxpayer or the preparer, which may be a subject for future research.¹⁶

If a preparer could not be matched to client records as the return signer, the preparer was excluded from analysis. Although IRS guidelines require tax preparers to sign returns prepared for compensation, tax code complexity often requires additional assistance in completing a return. The inability to identify paid preparers who may have contributed to, but did not sign, the completed return required that these contributing preparers be omitted from the study.

In some cases, there were a limited number of observations for various AUR and EOAD adjustment categories and, although there may be an observed difference between the study groups, a small number of observations may reduce any statistical or practical significance. The small population of untested enrolled agents may also limit extrapolating results beyond this subset of the enrolled agent population. The analysis relied on error rates from operational enforcement data and did not take into account the nature and magnitude of the errors.¹⁷

Analysis of Error Rates

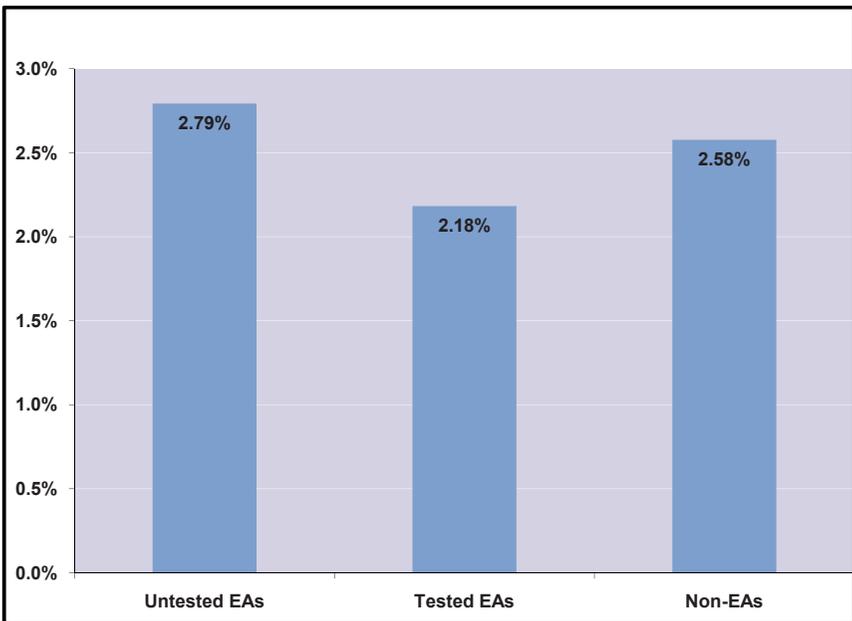
To compare the accuracy of the returns prepared by our three groups of preparers, three ratios were calculated utilizing the data extracted from IRTE, AUR, and EOAD for each tax year:

- Adjusted Error Rate (AER)—the number of returns adjusted by AUR divided by the total number of returns prepared;
- Exam Error Rate (EER)—the number of returns adjusted by EOAD divided by the total number of returns prepared; and

- Combined Error Rate (CER)—the total number of returns adjusted by AUR and EOAD divided by the total number of returns prepared.

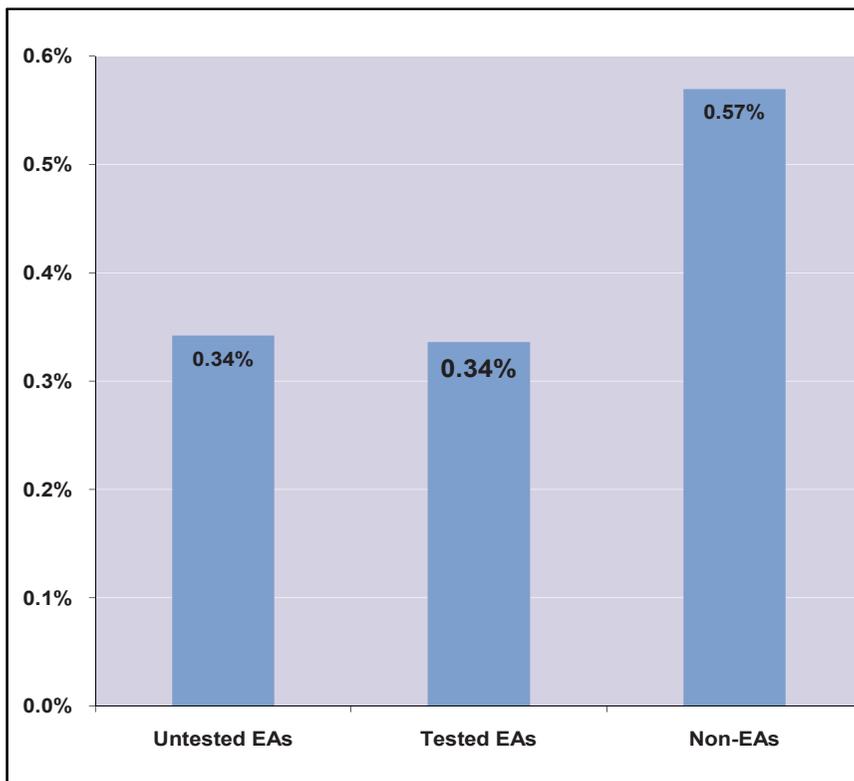
The calculation of ratio scores using operational data as a measure of preparer accuracy has an established precedence in preparer research and was used by Bloomquist et al. (2007) to evaluate preparation accuracy, as well as by McKerchar, Bloomquist, and Leviner (2008) in exploring the use of regulation to improve the services offered by tax agents.¹⁸

FIGURE 1. Adjusted Error Rates (AER)



Adjusted Error Rate: Figure 1 shows the adjusted error rate (AER) for the three preparer populations for Tax Years 2005 to 2007. The tested EA population had a lower error rate than both the untested and non-EA populations. For returns prepared by tested enrolled agents, 2.18 percent had a discrepancy detected by the Automated Underreporter program (AUR). Of the three groups, untested EAs had the highest adjusted error rate, 2.79 percent. This rate is marginally higher than the non-EA group, who experienced an adjusted error rate of 2.58 percent. With a difference of more than 0.6 percent between tested and untested enrolled agents, these results suggest that testing may influence tax preparation accuracy.

FIGURE 2: Exams Error Rates (EER)

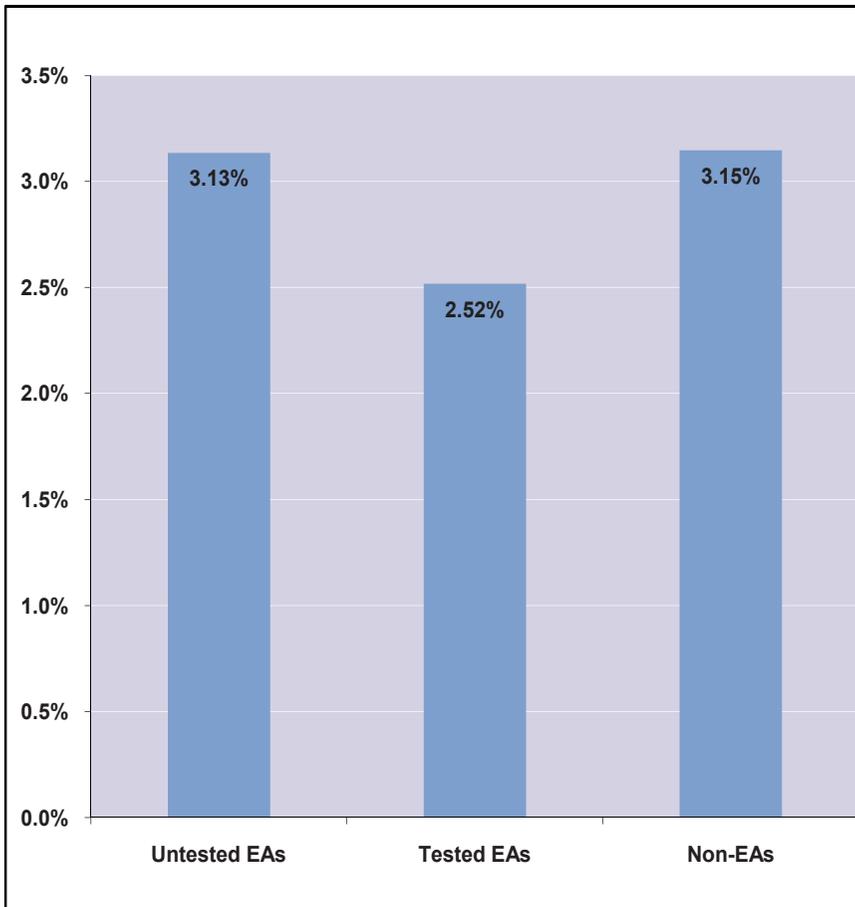


Exam Error Rate: Figure 2 shows the error rate for examined returns (EER) for the 3-year period 2005–2007 by preparer type. Both tested and untested enrolled agents at 0.34 percent have a lower exam error rate than non-EAs (0.57 percent). Tested and untested enrolled agent populations had the same exam error rate suggesting that for adjustments made by examination, which is a subjective process, testing may not be a factor. Rather, other factors may influence the observed difference between the enrolled agent and non-enrolled agent groups.

The 0.23-percent difference between the enrolled agent and non-enrolled agent groups may suggest that practitioners who are granted the privilege to represent clients before the IRS are better able to argue their clients' positions. As noted by Galanter (1974), enrolled agents and other practitioners governed by Treasury Department Circular No. 230 may have a better understanding of IRS practices and, due to the frequent interactions with the Service, may have developed working

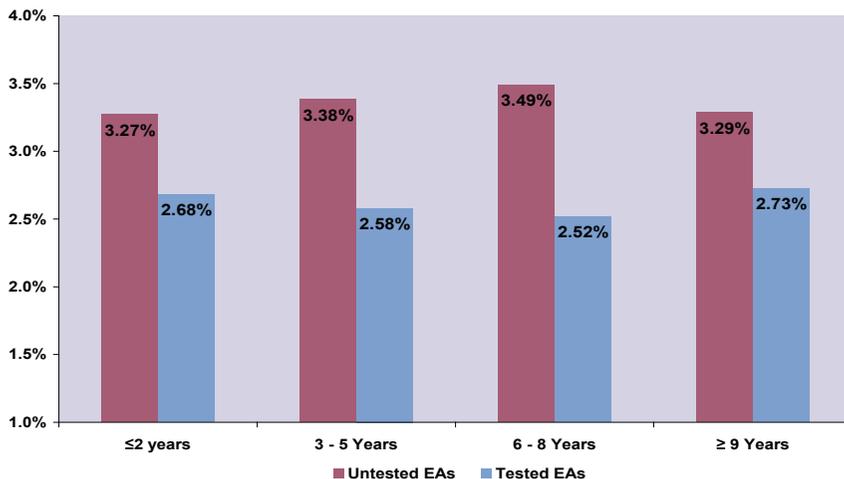
relationships with examination personnel. These two factors may improve their chances in resolving issues to the benefit of their client (as cited in Ayres, Jackson, and Hite, 1989).

FIGURE 3: Combined Error Rates (CER)



Combined Error Rates: Figure 3 illustrates the combined error rate (CER) for the 3-year period 2005–2007 by preparer type. Tested enrolled agents have a lower combined error rate than non-EAs and untested EAs, 2.52 percent, 3.13 percent, and 3.15 percent respectively. With a difference of more than 0.6 percent between tested enrolled agents and both untested enrolled agents and non-EAs, the results are consistent with the assumption that testing may be a contributing factor in reducing errors and improving tax preparation accuracy.

FIGURE 4: Effect Of Continuing Professional Education On CER



Effect of Continuing Education: For both groups of enrolled agents, tested and untested, the amount of required continuing education was thought to contribute to preparer accuracy. To approximate the amount of continuing professional education (CPE) the practitioner had completed, the number of years since the practitioner's enrollment date (EA tenure) was calculated and used as a proxy.¹⁹ An assumption was made that longer tenure reflects more renewal cycles, which should result in greater tax expertise gained from accumulated CPE hours.

Figure 4 above illustrates the combined error rates for both groups of enrolled agents. Across all four levels of tenure, tested enrolled agents consistently had a lower combined error rate (CER) than untested EAs. With both groups subject to the same continuing education requirements, the results show little evidence that professional development alone affects preparation accuracy. However, in this study, there was no attempt to control for tax return complexity. It is likely that as preparers become more experienced, the level of complexity in the returns they prepare will also increase.

For tested enrolled agents, the number of years since enrollment was also used to observe the test effect, or the potential impact that testing and test preparation has on tax return accuracy. Although there was almost a 0.59 percent difference in the combined adjustment rate between tested and untested EAs in the first renewal cycle, this gap was smaller than the differences in the second and third renewal cycles which were 0.80 percent and 0.97 percent, respectively. Any test effect would be indicated by a larger gap in the first cycle.

FIGURE 5: Combined Error Rate By Volume Of Returns Prepared

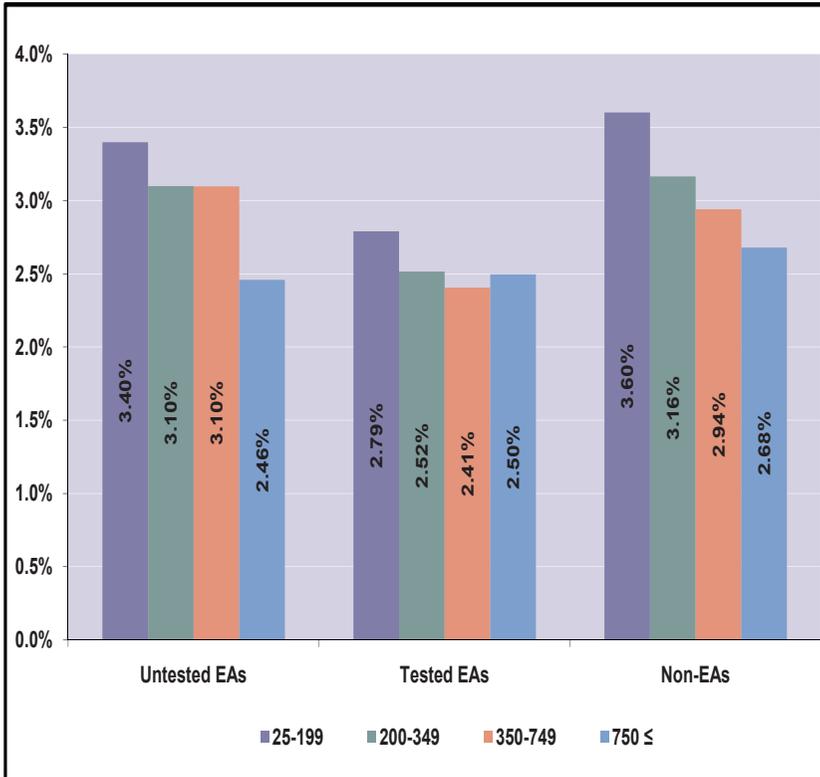


Figure 5 shows the combined error rate (CER) for Tax Years 2005–2007 for each preparer type segmented by the volume of tax returns prepared. Serving as a proxy for experience, it is assumed that higher return volume indicates a preparer has more experience than a preparer with lower return volume. Overall, in three (25-199, 200-349, and 350-749) of the four return-volume segments, tested enrolled agents have the lowest combined error rate compared to both untested enrolled agents and non-EAs.

For all of the preparer groups, there appears to be a decline in the combined error rate as return volume increases. This decline suggests that, when using return volume as a proxy, more experienced return preparers are likely to be more accurate.

Tax Issues by Frequency

Since differences in tax preparation accuracy are observable across the three preparer types, this study attempted to identify where the differences in tax-preparation accuracy are occurring by taking a closer look at the types of adjustments experienced by each preparer segment.

TABLE 3: Issue Adjustment by Type as Reported by Examination

Issue Adjustment Type	Tested EAs	Rank	Untested EAs	Rank	Non-EAs	Rank
Adj. to Tax before Credits	18.56%	1	18.22%	1	17.17%	1
EIC	9.21%	2	8.31%	2	14.64%	2
Prepayment Credit	6.30%	3	6.16%	4	10.04%	3
EITC earned income per exam	6.02%	4	4.08%	9	3.86%	6
Additional Child Care Credit	6.01%	5	5.37%	6	8.83%	4
Excess Misc. Deductions Per Exam	5.65%	6	4.87%	8	3.71%	7
Child Tax Credit	5.40%	7	5.59%	5	6.12%	5
Self Employment Tax	3.72%	8	4.91%	7	2.68%	8
EITC Investment income per exam	3.56%	9	4.08%	9	2.36%	9
Contributions Per Exam	2.93%	10	2.90%	11	1.58%	11

Table 3 above shows the percent of paid-preparer returns adjusted by examination by type of issue. For the tested enrolled-agent group, the top 10 issues were listed in rank order, with these results then compared to the other 2 groups. There appears to be little variation in the top 10 issue types across the 3 preparer groups with the exception of EITC earned income per exam, which ranks 4th for tested EAs, 9th for untested EAs, and 6th for non-EAs. Despite tested EAs having a greater overall accuracy rate, there is no consistent pattern in the ranking of adjustments among the three groups. However, this study did not attempt to control for tax return complexity.

TABLE 4: Discrepancy by Type as Reported by AUR

Discrepancy Type	Tested EAs	Rank	Untested EAs	Rank	Non-EAs	Rank
Withholding	14.31%	1	14.87%	1	15.09%	1
Mortgage Interest	12.76%	2	14.56%	2	11.16%	4
Wages	12.36%	3	10.62%	3	14.76%	2
Interest Income	12.19%	4	13.25%	4	11.71%	3
Other Income	10.67%	5	10.93%	5	10.33%	5
Taxable SSA	8.08%	6	8.15%	6	7.10%	7
Dividends	7.82%	7	7.41%	7	7.91%	6
Gambling Income	5.81%	8	5.60%	8	4.87%	8
Unemployment	3.28%	9	3.07%	9	3.88%	9
Pension	2.91%	10	2.71%	10	2.44%	12
Grant/Debt Cancellation Income	2.66%	11	2.37%	11	2.44%	11
IRA Payments	2.40%	12	1.49%	12	2.26%	14

Table 4 above illustrates the percent of returns adjusted by AUR according to type of discrepancy for each preparer group. For the tested enrolled-agent group, the top 12 adjustments were listed in rank order, with these results then compared to the other 2 groups. The rank order of adjustments for tested and untested EAs is identical. However, greater variation is observed when compared to the non-EA group.

Conclusions

This study explored the relationship between competency testing and tax-preparation accuracy by examining the adjustment rate for the returns prepared by three groups of paid preparers: tested enrolled agents, enrolled agents exempt from the testing requirement, and a group of non-enrolled agent preparers. The findings suggest there may be a relationship between preparer testing and tax-preparation accuracy. Using this study's measures, Federal individual income tax returns prepared by tested enrolled agents for Tax Years 2005–2007 had fewer errors than those prepared by untested enrolled agents or non-EA preparers. However, based on the data available it was not possible to confirm that testing alone caused the difference in accuracy or whether other underlying factors influenced these results.

To explore these potential influences, the effects of testing and continuing professional education (CPE) were isolated for the two enrolled agent groups. There was no observed relationship between accumulated professional development and tax preparation accuracy nor did testing alone appear to affect return accuracy rates for the two groups. Although returns prepared by tested enrolled agents were consistently better over the 3-year period, it appears that these factors alone cannot explain why these returns were more accurate.

This study also examined the influence of experience for all three preparer groups by using return volume as a proxy. Overall, it was found that an inverse relationship existed between return volume and return error rates. One explanation may be that as preparer experience increases, accuracy rates may improve. Returns prepared by tested enrolled agents were just as or more accurate than those prepared by untested EAs and non-EAs across all volume segments. The non-EA preparer population had the highest combined error rates across all four volume segments.

In addition to suggesting a possible relationship between competency testing and tax preparation accuracy, this study also addresses the current deficiencies in the literature. At present, few studies have investigated the relationship between testing and job performance, and little exists specific to tax preparation accuracy. This study makes an effort to bridge this knowledge gap and provide a baseline for future research. Regulations enacted in 2010 will soon require all paid

tax preparers to register annually with the IRS and earn continuing professional education credits. Preparers who are not enrolled agents, CPAs, or attorneys will also be required to pass competency exams to demonstrate their expertise in order to prepare tax returns for compensation. This registration and testing process will provide rich detail to inform future research.

Acknowledgements

We wish to thank our colleagues in Research, Analysis, and Statistics and the Office of Program Evaluation and Risk Analysis who provided their critiques, comments, and suggestions in support of this research—in particular, Patricia McGuire for her support and Kevin Cecco for his review. We also wish to thank Karen Hawkins and members of the Office of Professional Responsibility for their review and sponsorship of this research project.

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Endnotes

- ¹ Department of the Treasury, Internal Revenue Service. *Return Preparer Review*. Publication 4832 (Rev. 12-2009) Catalog Number 54419P <http://www.irs.gov/pub/irs-pdf/p4832.pdf>.
- ² *Proposed New Requirements for Tax Return Preparers: Frequently Asked Questions*, <http://www.irs.gov/taxpros/article/0,,id=218611,00.html#Testing> (August 2, 2010).
- ³ Treasury Department Circular No. 230 (Revised 4-2008). *Regulations Governing the Practice of Attorneys, Certified Public Accountants, Enrolled Agents, Enrolled Actuaries, Enrolled Retirement Plan Agents, and Appraisers before the Internal Revenue Service* <http://www.irs.gov/pub/irs-pdf/pcir230.pdf>.
- ⁴ *Return Preparer Review* <http://www.irs.gov/pub/irs-pdf/p4832.pdf>.
- ⁵ In 2000, IRS established the National Research Program (NRP) as part of its efforts to develop and monitor strategic measures of taxpayer compliance. The NRP seeks to increase public confidence in the fairness of our tax system by helping the IRS identify where voluntary compliance problems occur so that the IRS can efficiently utilize its resources to address those problems.
- ⁶ In 1999, IRS estimated there were up to 1.2 million paid preparers (GAO-08-781, p.6).
- ⁷ Reference Number 2009-40-098.
- ⁸ The principals and responsible officials for firms that apply to participate in the IRS *e-file* Program are currently subject to suitability checks that include compliance with tax requirements. See *Publication 1345, Handbook for*

Authorized IRS e-file Providers of Individual Income Tax Return, <http://core.publish.no.irs.gov/pubs/pdf/64382a01.pdf>.

- ⁹ International Data Corporation (IDC) is a provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. <http://www.idc.com/>.
- ¹⁰ Those who are not enrolled agents, certified public accountants, or attorneys.
- ¹¹ IRM 4.10.16.1
- ¹² Examination Operational Database (11/2009), <http://mysbse.web.irs.gov/CLD/GLD/GL/Programs/Exam/4530.aspx> (1109).
- ¹³ The extract included records through the 201004 processing period.
- ¹⁴ The extract for this study included records through the 200852 processing period.
- ¹⁵ Treasury Department Circular No. 230 (Revised 4-2008), <http://www.irs.gov/pub/irs-pdf/pcir230.pdf>.
- ¹⁶ Taxpayer compliance intentions may influence their preparer selection decision.
- ¹⁷ Operational enforcement data is not representative of the entire population and thus may reflect a lower bound of errors.
- ¹⁸ These studies also relied on operational data and are thus subject to the similar limitations discussed in note 17.
- ¹⁹ During each 3-year enrollment cycle, enrolled agents must complete 72 contact hours of tax or tax-related education with a minimum of 16 hours each year.

7



Appendix

Conference Program

List of Attendees

2010 IRS Research Conference Program
The Liaison Capitol Hill
June 29–30, 2010

DAY ONE: Wednesday, July 8

8:00–8:45 **Registration**

8:45–9:00 **Welcome**

9:00–9:30 **Keynote Address**

Mark Ernst, Deputy Commissioner for Operations Support,
Internal Revenue Service

9:30–10:30 **Panel Discussion:**

The Impact of Globalization on Tax Administration

Moderator:

Rosemary D. Marcuss, Director, Research, Analysis, and
Statistics, Internal Revenue Service

Panelists:

Michael Danilack, Large and Mid-Size Business, Internal
Revenue Service, Partho Shome, Knowledge, Analysis,
and Intelligence, Her Majesty's Revenue and Customs, and
Patricia Arteaga, Mexican Tax Administration Service

10:30–10:50 **BREAK**

10:50–12:20 **Compliance of Large Business Entities**

Moderator:

Lois Petzing, Large and Mid-Size Business, Internal
Revenue Service

Papers:

- *An Examination of FIN 48: Tax Shelters, Auditor Independence, and Corporate Governance*, Petro Lisowsky, University of Illinois at Urbana-Champaign, Leslie A. Robinson, Tuck School of Business at Dartmouth and Andrew P. Schmidt, Columbia University

- *Partnerships with Reportable Entity Partners*, Charles E. Boynton and Barbara A. Livingston, Large and Mid-Size Business, Internal Revenue Service
- *Temporary and Permanent Book-Tax Differences: Complements or Substitutes?*, Jennifer Blouin, The Wharton School, University of Pennsylvania, Jason DeBacker, Office of Tax Analysis, U.S. Department of the Treasury, and Stephanie Sikes, The Wharton School, University of Pennsylvania

Discussant:

Drew Lyon, PricewaterhouseCoopers

12:20–2:00

Lunch

2:00–2:15

Presentation of IRS Research Recognition Awards

2:15–3:45

Influencing Individual Taxpayer Behavior

Moderator:

Patti Davis-Smith, Wage and Investment, Internal Revenue Service

Papers:

- *Subsidizing Charitable Contributions with a Match vs. Income Tax Rebate: What Happens to Donations and Compliance?*, Marsha Blumenthal, University of St. Thomas, Laura Kalambokidis, University of Minnesota, and Alex Turk, Small Business/Self-Employed Division, Internal Revenue Service
- *Solving Information Asymmetry for Offshore Accounts*, Susan Morse, Hastings College of the Law, University of California
- *Facilitated Self-Assistance Enhances Taxpayers' Taxpayer Assistance Center (TAC) Experiences*, Kirsten Davis, Melissa Hayes, and Erica Jenkins, Wage and Investment, Internal Revenue Service

Discussant:

Leandra Lederman, Indiana University

3:45–4:00

BREAK

4:00–5:15

Drivers of Noncompliance**Moderator:**

Rahul Tikekar, Research, Analysis, and Statistics, Internal Revenue Service

Papers:

- *A Balance Due Before Remittance: The Effect on Reporting Compliance*, Paul Corcoro and Peter Adelsheim, Small Business/Self-Employed Division, Internal Revenue Service
- *Predicting Intentional and Inadvertent Noncompliance*, Kathleen M. Carley, Brian Hirshman, Ju-Sung Lee, Michael Martin, Dawn Roberston, and Jesse St. Charles, Carnegie Mellon University

Discussant:

Peggy Hite, Indiana University

5:30–6:30

Poster Session and Social Hour

- *Application of Text Mining to Uncover the Issues and Concerns Surrounding Tax Preparers*, Ririko Horvath, Larry May, Rahul Tikekar, and Cheryl Wagner, Research, Analysis, and Statistics, Internal Revenue Service
- *Compliance, Assistance, and the SmartCard*, Kathleen M. Carley, Neal Altman, and Michael Martin, Carnegie Mellon University and Joanne Meikle and Traci L. Suiter, Research, Analysis, and Statistics, Internal Revenue Service
- *Understanding Tax Professionals' Work Processes Using the In Basket Technique*, Courtney L. Rasey, Wage and Investment, Internal Revenue Service
- *An Analysis of Preparer Testing on Compliance*, Chris Hess, Karen Yeager, Michael Bourque, and Amy Sriuthai, Research, Analysis, and Statistics, Internal Revenue Service

DAY TWO: Thursday, July 9**8:30–10:00 Tax Code Complexity and Compliance Burden****Moderator:**

Kara Leibel, Research, Analysis, and Statistics, Internal Revenue Service

Papers:

- *Individual Taxpayer Compliance Burden: The Role of Assisted Methods in Taxpayer Response to Increasing Complexity*, George Contos, John Guyton, Patrick Langetieg, and Melissa Vigil, Research, Analysis, and Statistics, Internal Revenue Service
- *Enhancing Compliance Through Improved Readability: Evidence From New Zealand’s Rewrite “Experiment,”* Adrian Sawyer, University of Canterbury
- *Tax Compliance Costs: The Effect of Authority Behavior and Taxpayer Services*, Sebastian Eichfelder, University of Wuppertal, Chantal Kegels, Federal Planning Bureau, and Michael Schorn, Institute for Economy and Policy Research

Discussant:

James R. Nunns, The Urban Institute

10:00–10:20 BREAK**10:20–11:50 Enforcement Strategies****Moderator:**

Katie Fox, Small Business/Self-Employed Division, Internal Revenue Service

Papers:

- *Collecting Collected Taxes*, Keith Fogg, Villanova University School of Law
- *Measuring and Tackling the Illicit Market for Excise Goods*, Anthony Rourke, Knowledge, Analysis, and Intelligence, Enforcement and Compliance, Her Majesty’s Revenue and Customs

- *Inspectors or Google Earth? Optimal Fiscal Policies Under Uncertain Detection of Evaders*, Martin Besfamille and Pablo Olmos, Universidad Torcuato Di Tella

Discussant:

Don McPartland, Large and Mid-Size Business, Internal Revenue Service

11:50–12:00

Closing Remarks

List of Attendees

IRS Research Conference

The Liaison Capitol Hill

June 29–30, 2010

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