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*Session Four:*

# Tax Code Complexity and Compliance Burden



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***Enhancing Compliance through  
Improved Readability: Evidence from  
New Zealand's Rewrite "Experiment"***

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# *Overview of Presentation*

- Introduction and Background
- Prior Research on Readability and Tax Legislation
- Research Method: New Zealand as a Case Study Experiment
- Overview of Prior Research Findings and Results of this Study
- Conclusions, Policy Implications, Limitations and Future Research



## *Introduction and Background*

- Tax law complexity is an international phenomenon that is often criticized but infrequently tackled
- NZ's *Tax Law Rewrite Project* reorganized key tax legislation & rewrote the statutory language used in the Income Tax Act (ITA)
- An international trend – Australia & UK
- Testing undertaken within IRD, plus use of readability formulae & other tests on versions of ITA during period 1993 to 2010.



# *Prior Research on Readability and Tax Legislation*



- *Long & Swingen (1988)*: tax complexity 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.”
- Reductions in complexity can assist with improving compliance, which *Roth et al. (1989)* define:
  - “*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.”

# *Prior Research on Readability and Tax Legislation (2)*



- *NZ Tax Law Rewrite Project: IRD (2001) 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.”

- Growth in ITA size: 24 pages (1891) to 2850 pages (2007).

# *Prior Research on Readability and Tax Legislation (3)*



1. 1994: Reorganisation of ITA 1976 and IRDA 1974 into ITA 1994, TAA 1994 and TRAA 1994
  - Rewrite Advisory Panel set up (reviewed: *Sawyer*, 2008)
2. 1996: Rewrite of Core Provisions (Parts A & B)
  - *Richardson & Sawyer* (1998) – improvements in readability (using Flesch)
3. 2004: Rewrite of Parts C – E & Y: ITA 2004
  - *Pau et al.* (2007) – further improvements in readability (using Flesch & FKGL). Internal IRD research: Cloze: ITA 2004 found to be the ‘best’ version (reviewed *Sawyer*, 2007)
4. 2008: Rewrite of Parts F to end of ITA: ITA 2007
  - *Saw & Sawyer* (2010) – further improvements in readability (using Flesch & FKGL).

# *Prior Research on Readability and Tax Legislation (4)*

- Readability measures: (egs) *Fog Index; Flesch Reading Ease; Flesch Kincaid Grade Level; Coleman-Liau Readability Score; Bormuth Readability Score*
- Limits on mathematical readability score use - do not capture: frequency of changes in laws; background knowledge & interest of reader; use of diagrams & flowcharts; conceptual difficulty; semantics; reader characteristics; & presentation of material, such as font size, layout of text, graphics & tables
- *Cloze Procedure* (filling in every missing 5<sup>th</sup> word in text) - better guide to readability & understandability. Used in assessing complex text elsewhere
- Multiple methods aid in triangulation of results.



# *Research Method: New Zealand as a Case Study Experiment*



- NZ offers an interesting case study for analysis:
  - First of 3 country ‘experiments’ completed;
  - Growing literature emerging analysing the project; &
  - Important implications for extending project
- Case study research appropriate in social science research (*Yin, 2003*). Exploratory case set in context in relation to a significant event – tax law rewrite project
- Full analysis unable to be completed as yet as full benefits yet to be observed (*Sawyer, 2007*)
- Cloze Procedure applied to equivalent 4 ‘common’ sections from 4 versions of ITA using student subjects.

# *Research Method: New Zealand as a Case Study Experiment (2)*

■ **Table 1: Sections from the ITA used in the Cloze Procedure instrument**

<b>Version of ITA / Section</b>	<b>ITA 2007</b>	<b>ITA 2004</b>	<b>ITA 1994</b>	<b>ITA 1976</b>
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

# *Overview of Prior Research Findings and Results of this Study*



- Prior NZ studies using Flesch for readability include: *Tan & Tower (1992); Richardson & Sawyer (1998); Pau et al. (2007); & Saw & Sawyer (2010)*
- Flesch scores have continued to increase with iterative steps in rewrite project, with ITA performing better than IRD's TIBs and on par with IRD's binding rulings
- While a university undergraduate should be capable of reading & understanding ITA, *NZ Census (2006)* indicates only 14 percent hold university qualification
- Who actually reads (or needs to read) the ITA: tax practitioners & lawyers; revenue officials; policymakers; the judiciary; tax students; taxpayers?
- Summary of Flesch data from prior studies follows.

# Overview of Prior Research Findings and Results of this Study (2)



■ **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
<b>Total</b>	<b>192</b>	<b>100</b>	<b>82</b>	<b>100</b>	<b>25</b>	<b>100</b>	<b>40</b>	<b>100</b>	<b>95</b>	<b>100</b>		

# Overview of Prior Research Findings and Results of this Study (3)

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
<b>Total</b>	<b>192</b>	<b>100</b>	<b>16</b>	<b>100</b>	<b>18</b>	<b>100</b>		

# *Overview of Prior Research Findings and Results of this Study (4)*

- *For IRD: Castle (2006) and Harrison (2006).* Tested on tax professionals & revenue officials: ITA 2004 (68.1%) and ITA 1976 (62.5%). Need for triangulation
- *Australia: Woellner et al. (2007):* used students (35% ITAA 1997 & 24% ITAA 1936); & tax practitioners (over 70% for both versions)
- *NZ: Introductory & advanced level undergraduate tax students with four versions: ITA 1976; ITA 1994; ITA 2004 & ITA 2007.* 221 useable responses (155:66)
- *Demographics: 30% English second language; most in 20-29 years age group; 55% female; 80% no prior tax work experience. Exercise found to be very difficult.*
- *Overall ITA 2004 scored best – tables follow:*

# Overview of Prior Research Findings and Results of this Study (5)

■ **Table 5: Basic Statistical Data for Cloze Procedure**

Item	Class: Introductory	Class: Advanced	Overall
<b>Means</b>	%	%	%
ITA 1976	30.10	38.42	32.25
ITA 1994	29.59	35.95	31.75
ITA 2004	33.56	<b>48.78</b>	40.59
ITA 2007	30.17	35.84	32.09
Average	<b>30.86</b>	<b>39.75</b>	<b>34.17</b>
<b>Standard Deviations</b>			
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
<b>Number of responses &gt; 44%</b>			
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	<b>21.55</b>	<b>32.92</b>	<b>25.69</b>

# Overview of Prior Research Findings and Results of this Study (6)

## Table 6: Frequency of Correct Responses

Range (number) / Version of Act	0-20%	20-40%	40-60%	60-80%	80-100%
<b>Introductory Class (155)</b>					
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
<b>Advanced Class (66)</b>					
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



# *Conclusions, Policy Implications, Limitations and Future Research*



- Rewrite project illustrates NZ Government's efforts to simplify legislation & enhance compliance
- Empirical results suggest moderate success – important when considering extending project (TAA / GSTA)
- Limitations: readability measures; use of student subjects for Cloze; only addressing a small component of complexity; incomplete cost/benefit analysis
- Cloze suggests moderating enthusiasm from readability
- Extend to tax practitioners for comparison
- Survey major users of tax legislation for views
- Case study approach enabled deeper analysis.