

# Decoding Retirement: A Detailed Look at Retirement Distributions Reported on Tax Returns

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January 21, 2020

## Abstract

This paper uses data that combine retirement distributions reported by taxpayers on tax returns with information reported by the payers of those distributions on information returns. With the combined data we can allocate distributions reported on Form 1040 by the detailed distribution codes reported on Form 1099-R. This allows us to, for example: distinguish nontaxable rollovers from nontaxable Roth distributions or nontaxable basis; and distinguish taxable early distributions from taxable normal distributions, taxable Roth conversions, or taxable distributions related to death or disability.

This paper addresses the question of how *leakage* should be defined when using tax data. Our analysis indicates that penalized distributions, which represent only about half of taxable distributions received by individuals younger than 55, are a reasonable approximation for leakage. For taxpayers younger than 55, unpenalized taxable distributions include payments that are not typically considered to be leakage. These include, for example, DB plan benefits paid to retired military, public safety officers, and other government employees; and distributions made after an employee or IRA owner dies or becomes disabled.

The paper also examines retirement distributions more generally, looking across all age groups. We find that receipt of retirement distributions is widespread and the amounts distributed are substantial. Among taxpayers of all ages in 2010, 28 percent received gross distributions—either directly or through a spouse—and 26 percent received non-rollover distributions. Incidence increases dramatically with age, with nearly 60 percent of taxpayers age 59 to 69 and nearly 85 percent of taxpayers age 70 or older receiving non-rollover distributions. Among taxpayers 59 or older with distributions, non-rollover distributions average \$20,000 per person. Overall, taxpayers age 59 or older received 80 percent of the dollars distributed through non-rollovers.

\* This research was conducted as part of the Statistics of Income Joint Research Program. Views presented are those of the authors and do not necessarily represent the views of the Internal Revenue Service or the views of the Investment Company Institute or its members.

## 1. Introduction

This paper uses data that combine retirement distributions reported by taxpayers on tax returns with information reported by the payers of those distributions on information returns. Retirement distributions include both IRA distributions (reported on line 15 of Form 1040) and distributions from pensions and annuities (reported on line 16 of Form 1040), with pension distributions encompassing payments from both defined benefit (DB) pension plans and defined contribution (DC) pension plans. With the combined data we can allocate distributions reported on Form 1040 by the detailed distribution codes reported on Form 1099-R. This allows us to, for example: distinguish nontaxable rollovers from nontaxable Roth distributions or nontaxable basis; and distinguish taxable early distributions from taxable normal distributions, taxable Roth conversions, or taxable distributions related to death or disability.

The goal of this research is to better understand the income generated by employer plans, IRAs, and tax-deferred insurance products. To this end, we examine the composition of retirement distributions by the age of the taxpayers who receive them. We look at both rollover-type distributions (which simply transfer accumulations from one retirement vehicle to another) and non-rollover distributions;<sup>1</sup> both IRA distributions and distributions from pensions and annuities; and nontaxable, taxable, and penalized distributions. In addition, we break down the broad categories of distributions using the detailed codes reported on Form 1099-R.

This paper is related to the literature on *leakage*—that is, early withdrawals from retirement accounts used for non-retirement purposes. Although not always referred to as *leakage*, concern that pre-retirement distributions from employer-sponsored retirement plans and IRAs were not being preserved for retirement date back to the 1980s.<sup>2</sup> The topic has been analyzed using both household survey data<sup>3</sup> and administrative tax data.<sup>4</sup>

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<sup>1</sup> In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of insurance contracts.

<sup>2</sup> See Poterba, Venti, and Wise (1998) for a review of the early literature.

<sup>3</sup> See, for example, Chang (1996); Poterba, Venti, and Wise (1998); Burman, Coe, and Gale (1999); Engelhardt (2002); and Hurd and Panis (2006).

<sup>4</sup> See, for example, Yakoboski 1994; Sabelhaus and Weiner 1999; and Amromin and Smith 2003.

This paper addresses the question of how *leakage* should be defined when using tax data. Amromin and Smith (2003) analyzes penalized distributions.<sup>5</sup> In contrast, Argento, Bryant, and Sabelhaus (2013) defines *leakage* as any taxable distribution received by taxpayers younger than 55.<sup>6</sup> The estimated magnitude of *leakage* from the later paper have been widely cited.<sup>7</sup> In addition, a more recent study—Goodman, et al. (2019)—effectively adopts the same definition for *leakage*, focusing on both penalized and non-penalized distributions made to taxpayers younger than 55.<sup>8</sup>

Our analysis indicates that penalized distributions, which represent only about half of taxable distributions received by individuals younger than 55, are a reasonable approximation for *leakage*. For taxpayers younger than 55, unpenalized taxable distributions include payments that are not typically considered to be *leakage*. These include DB plan benefits paid to retired military, public safety officers, and other government employees; distributions to beneficiaries after the death of an employee or IRA owner; and distributions made after an employee or IRA owner becomes disabled. They also include ESOP dividend payments, distributions made pursuant to a divorce settlement, and distributions from annuities purchased by an employer when a DB plan is terminated.

This paper also adds to the literature that uses administrative tax data to measure retirement distributions more generally. For example, the earliest studies we know of that utilized data from information returns were Yakaboski (1993) and Yakaboski (1994), which analyzed tabulations created by the IRS for the Employee Benefit Research Institute (EBRI). Specifically, the IRS used Form 1099-R data to produce aggregate estimates of lump-sum

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<sup>5</sup> Amromin and Smith (2003) does not actually use the term *leakage* to describe early penalized distributions.

<sup>6</sup> Argento, Bryant, and Sabelhaus (2013) uses the tax return as the unit of analysis, so effectively defines leakage as taxable distributions reported on non-joint returns where the primary taxpayer is younger than age 55 and joint returns where both the primary and secondary taxpayer are younger than age 55.

<sup>7</sup> See, for example, Beshears, et al. 2015; Goda, Jones, and Ramnath 2017; and Herd et al. 2018.

<sup>8</sup> Goodman, et al. (2019) attempts to identify whether distributions were from DB plans or DC plans, but the study does not define leakage as only penalized distributions. Although it is unclear exactly which codes are included in the study's definition of leakage, it appears that, at a minimum, leakage includes distributions coded on Form 1099-R as: *normal*; as *early, exception applies*, and as *early, no known exception*. As explained in Section 4 of this paper, nearly all distributions typically considered to be leakage would be coded as *early, no known exception*. See the Appendix for information on the detailed codes reported on Form 1099-R.

distributions from pensions and annuities and used Form 5498 data to produce aggregate estimates of rollover contributions to IRAs. Sabelhaus and Weiner (1999), which also focused on lump-sum distributions from pensions and annuities, used information reported on both tax returns (Form 1040) and information returns (Form 1099-R and Form 5498). Bershadker and Smith (2005) used cross-sectional data from tax returns (Form 1040) to analyze taxable IRA withdrawals, but also presented tabulations of distributions from pensions and annuities. Our study is itself part of a larger research project which was originally focused on measuring changes in spendable income around the time individuals claim Social Security benefits (Brady, et al. 2017).

We present comprehensive estimates of the incidence and amounts of retirement distributions, including both distributions from pensions and annuities and IRA distributions and including both lump-sum distributions and periodic distributions. Like Yakaboski (1993, 1994), we report distributions by detailed category using the codes reported on Form 1099-R.<sup>9</sup> Like Sabelhaus and Weiner (1999), we use the combination of information reported by taxpayers on tax returns (Form 1040) and reported by third parties on information returns (Form 1099-R and Form 5498). And, like Bershadker and Smith (2005), we present tabulations of distributions both from IRAs and from pensions and annuities.

We find that receipt of retirement distributions is widespread across taxpayers and that the amounts distributed are substantial. In 2010, 28 percent of all taxpayers received gross distributions—either directly or through a spouse—and 26 percent received non-rollover distributions. Gross retirement distributions totaled \$1.2 trillion in 2010, with \$363 billion in rollover-type distributions and \$856 billion in non-rollover distributions.

The incidence and average amount of distributions increases with age and, as a result, older taxpayers receive the bulk of retirement distributions. In 2010, taxpayers age 59 or older received 73 percent of gross distributions, 80 percent of non-rollover distributions, and 56 percent of rollover-type distributions.

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<sup>9</sup> In addition to what is included in the paper, more detailed information is available in the Supplementary Tables.

The incidence of rollover-type distributions peaks for taxpayers age 59 to 69. Among taxpayers younger than age 50 in 2010, 1.9 percent had rollover-type distributions, with an average distribution of \$32,000. Among taxpayers age 59 to 69, 4.9 percent had rollover-type distributions, with an average distribution of \$111,000.

The incidence of non-rollover distributions increases dramatically with age, with most taxpayers age 59 or older receiving non-rollover distributions either directly or through a spouse. Among taxpayers age 59 to 69 in 2010, 59 percent reported non-rollover distributions on their tax return—44 percent who received distributions directly plus another 14 percent who did not receive distributions but had a spouse who did. Among taxpayers age 70 or older, 84 percent received distributions—75 percent directly plus another 9 percent only through a spouse.

Average non-rollover distribution amounts increase with age. Among taxpayers who reported non-rollover distributions on their tax return in 2010, the average amount increased from \$8,000 per person for taxpayers younger than age 50 to \$20,000 per person for taxpayers age 59 or older.<sup>10</sup>

Although pensions and annuities are the source of most non-rollover distributions regardless of age, most taxpayers age 70 or older who receive non-rollover distributions (directly or through a spouse) get at least a portion of their distributions from IRAs. Among taxpayers age 70 or older in 2010 with non-rollover distributions, 87 percent had pension and annuity distributions and 57 percent had IRA distribution, with 44 percent having both.

Most non-rollover distributions are fully taxable, but the share that are partially taxable—a sizeable portion of which are likely payments from government employee pensions—increases with age.<sup>11</sup> Among taxpayer who received non-rollover distributions directly in 2010, the share

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<sup>10</sup> For a non-joint return, per person distributions are simply the amount the primary taxpayer receives directly. For joint returns, per person distributions are calculated as the sum of distributions received by the primary and secondary taxpayer (i.e., the amounts reported on the joint tax return). divided by 2.

<sup>11</sup> As discussed in Section 7, most partially taxable distributions are from pensions and annuities and the most common type of nontaxable distribution is basis in non-Roth distributions. Distributions that represent the return of non-Roth after-tax employee contributions are one example of basis. Federal government employees and many state and local government employees—particularly those not covered by Social Security—are required to make after-tax contributions to their DB pension plans. As such, benefit payments from these plans would typically be only partially taxable.

with partially taxable distributions increased from 12 percent for taxpayers younger than age 50 to 34 percent for taxpayers age 59 or older, and the share of non-rollover distribution amounts received by those with partially taxable distributions increased from 22 percent to 50 percent, respectively.

The rest of the paper proceeds as follows. Section 2 describes the data used in the study. Section 3 explains the age categories used for the analysis, which are based on the tax rules that penalize both younger taxpayers who receive certain types of retirement distributions and older taxpayers who do not receive a required minimum amount of distributions. Sections 4 addresses the topic of *leakage* by examining taxable and penalized distributions received by taxpayers younger than 59. The remainder of the paper looks at retirement distributions more broadly across all age groups. Sections 5 through 8 measure the direct receipt of retirement distributions by individual taxpayers. Section 9 looks at the share of taxpayers who benefit from retirement distributions, whether they receive the distributions directly or through a spouse. Section 10 summarizes our results.

## 2. Description of the Data

The data we use combine two components: (1) tax return data and (2) information return data.

The tax return data are the 2010 Individual and Sole Proprietor (INSOLE) file. This file is used by the IRS Statistics of Income (SOI) Division to produce its annual *Individual Income Tax Returns Complete Report* publication. It is also used by the Joint Committee on Taxation (JCT) and the Department of Treasury Office of Tax Analysis (OTA) as the basis for their microsimulation models.

The 2010 INSOLE is a probability sample from the 143 million individual income tax returns (Forms 1040, 1040A, and 1040EZ, hereafter simply referred to as *Form 1040*) filed by US citizens and residents in 2011.<sup>12</sup> The sample consists of 308,946 tax returns and includes information reported on Form 1040, as well as information from associated Schedules (such as

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<sup>12</sup> For a more complete description of the sample, see Section 2 of Internal Revenue Service, Statistics of Income Division (2012).

Schedule SE, which is used to calculate self-employment tax) and Forms (such as Form 6251, which is used to calculate the alternative minimum tax).

In addition to the 2010 INSOLE, we incorporate data from various information returns, which allow us to allocate some income reported on joint tax returns filed by married couples to individual taxpayers, and which may provide information not reported on Form 1040. The information returns used in this study include Form 1099-R (“Distributions From Pensions, Annuities, Retirement or Profit-Sharing Plans, IRAs, Insurance Contracts, etc.”) and Form 5498 (“IRA Contribution Information”).<sup>13</sup>

The focus of this paper is on retirement distributions. We define retirement distributions as the combination of:

- IRA distributions, reported on lines 15a (gross) and line 15b (taxable) of Form 1040; and
- Pensions and annuities, reported on line 16a (gross) and line 16b (taxable) of Form 1040

Note that distributions reported on line 16 are actually broader than just distributions from pensions and annuities, as indicated by the title of Form 1099-R provided above and as discussed more below. In addition, some distributions reported on Form 1099-R are reported by taxpayers on lines other than line 15 and line 16.<sup>14</sup>

The unit of analysis in the paper is the individual taxpayer. This includes primary taxpayers on non-joint returns and primary and secondary taxpayers on joint returns. For married taxpayers filing a joint return, we use Form 1099-R to allocate retirement distributions to each spouse and report the incidence at both the individual and return level.

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<sup>13</sup> For a detailed explanation of how we reconcile information reported by taxpayers on Form 1040 and associated forms and schedules with information reported by recordkeepers on Form 1099-R and Form 5498, see Brady and Bass (2019).

<sup>14</sup> For example, the return of excess contributions from a qualified employer plan is reported as wage and salary income on line 7 of Form 1040, as are certain disability payments from qualified employer plans.

### 3. Age Categories Based on Tax Rules

In this study, we analyze distributions based on taxpayer age. The age categories were chosen based on the various rules for penalized distributions, exceptions to those penalties, and required distributions. Using these criteria, taxpayers were placed in one of five age groups:

- Younger than 50,
- 50 to 54,
- 55 to 58,
- 59 to 69, or
- 70 or older.

The remainder of this section explains the rules governing the taxation of retirement distributions and our rationale for choosing these age groupings.

#### 3.1 Distributions Taken Before Age 59½ Are Generally Subject to Penalty

Distributions taken by individuals younger than age 59½ are typically considered early distributions and are subject to a 10 percent penalty<sup>15</sup> on the taxable portion of the distribution unless they meet the criteria of one of the exceptions specified in the Internal Revenue Code (IRC). Distributions potentially subject to penalty include any lump sum distribution or withdrawal from a defined benefit (DB) plan, a defined contribution (DC) plan, an IRA,<sup>16</sup> a nonqualified annuity, or a modified endowment contract.<sup>17</sup> Exceptions to penalty are enumerated below.<sup>18</sup>

##### 3.1.1 Rollover-Type Distributions

Distributions that simply move retirement assets or accrued retirement benefits to an IRA or to another employer plan are not subject to penalty. Similarly, distributions that simply trade one annuity contract for another are not penalized. These distributions include rollovers,<sup>19</sup> Roth

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<sup>15</sup> Early distributions from a SIMPLE retirement account made within two years of the date the individual first contributes are subject to a higher 25 percent penalty. We use Form 5329 to identify penalized distribution amounts.

<sup>16</sup> IRA refers to both individual retirement accounts and individual retirement annuities.

<sup>17</sup> To be considered life insurance for tax purposes, the cash value of a policy is limited relative to the death benefit provided. If a life insurance contract exceeds this limit (determined by means of a seven-part test), it is considered to be a modified endowment contract and it is taxed much the same as a nonqualified annuity contract.

<sup>18</sup> See section 72(q), (t), (u), and (v) of the Internal Revenue Code (IRC) for a complete list of exceptions.

<sup>19</sup> Rollovers may be direct or indirect. Direct rollovers are direct transfers from one retirement vehicle to another and can be made: from an employer plan to an IRA; from an IRA to an employer plan; from an employer plan to another employer plan; or from one type of IRA to another. Taxpayers also have the option to make an indirect rollover by

conversions,<sup>20</sup> and exchanges of annuity contracts (referred to as section 1035 exchanges).<sup>21</sup> Rollovers are exempt from both tax and penalty, unless the rollover is either directly from a tax-deferred employer plan to a Roth IRA or to a Roth account inside an employer plan. Roth conversions and direct rollovers from employer plans to a Roth IRA or other Roth account are subject to tax, but not subject to penalty. Section 1035 exchanges are not subject to penalty and are typically tax-free.

### *3.1.2 Non-Rollover Distributions Exempt from Penalty Regardless of Age*

- **Death:** Distributions made to a beneficiary on or after the death of an employee, IRA owner, or annuity or modified endowment contract holder
- **Disability:** Distributions attributable to an individual becoming disabled
- **Withdrawals from 457(b) plans<sup>22</sup>**
- **Annuities purchased at plan termination:** Distributions from annuities purchased by an employer when a 401(a) or 403(a) plan is terminated, provided the annuity is held by the employer until the employee separates from service
- **Series of substantially equal periodic payments:** Payments that are part of a series of substantially equal periodic payments made for the life (or life expectancy) of an employee, IRA owner, or annuity or modified endowment contract holder, or the joint lives (or joint life expectancies) of the individual and a designated beneficiary<sup>23</sup>
- **Domestic relations settlements:** Distributions made to an alternate payee pursuant to a qualified domestic relations order

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taking a distribution from an employer plan or IRA and contributing the same amount to an IRA within 60 days of the original distribution.

<sup>20</sup> Roth conversions are distributions that transfer the balance in a traditional IRA to a Roth IRA. We also include in Roth conversions taxable Roth rollovers (direct transfers of tax-deferred amounts from an employer plan to a Roth IRA; and in-plan transfers from a tax-deferred account to a designated Roth account). Any tax-deferred amounts transferred are subject to tax, but not penalty.

<sup>21</sup> Section 1035 exchanges are exchanges of one insurance product (annuity contracts, life insurance policies, or modified endowment contracts) for a newer, or otherwise different, version of the same product.

<sup>22</sup> 457(b) plans are deferred compensation plans that state and local governments and non-profit organizations can offer their employees. Regardless of an individual's age, distributions from 457(b) plans are not subject to penalty unless they are attributable to assets previously rolled into the plan from a qualified employer plan or IRA.

<sup>23</sup> A series of substantially equal periodic payments may be taken from a qualified employer plan, an IRA, a nonqualified annuity contract, or a modified endowment contract. In the case of qualified employer plan (that is, a DB plan or a DC plan), the distributions must begin after separation from service. If any modifications are made to the payments before the taxpayer turns age 59½ or, if later, before five years, withdrawals may be subject to penalty.

- **Insurance products:** Payments from immediate annuities,<sup>24</sup> distributions from life insurance contracts, and distributions from qualified employer plans to pay for the current cost of life insurance
- **Distributions from structured settlements:** Payments from “qualified funding assets” — which are typically set up in relation to a personal injury
- **Employee stock ownership plan (ESOP) dividends**
- **Special exceptions for IRA distributions:** Distributions of up to \$10,000 for qualified first-time home purchases; distributions for qualified education expenses; distributions taken by unemployed individuals for health insurance premiums
- **Other exceptions:** Distributions from qualified employer plans and IRAs taken by reservists called to active duty, taken for unreimbursed medical expenses in excess of 7.5 percent of adjusted gross income, or taken because of an IRS levy under section 6331

### *3.1.3 Benefits Paid Out as an Annuity from a Defined Benefit Plan*

Benefits paid out over the life of an employee or the joint-life of an employee and beneficiary from defined benefit (DB) plans are not subject to penalty, even if received prior to age 59½.

Military and government pensions often pay out normal retirement benefits at a much younger age than the typical private-sector pension. In addition, pensions may allow early retirement benefits to be claimed prior to the normal retirement age.

- **Military service.** For active duty military personnel, full retirement benefits are available after 20 years of service. Since individuals can enlist as early as age 17 with parental consent, distributions from a military pension could begin as early as age 37.
- **State and local public safety officers.** Many state and local pension plans offer normal retirement benefits at early ages. According to a 2012 study (Snell, 2012) by the National Conference of State Legislatures, public safety officers (police and fire) could receive normal retirement age benefits before age 55 in 71 percent of plans, including 60 percent of plans where normal retirement age benefits could be claimed at age 50 or younger.<sup>25</sup>
- **Other state and local employees.** Although normal retirement ages for other state and local employees are typically higher than those for public safety officers, many plans still allow for normal or early retirement prior to age 59½. According to a survey of plans in 2010 (Schmidt, 2011), 8 percent of beneficiaries and annuitants were in plans which paid

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<sup>24</sup> Immediate annuities are annuities that are purchased with a single premium and which provide for a series of substantially equal payments (no less frequently than annual) during the annuity period, with payments beginning no later than one year after the date the annuity is purchased.

<sup>25</sup> These are the rules applicable for new hires in 2012. As of 2012, many states had recently increased their retirement age for new hires. Thus, a higher share of taxpayers in 2010 who had worked as state and local public safety officers may have been eligible for younger retirement ages.

normal retirement benefits, and another 31 percent were in plans which paid early retirement benefits, at age 50 or at any age after 25 years of service or less.<sup>26</sup> And nearly all beneficiaries and annuitants were in plans that paid normal retirement benefits (56 percent) or early retirement benefits (an additional 40 percent) by age 55 or at any age after 30 years of services or less.

- **Federal employees.** Federal employees covered under either the Civil Service Retirement System (CSRS) or the Federal Employees Retirement System (FERS) can receive benefits before age 59½.<sup>27</sup> Under CSRS, air traffic controllers, law enforcement personnel, and firefighters can retire at age 50 with 20 or more years of service, and air traffic controllers can retire at any age with 25 years of service. For “certain involuntary separation cases and in cases of voluntary separations during a major reorganization or reduction in force,” benefits are available under both CSRS and FERS at age 50 with 20 years of service or at any age with 25 years of service. Workers with 30 years of service can retire with full benefits at age 55 if covered by CSRS and at age 56 if covered by FERS.<sup>28</sup> In addition, workers covered by FERS with at least 10 years of service could receive a reduced benefit at age 56.

#### *3.1.4 Withdrawals after Separation from Service after Turning Age 55 (or Age 50)*

Withdrawals of any type (including lump sum distributions) taken from a qualified employer plan (DB plan or DC plan) after separation from service when the separation occurs in or after the year in which the taxpayer reaches age 55 (or age 50 for qualified public safety employees covered by a governmental plan) are not subject to penalty.

### **3.2 Distributions Generally Required After Age 70½ and After Death**

Individuals must begin distributions from traditional IRAs and (if separated from service) from employer-sponsored DC plans when they turn age 70½. Employer plan beneficiaries and non-spouses who inherit traditional IRAs also must take required distributions.<sup>29</sup> Generally, the required amount is a percentage of the account balance based on the owner’s age (or the ages of the owner and spouse).

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<sup>26</sup> These were the rules applicable for new hires in 2010. As of 2010, many states had recently increased their retirement age for new hires. Thus, a higher share of taxpayers in 2010 who had worked for state and local governments may be eligible for younger retirement ages.

<sup>27</sup> For more information about CSRS eligibility, see [www.opm.gov/retirement-services/csrs-information/eligibility](http://www.opm.gov/retirement-services/csrs-information/eligibility). For more information about FERS eligibility, see [www.opm.gov/retirement-services/fers-information/eligibility](http://www.opm.gov/retirement-services/fers-information/eligibility).

<sup>28</sup> The minimum retirement age under FERS was age 55 for workers born before 1948 and gradually increased to age 57 for workers born after 1969. For workers born from 1953 to 1964, the minimum retirement age was 56. Under FERS, workers with at least 10 years of service could receive a reduced benefit at the minimum retirement age.

<sup>29</sup> Spouses have the option to treat inherited IRAs as their own.

### 3.3 Explanation of Age Categories Chosen for Analysis

Broadly, distributions were grouped into three age categories to match, to the extent possible, the age ranges where distributions were (1) penalized unless qualifying for an exception; (2) not penalized, but not required; and (3) required. The penalized group was then subdivided into three age categories to match the ages at which various exceptions to early withdrawal penalties were available to taxpayers. The result was five age categories, which are used throughout the study:

- **Younger than age 50.** Other than the exceptions that apply at any age, distributions received by taxpayers younger than age 50 are generally subject to penalty, although nonpenalized regular benefit payments may be available from military DB pension plans and from certain state and local DB pension plans (primarily for public safety officers).
- **Age 50 to 54.** In addition to the exceptions available to those younger than age 50, nonpenalized regular benefit payments from DB plans would be available through more state and local plans (for both public safety officers and other employees). In addition, public safety officers may take nonpenalized distributions from qualified employer plans (either DB plans or DC plans) if they separate from service with the plan's sponsor at age 50 or later.
- **Age 55 to 58.** In addition to the exceptions available to those younger than 55, all employees, both government workers and private-sector workers, may take nonpenalized distributions from qualified employer plans if they separate from service with the plan's sponsor at age 55 or later.
- **Age 59 to 69.** Beginning at age 59½, distributions from qualified employer plans and IRAs are generally not subject to penalty.<sup>30</sup> However, taxpayers are generally not required to receive distributions from these plans.
- **Age 70 or older.** Beginning around age 70½, distributions are generally required from DC plans and traditional IRAs.<sup>31</sup>

## 4. Are All Taxable Distributions Received by Younger Taxpayers *Leakage*?

As more and more workers depend on DC plans and IRAs to accumulate retirement resources, there has been growing concern that *leakage* from retirement accounts—that is, early withdrawals used for non-retirement purposes—will reduce retirement preparedness.

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<sup>30</sup> As explained in note 23, individuals older than 59½ could be subject to penalty if they modified a series of substantially equal periodic payments within five years of the payments starting.

<sup>31</sup> Distributions are not required from the current employer's DC plan if the employee has not separated by age 70½; they are only required after an employee separates from service.

A widely cited source of the magnitude of *leakage* from self-directed retirement accounts is Argento, Bryant, and Sabelhaus (2013), which defines it as taxable retirement distributions received by taxpayers younger than 55, "... for whom regular DB payments are likely to be only a small fraction of total distributions."<sup>32</sup> The authors argue that categorizing only penalized distributions as *leakage* would produce too low an estimate because many distributions exempt from penalty—such as IRA withdrawals to pay for a first-time home purchase or education expenses—could be considered *leakage*.<sup>33</sup>

In this section we use the detailed codes to examine taxable distributions made to taxpayers younger than 59. We find that penalized distributions received by workers younger than 55—which represent about half of their taxable distributions—are, in fact, a reasonable approximation for what many consider to be *leakage*. We caution the reader, however, that we cannot determine if penalized distributions from pensions and annuities are from DC plans, DB plans, annuities, or modified endowment contracts. Further, we cannot determine if penalized IRA distributions represent balances attributable to IRA contributions, rollovers from DC plans, or rollovers of lump sum distributions from DB plans.

#### 4.1 Not All Younger Taxpayers Are Penalized on Taxable Distributions

Among taxpayers younger than age 59 in 2010, the share with taxable distributions increases sharply with age, but the share with penalized distributions does not (Figure 4.1). Even among taxpayers younger than age 50, only about 70 percent of those who receive taxable distributions pay a penalty on those distributions (3.8 percent out of 5.5 percent). That percentage falls to about 40 percent for taxpayers age 50 to 54 (4.8 percent out of 11 percent) and to about 20 percent for taxpayers age 55 to 58 (3.9 percent out of 18 percent).

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<sup>32</sup> Argento, Bryant, and Sabelhaus (2013) p. 15. Argento, Bryant, and Sabelhaus (2013) uses the tax return as the unit of analysis, whereas this study uses taxpayers as the unit of analysis. For married couples filing joint returns we use Form 1099-R to identify the amount of retirement distributions each spouse receives directly.

<sup>33</sup> "Taxpayers can get an exemption from the penalty if they take withdrawals for hardship reasons, home purchase, post-secondary education, and even in cases where the taxpayer simply agrees to take 'substantially equal' withdrawals for a fixed period of time of at least 5 years." Argento, Bryant, and Sabelhaus (2013) p. 3.

Penalized distributions tend to be smaller, on average, than other taxable distributions (Figure 4.2). For taxpayers younger than age 50 in 2010, penalized distributions averaged just under \$8,100 (\$9,300 for taxable distributions), with about half of penalized distributions \$3,100 or less. For taxpayers age 50 to 54 with penalized distributions, the average was just under \$14,000 (\$16,000 for taxable distributions) and the approximate median was about \$5,700.<sup>34</sup>

As a result, the share of dollars penalized is lower than the share of taxpayers penalized. (Figure 4.3). The share of taxable distributions penalized was 60 percent (\$35 billion out of \$58 billion) for taxpayers younger than age 50, 37 percent (\$13 billion out of \$35 billion) for taxpayers age 50 to 54, and 15 percent (\$8 billion out of \$51 billion) for taxpayer age 55 to 58. Focusing just on taxpayers younger than age 55, only 51 percent of taxable distributions were penalized.

#### 4.2 Relationship between Non-Retirement Income and Penalty Varies by Age

To examine differences among younger taxpayers by income, we rank individuals by their non-retirement income. Non-retirement income is simply adjusted gross income (AGI) less taxable retirement distributions.<sup>35</sup> We use a per capita measure of income, which means the income reported by married couples on joint returns is split equally between spouses. Note that, although per capita non-retirement income is used to rank taxpayers, the incidence and amount of retirement distributions continue to be measured on an individual basis. Rankings are done separately for each age group.<sup>36</sup>

For taxpayers younger than age 50, the incidence of both taxable and penalized retirement distributions generally increases with non-retirement income (Figure 4.4, left panels). The share

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<sup>34</sup> To avoid the possibility of disclosure we report an approximate median, which we calculate as the average of the middle 10 percent of taxpayers in the age group with the type of distribution.

<sup>35</sup> The statistics reported for the full age group include taxpayers with negative non-retirement income. The analysis by income excludes these taxpayers.

<sup>36</sup> We group those with no or negative non-retirement income together and then divide the remaining taxpayers into five quintiles based on their non-retirement income—each quintile representing 20 percent of taxpayers with positive non-retirement income. The highest amounts of per capita non-retirement income for the first through fourth quintiles are approximately: \$10,650, \$20,050, \$31,950, and \$49,450, respectively, for taxpayers younger than age 50; \$16,800, \$29,350, \$43,350, and \$64,600, respectively, for taxpayers age 50 to 54; and \$15,200, \$27,650, \$40,800, \$62,650, respectively, for taxpayers age 55 to 58.

of taxpayers receiving a taxable distribution increases from 2.5 percent for the lowest quintile to 7.5 percent for the highest. The share with a penalized distribution increases from 1.7 percent for the lowest quintile to 5.0 percent for the fourth quintile, before dropping to 4.5 percent for the highest quintile. Conditional on having a taxable distribution, the probability that at least a portion of the taxable distribution is penalized is highest for the second and middle quintiles of non-retirement income.

Taxpayers age 50 to 58 look considerably different than younger taxpayers, presumably because they are more likely to be at least partially retired. As was previously noted, the share with taxable retirement distributions increases substantially when compared with younger taxpayers, but the share subject to penalty does not. The incidence pattern by non-retirement income also differs by age, as those in the lowest quintile of non-retirement income become increasingly more likely to receive non-penalized taxable distributions with age.

For taxpayers age 50 to 54, the share with taxable distributions is relatively flat across the non-retirement income distribution, while the share with penalized distributions is substantially higher for the middle quintile (Figure 4.4, middle panels). The incidence of taxable distributions is 12 percent in the middle quintile and 11 percent for all other quintiles. Incidence of penalized distributions increases from 3.9 percent for taxpayers in the lowest quintile of non-retirement income to 6.3 percent for the middle quintile, and then falls to 3.7 percent for the highest quintile. As with those younger than age 50, conditional on having a taxable distribution, the probability of having a penalized distribution is highest for the second and middle quintile of non-retirement income.

In contrast with the two younger age groups, the share of taxpayers age 55 to 58 with a taxable retirement distribution declines with non-retirement income, while the share with a penalized distribution is relatively flat (Figure 4.4, right panels). The incidence of taxable distributions falls from 21 percent for those in the lowest quintile to 15 percent for those in the highest quintile. The incidence of penalized distributions increases slightly from 3.7 percent for the lowest quintile to 4.3 percent for the fourth quintile before falling to 3.2 percent for the highest quintile. Conditional on having a taxable distribution, those in the lowest quintile of non-retirement income are the least likely to have a penalized distribution.

### 4.3 Unpenalized Taxable Distributions Do Not Appear to Be *Leakage*

To better understand why only about half of taxable retirement distributions received by taxpayers younger than 55 are penalized (including 60 percent of taxable distributions for those younger than age 50 and 37 percent for those age 50 to 54), this subsection examines the detailed codes for distributions received by younger taxpayers.<sup>37</sup>

For taxpayers younger than age 50, \$35 billion of taxable distributions, or 60 percent of all taxable contributions, are coded as *early, no known exception* (Figure 4.5, left panels). Most, but not all, of these distributions are subject to penalty. This is because a distribution may be penalty-free but the payer of the distribution, who issues the Form 1099-R, may not know that it meets the criteria for an exemption. In such cases, taxpayers may attest to meeting the criteria by using Form 5329.<sup>38</sup> In addition, there are certain distributions that are always coded as *early, no known exception*, and for which the taxpayer must use Form 5329 to claim an exemption from penalty. These exceptions include:

- Distributions taken from an IRA for qualified education expenses
- Distributions of up to \$10,000 taken from an IRA for qualified first-time home purchases
- Distributions taken from an IRA by unemployed individuals for health insurance premiums
- Qualified distributions from a qualified plan or IRA taken for unreimbursed medical expenses in excess of 7.5 percent of adjusted gross income

Note that two of the three exemptions from penalty cited in Argento, Bryant, and Sabelhaus (2013) as examples of non-penalized distributions received by younger taxpayers that should be considered *leakage*—IRA distributions used for a home purchase or for post-secondary education—would be coded as *early, no known exception*.<sup>39</sup>

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<sup>37</sup> For a more complete explanation of what is included in each detailed code, see the appendix.

<sup>38</sup> In 2010, taxpayers younger than age 50 used Form 5329 to claim exemption from penalty on \$2.5 billion of retirement distributions, and taxpayers age 50 to 54 used the form to claim \$1.9 billion in exemptions. See supplementary tables.

<sup>39</sup> As quoted in note 33, Argento, Bryant, and Sabelhaus (2013) gives four examples of penalty-free withdrawals that should be considered *leakage*. However, one example—withdrawals from employer plans for hardship reasons—is not actually exempt from penalty. While employers may allow hardship withdrawals from their qualified plan, the withdrawals are not exempt from penalty unless they meet one of the enumerated exemptions.

The remaining taxable distributions paid to individuals younger than age 50 are not typically considered to be *leakage* (Figure 4.5, left panels).

- \$6.4 billion in distributions are categorized as *normal*, which would include payments from life insurance products, structured settlements, and immediate annuities, as well as fee rebates from nonqualified annuities and ESOP dividends.
- \$4.3 billion in distributions are categorized as *early, exception applies*, which would include regular benefit payments from DB plans for retired military, public safety officers, and possibly other state and local government employees; distributions from 457(b) plans; and distributions related to a divorce. This category would also include the third example of non-penalized distributions that should be considered *leakage* cited by Argento, Bryant, and Sabelhaus (2013): distributions that are part of a series of substantially equal payments.<sup>40</sup>
- \$5.2 billion in distributions to beneficiaries made after the death of an employee, IRA owner, or annuity or modified endowment contract holder. Beneficiaries have little choice as to the timing of these distributions. For example, owners of inherited IRAs are required to take minimum distributions.
- \$0.7 billion in distributions made after an employee, IRA owner, or annuity or modified endowment contract holder becomes disabled.
- \$1.8 billion in Roth conversions taxable in 2010.<sup>41</sup>
- The remaining distributions totaled \$5.0 billion, the bulk of which was reported on tax returns with more taxable distributions reported on their Form 1040 than was reported on Form 1099-R (presumably because we were missing at least one Form 1099-R issued to the taxpayer). It is possible that some of these distributions should have been categorized as *early, no known exception*.

The composition of taxable retirement distributions changes for workers 50 or older (Figure 4.5, middle and right panels). The share of taxable distributions categorized as *early, no known exception* falls to 40 percent for taxpayers age 50 to 54, and to 17 percent for taxpayers age 55 to 58. In contrast, the share of taxable distributions categorized as *early, exception applies* rises from

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<sup>40</sup> As quoted in note 33, Argento, Bryant, and Sabelhaus (2013) argue that substantially equal payments should be considered *leakage* because the withdrawals need only be taken for five years. As explained in note 23, such payments are exempt from penalty only if they are made in equal installments over the remainder of the individual's life (or the joint-life expectancy of the individual and spouse) and cannot be modified until after the taxpayer turns age 59½ or, if later, five years after the payments started. Thus, most taxpayers younger than 55 would need to continue the payments for more than five years.

<sup>41</sup> As explained in Brady and Bass (2019) and as discussed in section 6 of this paper, taxpayers who made a Roth conversion or a Roth rollover in 2010 had the option to not claim the income in 2010 and instead spread the income equally over 2011 and 2012. Some taxpayers, however, chose to claim the income in 2010.

7 percent for taxpayers younger than age 50, to 20 percent for taxpayers age 50 to 54, and to 45 percent for taxpayers age 55 to 58. The share of taxable distributions categorized as *normal* also increases, but more modestly, from 11 percent for those younger than age 50 to 19 percent and 23 percent, respectively, for the two older age groups.

The results are consistent with the stated reasons for choosing our age categories. Specifically, the share of taxable distributions coded as *early, exception applies* increases for those age 50 to 54 and increases again for those at age 55 to 58. This increase is consistent with our expectations because, beginning at age 50, an increasing number of participants in DB plans—especially public safety officers and other state and local employees—can begin receiving normal or early retirement benefits. In addition, public safety officers can take penalty-free distributions from a qualified employer plan (either lump sum distributions from a DB plan or withdrawals from a DC plan) if they separate from service at age 50 or later, and all other workers can do so if they separate from service at age 55 or later. Both regular payments from DB plans and distributions taken after separation from service would be categorized as *early, exception applies*.

#### **4.4 Shift in Composition at Age 50 Occurs in Pensions and Annuities**

Also consistent with the reasoning used to set our age breaks, the decline in the share of distributions categorized as *early, no known exception* for taxpayers age 50 to 58 occurs almost exclusively in pensions and annuities, rather than in IRA distributions. The fact that the composition of IRA distributions changes little at age 50 was expected because, other than the exceptions available regardless of age, all IRA distributions are subject to penalty until age 59½. In contrast, the two types of unpenalized distributions we expect to increase beginning at age 50—regular payments from DB plans and distributions taken after separation from service—would be categorized as *early, exception applies* and would be reported on the pensions and annuities line of Form 1040.

Pension and annuity distributions represent about two-thirds of the taxable distributions received by taxpayers younger than 55 and four-fifths of the distributions received by taxpayers age 55 to 58 (Figure 4.6).

Within certain distributions categories, however, the source of distributions changes beginning at age 50 (Figure 4.6). Among taxpayers younger than age 50, pensions and annuities account for nearly all distributions categorized as *normal* or *disability*, about two-thirds of early distributions (both *early, no known exception* and *early, exception applies*), and about half of the distributions categorized as *death (inherited)*. For taxpayers age 50 to 58, *normal* and *disability* distributions continue to be predominately from pensions and annuities, and *death (inherited)* distributions remain about split. The composition of early distributions, however, shifts. The share of distributions categorized as *early, no known exception* from pensions and annuities falls to about half for taxpayers age 50 to 54 and to about one-third for taxpayers age 55 to 58. In contrast, the share of distributions categorized as *early, exception applies* from pensions and annuities increases to 87 percent for taxpayers age 50 to 54 and to 94 percent for taxpayers age 55 to 58.

If we instead look at the composition of taxable distributions from the two sources by detailed distribution code, we see that the composition of distributions from pensions and annuities shifts much more substantially starting at age 50 (Figure 4.7). Of the taxable distributions received by those younger than age 50, distributions categorized as *early, no known exception* represent 60 percent of both IRA distributions and distributions from pensions and annuities. While this share falls slightly with age for IRA distributions, it falls precipitously for pensions and annuities. The share of pensions and annuities categorized as *early, no known exception* falls from 60 percent for taxpayers younger than age 50, to 29 percent for taxpayers age 50 to 54, and to 7 percent for taxpayers age 55 to 59. In contrast, the share of pensions and annuities categorized as *early, exception applies* increases from 8 percent for taxpayers younger than age 50, to 27 percent and 53 percent, respectively, for the two older age groups.

#### 4.5 Discussion of Results

Nearly half of taxable distributions received by taxpayers younger than age 55 are distributions that are not typically considered leakage. These include: distributions to beneficiaries after the death of an employee or IRA owner; distributions made after an

employee or IRA owner becomes disabled; and regular benefit payments from DB plans for military, public safety officers, and possibly other state and local government employees.

The results also suggest that penalized distributions, rather than all taxable distributions, represent a better estimate of *leakage*. The amount of penalized distributions corresponds closely to the amount of taxable distributions categorized as *early, no known exception*. This category would include most distributions that are typically considered to be *leakage*—including certain unpenalized distributions, such as IRA distributions used to purchase a home or used to pay for post-secondary education.

We caution the reader, however, that *leakage* does not necessarily come entirely from DC plans, much less private-sector DC plans. It is unlikely that all pension and annuity distributions categorized as *early, no known exception* are from DC plans. Participants in private-sector DB plans often have the option to take a lump sum payout of benefits when they separate from employment, and these payments would be categorized as *early, no known exception* unless they were rolled over into an IRA or employer plan.<sup>42</sup> Similarly, it is unlikely that all IRA distributions categorized as *early, no known exception* are ultimately attributable to DC plan accumulations. While a portion of IRA balances originated in DC plans and were later rolled over, some are attributable to lump sum distributions from DB plans and some are attributable to contributions made directly into the IRA.

## 5. Gross Distributions by Major Category

The remainder of the paper looks at retirement distributions more broadly, examining distributions received by all age groups. More detailed information on distributions is available in the supplemental tables. Sections 5 through 8 measure retirement distributions taxpayers

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<sup>42</sup> Although participants in government-employee DB plans may also be able to take lump sum distributions before age 59½, we assume such distributions would be uncommon. The lump sum payout offered by a private-sector DB plan to a vested participant who separates from service is an estimate of the present value of future benefit payments. Participants in government DB plans are often offered a lump sum payout when they separate from service, but the lump sum amount typically represents the return of employee contributions, plus possibly a small credit for earnings on those contributions. As this would represent only a fraction of the value of future benefits, we assume few vested participants would choose to take the lump sum distribution from a government DB plan.

receive directly. Section 9 measures retirement distributions received either directly or through a spouse.

This section examines both the incidence and amount of gross distributions, as well as the split between rollover-type distributions and non-rollover distributions. In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts. All other distributions that would be reported on line 15 (IRA distributions) or line 16 (pensions and annuities) of Form 1040 are categorized as non-rollover distributions.

The share of taxpayers who receive gross retirement distributions directly increase sharply with age, from 7.2 percent of all taxpayers younger than age 50 to 75 percent for taxpayers age 70 or older (Figure 5.1, upper panel).

Regardless of age, most taxpayers with gross distributions receive non-rollover distributions (Figure 5.1, lower panel). Of those with gross distributions, just over one-in-four who are younger than age 50 roll over all (19 percent) or part (7 percent) of their distributions. The share who roll over only a portion of their distributions remains roughly the same for taxpayers age 50 to 69, but the share who roll over the entire distribution drops. Among those age 70 or older with a gross distribution, only 3 percent roll over a portion of their distribution and only a very small number roll over the entire amount.

Although a smaller percentage of taxpayers with gross distributions have rollovers, rollover-type distributions are typically much larger than non-rollover distributions (Figure 5.2). For example, among taxpayers age 59 to 69, the average non-rollover distribution is roughly \$27,000, whereas the average rollover-type distribution is about \$111,000. For the same age group, the approximate medians are \$17,000 and \$43,000, respectively.<sup>43</sup>

Rollover distributions are also typically larger than non-rollover distributions for those who have both (Figure 5.3). Among those with both, rollover-type distributions account for roughly two-thirds of gross distributions, on average, for taxpayers younger than age 50, and about three-quarters for taxpayers 50 or older. For example, among taxpayers age 59 to 69 who

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<sup>43</sup> For explanation of how we calculate the approximate median, see note 34.

have both, the average non-rollover distribution is roughly \$38,000 and the average rollover-type distribution is about \$112,000.

As a result, although a small share of taxpayers with distributions fully or partially roll the distribution into another retirement vehicle, rollover-type distributions represent a substantial share of gross distributions (Figure 5.4). Rollover-type distributions account for about 30 percent of all gross distributions and nearly half of gross distributions received by taxpayers younger than age 55.

In addition, the size of both rollovers and non-rollovers typically increases with age (Figure 5.2). For example, among taxpayers younger than age 50 with distributions, the average non-rollover distribution is about \$11,000 and the average rollover-type distribution is roughly \$32,000. Among taxpayers age 70 or older, those averages are \$23,000 and \$117,000, respectively.

The combination of higher incidence and higher average distributions results in older taxpayers receiving the bulk of retirement distributions (Figure 5.4). In 2010, taxpayers age 59 or older received 73 percent of gross distributions. Broken down by category, this age group received 80 percent of non-rollover distributions and 56 percent of rollover distributions.

## 6. Rollover-Type Distributions by Detailed Type

This section looks in more detail at rollover-type distributions—that is, distributions that simply transfer funds from one retirement vehicle to another. We divide these distributions into three categories:

- *Rollovers*, which include both direct rollovers reported on Form 1099-R and indirect rollovers that we can identify using Form 5498;<sup>44</sup>
- *Roth conversions*, which include conversions of tax-deferred (traditional, SEP, and SIMPLE) IRAs to Roth IRAs, as well as in-plan Roth rollovers and direct rollovers from tax-deferred qualified plans to Roth IRAs; and
- *Section 1035 exchanges* of annuity contracts.

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<sup>44</sup> The amount of distributions we identify as indirect rollovers is likely a conservative estimate; that is, we are unlikely to have identified all indirect rollovers. See Brady and Bass (2019) for an explanation, and a discussion, of our method for identifying indirect rollovers.

Among all age groups, rollovers are the most common of these transactions, with incidence peaking among taxpayers age 59 to 69 (Figure 6.1). The share of all taxpayers with rollovers increases from 1.6 percent among those younger than age 50, to 4.0 percent for the 59 to 69 age group, before falling back to 1.4 percent among taxpayers age 70 or older. Assuming the group of taxpayers with rollovers does not stay the same from year to year, these incidence rates imply a substantial share of taxpayers make a rollover at some point during their working careers.

For all but the 70 or older age group, Roth conversions are the next most common type of rollover-type distribution in 2010, with incidence peaking—as was the case with rollovers—among the 59 to 69 age group (Figure 6.1). Overall, 0.4 percent of all taxpayers, including 0.7 percent of taxpayers age 59 to 69, made a Roth conversion in 2010.

The number of Roth conversions was unusually high in 2010 due to changes in tax law, so these incidence rates should not be considered typical. First, there were permanent changes made to the rules.<sup>45</sup> These changes likely will increase the number of Roth conversions in all future years compared to years prior to 2010 but are unlikely to have as large of an effect on an ongoing basis as they did in 2010. Second, a special rule applied only to Roth conversions made in 2010. Typically, the taxable portion of Roth conversions and Roth rollovers would be included in income (that is, reported on Form line 15b or line 16b of Form 1040) in the year of the transaction. In 2010 only, taxpayers had the option to not claim the income in 2010 and instead spread the income equally over 2011 and 2012.

Unlike rollovers and Roth conversions, the share of taxpayers with a Section 1035 exchange peaks among taxpayers age 70 or older (Figure 6.1). Overall, 0.2 percent of taxpayers made a Section 1035 exchange, including 0.6 percent of taxpayers age 70 or older.

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<sup>45</sup> Two permanent changes were made. First, taxable Roth rollovers—that is, in-plan transfers from a tax-deferred DC plan account to a designated Roth account and direct transfers from a tax-deferred DC plan account to a Roth IRA—were allowed. Previously, in-plan Roth rollovers were not allowed and, although direct transfers from a designated Roth account to a Roth IRA were allowed prior to 2010, tax-deferred compensation first had to be transferred to a traditional IRA and then converted to a Roth IRA. Second, income limits on Roth conversions were removed. Prior to 2010, taxpayers could not make a Roth conversion if their AGI (not including the Roth conversion) was \$100,000 or more, or if they were married and filed a separate return from their spouse.

The average and approximate median<sup>46</sup> dollar amounts generally increase with age for all three types of distributions, but peak with different age groups (Figure 6.2). Rollovers are largest, on average, among taxpayers age 59 to 69. Both Roth conversions and Section 1035 exchanges are typically largest for those age 70 or older.

Overall in 2010, over 80 percent of the dollars transferred between retirement vehicles by taxpayers younger than 70 were transferred via rollover (Figure 6.3). Among those age 70 or older, that share drops to just under 60 percent, with the remainder split about equally between Roth conversions and Section 1035 exchanges.

## 7. Non-Rollover Distributions by Source and Tax Treatment

The share of all taxpayers who receive non-rollover distributions directly in 2010 ranged from 5.8 percent for those younger than age 50 to 75 percent for those age 70 or older (Figure 7.1). The incidence of non-rollover distributions increases more sharply with age than the incidence of gross distributions because the share with only rollover-type distributions declines with age. Among those with gross distributions, the share with non-rollover distributions increases from 81 percent for those younger than age 50 to very nearly all age 70 or older (shown earlier in Figure 5.1).

Whereas rollover-type distributions represent an intermediate step in the accumulation of retirement resources, non-rollover distributions represent the final step. In the case of pensions and IRAs, the process starts when workers set aside for retirement (or have set aside for them) a portion of their current compensation. The process ends when the resources workers have accumulated—be it entitlements to pension benefits or retirement account assets—are taken out of a retirement vehicle and distributed to them.

This section examines non-rollover distributions in more detail. Section 7.1 splits non-rollover distributions by source: the portion from IRA distributions (reported on line 15 of Form 1040) and the portion from pensions and annuities (reported on line 16 of Form 1040).<sup>47</sup>

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<sup>46</sup> For explanation of how we calculate the approximate median, see note 34.

<sup>47</sup> As noted in Section 2 and Section 3, distributions reported as “pensions and annuities” on line 16 of form 1040 encompass more than just distributions from qualified employer plans (i.e., DB plans and DC plans) and annuities.

Section 7.2 splits non-rollover distributions by whether or not they are included in income (i.e., reported on line 15b or line 16b) and subject to tax.

### **7.1 More than Half with Non-Rollovers Age 70 or Older Have IRA Distributions**

Regardless of age, non-rollover distributions from pensions and annuities are more common than non-rollover IRA distributions (Figure 7.1, upper panel). For example, 38 percent of taxpayers age 59 to 69 receive distributions from pensions and annuities (the sum of the lower dark blue bar and the middle light blue bar), compared with 13 percent who receive IRA distributions (the sum of upper medium blue bar and the middle light blue bar).

The incidence of non-rollover distributions from both sources increases with age (Figure 7.1, upper panel). The share with pensions and annuities increases from 4.2 percent of taxpayers younger than age 50 to 60 percent of taxpayers age 70 or older. For those same age groups, the incidence of IRA distributions increases from 1.9 percent to 42 percent.

Among those with a non-rollover distribution, taxpayers age 70 or older are much more likely to receive distributions both from pensions and annuities and from IRAs (Figure 7.1, lower panel). Among all taxpayers younger than 59 with non-rollover distributions, only 5.0 percent receive them from both sources; about two-thirds receive only pensions and annuities and the remainder receive only IRA distributions. The share who receive distributions from both increases to 14 percent for the 59 to 69 age group and then jumps to 36 percent for the 70 or older age group.

Although the incidence of both pension and annuity distributions and IRA distributions increases for those age 70 or older, IRA incidence increases more substantially, shifting the composition by source (Figure 7.1, lower panel). Of those with non-rollover distributions, the share with pensions and annuities (the sum of the lower dark blue bar and the middle light blue bar) falls slightly, from 85 percent of those age 59 to 69 to 80 percent of those age 70 or older. In contrast, the share with IRA distributions (the sum of upper medium blue bar and the middle

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Also reported on this line are, for example, certain distributions from life insurance contracts, distributions from modified endowment contracts (see note 17), and distributions from structured settlements.

light blue bar) increases substantially, from 29 percent of those age 59 to 69 to 56 percent of those age 70 or older.

Regardless of age, taxpayers with distributions from both sources receive larger total distributions, on average, than those who receive distributions from only one source (Figure 7.2). For example, among taxpayers age 59 to 69, the average for those with only pensions and annuities was \$25,000 and the average for those with only IRA distributions was \$23,000. The average for those with distributions from both sources was considerably higher at \$42,000, with \$22,000 from pensions and annuities and \$20,000 from IRAs. Differences in total distributions are likely related to higher earners being more likely to accumulate retirement resources through both pensions and IRAs, rather than being a simple arithmetic relationship.

The average and approximate median<sup>48</sup> amounts of non-rollover distributions peaks for taxpayers age 59 to 69 (Figure 7.3). Average distributions increase from about \$11,000 for those younger than age 50 to \$27,000 for those age 59 to 69, and then falls to \$23,000 for those age 70 or older. For those same age groups, approximate medians increase from about \$3,900 to \$17,000, and then fall to \$14,000. For taxpayers age 50 or older, non-rollover distributions from pensions and annuities are typically larger than IRA distributions.

For all age groups, the average amount of retirement distributions is higher than the average amount from either source (Figure 7.3). This is because some taxpayers receive distributions from both sources. This is also true at the median for taxpayers age 59 or older.

Overall, most of the dollars distributed through non-rollovers are from pensions and annuities regardless of age (Figure 7.4). The pensions and annuities share increases from 65 percent for the younger than age 50 age group to 77 percent for the 59 to 69 age group, and then falls a bit to 73 percent for taxpayers age 70 or older.

Nonetheless, a substantial share of the dollars distributed through non-rollovers are paid to individuals with distributions from both sources (Figure 7.4). For the 55 to 59 age group, taxpayers with both sources receive 22 percent of the dollars distributed, with nearly half of those dollars coming from IRAs. For the 70 and older age group, taxpayers with both sources

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<sup>48</sup> For explanation of how we calculate the approximate median, see note 34.

receive nearly half of the dollars distributed, with nearly one-third of those dollars coming from IRAs.

## 7.2 Non-Rollover Distributions by Tax Treatment

The portion of a worker's compensation set aside for retirement through a qualified employer plan (both DB or DC) or an IRA is typically tax deferred. That is, for purposes of the income tax, that portion of a worker's compensation is generally not included in income in the year it is earned. Instead, the income is deferred until the plan participant or IRA owner receives a distribution, at which point the entire distribution is included in income and subject to tax.

Not all non-rollover distributions are fully taxable, however.

- **Roth distributions.** Contributions to a Roth IRA or to a designated Roth account in an employer plan are included in income and subject to income tax. Qualified Roth distributions are not included in income, and thus free from tax.<sup>49</sup> Further, only a portion of nonqualified Roth distributions may be taxable.<sup>50</sup>
- **Basis in distributions from qualified employer plans.** Regardless of plan type, employer contributions to qualified plans made on behalf of an employee are excluded from the employee's taxable compensation. Employee contributions to 401(k) plans and certain other qualified plans are also excluded from a worker's income. As a general rule, however, employee contributions are included in income and subject to tax. Plans with taxable employee contributions include certain DC plans that allow employees to make (non-Roth) after-tax contributions. They also include certain DB plans that require workers to make contributions—a more common arrangement for government employees than for private-sector workers. For these plans, the portion of distributions that represent a return of after-tax employee contributions is not included in income and is not subject to tax.
- **Basis in distributions from traditional IRAs.** All workers may contribute to a traditional IRA, but the deductibility of those contributions may be limited based on income. The portion of traditional IRA distributions that represents nondeductible IRA contributions is not included in income or subject to tax. In addition, distributions that represent after-

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<sup>49</sup> To be considered qualified, Roth distributions must be taken five years after the Roth account was established. In addition, the Roth distribution must be: made after age 59½; made to a beneficiary after death; attributable to disability of the account owner; or used for a first-time home purchase.

<sup>50</sup> Nonqualified Roth distributions are attributed first to contributions and then to account earnings. Only nonqualified Roth distributions in excess of contributions are included in income and subject to tax.

tax employee contributions to an employer plan that were later rolled into a traditional IRA are not taxable.

- **Basis in distributions from nonqualified annuities and other insurance products.** Nonqualified annuities and modified endowment contracts are purchased with after-tax income. Distributions from these products, as well certain types of payments from life insurance policies, are generally taxable, but the portion that represents the return of the original investment is not included in income or subject to tax.
- **Special provisions allowing tax-free distributions.** There are various special provisions in the tax code that exempt certain distributions from tax. While we could not identify all such distributions with the data we had available, we were able to identify two: qualified charitable distributions and distributions used to fund health savings accounts (HSAs).<sup>51</sup>

#### *7.2.1 Basis in Non-Roth Distributions Is the Most Common Type of Nontaxable Distribution*

We split nontaxable non-rollover distributions into four categories. Those we could specifically identify were split into three categories: nontaxable Roth distributions; basis in non-Roth distributions; and qualified charitable distributions and distributions to fund HSAs. The remaining nontaxable distributions we were not able to specifically identify.

Note that unidentified nontaxable distributions should not be interpreted as distributions on which taxpayers should have paid taxes. As explained in Brady and Bass (2019), nontaxable distributions are calculated as the difference between gross distributions and taxable distributions reported on Form 1040. The difference between the gross and taxable amounts reported by the taxpayer on the tax return are presumably differences the taxpayer can justify. We use information returns and the various forms and schedules filed with the tax return to allocate these distributions by distribution type, including both nontaxable rollover-type distributions and nontaxable non-rollover distributions. For some tax returns, however, we cannot identify all nontaxable amounts.

Although we classify unidentified nontaxable distributions as non-rollover distributions, it is possible that a portion are in fact rollovers. Unidentified nontaxable distributions include

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<sup>51</sup> Qualified charitable distributions and distributions used to fund HSAs generally receive either a *normal* or *early, no know exception* code, but are not subject to tax. We can identify these distributions because taxpayers indicate on Form 1040 that reported gross distributions include qualified charitable distributions or were used to fund an HSA. See discussion in Brady and Bass (2019).

non-rollover distributions with special tax exemptions we were unable to identify. For example, distributions used to pay up to \$3,000 of health insurance premiums for retired public safety officers (e.g., law enforcement officers and firefighters) are excluded from taxable distributions, but the available data do not allow us to identify which taxpayers excluded these amounts or the amounts excluded.<sup>52</sup> They also include basis in distributions from federal government defined benefit pensions, as we are unable to calculate the portion of these distributions that represent the return of after-tax employee contributions.<sup>53</sup> Nontaxable distributions reported on Form 1040 could also be categorized as unidentified for taxpayers with at least one missing Form 1099-R. Unfortunately, unidentified nontaxable distributions may also include indirect rollovers that we were unable to identify.<sup>54</sup>

Most nontaxable non-rollover distributions are from pensions and annuities, with basis in non-Roth distributions the most common type (Figure 7.5). Among taxpayers of all ages, 5.3 percent receive nontaxable non-rollover distributions from pensions and annuities and 1.0 percent receive them from IRAs. Basis in non-Roth distributions was the most common type, received by 4.3 percent of taxpayers, nearly all from pensions and annuities. Unidentified nontaxable distributions were received by 2.0 percent, about three quarters of these from pensions and annuities. Only 0.4 percent of taxpayers received nontaxable Roth distributions, almost exclusively from Roth IRAs. Very few taxpayers received qualified charitable distributions or made distributions to fund HSAs, both of which can only be taken from IRAs.

Average unidentified nontaxable distributions tend to be larger than other nontaxable distributions, suggesting that at least a portion of these distributions—particularly in the case of

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<sup>52</sup> Taxpayers who take this deduction are instructed to report gross distributions on line 16a, report taxable distributions on line 16b, and write “PSO” on the tax return next to line 16b. For more information, see “Insurance Premiums for Retired Public Safety Officers” under “Lines 16a and 16b” in Internal Revenue Service (2011a).

<sup>53</sup> For distributions from federal defined benefit pensions the gross distribution and the total amount of after-tax employee contributions made by the participant over his or her entire career are captured in the data. Although this information would allow the taxpayer to properly calculate taxable distributions, we would need additional information, such as when a worker retired and whether he was hired before or after certain dates. Further, the data we used did not identify the source of payments, so we do not know if all Form 1099-R that report total employee contributions and have the “taxable amount not determined” box checked were issued by a federal government pension.

<sup>54</sup> See note 44.

IRAs—are indirect rollovers which we were unable to identify (Figure 7.6). Unidentified nontaxable distributions from IRAs average \$35,000 and unidentified pensions and annuities average \$9,100. By way of comparison, the average amount of basis in non-Roth distributions is \$2,000 for IRA distributions and \$5,600 for pensions and annuities.

The share of taxpayers with nontaxable non-rollover distributions from pensions and annuities increases sharply with age (Figure 7.7). The incidence of distributions from pensions and annuities with nontaxable basis increases from 0.4 percent for taxpayers younger than age 50 to 18 percent for taxpayers age 70 or older. Distributions with basis would include distributions from employer DC plans that allowed after-tax employee contributions and distributions from nonqualified annuities. They would also include distributions from DB plans with after-tax employee contributions, including many government employee pensions. The incidence of unidentified nontaxable distributions from pensions and annuities increases from 0.2 percent for taxpayers younger than age 50 to 6.1 percent for taxpayers age 70 or older. Unidentified nontaxable amounts could be attributable to special tax provisions we cannot identify, such as the exclusion for health insurance premiums for retired public safety officers. These amounts could also be attributable to the portion of federal government pension benefits that represent after-tax employee contributions.

For pensions and annuities, the average and approximate median amounts of basis in non-Roth distributions and of unidentified nontaxable distributions follow a similar pattern by age, which suggests that many of the pension and annuity distributions with unidentified nontaxable amounts may be federal government pension benefits (Figure 7.8). For example, median basis in pension and annuity distributions falls from approximately \$1,900 for taxpayers younger than age 50 to \$600 for taxpayers age 70 or older, and median unidentified nontaxable distributions fall from \$3,100 to \$1,400. In contrast, the amount of unidentified nontaxable distributions from IRAs increases with age, peaking for taxpayers age 59 to 69—a pattern perhaps more consistent with these distributions largely representing indirect rollovers.

### *7.2.2 Most Distributions Fully Taxable, but Share Partially Taxable Increases with Age*

Most taxpayers with non-rollover distributions receive only fully taxable distributions, but the share who receive both taxable and nontaxable distributions increases with age (Figure 7.9). Among taxpayers with non-rollover distributions, the share who receive fully taxable distributions falls from 81 percent for those younger than age 50 to 67 percent for those age 70 or older. For those same age groups, the share with both taxable and nontaxable distributions increases from 12 percent to 33 percent.

The increased incidence of partially taxable non-rollover distributions is largely from pensions and annuities. Of those with partially taxable distributions younger than age 50, 70 percent have partially taxable distributions from pensions and annuities. For taxpayers 50 or older, that share increases to 90 percent.

Taxpayers who receive both taxable and nontaxable non-rollover distributions typically have larger total non-rollover distributions (Figure 7.10). For example, for taxpayers age 70 or older with fully taxable distributions, average non-rollover distributions are \$17,000 and median non-rollover distributions are approximately \$11,000. For taxpayers age 70 or older with partially taxable distributions, average non-rollover distributions are \$35,000 and median non-rollover distributions are approximately \$24,000.

These differences in distribution amounts are consistent with partially taxable distributions being more likely to come from government employee pensions. Using data from the Current Population Survey, Brady and Bogdan (2016) find that government pension benefits were higher, on average, than those received by retired private-sector workers.<sup>55</sup> In fact, the differences in the amount of benefits between private-sector and government pensions reported in that study are similar in magnitude to the difference between fully taxable and partially taxable distributions reported here.

Although most dollars distributed through non-rollovers are taxable, a substantial share of the dollars are received by taxpayers with partially taxable distributions (Figure 7.11).

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<sup>55</sup> Some of the difference in the generosity is attributable to the fact that, at least historically, many government workers were not covered by Social Security. Brady and Bogdan (2016) finds that those with government pensions have much lower Social Security benefits, on average, offsetting a portion of the differences in pension benefits.

Taxpayers with partially taxable distributions received about one-fifth of the non-rollover distributions paid to those younger than age 50, with about half of the distributions they received nontaxable. For taxpayers age 59 to 69, those with partially taxable distributions get about half of non-rollover distributions, although only 18 percent of the distributions they receive are nontaxable.

## 8. Incidence and Amounts by Income

This section looks at the incidence and amount of retirement distributions by income. The income measure we use is adjusted gross income (AGI).<sup>56</sup> We use a per capita measure of AGI, which means that AGI reported by married couples on joint returns is split equally between spouses. Note that, although per capita income is used to rank taxpayers, the incidence and amount of retirement distributions continue to be measured on an individual basis. Rankings by income are done separately within each age group.<sup>57</sup> The figures below show the results for taxpayers with positive AGI.<sup>58</sup>

### 8.1 Gross Distributions

Within age groups, the share of taxpayers with gross distributions generally increases with income but, particularly for older taxpayers, incidence is relatively high across the income distribution (Figure 8.1). For example, among taxpayers age 59 to 69, incidence increases from 36 percent among those in the lowest quintile of positive income to 53 percent among those in the fourth quintile, before dropping to 51 percent among those in the highest quintile.

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<sup>56</sup> This differs from the analysis in section 4.2, which used per capita non-retirement income (AGI less taxable retirement distributions) to rank individuals.

<sup>57</sup> We group those with no or negative AGI together and then divide the remaining taxpayers into five quintiles based on their AGI—each quintile representing 20 percent of taxpayers with positive non-retirement income. The highest amounts of per capita AGI for the first through fourth quintiles are approximately: \$10,800, \$20,300, \$32,500, and \$50,250, respectively, for taxpayers younger than age 50; \$18,100, \$30,050, \$45,100, and \$66,550 for taxpayers age 50 to 54; \$18,100, \$31,000, \$44,650, and \$66,600 for taxpayers age 55 to 58; \$13,300, \$26,150, \$40,150, and \$60,600 for taxpayers age 59 to 69; and \$8,550, \$15,700, \$27,800, \$47,650 for taxpayers age 70 or older.

<sup>58</sup> Results for taxpayers with zero or negative AGI are available in the Supplemental Tables.

## 8.2 Rollover-Type Distributions

Within age groups, the share of taxpayers with rollover-type distributions and (generally) the average amount distributed increase with income (Figure 8.2). For example, among taxpayers younger than age 50, incidence increases from 0.3 percent for taxpayers in the lowest quintile of positive income to 1.3 percent for the middle quintile and 4.8 percent for highest quintile; and average amounts for those same quintiles increases from \$13,000 to \$17,000 and \$45,000, respectively. Among taxpayers age 59 to 69, incidence increases from 2.4 percent for the lowest quintile to 4.4 percent for the middle quintile and 8.8 percent for highest quintile; and average amounts for those same quintiles increases from \$50,000 to \$82,000 and \$178,000, respectively.

## 8.3 Non-Rollover Distributions

Among older taxpayers, non-rollover distributions are common across the income distribution and the average amounts are substantial (Figure 8.3). Among taxpayers age 70 or older, the share of taxpayers with non-rollover distributions increases from 61 percent for taxpayers in the lowest income quintile to 79 percent for the middle quintile and 85 percent for the highest quintile. Average distributions for this age group increase from \$7,200 for the lowest quintile to \$18,000 for taxpayers in the middle quintile to \$48,000 for the highest quintile.

## 9. Return Incidence and Retirement Distributions Per Taxpayer

In this section, we examine the share of taxpayers who benefit from retirement distributions, whether they receive the distributions directly or through a spouse. The unit of observation remains the individual taxpayer. The difference is how we allocate distributions reported by married couples filing a joint return.

The incidence and amount of retirement distributions are calculated *per capita*: the amounts reported on line 15 and line 16 of Form 1040 are divided by the number of taxpayers on the return. For taxpayers filing non-joint returns (single, head of household, qualifying widow(er), and married filing separately), per capita distributions are the same as the amounts previously

reported. For married taxpayers filing a joint return, rather than allocating based on the amount that each spouse receives directly, one-half of retirement distributions reported on Form 1040 are allocated to each spouse. That is, even if a married taxpayer had no Form 1099-R, they would be categorized as receiving retirement distributions, and they would be allocated one-half of their spouse's distributions.

Accounting for the shared resources of married couples is particularly important when it comes to retirement distributions, as older taxpayers are more likely to be married (Figure 9.1). The share of taxpayers who file a joint return increases from 46 percent of taxpayers younger than age 50 to 70 percent age 59 to 69. For those 70 and older, the share falls back to 60 percent.

Compared with measuring the distributions that individual taxpayers receive directly, per capita incidence is higher, and the average per capita distributions are lower. Incidence is higher because some married taxpayers who do not receive distributions have a spouse who does. Average amounts are lower because the same amount of aggregate distributions is allocated to more individuals.

## 9.1 Return Incidence

The share of taxpayers who benefit from retirement distributions is even higher than was suggested by previous analysis because many individuals who do not receive retirement distributions have a spouse who does. Among taxpayers of all ages, 28 percent received gross distributions or had a spouse who did, and 26 percent received a non-rollover distribution or had a spouse who did (Figure 9.2).

Accounting for shared resources among married couples, most taxpayers age 59 or older benefit from non-rollover distributions (Figure 9.2) In addition to the 44 percent of taxpayers age 59 to 69 who receive non-rollover distributions, another 14 percent do not receive non-rollover distributions but have a spouse who does. Similarly, in addition to the 75 percent of taxpayers age 70 or older who receive non-rollover distributions directly, another 9 percent receive non-rollover distributions through a spouse.

Married taxpayers filing a joint return are about twice as likely to report retirement distributions on Form 1040 as are taxpayers filing a non-joint return (Figure 9.3). Among

taxpayers filing a non-joint return in 2010, 17 percent received a gross distribution and 16 percent received a non-rollover distribution. Among taxpayers filing a joint return, 37 percent received, or had a spouse who received, a gross distribution and 34 percent received, or had a spouse who received, a non-rollover distribution.

These differences exist despite the fact that, controlling for age, there is little difference in the share of joint and non-joint filers who receive retirement distributions directly (Figure 9.3). For example, the share receiving non-rollover distributions directly is about the same for non-joint filer and joint filers in the 50 to 54, 55 to 58, and 59 to 69 age groups; slightly higher for joint filers younger than age 50 (7.1 percent versus 4.7 percent); and slightly lower for joint filers age 70 or older (74 percent versus 77 percent).

Joint filers are more likely to report retirement distributions on their return for two reasons (Figure 9.3). First, taxpayers filing a joint return are older, on average, than taxpayers on non-joint returns and, as a result, are more likely to receive distributions directly. For example, 23 percent of joint filers receive non-rollover distributions directly compared with 16 percent of non-joint filers. Second, many joint filers who do not receive distributions directly have a spouse who does. For example, 11 percent of joint filers who do not receive a non-rollover distribution have a spouse who does.

Among joint filers, the share on returns where both spouses receive distributions increases with age (Figure 9.4). Among all joint filers younger than age 50, only 2.1 percent were in a couple where both spouses received non-rollover distributions. Within this age group, these taxpayers accounted for 16 percent of joint filers who reported non-rollover distributions on their returns. As a percentage of those with distributions, the share of joint filers in a couple where both spouses received distributions increases after age 58. For example, among all joint filers age 70 or older, more than half were in couples where both received non-rollover distributions, accounting for nearly 60 percent of those reporting distributions on their returns.

Note that among all joint filers, the number who received distributions but have a spouse who did not (Figure 9.4, lower blue bars) is exactly equal to the number who did not receive distributions but have a spouse who did (Figure 9.4, upper yellow bars). This is not a

coincidence: all married taxpayers are also spouses of taxpayers, so the two numbers must match.

This need not hold within age groups, however, because (as helpful as it would be for analysis) individuals are not required to marry within their age group. For example, 22 percent of joint filers age 70 or older received non-rollover distributions but have a spouse who did not, whereas only 15 percent did not receive distributions but have a spouse who did (Figure 9.4). In contrast, only 12 percent of joint filers age 55 to 58 received non-rollover distributions but have a spouse who did not, whereas 16 percent did not receive distributions but have a spouse who did. These patterns by age imply that, among joint filers on returns where only one spouse receives, the older spouse is more likely to receive the distribution.

Relative to individual measures, per capita measures increase incidence for taxpayers age 50 to 58 by the highest percentage. The per capita measure of non-rollover incidence is nearly 60 percent higher for taxpayers 50 to 58. Compared with taxpayers younger than age 50, for whom the per capita measure of non-rollover incidence is about 45 percent higher, the impact is greater for those 50 to 58 because they are more likely to file a joint return, and the two measures only differ for joint filers. Compared with older taxpayers, the impact is greater for two reasons. First, older couples are much more likely to both receive distributions. Second, older taxpayers in couples where only one spouse receives distributions are more likely to be the spouse who receives the distribution. As a result, the per capita measure of non-rollover incidence is about one-third higher for taxpayers 59 to 69 and only 12 percent higher for taxpayers age 70 or older.

In addition to increasing overall incidence, accounting for shared resources among married couples reduces the share of taxpayers with non-rollover distributions who receive only IRA distributions and increases the share who receive distributions both from pensions and annuities and from IRAs (Figure 9.5). These affects are most noticeable among taxpayers age 70 or older. For this age group, the share of all taxpayers with pensions and annuities increases from 60 percent measured on an individual basis (previously reported on Figure 7.1) to 73 percent measured on a return basis (Figure 9.5, upper panel); and the share with IRA distributions increases from 42 percent to 48 percent. Among those in the age group with

distributions, the share with IRA distributions only falls from 20 percent measured on an individual basis (previously reported on Figure 7.1) to 13 percent measured on a return basis (Figure 9.5, lower panel); and the share with distributions from both pensions and IRAs increases from 36 percent to 44 percent.

## 9.2 Per Capita Distribution Amounts

Compared with individual measures, measuring incidence on a per capita basis necessarily reduces the average amount received by those with distributions. Arithmetically, the same amount of aggregate distributions is spread across a larger number of individuals.

In aggregate, differences between individual and per capita measures should be proportional: the larger the increase in incidence, the larger the decrease in average distributions.

While this relationship must hold in the aggregate, it need not hold within age groups because some individuals marry outside of their age group. As already noted, the older spouse in a couple is more likely to receive retirement distributions directly. As a result, relative to the individual measure, the per capita measure shifts retirement distributions from older age groups to younger age groups.

We find that average per capita non-rollover distributions decline more (relative to individual measures) for those age groups where per capita incidence increased the most (relative to individual measures), but not proportionately so. Compared to individual measures, per capita average distributions are 28 percent lower for taxpayers age 50 to 58, and 25 percent lower for both the younger than age 50 and the 59 to 69 age groups. The smallest difference between the two measures is for the 70 or older age group, where average per capita distributions are only 15 percent smaller.

When measured on a per capita basis, a much different story emerges when comparing age groups (Figure 9.5). Specifically, compared with taxpayers age 59 to 69, we do not observe smaller non-rollover distributions for taxpayers age 70 or older. Non-rollover distributions average \$20,000 per person for both the 59 to 69 and the 70 or older age groups. Similarly, the approximate median non-rollover distribution is \$13,000 per person for both age groups. On an

unrounded basis, both measures differ by less than 1.0 percent between the two age groups.<sup>59</sup> In contrast, when measured on an individual basis (previously reported on Figure 7.3), average retirement distributions for taxpayers age 70 or older were 13 percent lower than for taxpayers 59 to 69, and median distributions were 17 percent lower.

Although differences between the two measures are complicated by married couples who straddle age groups, one reason the two measures tell a different story is that married individuals age 70 or older are much more likely to be in couples where both spouses receive distributions. For intuition on why this would affect the two measures differently, suppose there was a couple where both spouses were age 59 to 69 and where one spouse receives \$30,000 in distributions and the other spouse receives none. Suppose there was a second couple where both spouses were age 70 or older and where one spouse receives \$30,000 of distributions and the other spouse receives \$10,000. Measured on an individual basis, average distributions would be higher for the younger couple (\$30,000 for the younger couple compared with \$20,000 for the older couple). Measured on a per capita basis, average distributions would be higher for the older couple (\$15,000 for the younger couple compared with \$20,000 for the older couple).

### 9.3 Non-Rollover Distributions by Income

Per capita measures show that non-rollover retirement distributions are prevalent across the income distribution, particularly for taxpayers 59 or older. The share of taxpayers age 59 to 69 who report non-rollover distributions on their return increases from 49 percent for the lowest income quintile to 66 percent for the fourth quintile, before falling to 61 percent for the highest quintile. The share of taxpayers age 70 or older who receive distributions directly or through a spouse increases from 73 percent for the lowest quintile to 90 percent for the two highest quintiles.

Further, the amounts received by older taxpayers are substantial throughout the income distribution. For taxpayers age 59 to 69, average non-rollover distributions range from \$7,200 per person for the lowest income quintile to \$38,000 per person for the highest quintile. Average

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<sup>59</sup> Unrounded measures are reported in the supplemental tables.

non-rollover distributions for the group age 70 or older range from \$5,800 per person for taxpayers in the lowest income quintile to \$43,000 per person in the highest income quintile.

## 10. Summary of Results

Our analysis indicates that penalized distributions, which represent only about half of taxable distributions received by individuals younger than 55, are a reasonable approximation for *leakage*. For taxpayers younger than 55, unpenalized taxable distributions include payments that are not typically considered to be *leakage*. These include DB plan benefits paid to retired military, public safety officers, and other government employees; distributions to beneficiaries after the death of an employee or IRA owner; and distributions made after an employee or IRA owner becomes disabled. They also include ESOP dividend payments, distributions made pursuant to a divorce settlement, and distributions from annuities purchased by an employer when a DB plan is terminated.

We find that the share of taxpayers with taxable distributions increases substantially beginning at age 50, but that the share of taxpayers with penalized distributions does not. As a result, among taxpayers in 2010 who received taxable distributions directly, the share who were penalized fell from 70 percent for those younger than age 50, to 40 percent for those age 50 to 54 and to 20 percent for those age 55 to 58. For those same age groups, the share of taxable distribution amounts penalized fell from 60 percent, to 37 percent and to 15 percent, respectively.

The decline with age in the share of taxable distribution amounts subject to penalty is closely correlated with the decline with age in the share of taxable distribution amounts coded as *early, no know exception* on Form 1099-R. Most distributions typically considered to be leakage would be given this code—including certain unpenalized distributions, such as IRA distributions used to purchase a home or used to pay for post-secondary education. In 2010, the share of taxable distribution amounts coded as *early, no know exception* fell from 60 percent for taxpayers younger than age 50, to 40 percent for taxpayers age 50 to 54 and to 17 percent for taxpayers age 55 to 58.

More generally across all age groups, we find that receipt of retirement distributions is widespread, and the amounts distributed are substantial. In 2010, 28 percent of all taxpayers received gross distributions—either directly or through a spouse—and 26 percent received non-rollover distributions. Gross retirement distributions totaled \$1.2 trillion in 2010, with \$363 billion in rollover-type distributions (which simply transfer accumulations from one retirement vehicle to another) and \$856 billion in non-rollover distributions.

The incidence and average amount of distributions increases with age and, as a result, older taxpayers receive the bulk of retirement distributions. In 2010, taxpayers age 59 or older received 73 percent of gross distribution amounts. Broken down by type of distribution, older taxpayers received 80 percent of non-rollover distributions and 56 percent of rollover-type distributions. Older taxpayers received a higher share of non-rollover distributions than they did of gross distributions because nearly half of gross distribution amounts received by taxpayers younger than age 59 were simply transferred to another retirement vehicle.

The incidence of rollover-type distributions peaks for taxpayers age 59 to 69, while the average distribution amount increases with age. Among taxpayers younger than age 50 in 2010, 1.9 percent had rollover-type distributions, with an average distribution of \$32,000. Incidence increased to 4.9 percent among taxpayers age 59 to 69 and the average distribution increased to \$111,000. For taxpayers age 70 or older, incidence dropped back down to 2.2 percent, but the average amount increased slightly to \$117,000.

Within age groups, the incidence and amount of rollover-type distributions generally increases with income. For example, among taxpayers age 59 to 69 in 2010 who were in the lowest income quintile of the age group, 2.4 percent had rollover-type distributions that averaged \$50,000. For the same age group, incidence of rollover-type distributions increased to 4.4 percent for the middle quintile and to 8.8 percent for the highest quintile, and average distribution amounts increased to \$82,000 and \$178,000, respectively.

The incidence of non-rollover distributions increases dramatically with age, with most taxpayers age 59 or older receiving non-rollover distributions either directly or through a spouse. Among taxpayers younger than age 50 in 2010, 8.5 percent reported retirement

distributions on Form 1040. Incidence increased to 59 percent for taxpayers age 59 to 69 and to 84 percent for taxpayers age 70 or older.

In addition, older married taxpayers are much more likely to be in a couple where both spouses receive non-rollover distributions. Among joint filers who report non-rollover distributions on their returns in 2010, the share on returns where both spouses received non-rollover distributions increased from 17 percent for those younger than age 59, to 35 percent for the 59 to 69 age group, and to 59 percent for the 70 or older age group.

Within age groups, the share of taxpayers who receive non-rollover distributions generally increases with income. For example, among taxpayers younger than age 50 in 2010, the share who received non-rollover distributions directly increased from 1.9 percent for the lowest income quintile to 10 percent for the highest income quintile. For the same age group, the share who received non-rollover distributions directly or through a spouse increased from 2.4 percent for the lowest income quintile to 15 percent for the highest income quintile.

Among older taxpayers, non-rollover distributions are widespread throughout the income distribution. Among taxpayers age 59 to 69 in 2010, the share of taxpayers who received non-rollovers directly or through a spouse ranged from 49 percent for the lowest quintile of positive income to 66 percent for the fourth income quintile. Among taxpayers age 70 or older, non-rollover incidence increased from 73 percent for the lowest quintile to 90 percent for the top two quintiles.

Average non-rollover distributions increase with age and, within age groups, generally increase with income. Among taxpayers who reported non-rollover distributions on their tax return in 2010, the average amount increased from \$8,000 per person for taxpayers younger than age 50 to \$20,000 per person for taxpayers age 59 or older. Within the younger than age 50 age group, average non-rollover distributions increased from 3,000 per person for the lowest income quintile to \$13,000 per person for the highest quintile. Within the 70 or older age group, average non-rollover distributions increased from \$5,800 per person for the lowest income quintile to \$43,000 per person for the highest quintile.

Although pensions and annuities are the source of most non-rollover distributions regardless of age, most taxpayers age 70 or older with non-rollovers get at least a portion of

their distributions from IRAs. The biggest difference by age is that older taxpayers are much more likely to receive distributions from both sources. For example, of taxpayers age 59 to 69 who received non-rollover distributions (directly or through a spouse), 87 percent had distributions from pensions and annuities and 34 percent had IRA distributions, with 21 percent having both. By age 70 or older, 87 percent had pension and annuity distributions and 57 percent had IRA distribution, with 44 percent having both.

Most non-rollover distributions are fully taxable, but the share that are partially taxable—a sizeable portion of which are likely benefit payments from government employee pensions—increases with age. Among taxpayer who receive non-rollover distributions directly in 2010, the share with partially taxable distributions increased from 12 percent for taxpayers younger than age 50 to 34 percent for taxpayers age 59 or older, and the share of non-rollover dollars received by those with partially taxable distributions increased from 22 percent to 50 percent, respectively.

## References

Amromin, Gene and Smith, Paul. 2003. "What Explains Early Withdrawals from Retirement Accounts? Evidence from a Panel of Taxpayers." *National Tax Journal* 56, no. 3: 595–612.

Argento, Robert, Victoria Bryant, and John Sabelhaus. 2015. "Early Withdrawals from Retirement Accounts During the Great Recession." *Contemporary Economic Policy* 33, Issue 1: 1–16. Available at SSRN: <https://ssrn.com/abstract=2520677> or <http://dx.doi.org/10.1111/coep.12064>

Bershadker, Andrew and Paul A. Smith. 2005. "Cracking Open the Nest Egg: IRA Withdrawals and Retirement Finance." *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association*, 98: 73–83.

Beshears, John, James J. Choi, Joshua Hurwitz, David Laibson, and Brigitte C. Madrian. 2015. "[Liquidity in Retirement Savings Systems: An International Comparison](#)." *American Economic Review Papers and Proceedings 2015* 105(5): 420–425.

Brady, Peter J. and Steven Bass. 2019. "Reconciling Form 1040 and Form 1099-R Data." SOI Working Paper. Washington, DC: Internal Revenue Service.

Brady, Peter, Steven Bass, Jessica Holland, and Kevin Pierce. 2017. "Using Panel Tax Data to Examine the Transition to Retirement." SOI Working Paper. Washington, DC: Internal Revenue Service. Available at <https://www.irs.gov/pub/irs-soi/17rptrtransitionretirement.pdf>.

Brady, Peter, and Michael Bogdan. 2016. "A Look at Private-Sector Retirement Plan Income After ERISA, 2015." ICI Research Perspective 22, no. 8. Available at [www.ici.org/pdf/per22-08.pdf](http://www.ici.org/pdf/per22-08.pdf).

Burman, Leonard E., Norma B. Coe, and William G. Gale. 1999. "Lump Sum Distributions from Pension Plans: Recent Evidence and Issues for Policy and Research." *National Tax Journal* 52, no. 3: 553–562.

Chang, Angela E. 1996. "Tax Policy, Lump-Sum Pension Distributions, and Household Saving." *National Tax Journal* 49, no. 2: 235–252.

Engelhardt, Gary. 2002. "Pre-Retirement Lump-Sum Pension Distributions and Retirement Income Security: Evidence from the Health and Retirement Study." *National Tax Journal* 55, no. 4: 665–685.

Goda, Gopi Shah, Damon Jones, and Shanthi Ramnath. 2017. "How Do Distributions from Retirement Accounts Respond to Early Withdrawal Penalties? Evidence from Administrative Tax Returns." September 2017 mimeo.

Goodman, Lucas, Kathleen Mackie, Jacob A. Mortenson, and Heidi Rose Schramm. 2019. "The Evolution of Leakage and Retirement Asset Flows in the U.S.". Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3450866](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3450866).

Herd, Pamela, Melissa Favreault, Madonna Harrington Meyer, and Timothy M. Smeeding. 2018. "A Targeted Minimum Benefit Plan: A New Proposal to Reduce Poverty among Older Social Security Recipients." *The Russell Sage Foundation Journal of the Social Sciences* 4, no. 2: 74–90.

Hurd, Michael and Constantijn Panis. 2006. "The Choice to Cash Out Pension Rights at Job Change or Retirement." *Journal of Public Economics* 90, no. 12: 2213–2227.

Internal Revenue Service. 2011. *1040 Instructions 2010*. Washington, DC: Internal Revenue Service. Available at <https://www.irs.gov/pub/irs-prior/i1040gi--2010.pdf>.

Internal Revenue Service, Statistics of Income Division. 2012. *Individual Income Tax Returns 2010*, Publication 1304. Washington, DC: Internal Revenue Service. Available at <https://www.irs.gov/pub/irs-soi/10inalcr.pdf>.

Poterba, James M., Steven F. Venti, and David Wise. 1998. "Lump-Sum Distributions from Retirement Saving Plans: Receipt and Utilization." In *Inquiries in the Economics of Aging*, edited by David A. Wise, 85-105. Chicago: University of Chicago Press. Available at <https://www.nber.org/chapters/c7082.pdf>.

Sabelhaus, John and David Weiner. 1999. "Disposition of Lump-Sum Pension Distributions: Evidence from Tax Returns." *National Tax Journal* 52, no. 3: 593–614.

Schmidt, Daniel. 2011. *2010 Comparative Study of Major Public Employee Retirement Systems*. Madison, WI: Wisconsin Legislative Council. Available at [http://legis.wisconsin.gov/lc/publications/crs/2010\\_retirement.pdf](http://legis.wisconsin.gov/lc/publications/crs/2010_retirement.pdf).

Snell, Ronald. 2012. *State Retirement Plans for Public Safety Employees*. Denver, CO: National Conference of State Legislatures. Available at <http://www.ncsl.org/documents/employ/PENSION-INTRODUCTION-FINAL-7-31-12.pdf>.

Yakoboski, Paul. 1994. "Retirement Program Lump-Sum Distributions: Hundreds of Billions in Hidden Pension Income." *EBRI Issue Brief*, no. 146.

Yakoboski, Paul. 1993. "New Evidence on Lump-Sum Distributions and Rollover Activity." *EBRI Notes* 14, no. 7: 6–8.

## Appendix: Explanation of Detailed Distribution Categories

We divide distributions into more detailed categories to gain additional insight into the source of retirement distributions.<sup>60</sup> Most of the categorization is done using the detailed distribution codes reported on Form 1099-R. We also use Form 8606 to identify Roth conversions not taxable in 2010, and to identify basis in taxable IRA distributions; and use Form 5498 to identify indirect rollovers.

We categorize distributions as described below. Supplemental tables are available that report additional detail.

### 1. Rollover-Type Distributions

- Direct rollovers reported on Form 1099-R
- Indirect rollovers that we can identify using Form 5498<sup>61</sup>
- Roth conversions (including in-plan Roth rollovers and direct rollovers from pretax qualified plans to Roth IRAs), including amounts taxable in 2010 and amounts not taxable in 2010 (amounts taxable in 2011 and 2012, and nontaxable basis from any conversion) as reported of Form 8606
- Section 1035 exchanges of annuity contracts

### 2. Nontaxable Non-Rollover

- Basis from distributions reported on Form 1099-R and basis in IRA distributions reported on Form 8606
- Nontaxable Roth distributions
- Qualified charitable distributions and distributions used to fund health savings accounts (HSAs)<sup>62</sup>
- Unidentified nontaxable distributions<sup>63</sup>

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<sup>60</sup> Brady and Bass (2019) describes in detail how we reconciled the data reported on Form 1040 with the data reported on Form 1099-R and how we allocated distributions using the detailed codes.

<sup>61</sup> The amount of distributions we identify as indirect rollovers is likely a conservative estimate; that is, we are unlikely to have identified all indirect rollovers. See discussion in Brady and Bass (2019).

<sup>62</sup> Qualified charitable distributions and distributions used to fund HSAs generally receive either a *normal* or *early, no know exception* code, but are not subject to tax. We can identify these distributions because taxpayers indicate on Form 1040 that reported gross distributions include qualified charitable distributions or were used to fund an HSA. See discussion in Brady and Bass (2019).

<sup>63</sup> Some taxpayers may have more nontaxable distributions reported on Form 1040 than we can identify using information returns and the various forms and schedules filed with the tax return. These would include indirect rollovers that we were unable to identify, and certain allowable deductions that are not captured in the data. Nontaxable distributions reported on Form 1040 could also be categorized as *unidentified* for taxpayers with at least one missing Form 1099-R. See discussion in Brady and Bass (2019).

### 3. Taxable Non-Rollover

#### *Normal*

- Distributions from qualified plans, IRAs, and nonqualified annuities to individuals age 59½ or older are generally coded as *normal*, with a few exceptions to that rule noted below.
- Certain distribution to individuals younger than age 59½ may also be coded as *normal*. These include:<sup>64</sup>
  - Payments from life insurance products
  - Payments from structured settlements
  - Fee rebates from nonqualified annuities
  - Certain annuity payments<sup>65</sup>
- In addition, we include dividends from an ESOP in the *normal* category, as they are not subject to penalty.

#### *Early, No Known Exception*

- Distributions from qualified plans, IRAs, and nonqualified annuities to individuals younger than age 59½ are generally coded as *early, no known exception* unless they meet the specific criterion laid out in the explanation for the other codes.
- Distributions to individuals age 59½ or older may also receive this distribution code if they modify a series of substantially equal periodic payments within the first five years.
- The *early, no known exception* category also includes distributions from a SIMPLE IRA within two years of the first contribution when the individual has not yet reached age 59½.

Note that not all distributions with this code are necessarily subject to penalty. The payers of the distributions who file Form 1099-R may not be able to certify that a taxpayer meets the criteria for certain exceptions to penalty. Instead, taxpayers attest to meeting the criteria for these exceptions using Form 5329. In addition, there are exceptions for which the taxpayer must use Form 5329 and that are always coded as *early, no known exception*. These exceptions include:

- Distributions taken from an IRA for qualified education expenses
- Distributions of up to \$10,000 taken from an IRA for qualified first-time home purchases

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<sup>64</sup> We are not confident that we have identified all the types of distributions that would be coded as *normal* if paid to individuals younger than age 59½.

<sup>65</sup> We believe that payments from immediate annuities are coded a *normal* regardless of the annuitants age. Also, payments made to annuitants younger than age 59½ are coded as normal in cases where: the original owner of the annuity contract is age 59½ or older; the original owner of the annuity contract is not the annuitant; and where payments to the annuitant continue after the death of the original owner. For such annuities, payments made to the annuitant are treated as income to the annuity owner prior to the annuity owner's death and are treated as income to the annuitant after the annuity owner's death.

- Distributions taken from an IRA by unemployed individuals for health insurance premiums
- Qualified distributions from a qualified plan or IRA taken for unreimbursed medical expenses in excess of 7.5 percent of adjusted gross income

#### *Early, Exception Applies*

- Regular payments of benefits from a DB plan, from a 403(b) annuity, or from an annuity contract purchased by a qualified plan or IRA
- Distributions from a 457(b) plan, unless the distributions are attributable to rollovers from qualified employer plans or IRAs
- Distributions as part of a series of substantially equal periodic payments
- Distributions from a qualified employer plan (but not an IRA) after separation from service when the separation occurs in or after the year in which the taxpayer reached age 55 (or age 50 for qualified public safety officers)
- Permissible withdrawals from plans with eligible automatic contribution arrangements
- Distributions pursuant to a qualified domestic relations order
- Qualified reservist distributions
- Distributions from qualified employer plans and IRAs because of an IRS levy under section 6331

#### *Death (Inherited)*

- Distributions from a qualified employer plan, IRA, annuity, or modified endowment contract made to a beneficiary on or after the death of an employee, IRA owner, or annuity or modified endowment contract holder
- These distributions are not only free from penalty, they are generally required

#### *Disability*

- Distributions from a qualified employer plan, IRA, annuity, or modified endowment contract made after an employee, IRA owner, or annuity or modified endowment contract holder becomes disabled

#### *Unidentified and Other<sup>66</sup>*

- Charitable gift annuities
- Cost of current life insurance
- Return of excess contributions<sup>67</sup>

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<sup>66</sup> Most of the distributions in this category, by incidence and amount, are unidentified taxable distributions.

<sup>67</sup> Returns of excess contributions only include amounts reported on Form 1040 line 15 and line 16. The return of excess contributions from an IRA should be reported by taxpayers on line 15, but the return of excess contributions from a qualified employer plan should *not* be reported on line 16. Instead, it should be reported as wage and salary income on line 7. Some return of excess contributions from employer plans could be included in this category, however, if it appeared that the taxpayer incorrectly reported the distribution on line 16. See discussion in Brady and Bass (2019).

- Taxable recharacterized contributions
- Prohibited transactions
- Unknown distributions (no code reported on Form 1099-R)
- Unidentified taxable distributions<sup>68</sup>

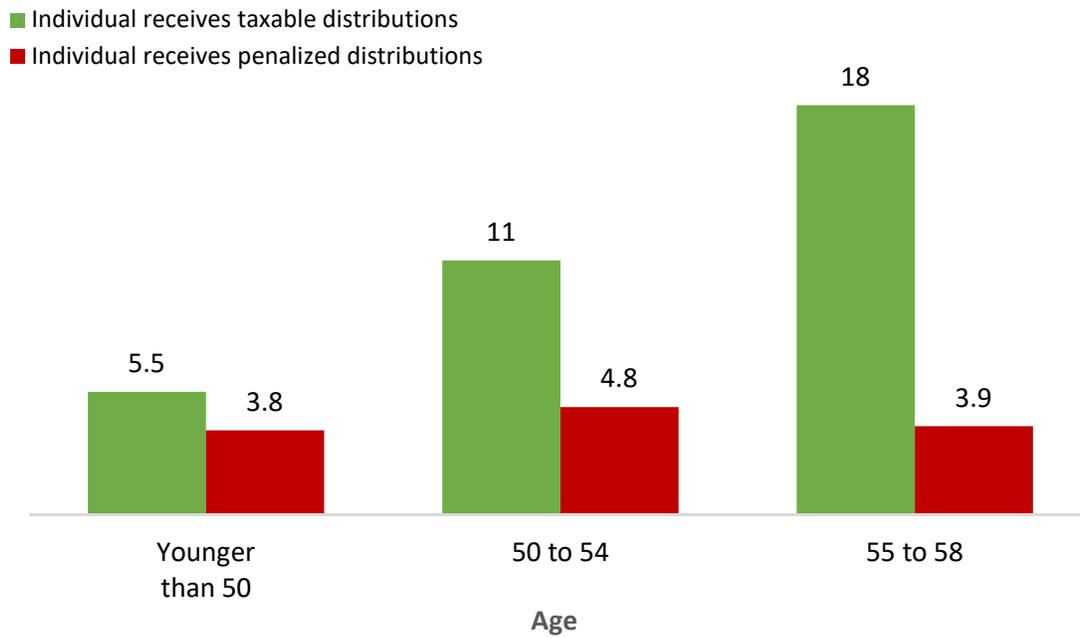
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<sup>68</sup> Some taxpayers may have more taxable distributions reported on Form 1040 than we can identify using information returns and the various forms and schedules filed with the tax return. These would include taxpayers with at least one missing Form 1099-R. See discussion in Brady and Bass (2019).

Figure 4.1

Younger Taxpayers Are Not Always Penalized on Taxable Distributions

Share of all taxpayers in age group by type of retirement distribution received, percent, 2010

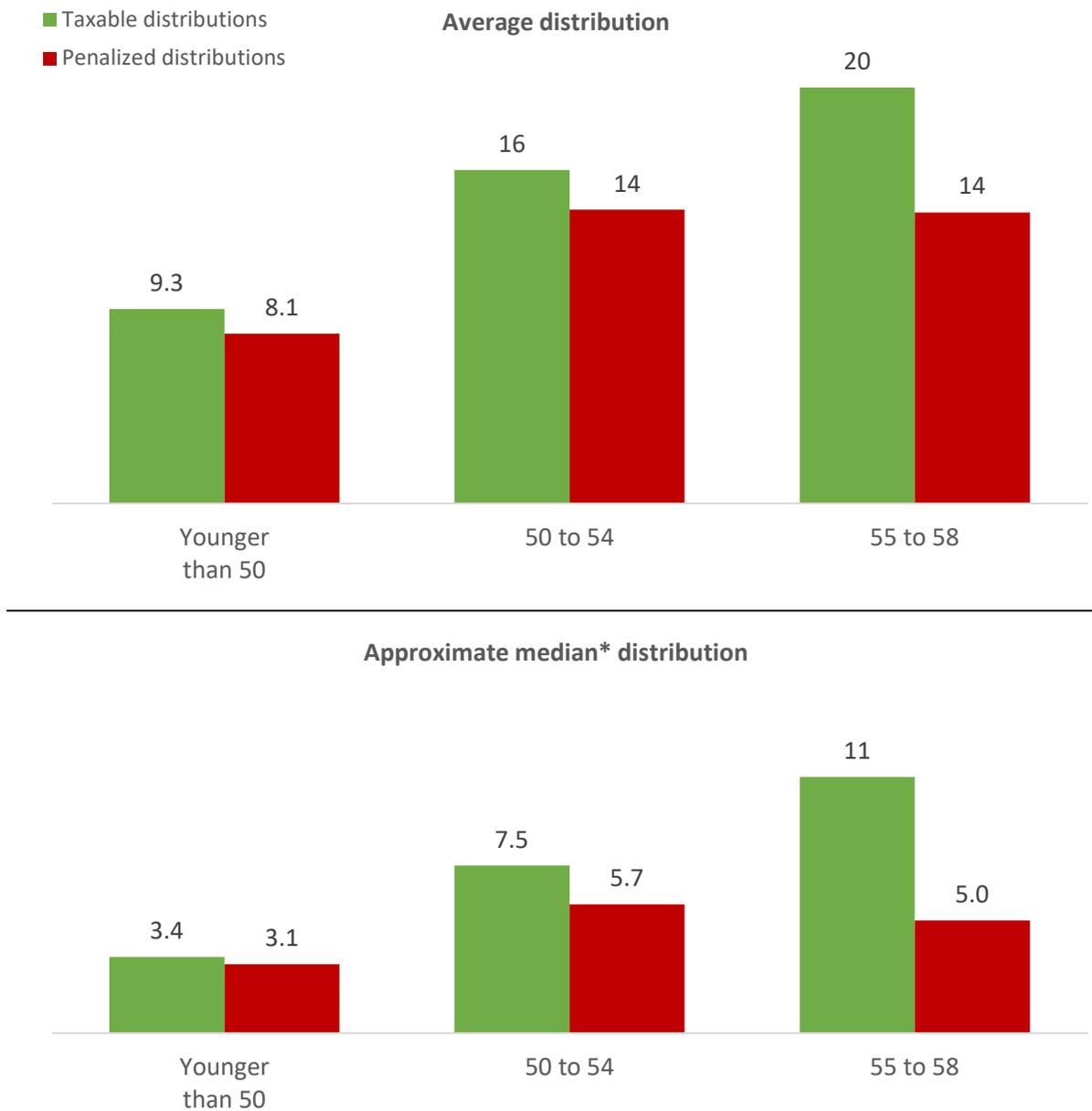


Source: Authors' analysis of IRS data

Figure 4.2

Penalized Distributions Are Smaller, On Average

Retirement distributions by tax treatment, thousands of dollars 2010

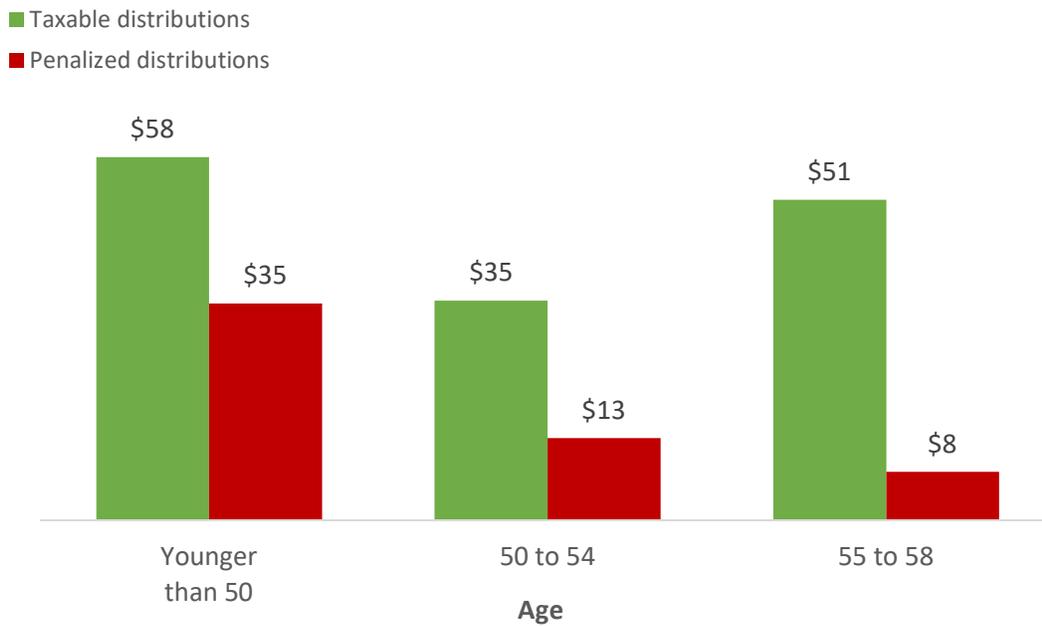


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of distributions received.  
Source: Authors' analysis of IRS data

Figure 4.3

Only Half of Taxable Distributions Received by Taxpayers Younger than 55 Are Penalized

*Retirement distributions by tax treatment, billions of dollars, 2010*

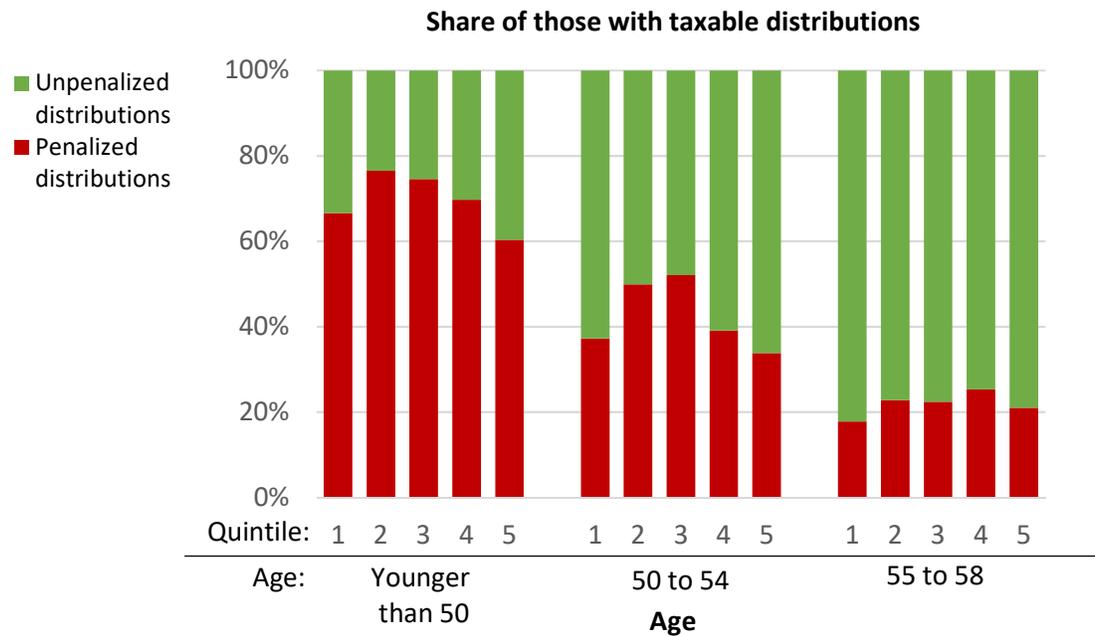
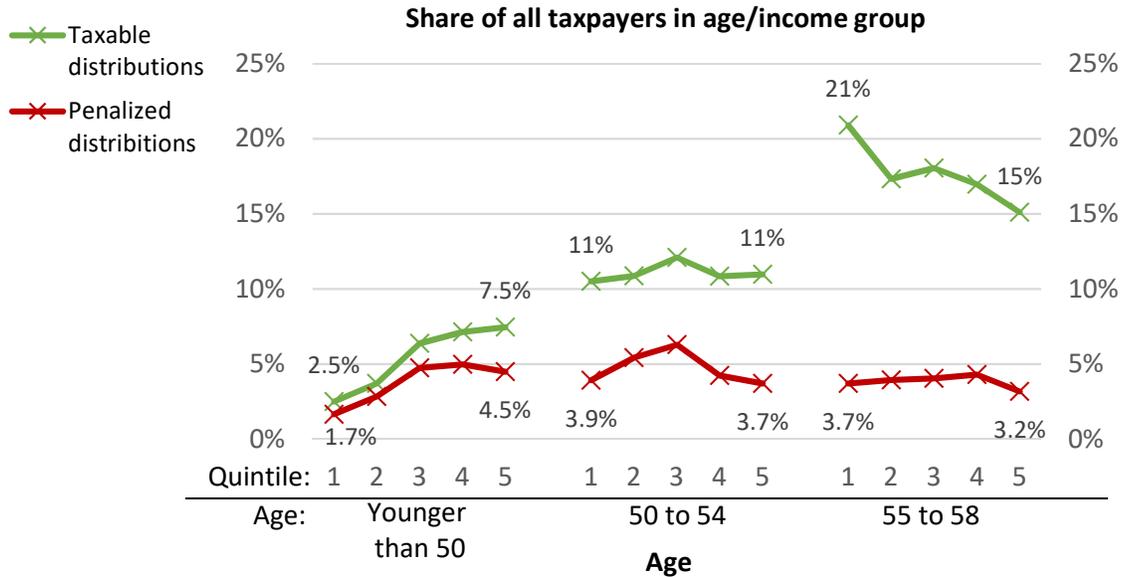


Source: Authors' analysis of IRS data

Figure 4.4

**Relationship Between Income and Penalized Distributions Varies by Age**

*Taxpayers receiving retirement distributions by age and quintile of positive non-retirement income, \* 2010*



\* Non-retirement income is adjusted gross income less taxable IRA distributions and less taxable pensions and annuities. The highest amounts of per-capita non-retirement income for the first through fourth quintiles for each age group are approximately: \$10,650, \$20,050, \$31,950, and \$49,450 respectively for taxpayers younger than 50; \$16,800, \$29,350, \$43,350, and \$64,600 respectively for taxpayers age 50 to 54; and \$15,200, \$27,650, \$40,800, and \$62,650 respectively for taxpayers age 55 to 58.

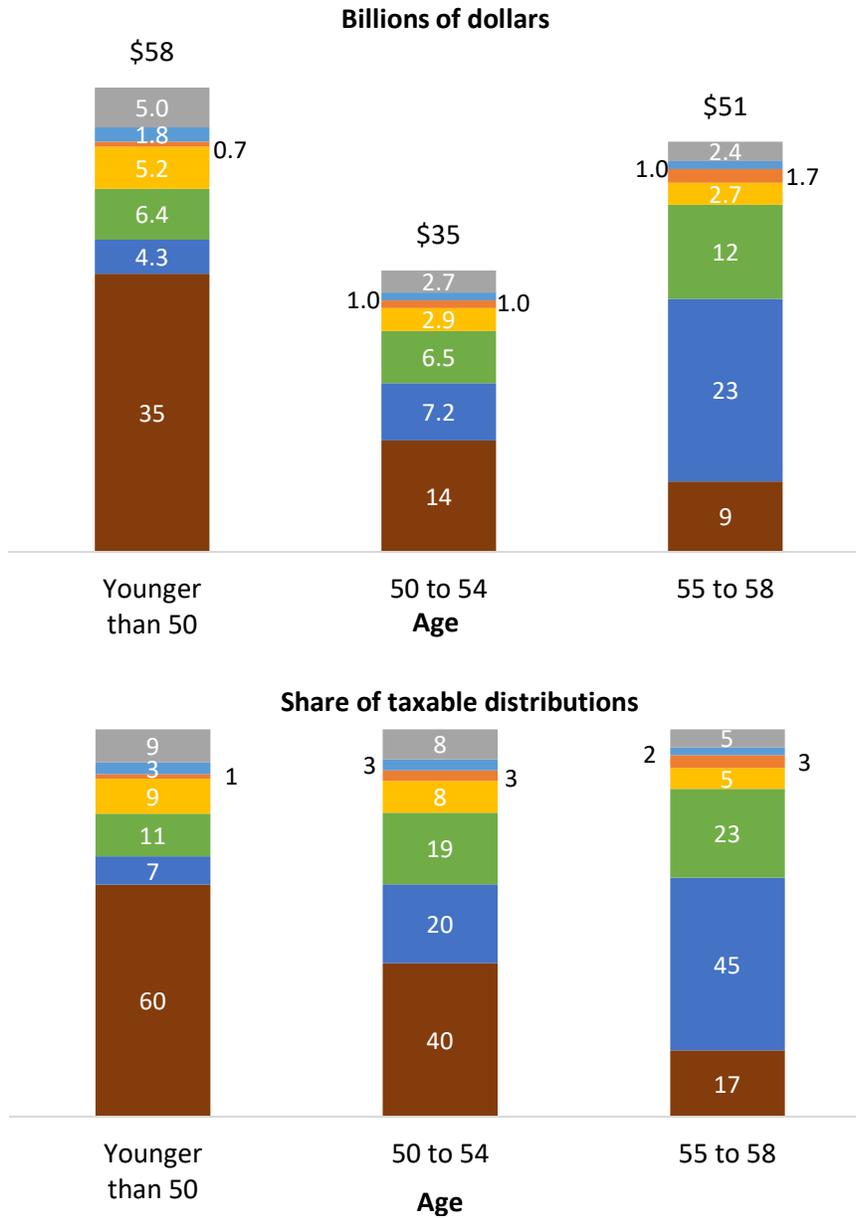
Source: Authors' analysis of IRS data

Figure 4.5

### Unpenalized Taxable Distributions Do Not Appear to Be "Leakage"

*Taxable retirement distributions by detailed code, 2010*

- Unidentified taxable and other
- Roth conversions taxable in 2010
- Disability
- Death (inherited)
- Normal
- Early, exception applies
- Early, no known exception

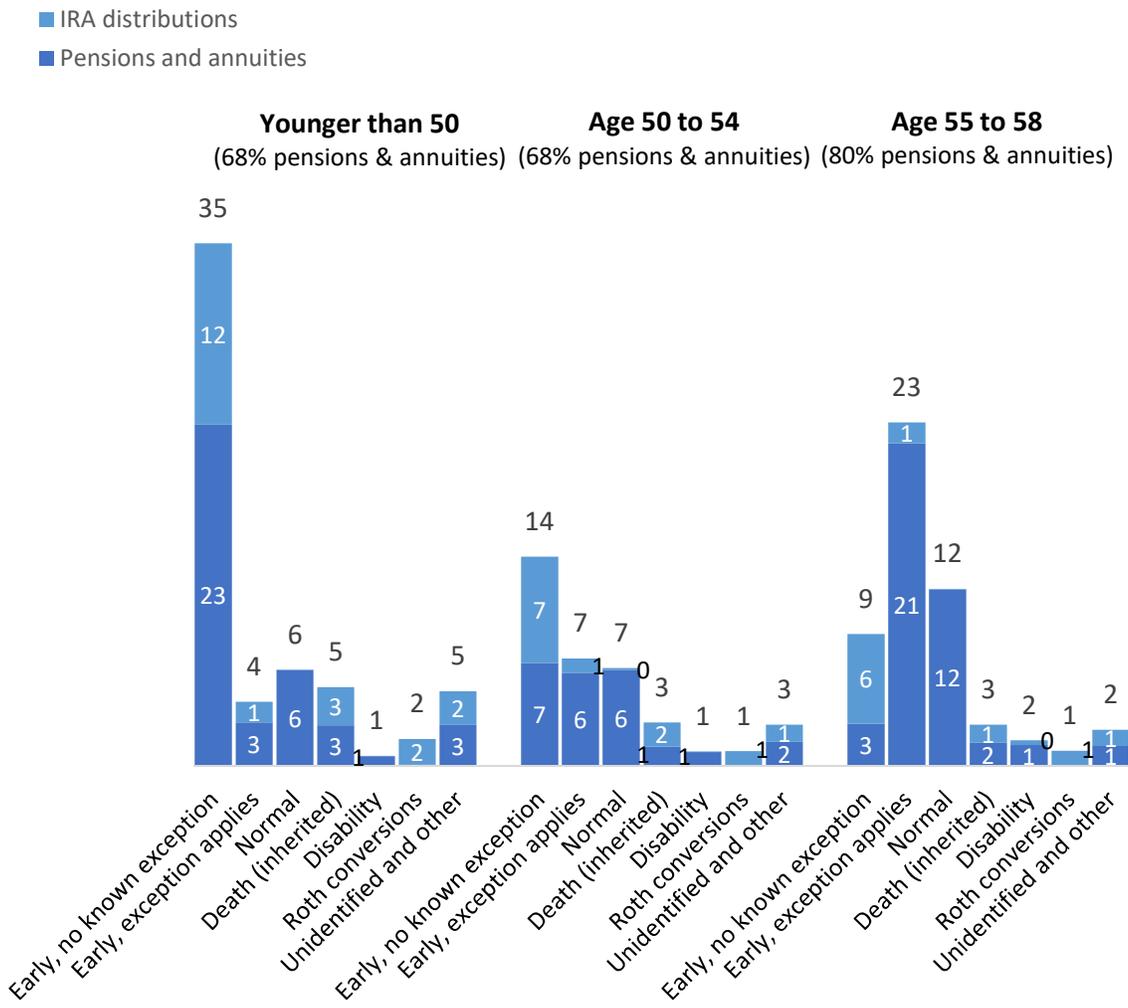


Source: Authors' analysis of IRS data

Figure 4.6

### Source of Early Distributions Shifts at Age 50

Taxable distributions by detailed code and source, billions of dollars, 2010



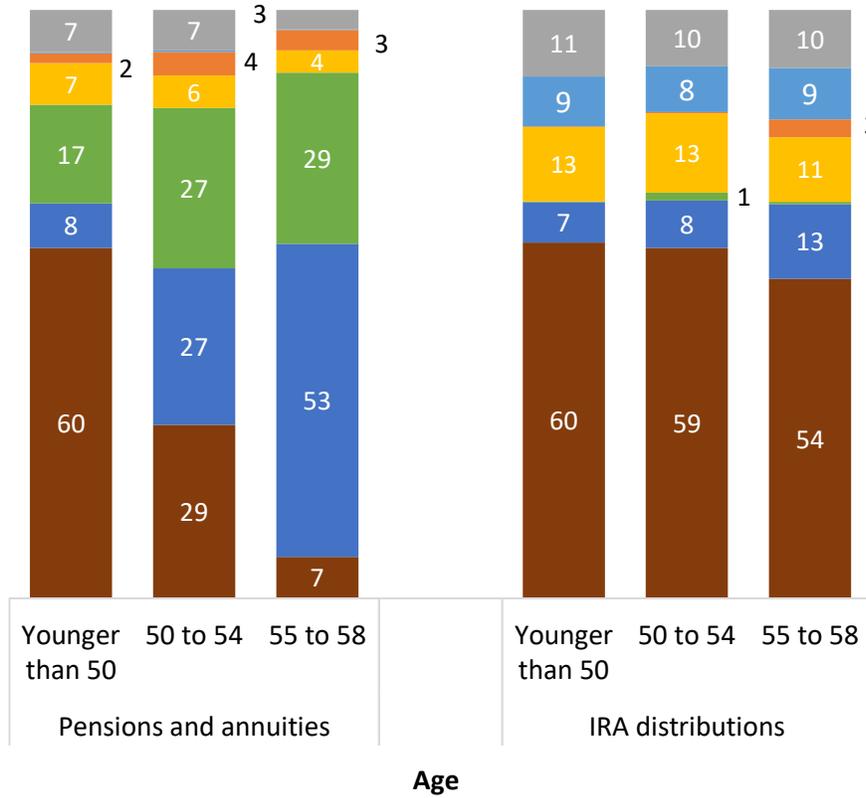
Source: Authors' analysis of IRS data

Figure 4.7

### Change in Composition of Distributions Driven by Pensions and Annuities

Share of distributions received by age group from source by detailed code, percent, 2010

- Unidentified taxable and other
- Roth conversions taxable in 2010
- Disability
- Death (inherited)
- Normal
- Early, exception applies
- Early, no known exception

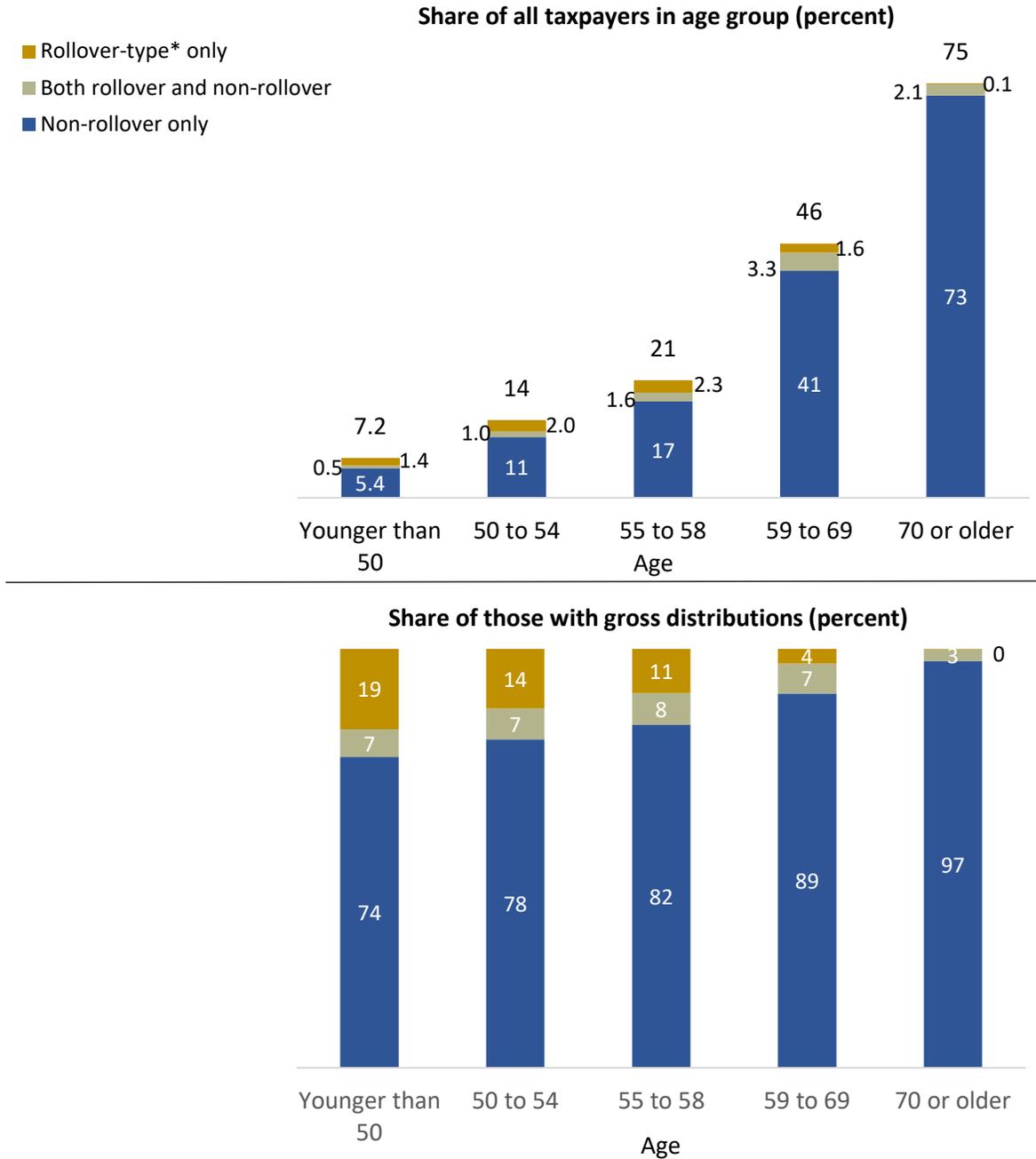


Source: Authors' analysis of IRS data

Figure 5.1

### Non-Rollover Distributions More Common Even For Younger Taxpayers

Taxpayers with gross retirement distributions by broad distribution category, 2010



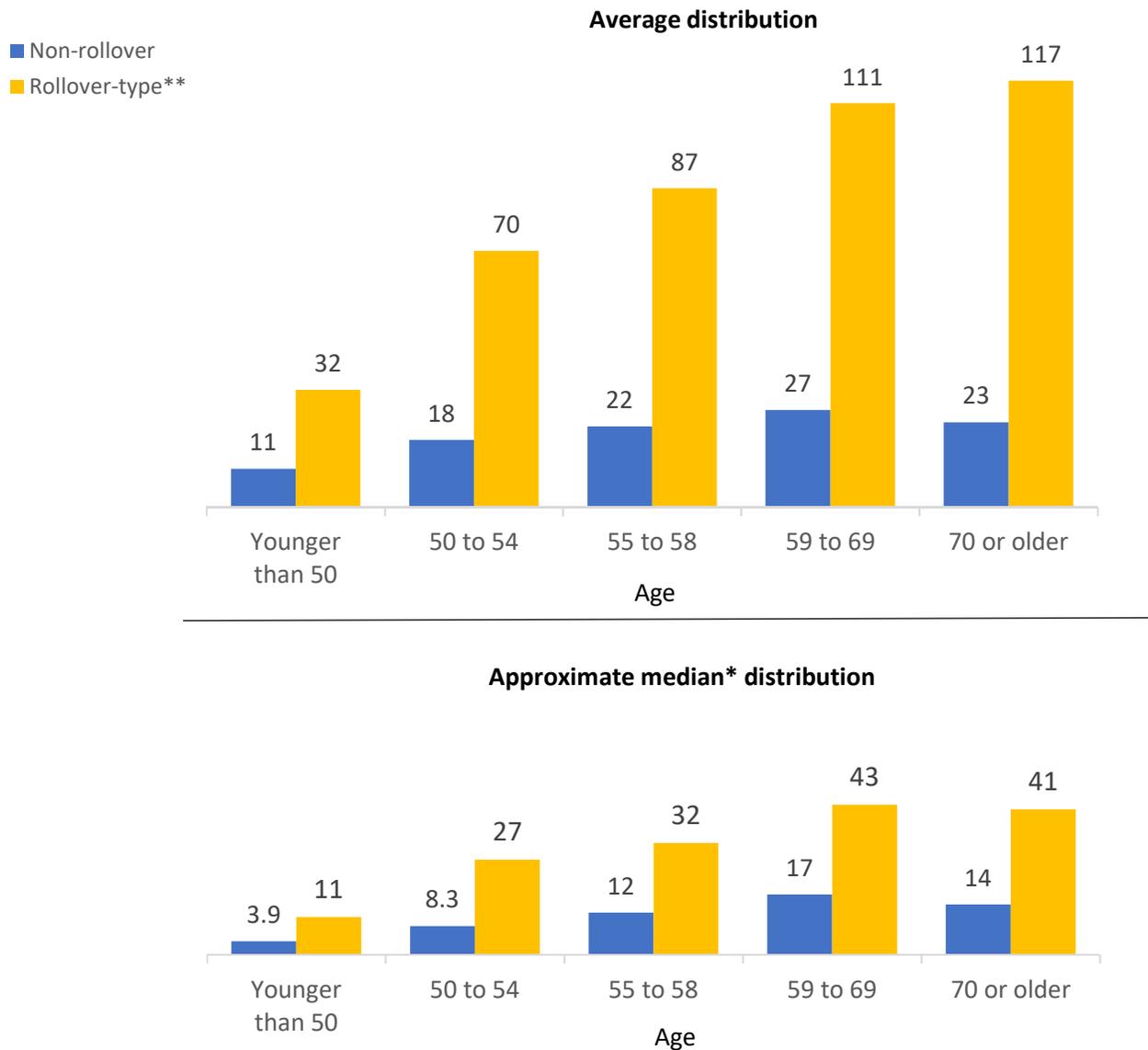
\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 5.2

### Rollover-Type Distributions Are Typically Larger than Non-Rollover Distributions

Average and approximate median\* distributions by broad distribution category, thousands of dollars, 2010



\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of gross distributions received.

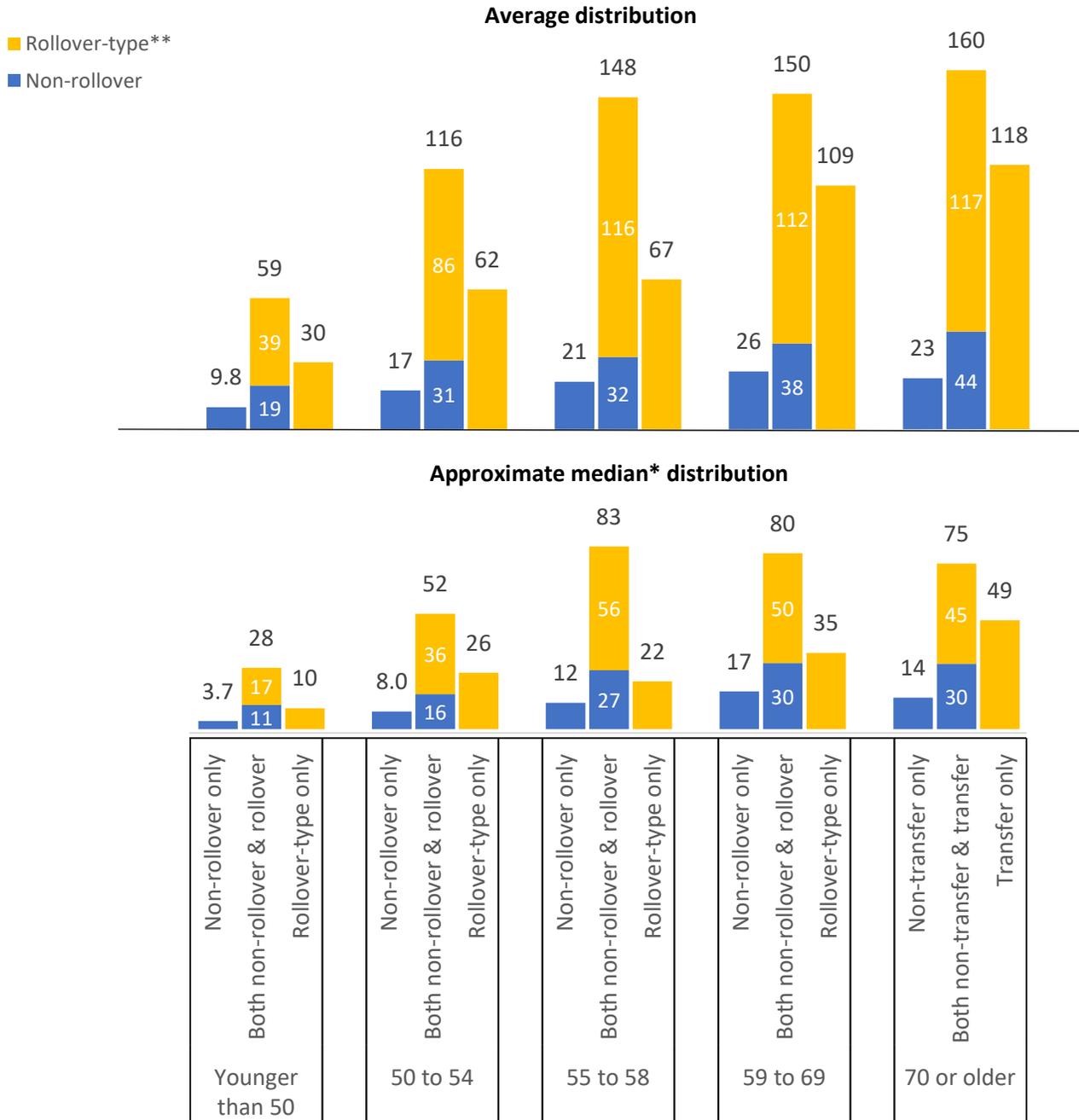
\*\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 5.3

**For Taxpayers with Both, Rollover-Type Two-Thirds or More of Gross Distributions**

Average and approximate median\* distributions by broad distribution category, thousands of dollars, 2010



\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of gross distributions received.

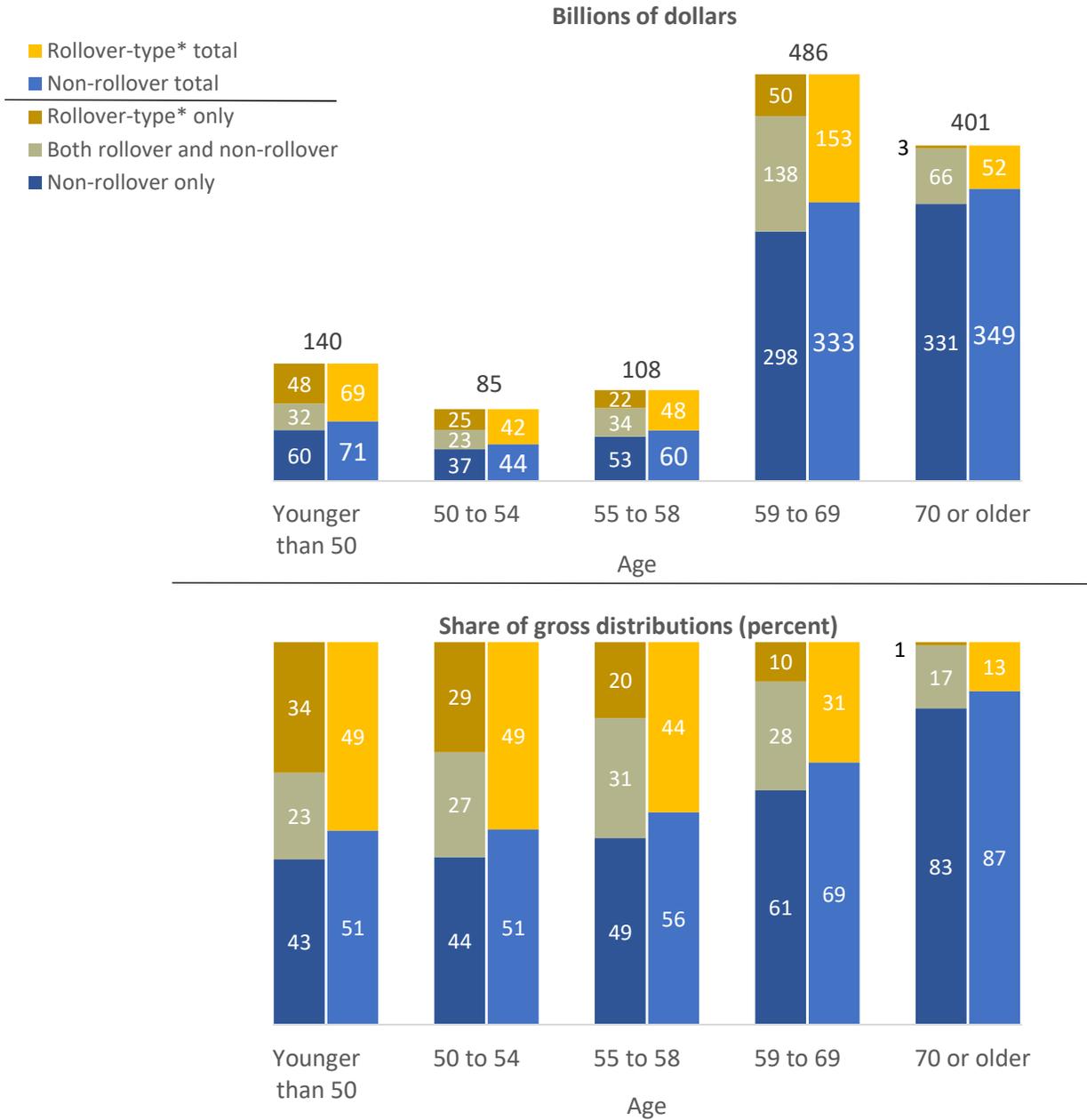
\*\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 5.4

**Younger Taxpayers Preserve Nearly Half of Gross Distributions for Retirement**

Gross retirement distributions by broad distribution category, 2010



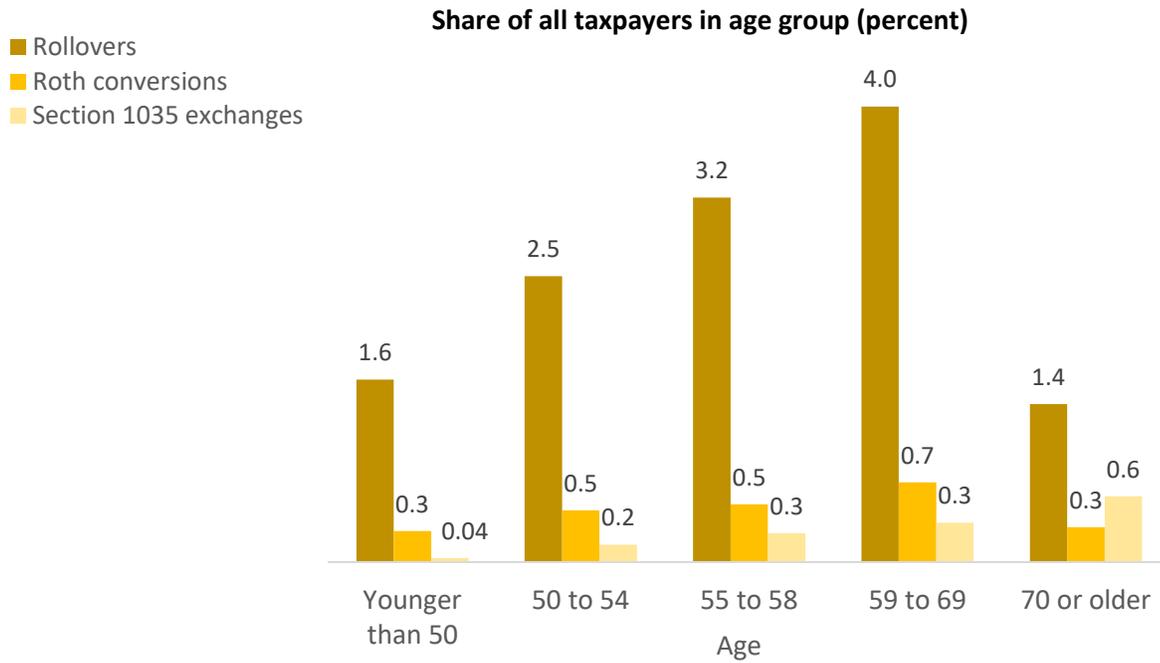
\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 6.1

### Share of Taxpayers with Rollovers Peaks for the 59 to 69 Age Group

Taxpayers with rollover-type\* distributions by detailed type, 2010



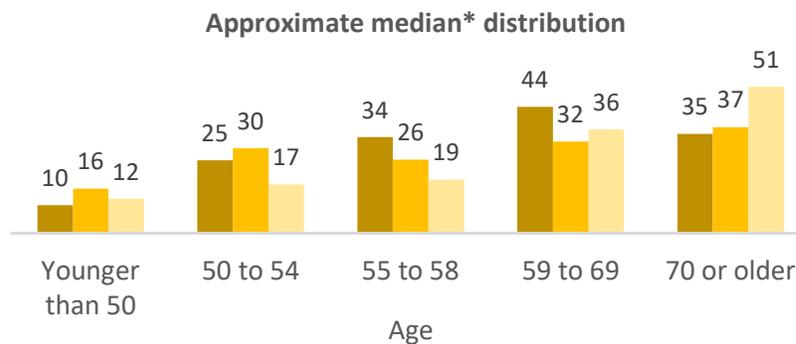
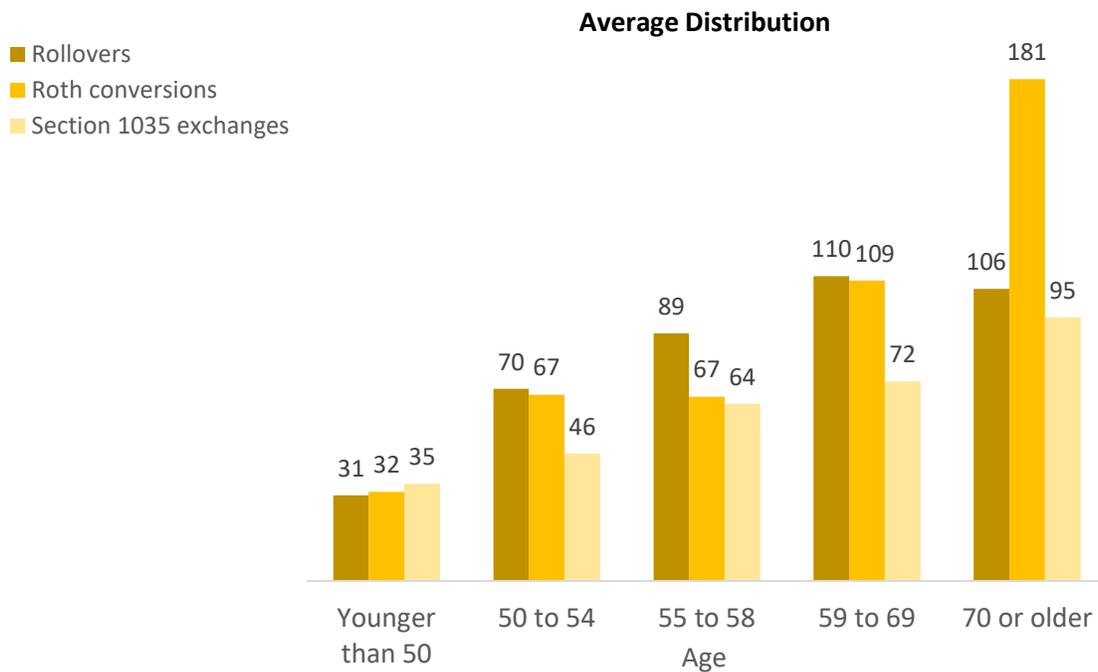
\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 6.2

### Rollover-Type Distributions Are Typically Larger for Older Taxpayers

Average and approximate median\* rollover-type\*\* distributions by detailed type, thousands of dollars, 2010



\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of distributions received.

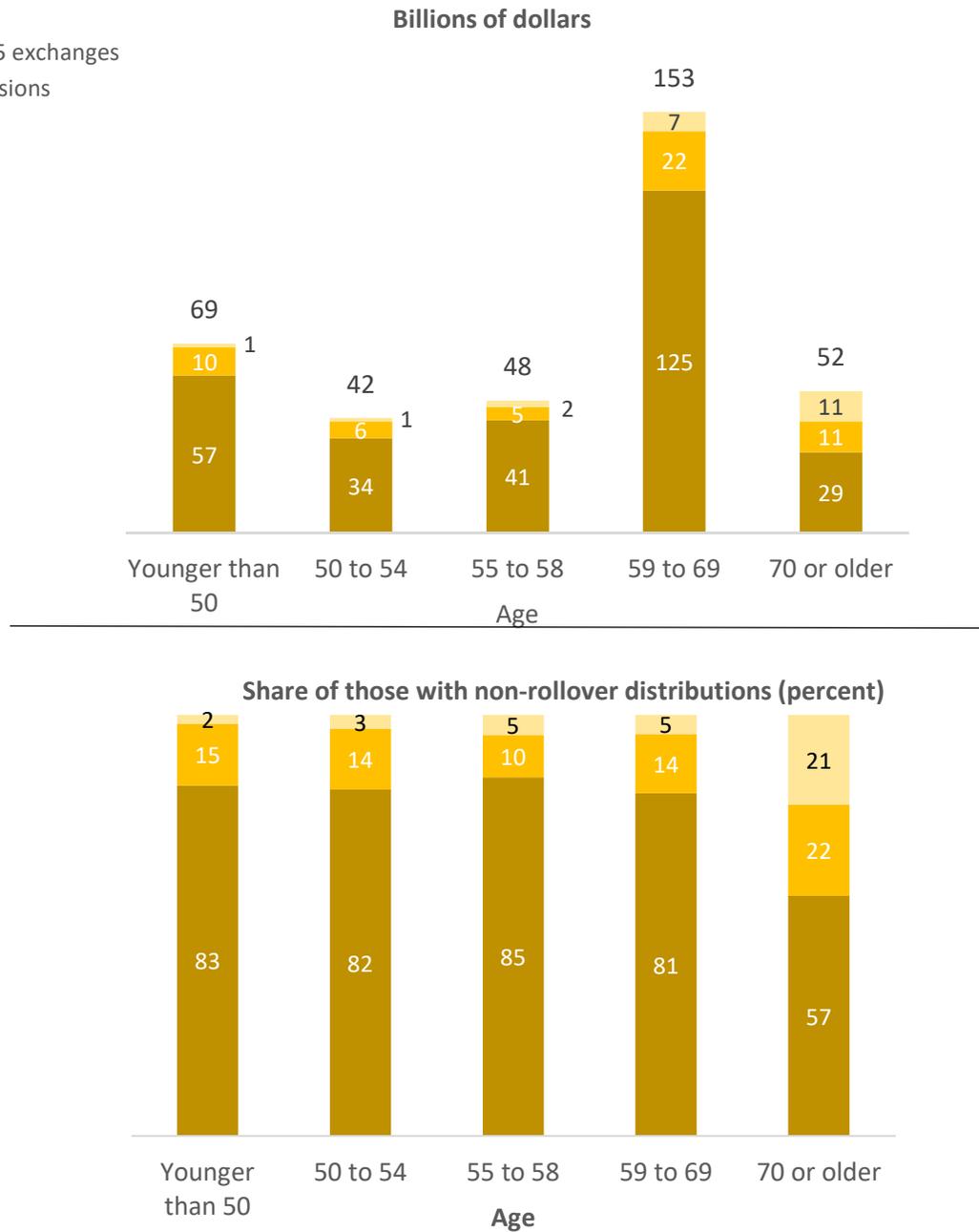
\*\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 6.3

Rollovers Most of "Rollover-Type" Distributions for Taxpayers Younger than 70

*Rollover-type\* distributions by detailed type, 2010*



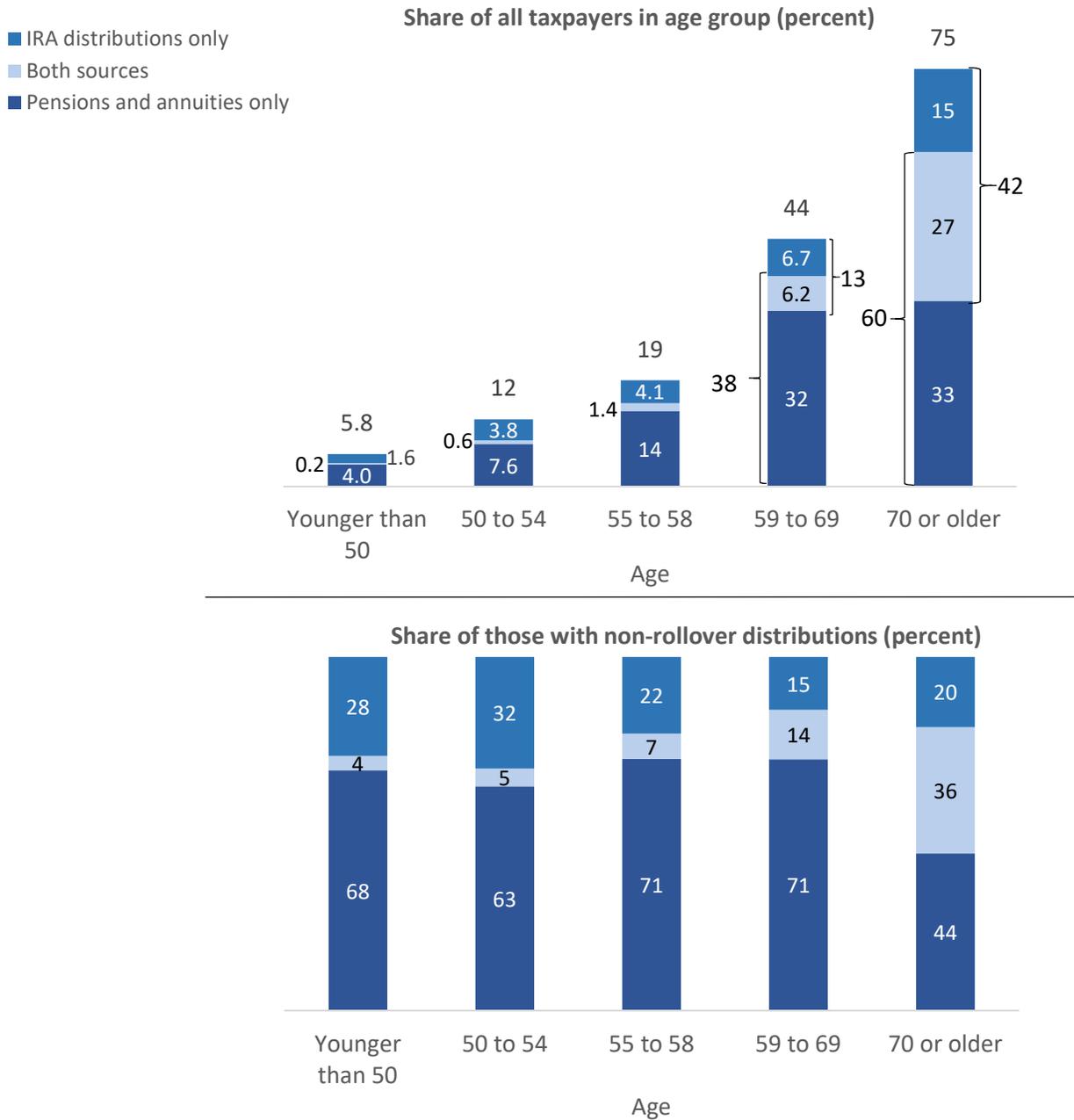
\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.

Source: Authors' analysis of IRS data

Figure 7.1

**More Than One-Third Age 70 or Older with Non-Rollovers Have Both Pension and IRA**

*Taxpayers with non-rollover distributions by source, 2010*



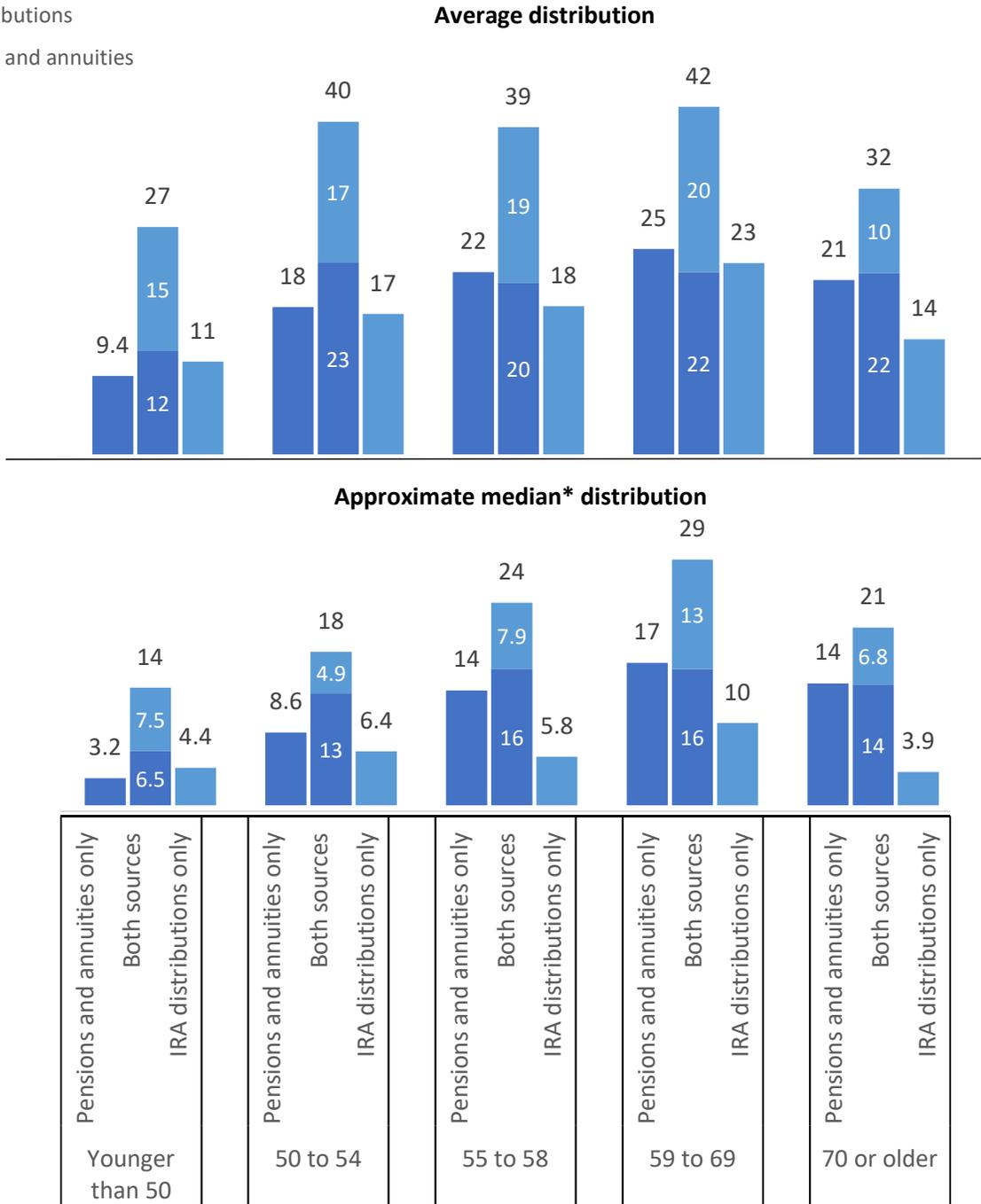
Source: Authors' analysis of IRS data

Figure 7.2

**Non-Rollover Distributions Are Larger for Those with Both Pension and IRA Distributions**

Average and approximate median\* non-rollover distributions by source, thousands of dollars, 2010

■ IRA distributions  
■ Pensions and annuities

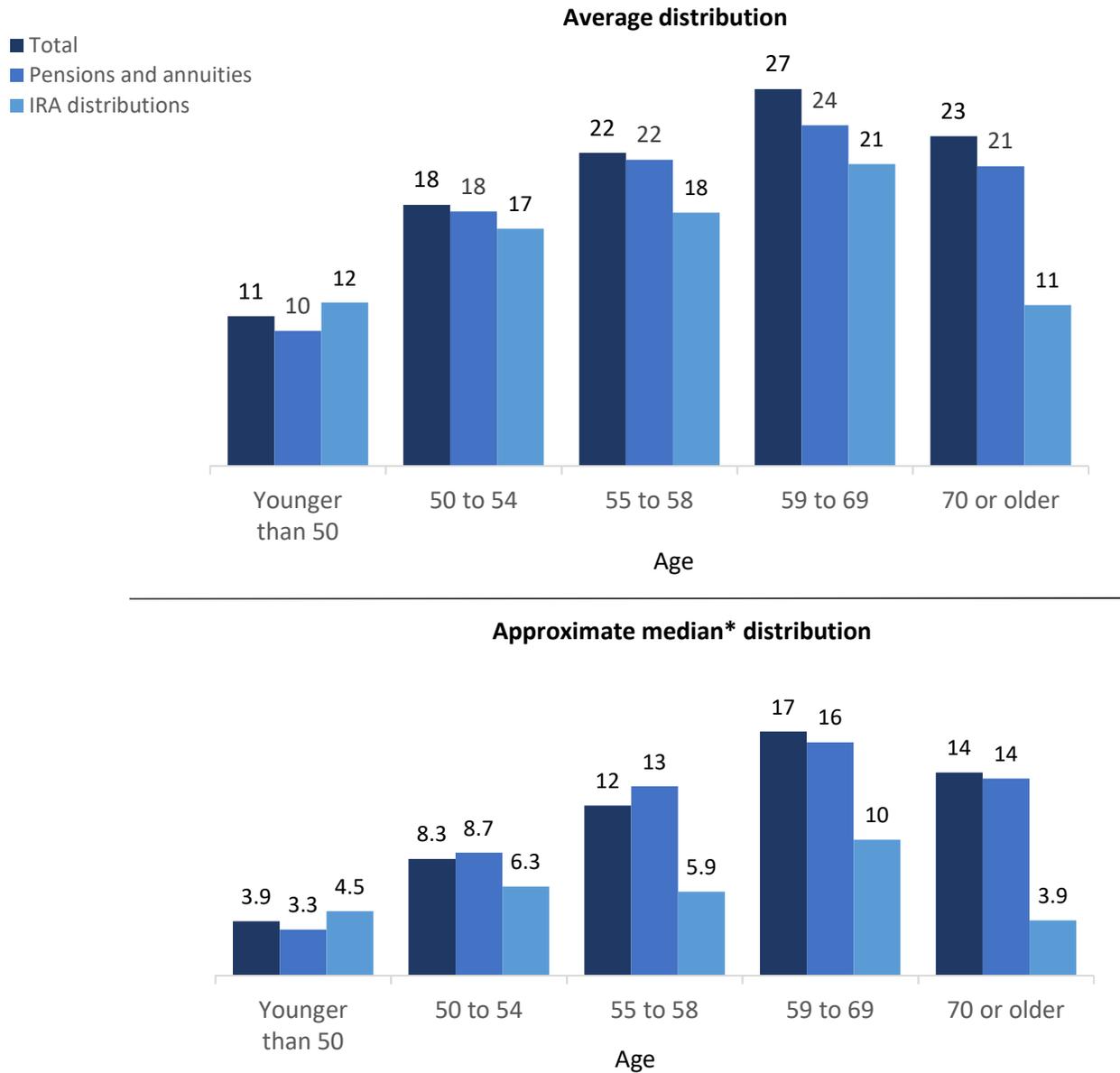


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of non-rollover distributions received.  
Source: Authors' analysis of IRS data

Figure 7.3

**Average and Median Non-Rollovers Peak for Taxpayers Aged 59 to 69**

*Average and approximate median\* non-rollover distributions by source, thousands of dollars, 2010*

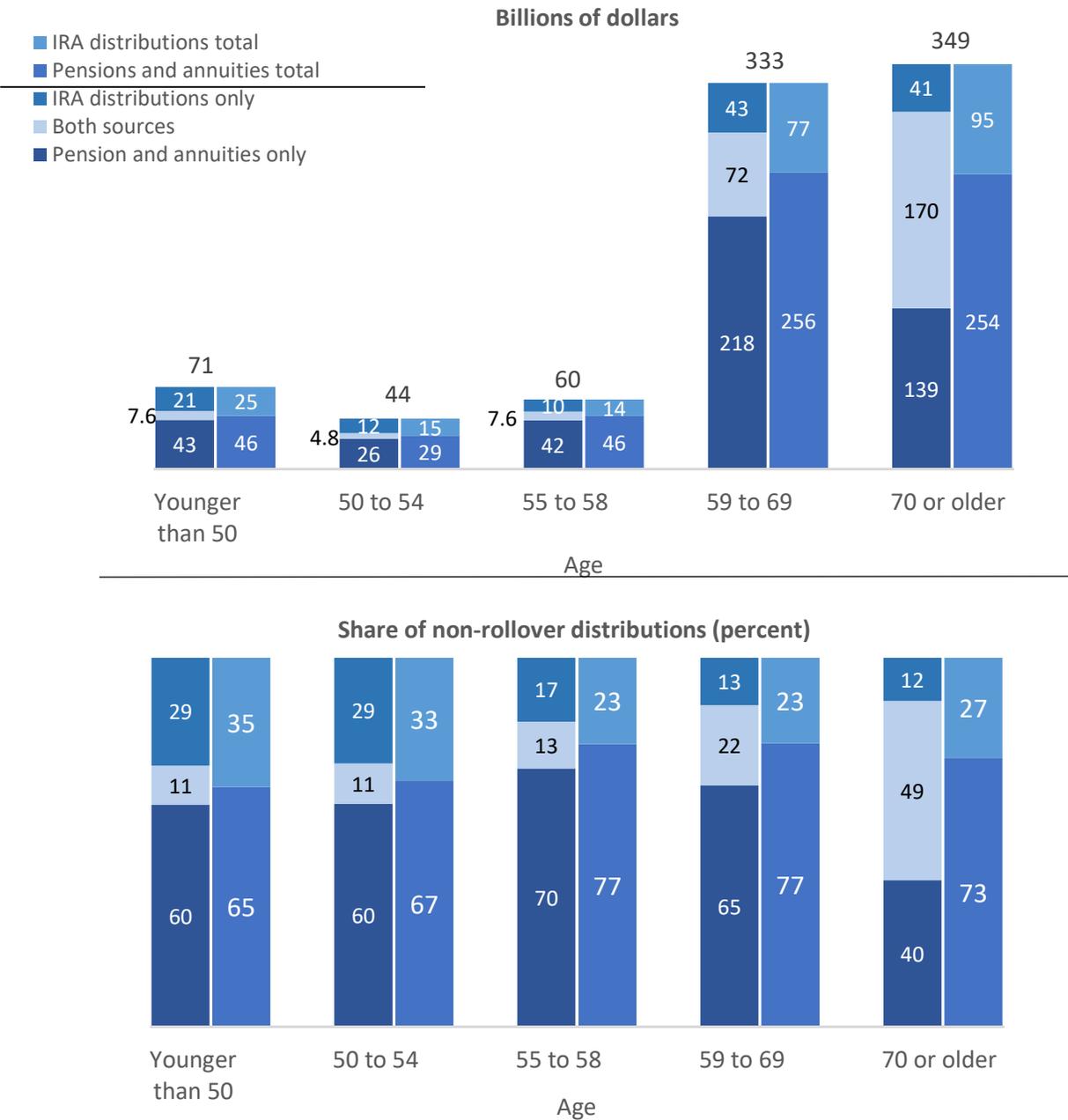


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of non-rollover distributions received.  
 Source: Authors' analysis of IRS data

Figure 7.4

**At All Ages Most Non-Rollover Distributions Are from Pensions and Annuities**

*Non-rollover distributions by source, 2010*

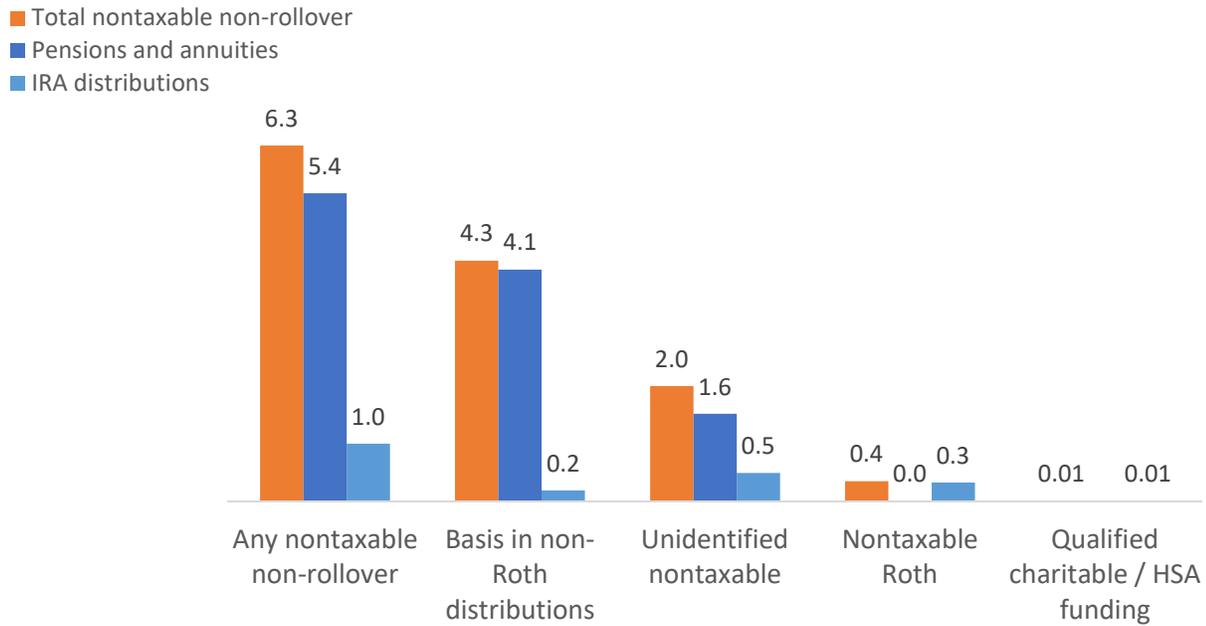


Source: Authors' analysis of IRS data

Figure 7.5

**Basis in Pensions and Annuities Is the Most Common Nontaxable Non-Rollover Distribution**

*Taxpayers with nontaxable non-rollover distributions as a share of all taxpayers, by detailed type, percent, 2010*

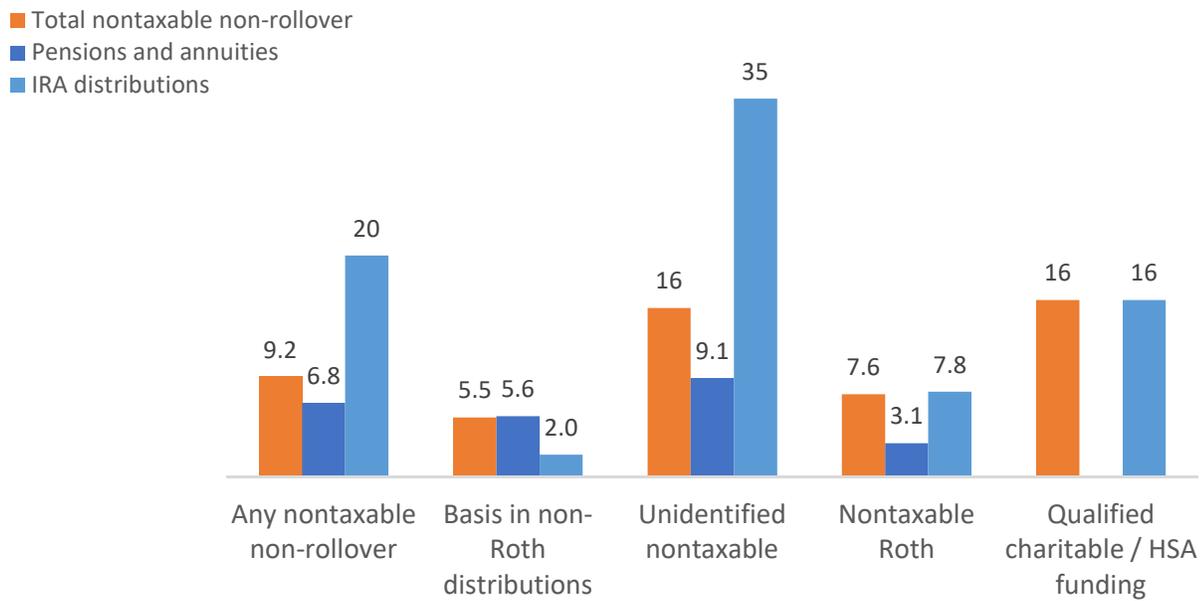


Source: Authors' analysis of IRS data

Figure 7.6

**Nontaxable Non-Rollover IRA Distributions Are Larger on Average**

*Average nontaxable non-rollover distributions by detailed type, thousands of dollars, 2010*

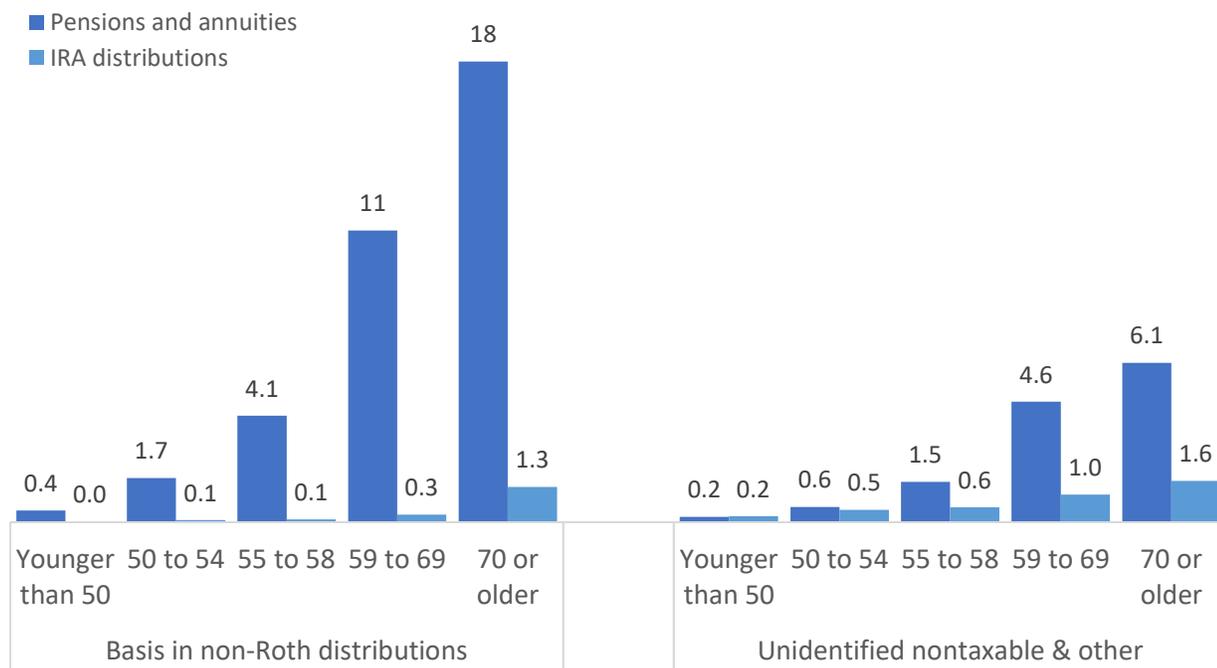


Source: Authors' analysis of IRS data

Figure 7.7

**Nontaxable Non-Rollover Pension Distributions Become Much More Common with Age**

*Taxpayers with nontaxable distributions as a share of all taxpayers in age group, selected types, percent, 2010*

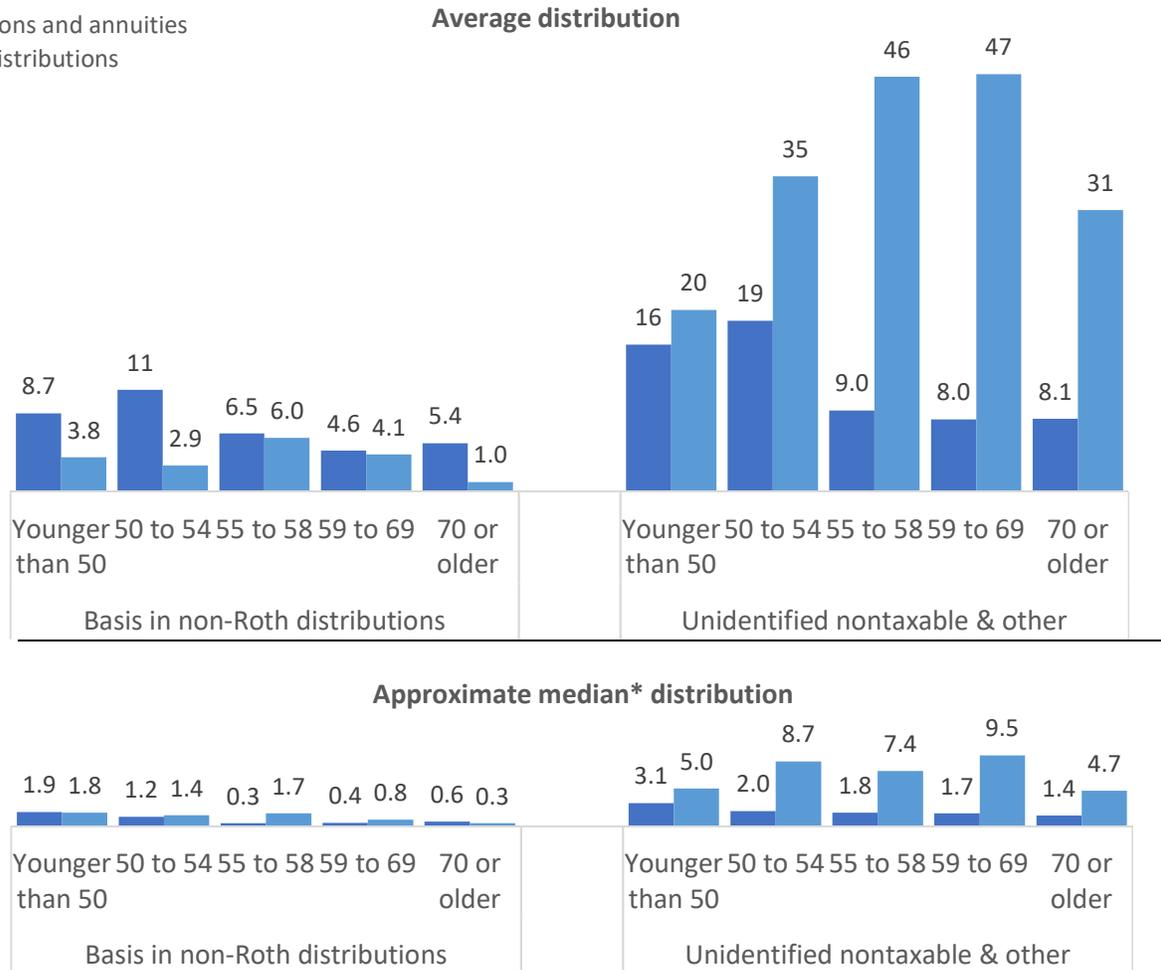


Source: Authors' analysis of IRS data

Figure 7.8

**Amount of Basis and Unidentified Nontaxable in Pensions and Annuities Falls with Age**

*Taxpayers with nontaxable distributions as a share of all taxpayers in the age group, selected types, percent, 2010*

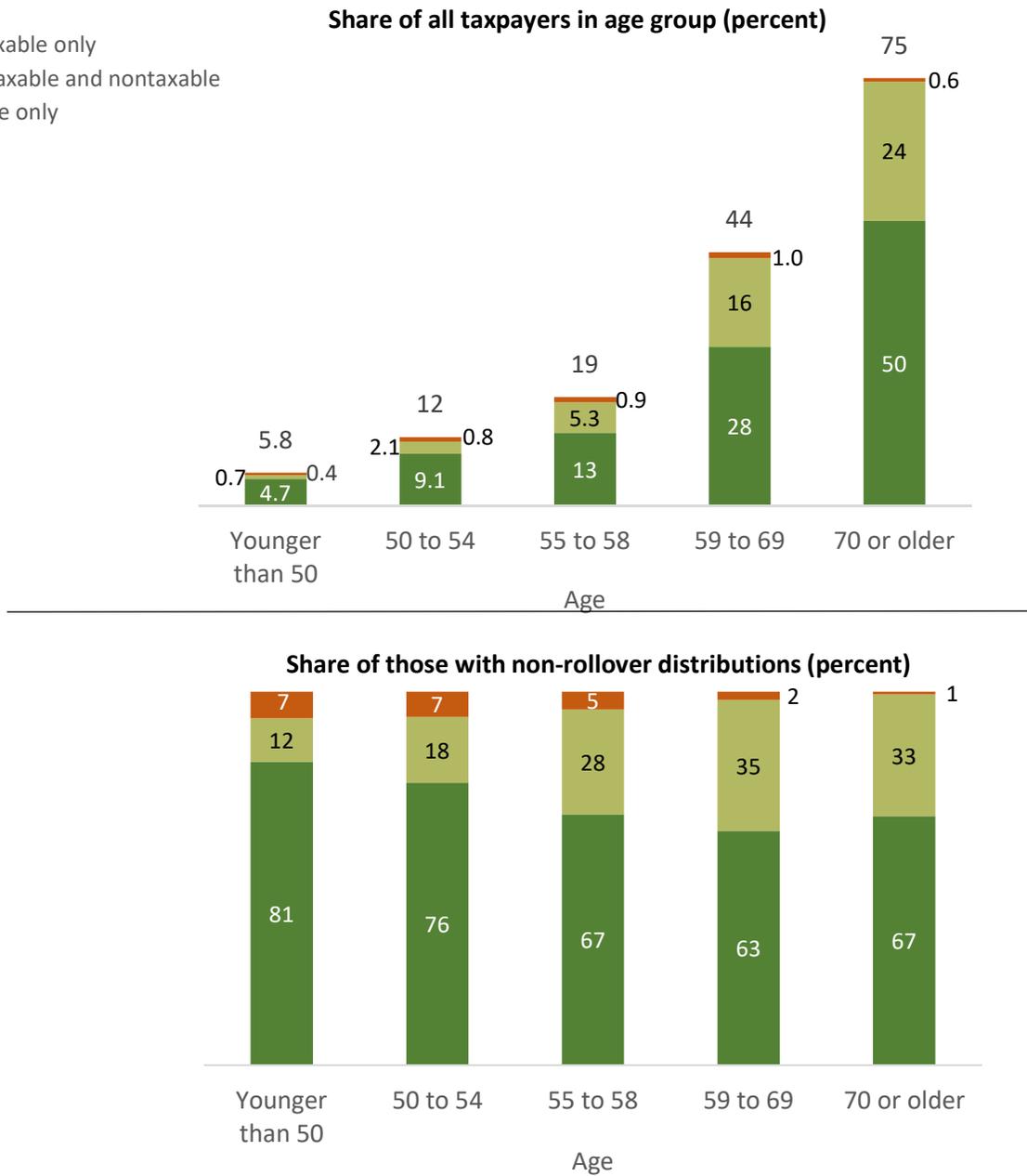


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of non-rollover distributions received.  
 Source: Authors' analysis of IRS data

Figure 7.9

**Most Receive Only Taxable Distributions, But Share Partially Taxable Increases with Age**

*Taxpayers with non-rollover distributions by tax treatment, 2010*

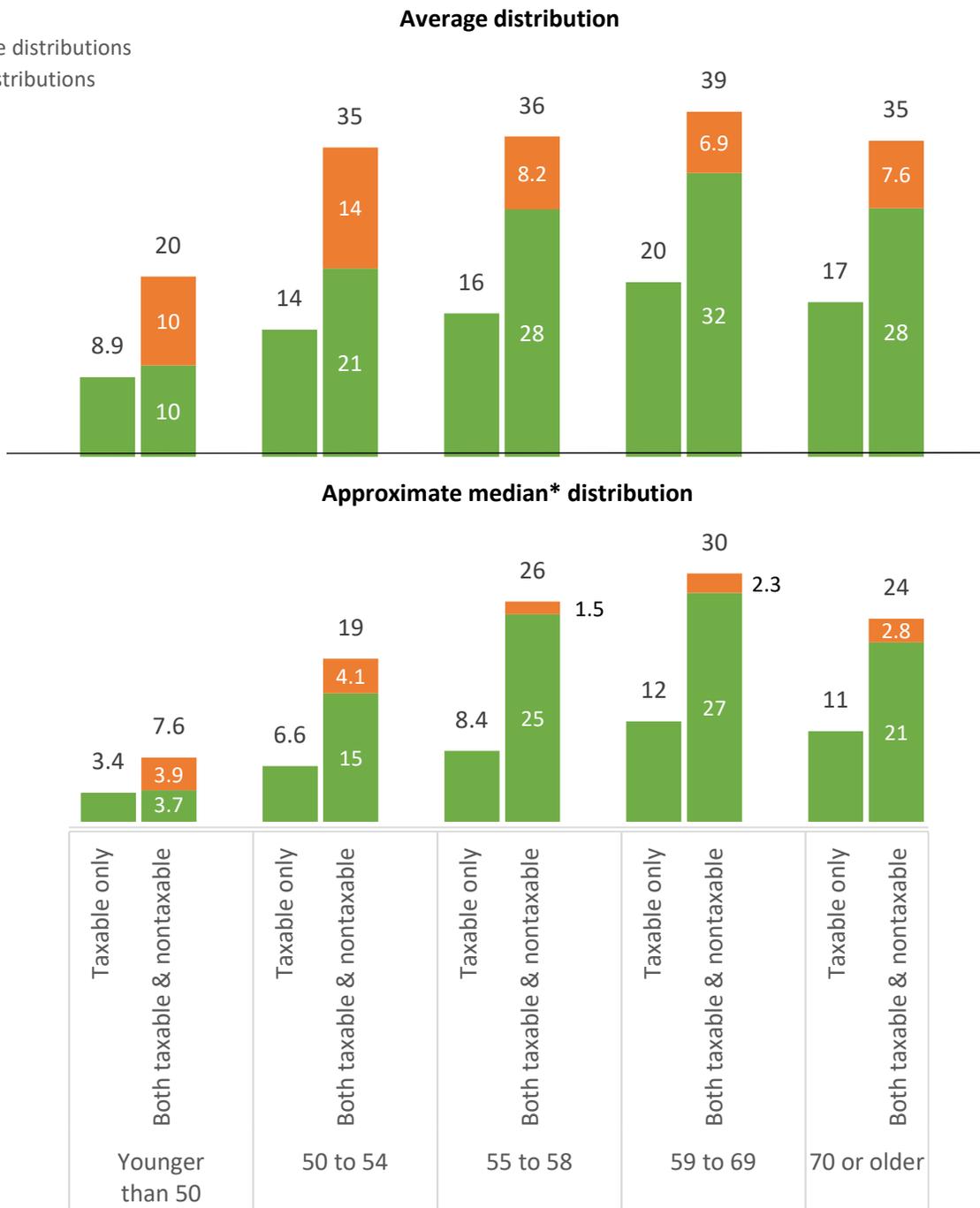


Source: Authors' analysis of IRS data

Figure 7.10

**Non-Rollover Distributions That Are Partially Taxable Are Typically Larger**

Average and approximate median\* non-rollover distributions by tax treatment, thousands of dollars, 2010

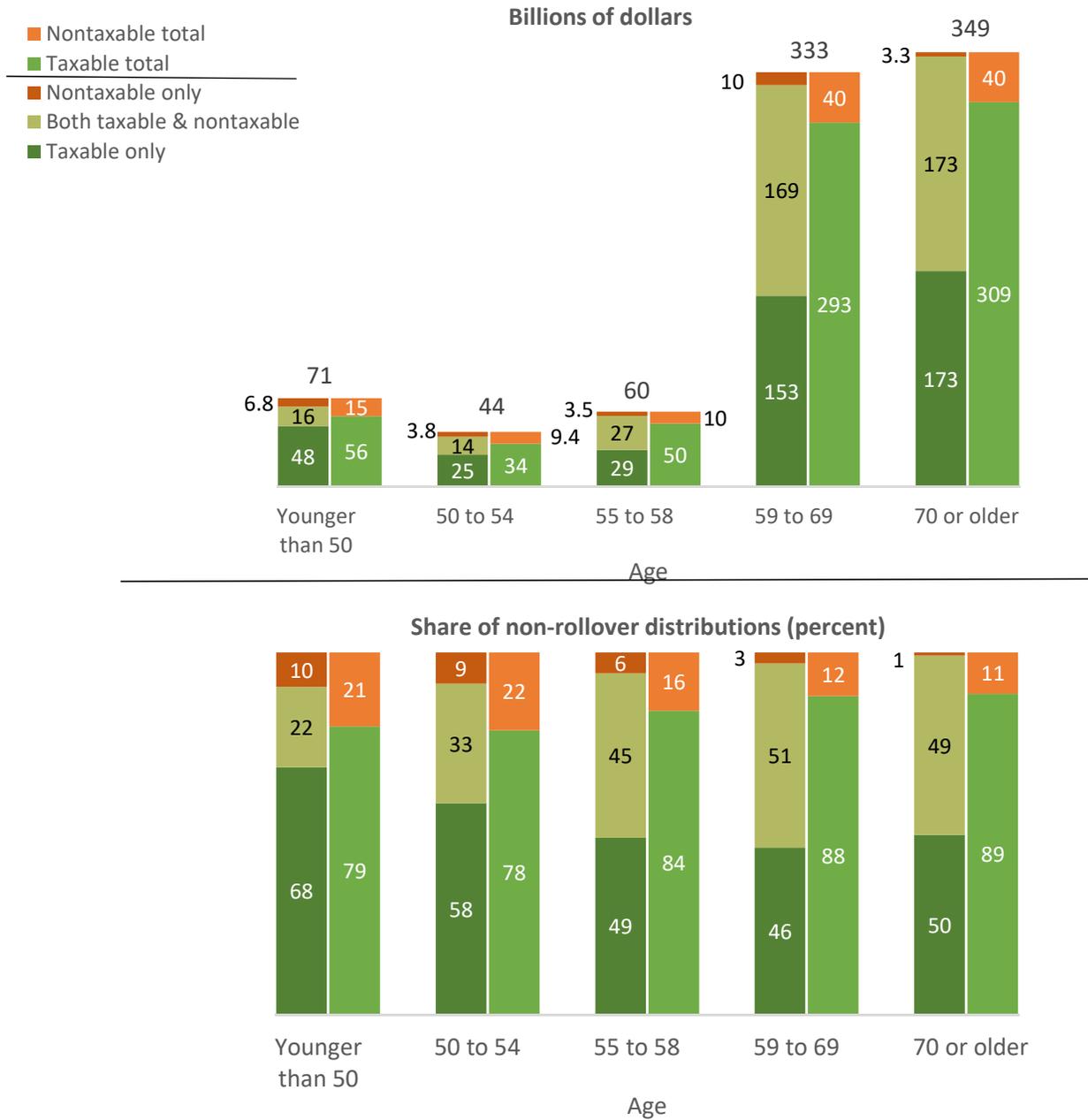


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of non-rollover distributions received.  
Source: Authors' analysis of IRS data

Figure 7.11

**Older Taxpayers with Partially Taxable Distributions Half of Non-Rollovers**

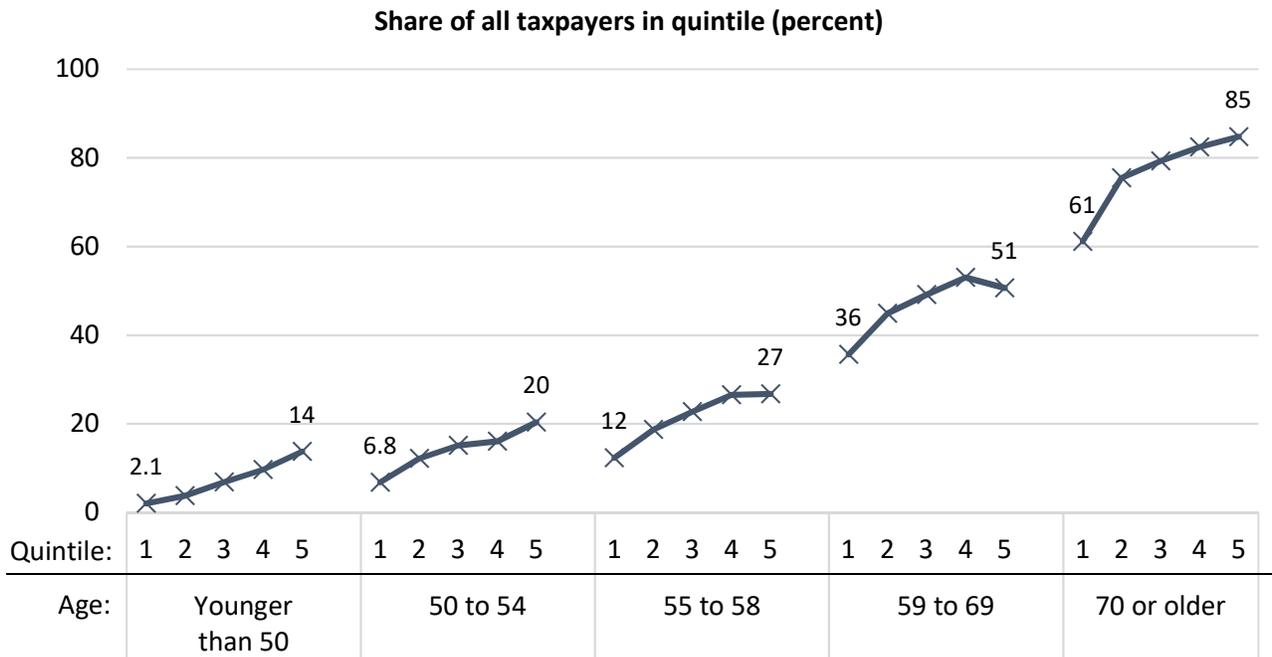
*Non-rollover distributions by tax treatment, 2010*



Source: Authors' analysis of IRS data

Figure 8.1

**Within Age Groups, Share with Gross Retirement Distributions Generally Increases with Incidence of gross retirement retirement distributions by age and quintile of positive income, \* 2010**



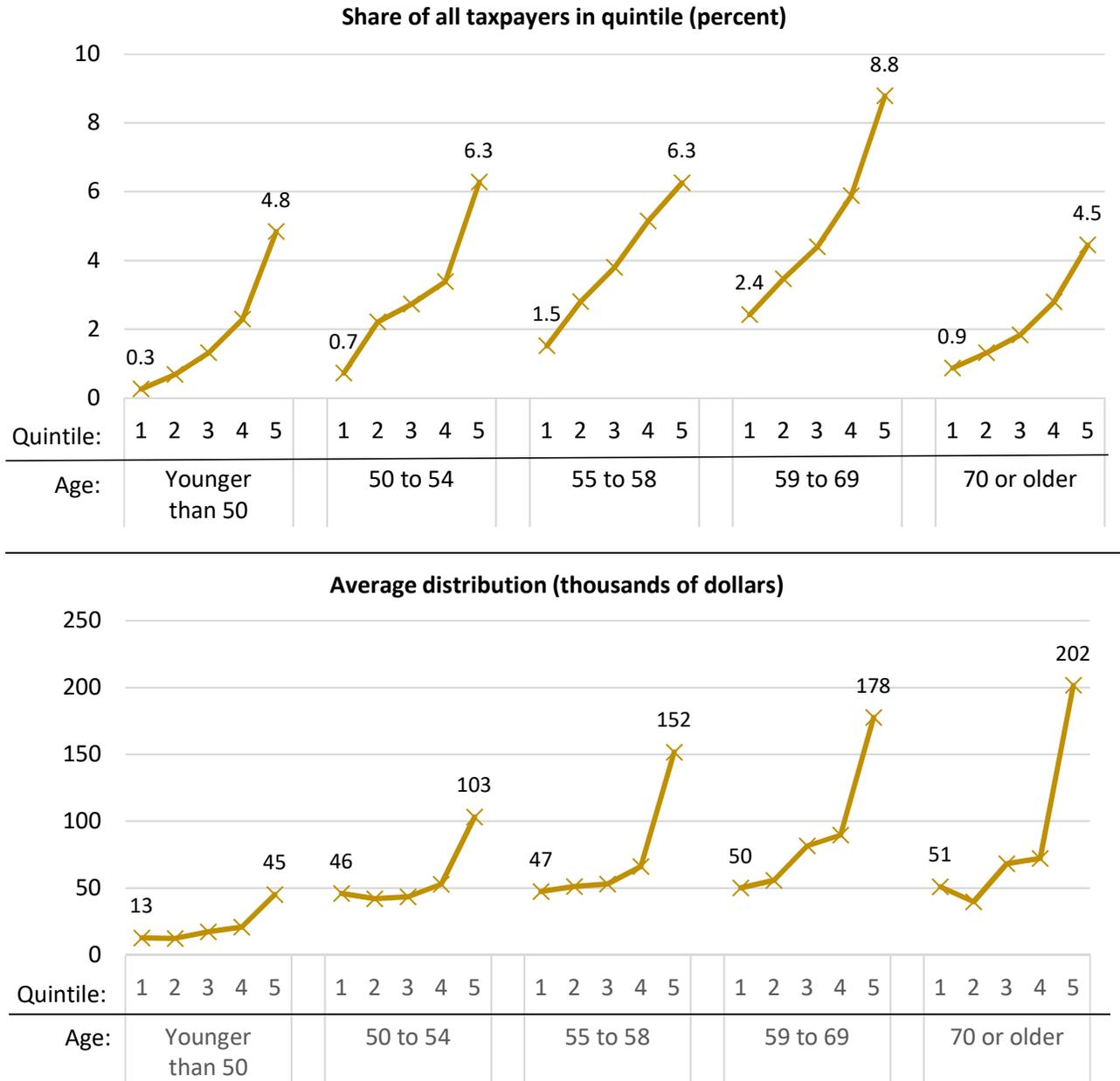
\*Percentile breaks are calculated based on positive per capita adjusted gross income (AGI). For individuals filing a non-joint return, per capita income is equal to return-level income. For married individuals filing a joint return, per capita income is equal to return-level income divided by two. The highest amounts of per-capita income for the first through fourth quintiles are approximately: \$10,800, \$20,300, \$32,500, and \$50,250, respectively, for taxpayers younger than 50; \$18,100, \$30,050, \$45,100, and \$66,550 for taxpayers aged 50 to 54; \$18,100, \$31,000, \$44,650, and \$66,600 for taxpayers aged 55 to 58; \$13,300, \$26,150, \$40,150, and \$60,600 for taxpayers aged 59 to 69; and \$8,550, \$15,700, \$27,800, \$47,650 for taxpayers aged 70 or older.

Source: Authors' analysis of IRS data

Figure 8.2

**Incidence and Amount of Rollover-Type Distributions Increases with Income**

*Incidence and average amount of rollover-type\* distributions by age group's quintile of positive income,\*\* 2010*



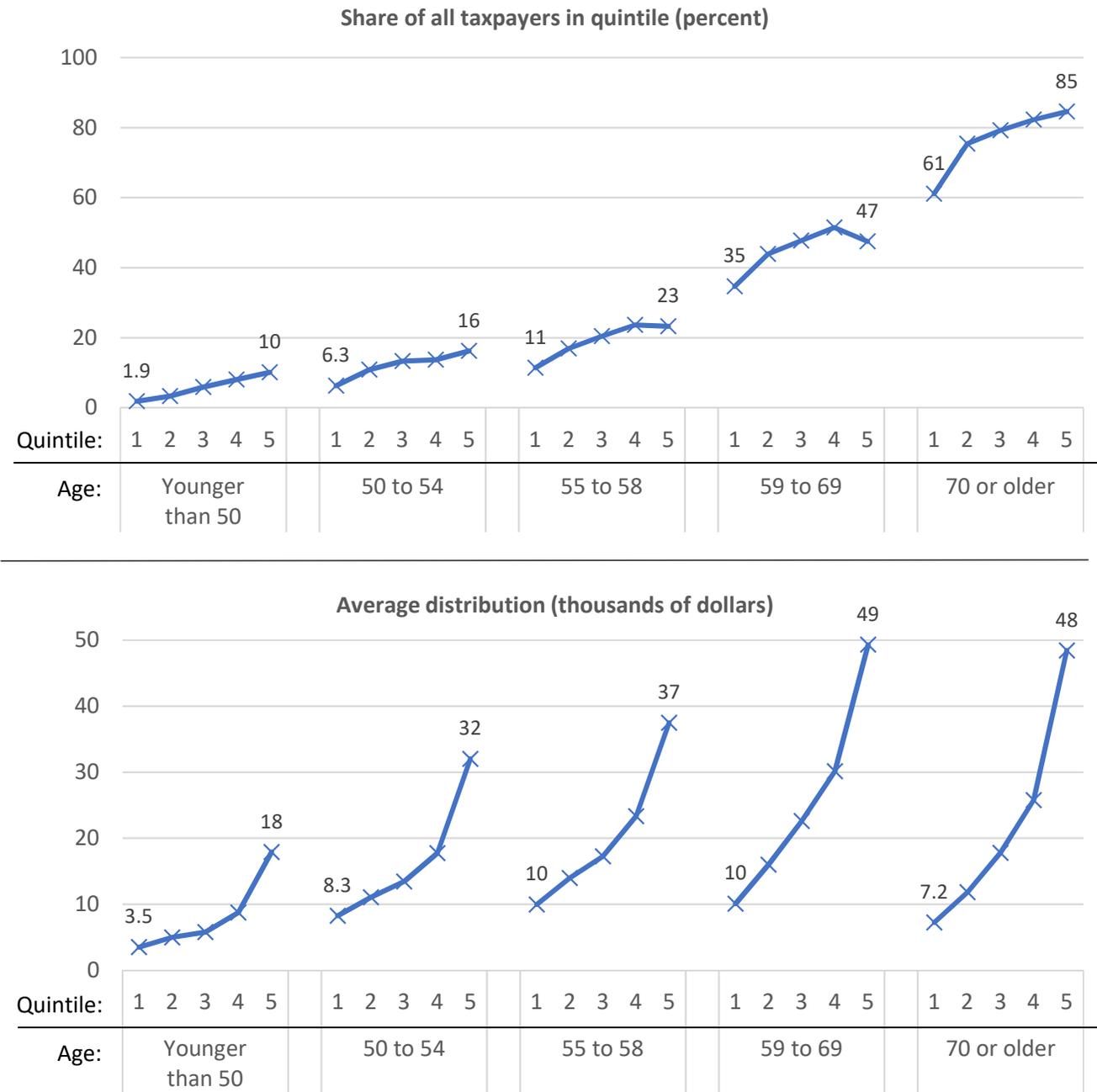
\*In addition to rollovers, rollover-type distributions include Roth conversions and Section 1035 exchanges of annuity contracts.  
 \*\*Percentile breaks are calculated based on positive per capita adjusted gross income (AGI). For individuals filing a non-joint return, per capita income is equal to return-level income. For married individuals filing a joint return, per capita income is equal to return-level income divided by two. See note in Figure 8.1 for quintile breaks.

Source: Authors' analysis of IRS data

Figure 8.3

**Incidence and Amount of Non-Rollovers Generally Increases with Age and Income**

*Incidence and average amount of non-rollover distributions by age group's quintile of positive income,\* 2010*



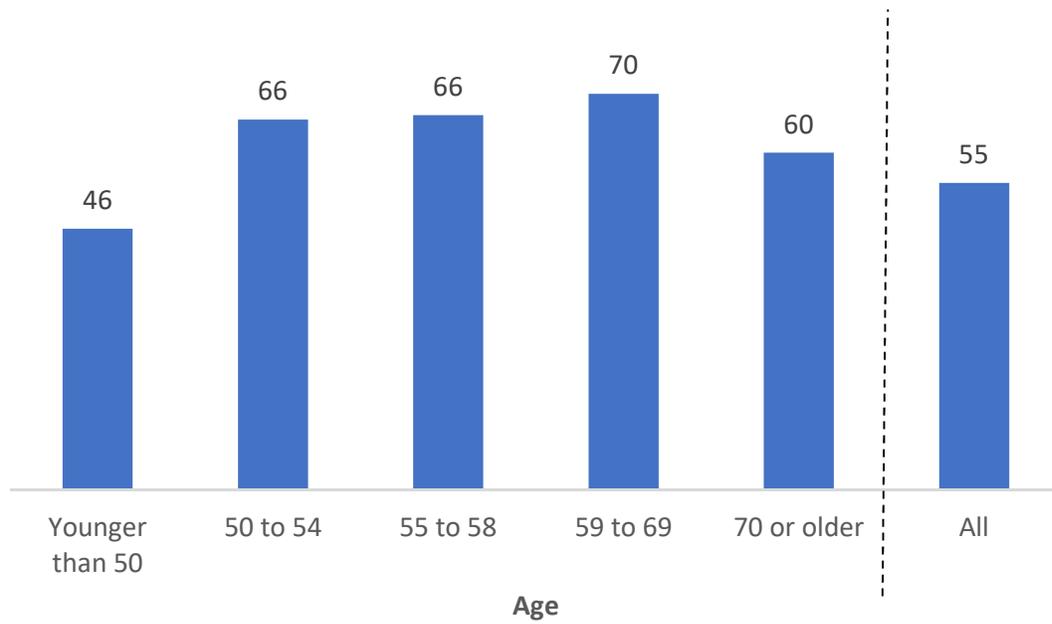
\*Percentile breaks are calculated based on positive per capita adjusted gross income (AGI). For individuals filing a non-joint return, per capita income is equal to return-level income. For married individuals filing a joint return, per capita income is equal to return-level income divided by two. See note in Figure 8.1 for quintile breaks.

Source: Authors' analysis of IRS data

Figure 9.1

### Most Older Taxpayers File a Joint Return

*Taxpayers filing a joint tax return as share of all taxpayers in the age group, percent, 2010*

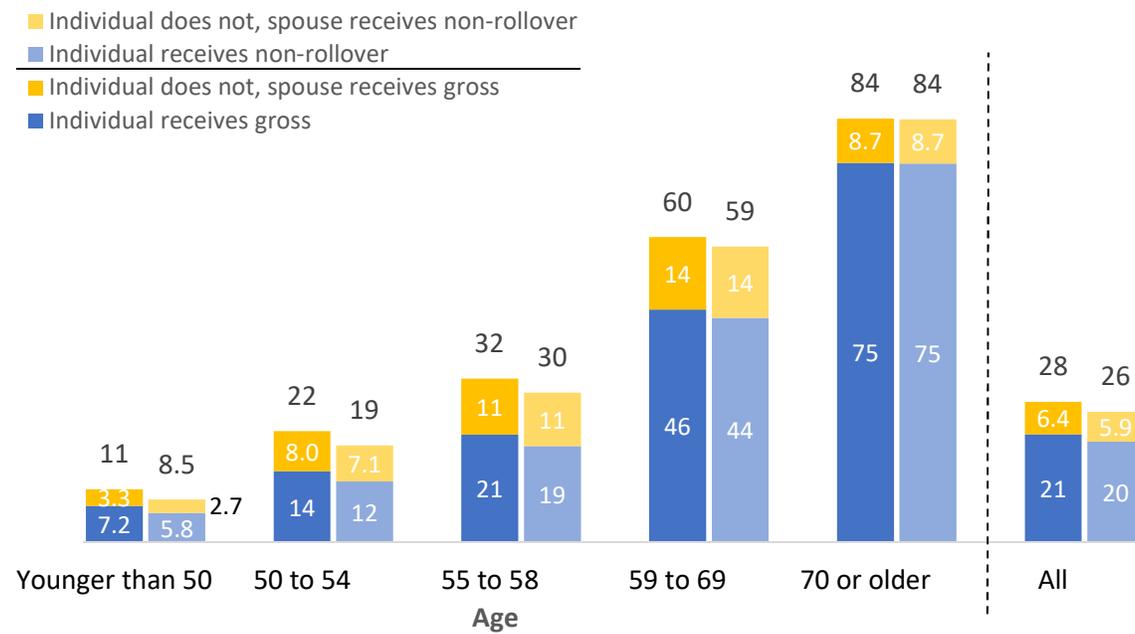


Source: Authors' analysis of IRS data

Figure 9.2

**One-in-Four Taxpayers Report Non-Rollover Distributions on Their Tax Return**

Share of all taxpayers in age group by type of retirement distributions received, percent, 2010

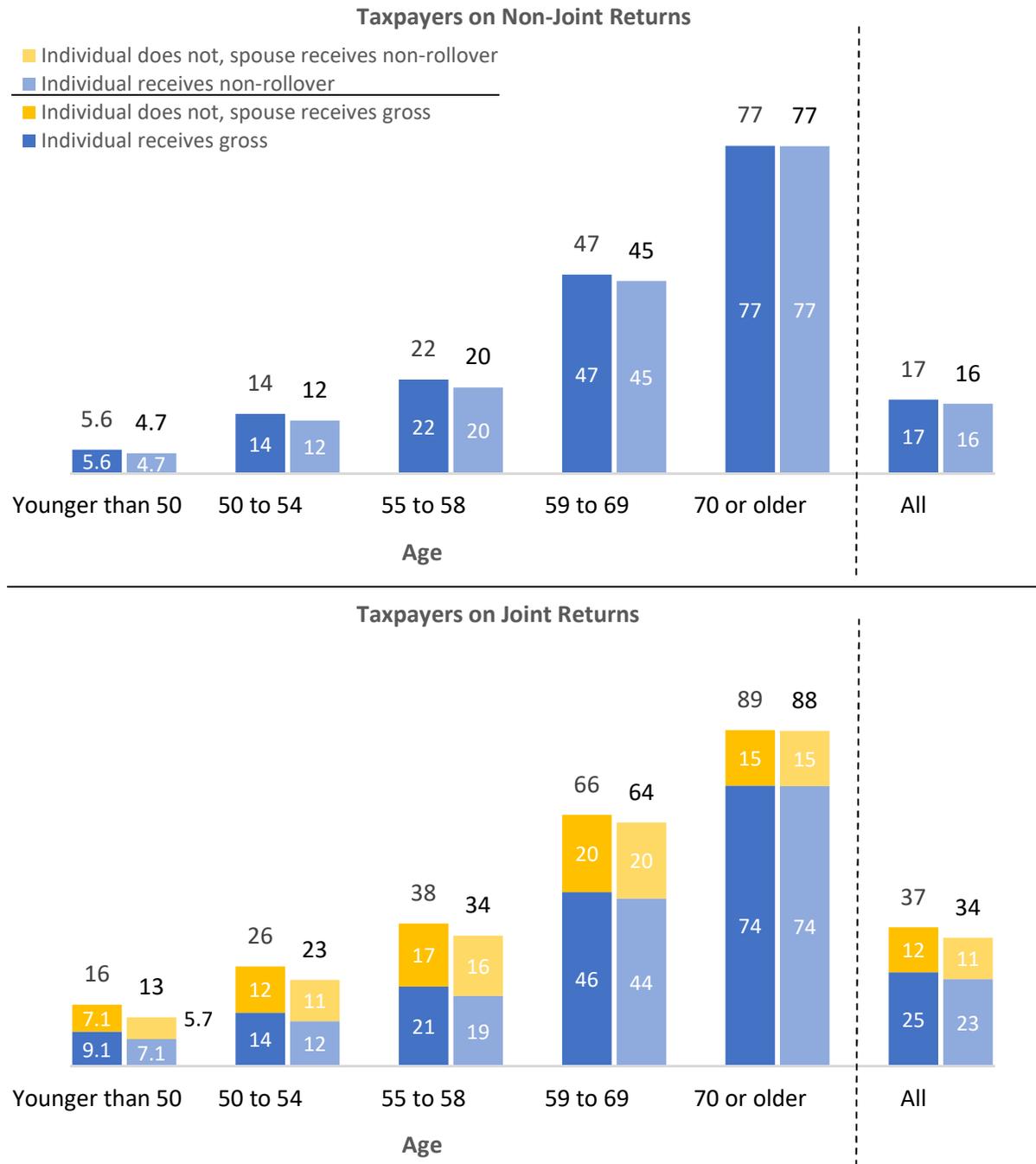


Source: Authors' analysis of IRS data

Figure 9.3

**Many Married Taxpayers Without Distributions Have a Spouse With Distributions**

Share of all taxpayers in age group by type of retirement distribution received, percent, 2010

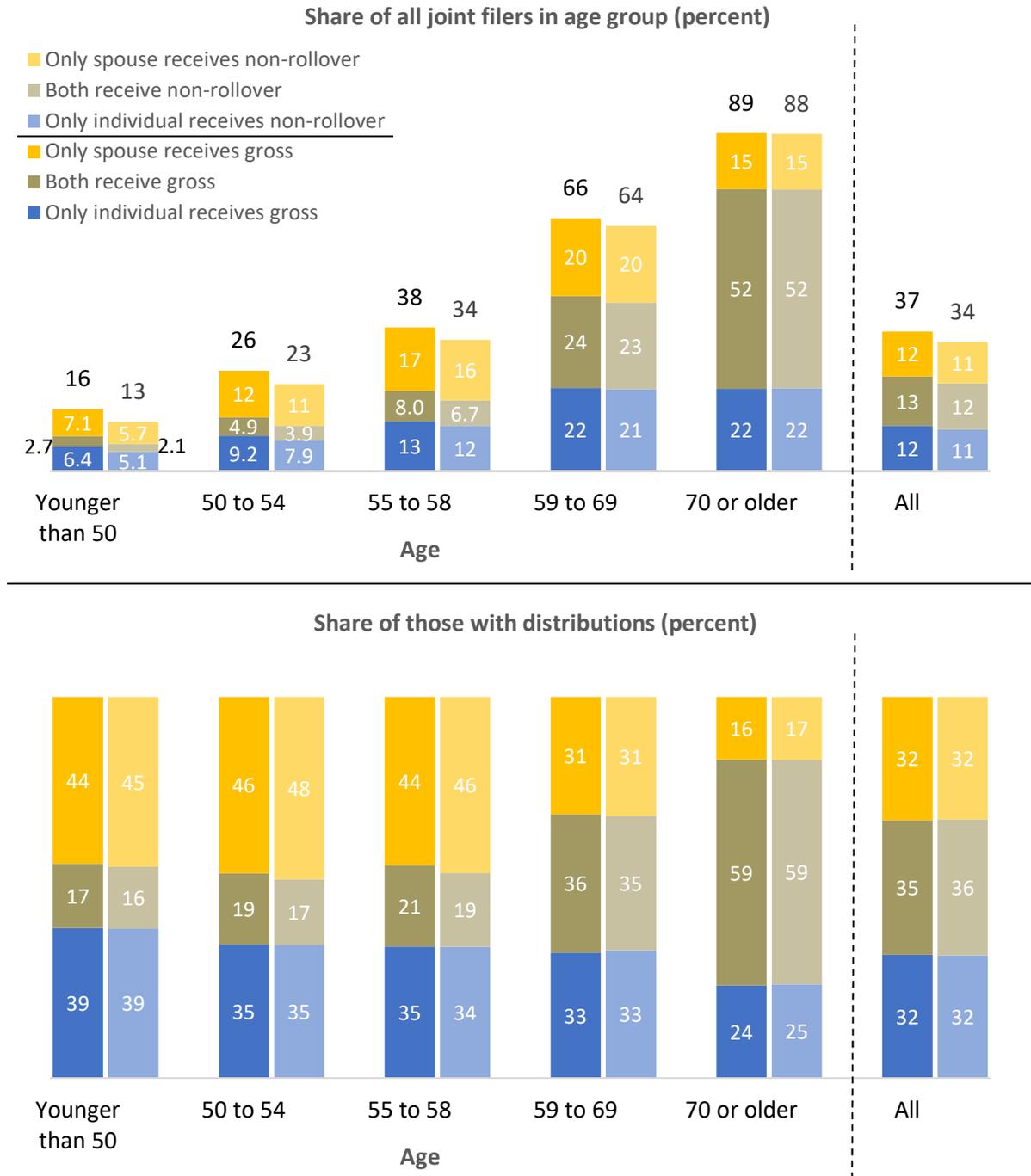


Source: Authors' analysis of IRS data

Figure 9.4

### Couples Where Both Have Distributions Increase with Age

Share of all taxpayers filing joint return in age group by type of retirement distribution received, 2010

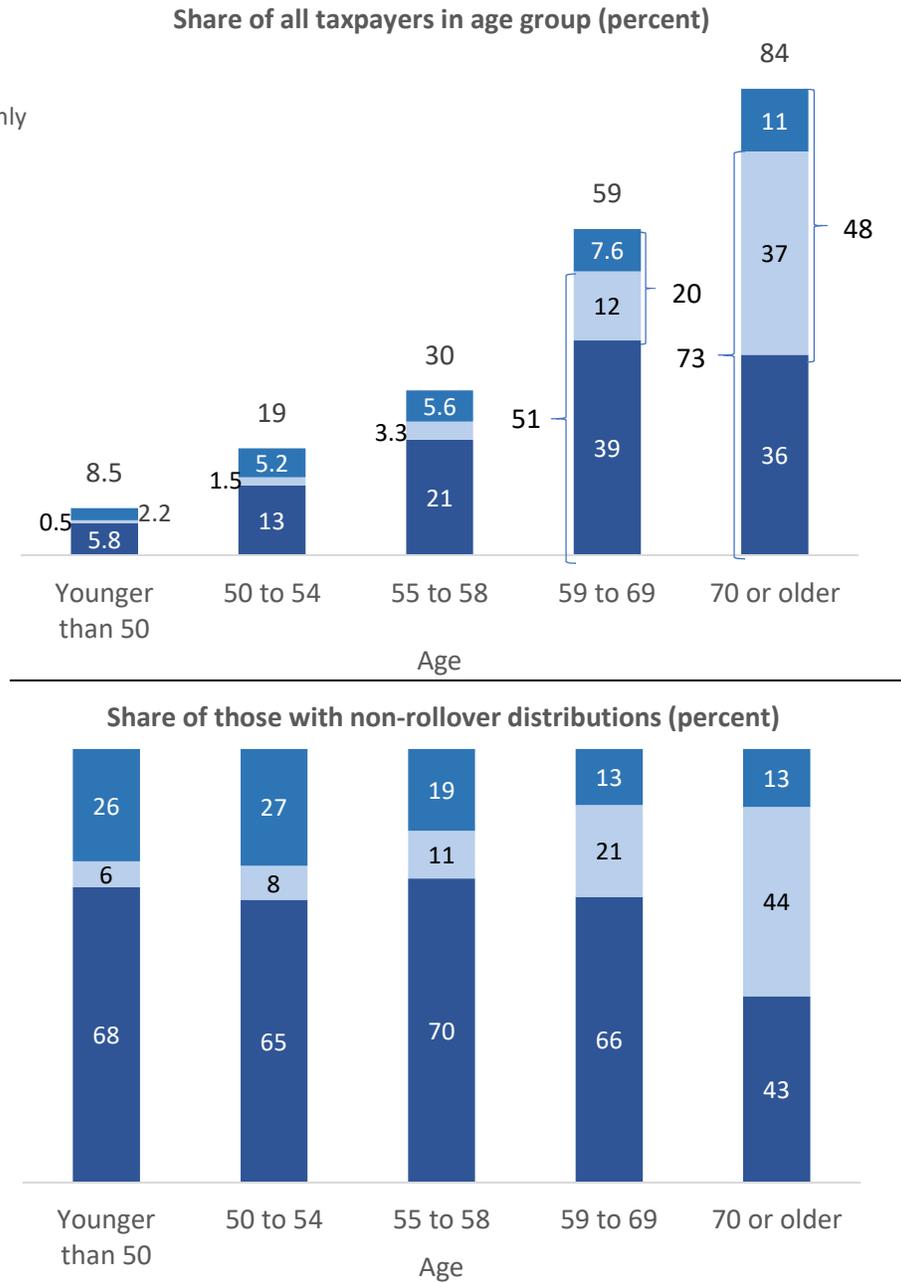


Source: Authors' analysis of IRS data

Figure 9.5

Three-Quarters 70 or Older Have Distributions from Pensions and Half from IRAs

Taxpayers with non-rollover distributions on their tax return by source, 2010

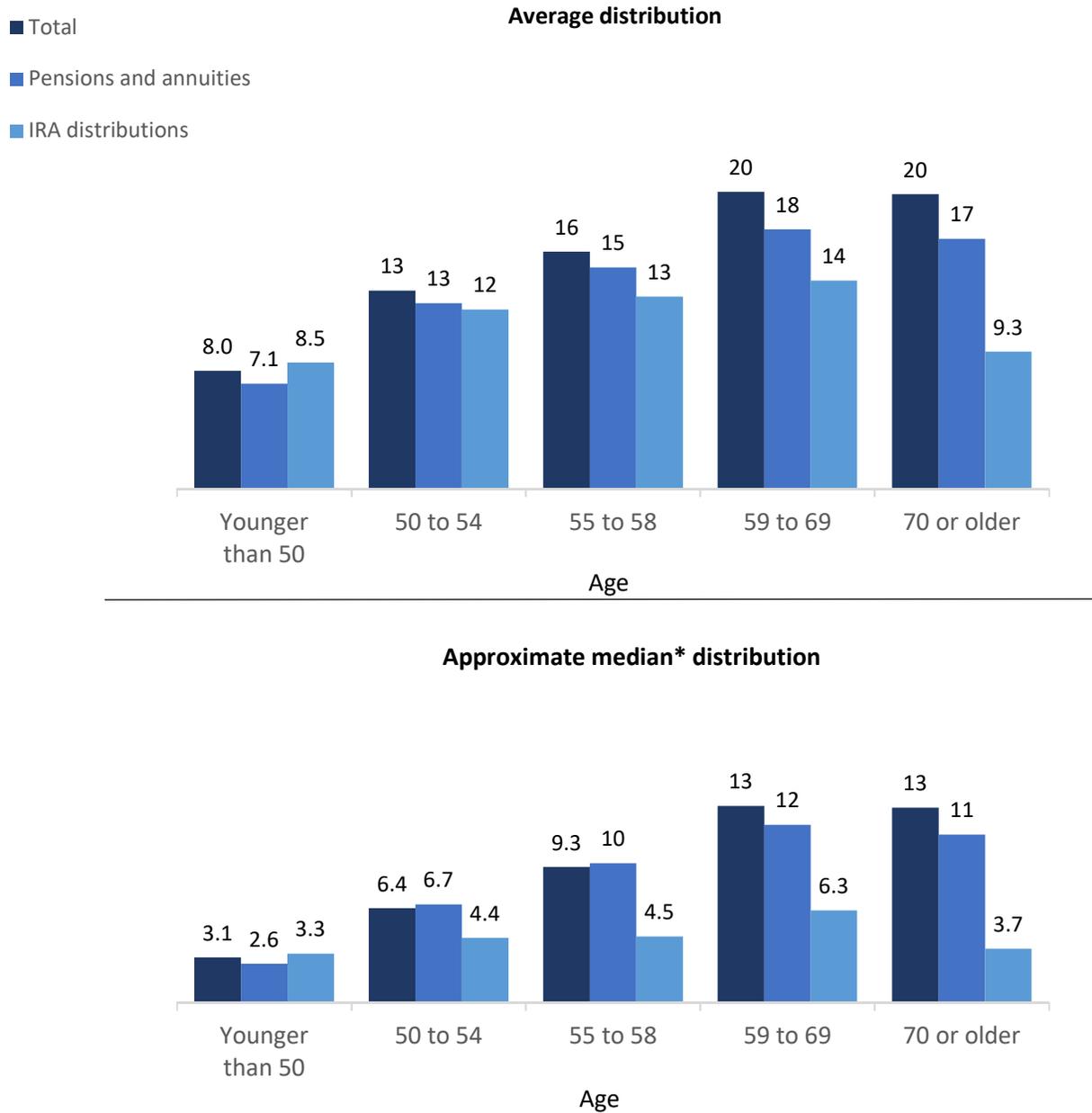


Source: Authors' analysis of IRS data

Figure 9.6

### No Dropoff in Size of Per Person Retirement Distributions after Age 70

Average and approximate median\* per capita non-rollover distributions by source, thousands of dollars, 2010

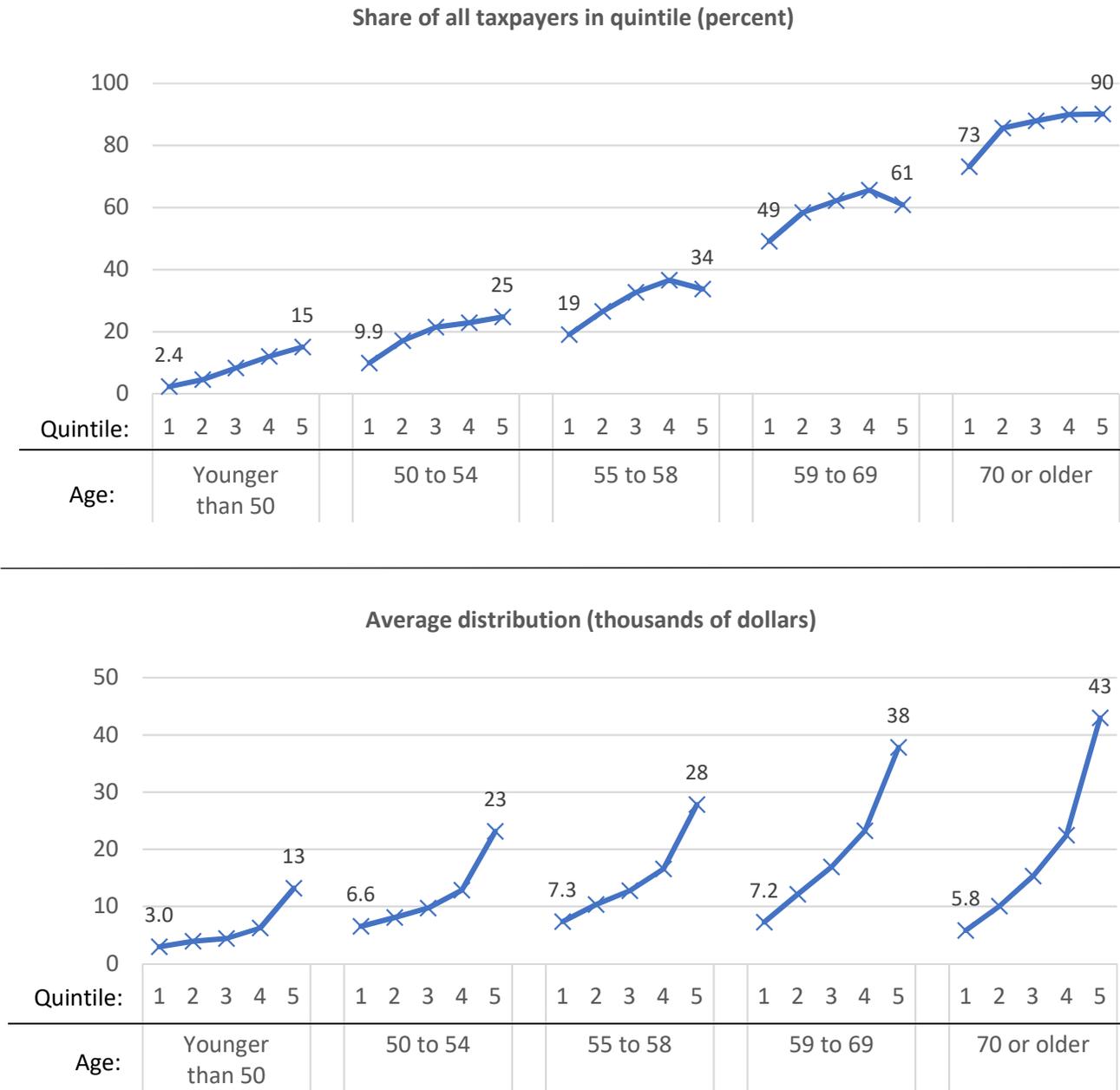


\* Approximate median is the average of the middle 10 percent of individuals in the group ranked by the amount of non-rollover distributions received.  
 Source: Authors' analysis of IRS data

Figure 9.7

**Vast Majority of Taxpayers 70 or Older Have Retirement Distributions on Their Tax Returns**

*Incidence and average amount of per capita non-rollover distributions by age group's quintile of positive income,\* 2010*



\*Percentile breaks are calculated based on positive per capita AGI. For individuals filing a non-joint return, per capita income is equal to return-level income. For married individuals filing a joint return, per capita income is equal to return-level income divided by two. The highest amounts of per-capita income for the first through fourth quintiles are approximately: \$10,800, \$20,300, \$32,500, and \$50,250, respectively, for taxpayers younger than 50; \$18,100, \$30,050, \$45,100, and \$66,550 for taxpayers aged 50 to 54; \$18,100, \$31,000, \$44,650, and \$66,600 for taxpayers aged 55 to 58; \$13,300, \$26,150, \$40,150, and \$60,600 for taxpayers aged 59 to 69; and \$8,550, \$15,700, \$27,800, \$47,650 for taxpayers aged 70 or older.

Source: Authors' analysis of IRS data