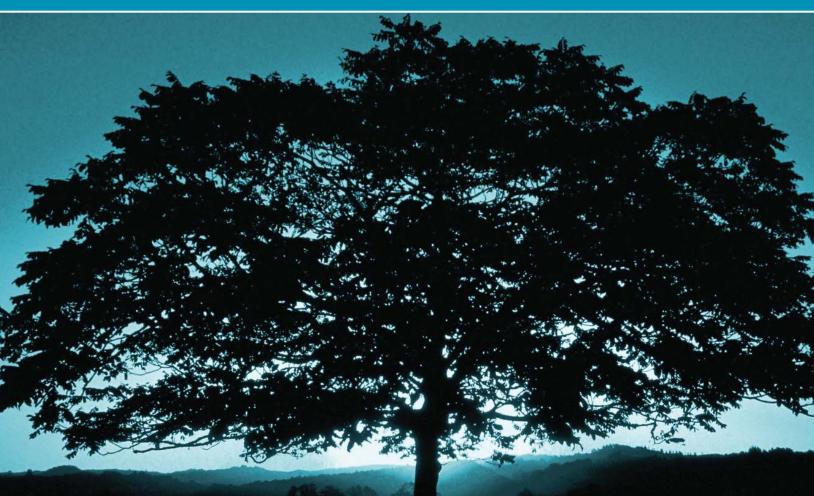
# The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2016

# SEPTEMBER 2018





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### The IRA Investor Database™

The Investment Company Institute maintains an account-level database with more than 17 million individual retirement account (IRA) investors. The aim of this database is to increase public understanding of this important segment of the US retirement market by expanding on the existing household surveys and Internal Revenue Service (IRS) tax data on IRA investors. By tapping account-level records, research drawn from the database can provide important insights into IRA investor demographics, activities, and asset allocation decisions. The database is designed to shed light on key determinants of IRA contribution, conversion, rollover, and withdrawal activity, and the types of assets that investors hold in these accounts.

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# Contents

Executive Summary
Traditional IRA Investors Had Only a Modest Reaction to Financial Stresses $\ldots \ldots 1$
Snapshot of Traditional IRA Investors at Year-End 2016 Provides Additional Insight into Traditional IRA Investors' Activities
Few Traditional IRA Investors Make Contributions
New Traditional IRAs Often Are Created by Rollovers
Withdrawal Activity Is Concentrated Among the Oldest Traditional IRA Investors $\ldots$ 3
Equity Holdings Figure Prominently in Traditional IRAs
Introduction
The Role of IRAs in US Retirement Planning4
Sources of IRA Data
The IRA Investor Database <sup>™</sup>
Research Agenda for This Report5
Chapter 1: Following Traditional IRA Investors over Time
Financial and Regulatory Developments, 2007-2016
Changes in Traditional IRA Assets
Changes in Consistent Individual Investors' Traditional IRA Balances, 2007-2016 11
Contribution Activity for Consistent Traditional IRA Investors, 2008–201613
Rollover Activity for Consistent Traditional IRA Investors, 2008-2016
Withdrawal Activity for Consistent Traditional IRA Investors, 2008–201614
Equity Investing in Traditional IRAs Before and After the Financial Crisis
Changes in Consistent Individual Investors' Traditional IRA Balances Between 2007 and 2016 by Investor Age
Chapter 2: Traditional IRA Investors' Contribution Activity in 2016
Contributions to Traditional IRAs
Contributions to Traditional IRAs in 2016 by Investor Age
Traditional IRA Contribution Amounts in 2016 by Investor Age

Traditional IRA Investors' Contribution Amounts Varied in 2016
Older Traditional IRA Contributors Were More Likely to Contribute at the Limit in 2016
Persistence in Contribution Activity Among Traditional IRA Investors from 2015 to 2016
Contributions at the Limit Tend to Persist
Chapter 3: Traditional IRA Investors' Rollover Activity in 2016
Rollovers Often Were the Source of New Traditional IRAs in 2016
Traditional IRA Rollover Activity in 2016 by Investor Age
Traditional IRA Rollover Amounts in 2016 by Investor Age
Rollovers Tend to Have a Strong Positive Impact on Traditional IRA Balances
Chapter 4: Traditional IRA Investors' Withdrawal Activity in 2016
Traditional IRA Withdrawal Activity 43
Traditional IRA Withdrawal Activity in 2016 by Investor Age
Traditional IRA Withdrawal Amounts in 2016 by Investor Age
Many Traditional IRA Investors Determine Withdrawal Amounts Using RMD Rules $\dots 48$
Traditional IRA Withdrawal Activity in 2016 by Age and Account Balance
Chapter 5: Traditional IRA Investors' Balances at Year-End 2016
Traditional IRA Balances in 2016 by Investor Age51
Distribution of Traditional IRA Balances by Size in 2016
Chapter 6: Snapshots of Investments in Traditional IRAs at Year-End 2007 and Year-End 2016
Investments in Traditional IRAs in 2016 by Investor Age
Snapshots of Allocation to Equity Holdings Between 2007 and 2016
Default Rollover Rules Likely Affect Equity Exposure in Smaller Traditional IRAs62
Small Rollovers Often Are Invested in Money Market Funds
<b>Appendix</b>
Notes
<b>References</b>

# Figures

## Chapter 1: Following Traditional IRA Investors over Time

FIGURE 1.1	Financial Events and Changing Rules Surrounding Traditional IRAs, 2007–2017
FIGURE 1.2	Traditional IRA Assets and Flows
FIGURE 1.3	Domestic Stock and Bond Market Total Return Indexes12
FIGURE 1.4	Factors Influencing Changes in Consistent Individual Investors' Traditional IRA Balances, 2008–201615
FIGURE 1.5	Contribution Activity for Consistent Traditional IRA Investors, 2008-2016
FIGURE 1.6	Withdrawal Activity for Consistent Traditional IRA Investors, 2008-2016
FIGURE 1.7	Equity Holdings Account for Majority of Assets in Traditional IRAs. $\dots 18$
FIGURE 1.8	Changes in Concentration of Traditional IRA Investors' Equity Holdings Between 2007 and 201620
FIGURE 1.9	Changes in Zero Allocation to Equity Holdings Among Consistent Traditional IRA Investors
FIGURE 1.10	Changes in 100 percent Allocation to Equity Holdings Among Consistent Traditional IRA Investors
FIGURE 1.11	Traditional IRA Balances Among Consistent Traditional IRA Investors24
FIGURE 1.12	Traditional IRA Balances Among Consistent Traditional IRA Investors by Investor Age
Chapter 2: Tradition	al IRA Investors' Contribution Activity in 2016
FIGURE 2.1	Traditional IRA Contribution Rates
FIGURE 2.2	Contribution Activity of Traditional IRA Investors by Investor Age
FIGURE 2.3	Traditional IRA Contribution Amounts by Investor Age
FIGURE 2.4	Distribution of Traditional IRA Contribution Amounts
FIGURE 2.5	Half of Traditional IRA Contributors Contributed at the Limit in 2016
FIGURE 2.6	Older Traditional IRA Contributors Were More Likely to Contribute at the Limit in 2016
FIGURE 2.7	Three-Fifths of Traditional IRA Investors at the Limit in Tax Year 2015 Continued to Contribute at the Limit in Tax Year 2016

## Chapter 3: Traditional IRA Investors' Rollover Activity in 2016

FIGURE 3.1	Sources of New Traditional IRAs by Investor Age	38
FIGURE 3.2	Rollover Activity of Traditional IRA Investors by Investor Age	39
FIGURE 3.3	Traditional IRA Investors with Rollovers by Investor Age	40
FIGURE 3.4	Many Traditional IRA Investors Have Made Rollovers	41
FIGURE 3.5	Recent Rollovers Provide a Significant Boost to Traditional IRA Balances	42
Chapter 4: Tradition	al IRA Investors' Withdrawal Activity in 2016	
FIGURE 4.1	Traditional IRA Withdrawal Rates	45
FIGURE 4.2	Withdrawal Activity of Traditional IRA Investors in 2016 by Investor Age	46
FIGURE 4.3	Traditional IRA Withdrawals in 2016 by Investor Age	47
FIGURE 4.4	Required Minimum Distributions Often Were Used to Determine Withdrawal Amounts in 2016	48
FIGURE 4.5	Traditional IRA Investors with Larger Balances Tend to Be More Likely to Take Withdrawals	49
FIGURE 4.6	Traditional IRA Investors with Larger Account Balances and Withdrawals Tended to Withdraw a Smaller Portion of Their Balances	50
Chapter 5: Tradition	nal IRA Investors' Balances at Year-End 2016	
FIGURE 5.1	Traditional IRA Balances in 2016 Tended to Increase with Investor Age	51

FIGURE 5.2	Distribution of Traditional IRA Balances by Size	52
FIGURE 5.3	Traditional IRA Balances by Investor Age	53

Chapter 6: Snapshots of Investments in Traditional IRAs at Year-End 2007 and Year-End 2016

FIGURE 6.1	Equity Holdings Figure Prominently in Traditional IRA Investments56
FIGURE 6.2	Investments in Traditional IRAs by Investor Age57
FIGURE 6.3	Number of Target Date Funds Owned by Traditional IRA Investors in 2016
FIGURE 6.4	Share of Traditional IRA Balances Allocated to Equity Holdings Little Changed Between 2007 and 201659
FIGURE 6.5	Investor Exposure to Equity Holdings Declined Among Traditional IRA Investors Between 2007 and 201661
FIGURE 6.6	Equity Holdings in Traditional IRAs with Balances of \$5,000 or Less63
FIGURE 6.7	Equity Holdings in Traditional IRAs with Balances of More Than \$5,00064
FIGURE 6.8	Many Small Rollovers Are Invested in Money Market Funds65
FIGURE 6.9	Small Rollovers Initially Invested in Money Market Funds Often Remain in Money Market Funds66
Appendix	
FIGURE A.1	Investments in Traditional IRAs in 2016 by Broad Investor Age67
FIGURE A.2	Movement of Small Rollover Traditional IRAs out of

HOURE A.Z	Money Market Funds	.68
FIGURE A.3	Age Distribution of Traditional IRA Investors	.69

# The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2016

Sarah Holden, ICI senior director of retirement and investor research, and Steven Bass, ICI associate economist, prepared this report.

# **Executive Summary**

With \$6.9 trillion in assets at year-end 2016, traditional individual retirement accounts (IRAs) are a key component of the US retirement system. Traditional IRAs were created by Congress to provide a contributory retirement savings vehicle (originally for individuals not covered by retirement plans at work) and as a place to roll over accumulations from employer-sponsored retirement plans. Traditional IRAs are managed by individuals, and policymakers are interested in understanding how traditional IRA investors navigated the financial crisis and managed their IRAs over time.

By analyzing the contribution, rollover, withdrawal, and asset allocation activity of 4.5 million consistent traditional IRA investors—those with accounts in every year between 2007 and 2016—it is possible to determine how consistent traditional IRA investors fared during and in the wake of the financial crisis. In addition, analysis of a snapshot of nearly 12 million traditional IRA investors in 2016 can provide more detailed insight into how individuals manage their traditional IRAs.

# **Traditional IRA Investors Had Only a Modest Reaction to Financial Stresses**

**Contributions, Rollovers, and Withdrawals.** Despite dramatic declines in stock values between October 2007 and March 2009, a recession (December 2007 to June 2009), and rising unemployment rates, traditional IRA investors with accounts from year-end 2007 through year-end 2016 showed little reaction to the financial events. Contribution and rollover activity declined only a bit in the wake of the financial crisis. Although relatively few traditional IRA investors contribute to their traditional IRAs in any given year, those that do contribute tend to do so in multiple years; this tendency persisted even from 2008 to 2016. Withdrawal rates rose slightly between 2008 and 2016, but still only a small fraction of younger traditional IRA investors took money out of their traditional IRAs.

**Asset Allocation.** Traditional IRA investors' allocation to equity holdings fell, on average, between 2007 and 2008 before rebounding, although some of the change merely reflects market movement rather than investors' rebalancing. For example, among consistent traditional IRA investors aged 27 to 59 in 2016, about three-quarters of their traditional IRA assets were invested in equity holdings—which includes equities, equity funds, and the equity portion of balanced funds—at year-end 2007, and about two-thirds of their traditional IRA assets were invested in equity holdings at year-end 2008. The share of traditional IRA assets invested in equities for consistent investors aged 27 to 59 was 73.1 percent by year-end 2016. Between year-end 2007 and year-end 2016, few traditional IRA investors changed to or from equity concentrations of zero or 100 percent of their traditional IRA balances. A significant minority of consistent traditional IRA investors had all of their traditional IRA balances invested in equity holdings; only slight net movement away from that full concentration occurred between year-end 2007 and year-end 2016.

**Account Balances.** The movement of traditional IRA balances reflected the impact of investment returns; investors' contribution, rollover, and withdrawal activity; and the rules governing traditional IRAs. Although account balances fell considerably following the stock market decline in 2008, the average traditional IRA balance for traditional IRA investors in all age groups with account balances in all years between 2007 and 2016 was higher at year-end 2016 than at year-end 2007. The change in traditional IRA balances reflects contributions, rollovers, withdrawals, and investment returns. Beginning at age 70½, individuals are no longer eligible to make contributions to traditional IRAs and typically must begin to take withdrawals, putting downward pressure on account balances among older traditional IRA investors. Increased Roth conversion activity in 2010 also may have put downward pressure on average traditional IRA balances.

## Snapshot of Traditional IRA Investors at Year-End 2016 Provides Additional Insight into Traditional IRA Investors' Activities

It also is possible to analyze a snapshot of all traditional IRA investors present in the database in any given year. This report primarily focuses on traditional IRA investors in 2016.

### Few Traditional IRA Investors Make Contributions

In any given year, few traditional IRA investors make contributions to their traditional IRAs. Several factors likely explain this tendency, including meeting savings needs through employer-sponsored retirement plans, rules limiting the ability to make deductible contributions, making Roth contributions instead, and confusion about IRA rules. In tax year 2016, 9.0 percent of traditional IRA investors contributed to their traditional IRAs, and half of traditional IRA investors who did so contributed at the legal limit. Among traditional IRA investors making contributions, there is persistence in contribution activity.

## New Traditional IRAs Often Are Created by Rollovers

Rollovers are the predominant way investors open traditional IRAs. In 2016, about 70 percent of new traditional IRAs received rollovers. Because rollovers generally occur after job change or retirement, which is a sporadic event for most people, in any given year only about one in 10 traditional IRA investors made rollovers. In the aggregate, the data for rollover activity indicate that more than half of traditional IRA investors have had a rollover at some point. Traditional IRAs with recent rollovers tend to have larger balances than those without rollovers, particularly among older traditional IRA investors.

# Withdrawal Activity Is Concentrated Among the Oldest Traditional IRA Investors

Withdrawal activity is rare among younger traditional IRA investors and overall, fewer than one in four traditional IRA investors took withdrawals in 2016. Of these, more than three-quarters were taken by traditional IRA investors aged 60 or older who can take penalty-free distributions, and more than half were taken by investors aged 70 or older for whom annual distributions generally are required. Withdrawal activity responds to rule changes, and it predictably dipped in 2009 when required minimum distributions (RMDs) were suspended by law. It also tends to edge up as more traditional IRA investors age into RMD status. A majority of traditional IRA investors aged 70 or older use RMD rules to determine how much to withdraw from their accounts.

## **Equity Holdings Figure Prominently in Traditional IRAs**

IRAs hold a range of investments, and the largest share of traditional IRA assets is invested in equities and equity funds, both in aggregate and across investor age groups. The pattern of investment holdings in traditional IRAs tended to vary with investor age, typically as expected across the life cycle. For the most part, younger traditional IRA investors tended to have a higher proportion of their accounts invested in equity holdings—equities, equity funds, and the equity portion of balanced funds—compared with older investors. Equity holdings typically decline as investors age; investors younger than 35—who were more concentrated in money market holdings and less concentrated in equity holdings than expected—were the exception. This result may be driven in part by the large number of small accounts among this age group. Such small accounts may represent automatic rollovers from employer-sponsored plans and may be invested in default money market and cash investments.

## Introduction

### The Role of IRAs in US Retirement Planning

The Employee Retirement Income Security Act of 1974 (ERISA) created individual retirement accounts (IRAs)—tax-deferred accounts for retirement savings.<sup>1</sup> Forty-four years later, IRAs have become a significant component of US households' retirement assets. All told, 43.9 million, or 34.8 percent of, US households owned one or more types of IRAs in mid-2017.<sup>2</sup> Households held \$8.1 trillion in IRAs at year-end 2016, or 32 percent of the \$25.4 trillion in total US retirement assets.<sup>3</sup> IRAs accounted for 11 percent of US households' total financial assets.<sup>4</sup> Traditional IRAs, the first type of IRA created, are the most common type.<sup>5</sup> IRAs play two roles in household retirement planning: (1) as a contributory savings vehicle and (2) to preserve and consolidate retirement accumulations from employer-sponsored plans through rollovers. Because of the important role that IRAs play in US retirement planning, policymakers and researchers seek to understand how individuals use IRAs. Whether funded by contributions, rollovers, or both, IRAs are managed by individuals, and asset allocation plays an important role in the returns and variation in returns that IRA investors experience. Thus, policymakers and researchers also are interested in understanding the asset allocation of IRA balances across investors. In addition, policymakers want to know how people manage these accounts, including whether there is significant withdrawal of assets prior to retirement and how individuals tap their IRAs throughout retirement.<sup>6</sup> In the wake of the financial crisis, there also is interest in understanding how IRA investors managed their accounts through and past those rough economic times.

### **Sources of IRA Data**

Researchers have relied primarily on household surveys and Internal Revenue Service (IRS) tax data to examine policy questions about IRAs. Several household surveys for analyzing households' retirement savings are publicly available;<sup>7</sup> in addition, ICI conducts two annual household surveys that provide information on IRA-owning households.<sup>8, 9</sup> Though household surveys provide a comprehensive picture of households' finances and activities and can provide insights into the reasoning behind decisions, they can suffer from data problems due to inaccurate respondent recall, which often limits the level of detail that can be obtained on specific financial assets or activities. The IRS collects a rich array of information about IRAs such as contributions, assets, rollovers into IRAs, conversions, and withdrawals from a variety of tax returns (e.g., Form 1040) and information returns (e.g., Form 5498 and Form 1099-R). The Statistics of Income Division of the IRS publishes tabulations of these data and research reports.<sup>10</sup> The tax data, however, do not have information about the types of assets that investors hold in their IRAs.

### The IRA Investor Database<sup>™</sup>

To augment the existing survey information and tax data for IRAs, the Investment Company Institute (ICI) embarked on a data collection effort—The IRA Investor Database—to examine administrative, or recordkept, data on IRAs. To date, this collection effort has gathered data on IRAs from 2007 through 2016. The IRA Investor Database contains account-level information from a wide range of mutual fund and insurance companies, which provided data for more than 17 million IRA investors in 2016. The database, which contains information about IRA asset levels, investments, contributions, rollovers, conversions, and withdrawals, provides a more complete picture of account-level holdings and activity for IRA investors. Throughout this report, the term IRA investor refers to a unique IRA investor at a given data provider.<sup>11</sup> For yearend 2016, The IRA Investor Database has 17.6 million IRA investors.

### **Research Agenda for This Report**

This report provides insight into how traditional IRA investors fared during and after the financial crisis by analyzing data drawn from The IRA Investor Database for year-end 2007 through year-end 2016.

After setting the scene in terms of financial developments and regulatory changes affecting traditional IRAs, chapter 1 analyzes the contribution, rollover, and withdrawal activity among 4.5 million consistent traditional IRA investors (those with accounts at the end of each year from 2007 through 2016). In addition, this chapter explores changes in asset allocation and account balances among consistent traditional IRA investors.

The remaining chapters of the report primarily focus on a snapshot of traditional IRA investors at year-end 2016. Chapter 2 discusses how contribution activity varied by investor age in 2016, exploring which traditional IRA investors had contributions and how many of them contributed at the limit. Chapter 3 notes that the vast majority of new traditional IRAs opened in 2016 were opened with rollovers, and examines rollover activity by investor age. Chapter 4 explores withdrawal activity, which varies significantly with investor age and in reaction to rules governing withdrawals. Few traditional IRA investors younger than 60 take withdrawals; traditional IRA investors taking withdrawals tend to be older and often take out the required minimum distribution (RMD) amount. Chapter 5 reports variation in traditional IRA balances by investor age. Chapter 6 compares snapshots of the asset allocation of traditional IRA balances among cross sections of traditional IRA investors at year-end 2007 and year-end 2016. Because some of the variation in asset allocation appears to be related to traditional IRA balance size, the asset allocation of balances of \$5,000 or less are compared with the asset allocation of balances of more than \$5,000. Smaller balances often have high allocations to money market funds or other cash instruments, which in part may reflect default investment rules for certain rollovers.

# CHAPTER 1 Following Traditional IRA Investors over Time

The IRA Investor Database contains data on millions of IRA investors from year-end 2007 through year-end 2016, which makes it possible to analyze snapshots, or cross sections, of IRA investors in any given year. In addition, one of the advantages of The IRA Investor Database is the ability to explore activity for the same investors from year to year to see whether activities and behaviors are persistent or changing.

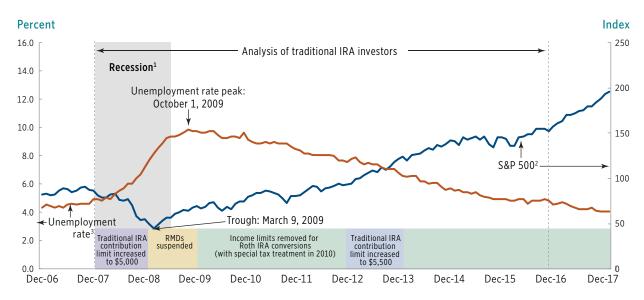
This chapter features such an analysis, focusing on the group of 4.5 million traditional IRA investors who had accounts at the same financial services provider at the end of each year from 2007 through 2016. These traditional IRA investors, who will be referred to as consistent traditional IRA investors, were 18 or older at year-end 2007 (the first year in the database) and 27 or older at year-end 2016. After reviewing the economic and regulatory influences on traditional IRAs between 2007 and 2016, this chapter examines how consistent traditional IRA investors fared in the wake of the financial crisis. Specifically, patterns of contribution, rollover, and withdrawal activities are explored, as well as changes in asset allocation. Finally, the movement of their traditional IRA balances from year-end 2007 to year-end 2016 is analyzed.

# Financial and Regulatory Developments, 2007-2016

Between 2007 and 2016, the United States experienced two dramatic financial events. During that period, large-cap stocks contracted in value, falling 37.0 percent in 2008 (Figure 1.1). The only worse annual stock market contraction occurred in 1931 (when large-cap stock values fell 43.3 percent over the year).<sup>12</sup> Large-cap stocks peaked in value on October 9, 2007, and fell 55.3 percent to their low on March 9, 2009.<sup>13</sup> Investors in the bond market also saw some rocky returns over this period, as interest rates on many nongovernment fixed-income securities also rose, and corporate bond prices declined 22.2 percent between September 9, 2008, and October 17, 2008.<sup>14</sup>

The US economy also contracted sharply, with a recession occurring between December 2007 and June 2009.<sup>15</sup> The unemployment rate rose, peaking at 10.0 percent in October 2009, and disposable personal income fell.<sup>16</sup> The financial crisis and recession weakened household balance sheets during much of this period. In addition, housing values fell by more than 25 percent between February 2007 and December 2011.<sup>17</sup> From 2010 through 2016, as the economy and financial sector began to recover, household income and net worth also began to increase.





<sup>1</sup> The National Bureau of Economic Research (NBER) dates the most recent recession from December 2007 to June 2009.

<sup>2</sup> The S&P 500 is an index of 500 stocks chosen for market size, liquidity, and industry group representation. The index is normalized to 100 in December 2006.

<sup>3</sup> The unemployment rate is the number of unemployed individuals as a percentage of the labor force and has been seasonally adjusted. Sources: Bureau of Labor Statistics, NBER, Standard and Poor's, and ICI summary of legislative changes

Traditional IRA assets, in large part, followed the movement of the stock market. Tracked on an annual basis, traditional IRA assets were \$4.2 trillion at year-end 2007, and were \$3.3 trillion at year-end 2008 (Figure 1.2). Aggregate traditional IRA assets then rose to \$6.9 trillion by year-end 2016.

Regulations governing traditional IRAs also changed between 2007 and 2016. In 2008, automatic adjustment for inflation increased the traditional IRA contribution limit by \$1,000 to \$5,000 for investors younger than 50 and in 2013 the limit increased by \$500 to \$5,500 (Figure 1.1). For investors aged 50 or older, the limit rose to \$6,000 (including catch-up contributions) in 2008 and \$6,500 in 2013. In 2009, required minimum distributions (RMDs) were suspended so that traditional IRA investors would not be forced to sell assets when the financial markets were performing poorly.<sup>18</sup> This meant traditional IRA investors aged 70<sup>1</sup>/<sub>2</sub> or older and those with inherited IRAs did not have to take withdrawals in 2009. In 2010, the income limits on Roth conversions were lifted.<sup>19</sup> Though this change does not directly apply to traditional IRAs, it could affect traditional IRAs if investors diverted assets into Roth IRAs.

## **Traditional IRA Assets and Flows**

Billions of dollars, 1996-2017

	Inflows		Outfl	Outflows		
	Contributions <sup>1</sup>	Rollovers <sup>2</sup>	Roth conversions <sup>3</sup>	Withdrawals	• <b>Total assets</b> ⁴ Year-end	
1996	\$14.1	\$114.0		N/A	N/A	
1997	15.0	121.5		N/A	\$1,642 <sup>e</sup>	
1998	11.9	160.0	\$39.3	N/A	1,974	
1999	10.3	199.9	3.7	N/A	2,423	
2000	10.0	225.6	3.2	\$96.8	2,407	
2001	9.2	187.8	3.1	105.8	2,395	
2002	12.4	204.4	3.3	116.7	2,322	
2003	12.3 <sup>e</sup>	205.0 <sup>e</sup>	3.0 <sup>e</sup>	103.4 <sup>e</sup>	2,719 <sup>e</sup>	
2004	12.6	214.9	2.8	133.0	2,957	
2005	13.4	228.5	2.6	119.3	3,034	
2006	14.3	282.0	2.8	136.8	3,722	
2007	14.4	316.6	2.2	159.0	4,187	
2008	13.4	272.1	3.7	212.3	3,257	
2009	12.8	257.3	6.8	165.2	3,941	
2010	12.8	288.4	64.8	243.3	4,340	
2011	12.3	297.5	11.3	189.6	4,459	
2012	15.5	334.6	18.1	237.2	4,969	
2013	16.8	393.4	7.5	243.7	5,828	
2014	17.5	423.9	8.3	257.7	6,225	
2015	17.7	459.9	9.0	276.9	6,387	
2016	N/A	N/A	N/A	N/A	6,900 <sup>e</sup>	
2017	N/A	N/A	N/A	N/A	7,850 <sup>e</sup>	

<sup>1</sup> Contributions include both deductible and nondeductible contributions to traditional IRAs.

<sup>2</sup> Rollovers are primarily from employer-sponsored retirement plans.

<sup>3</sup> Roth IRAs were first available in 1998.

 $^{\rm 4}$  Total assets are the fair market value of assets at year-end.

<sup>e</sup> Data are estimated.

N/A = not available

Sources: Investment Company Institute and Internal Revenue Service Statistics of Income Division

Against this backdrop, it is possible to analyze how consistent traditional IRA investors navigated this period. Changes in traditional IRA balances between year-end 2007 and year-end 2016 among consistent traditional IRA investors are affected by these investors' activities with respect to contributions, rollovers, and withdrawals from 2008 through 2016. In addition, asset allocation plays a role in investment returns, which also affect traditional IRA balances.

# **Changes in Traditional IRA Assets**

Changes in traditional IRA assets from one period to the next are affected by several factors including:

- » contributions into traditional IRAs (+);
- » rollovers from employer-sponsored retirement plans—both defined benefit (DB) and defined contribution (DC), from both private-sector and public-sector employers—into traditional IRAs (+);
- $\,\gg\,$  distributions out of traditional IRAs, whether as withdrawals or Roth conversions (-);  $^{20}$  and
- » returns on investments, which vary with asset allocation.

Contributions in aggregate tend to be relatively small, running at about \$15 billion per year, on average, between 2008 and 2015 (latest data available) (Figure 1.2). Rollovers provide the bulk of the new money into traditional IRAs. In aggregate, they appear to vary a bit with economic cycles and stock market movement, rising to \$225.6 billion in 2000 with the stock market peak in March 2000, before falling with the recession in 2001 to \$187.8 billion. Rollovers rose through 2007 as the stock market and economy recovered, fell during the financial stresses in 2008 and 2009, and rose from 2010 through 2015. Relative to the asset base, withdrawals have tended to represent a small percentage. Roth conversions have also tended to be minor, with the exception of 1998 and 2010, when special tax incentives were available.<sup>21</sup> The tax law change, which lifted income limits on Roth conversion activity starting in 2010 and provided special tax incentives in 2010, increased Roth conversion activity. Between 2009 and 2010, Roth conversions increased nearly tenfold from \$6.8 billion to \$64.8 billion.<sup>22</sup> Roth conversions were significantly below their 2010 peak in 2011 through 2015, but still remained elevated over the 1999-2009 average.

# Changes in Consistent Individual Investors' Traditional IRA Balances, 2007–2016

When analyzing the change in investor account balances over time, it is important to have a consistent sample. Comparing average account balances across different year-end snapshots can lead to false conclusions. For example, the addition of a large number of new investors with smaller balances would tend to pull down the average account balance. This could then be mistakenly described as an indication that balances are declining, but actually would tell us nothing about the experience of individual investors. Because of this, the following analysis of traditional IRA balances covers traditional IRA investors with account balances at the end of every year between 2007 and 2016.

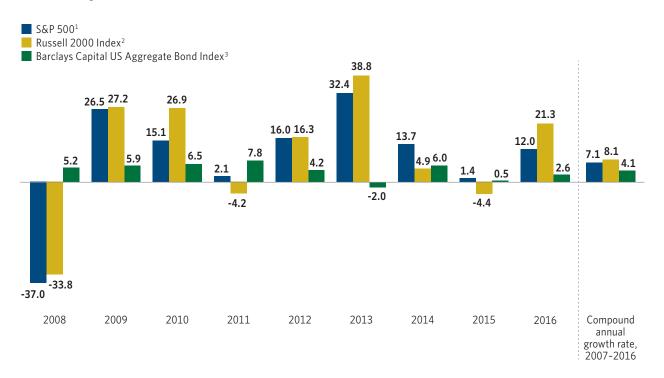
To analyze changes in traditional IRA balances from year-end 2007 to year-end 2016, the flow activity of traditional IRA investors from 2008 through 2016 must be understood. Although detailed information on the timing of flows into and out of the traditional IRA balances analyzed is not available, the presence of annual contributions, rollovers, or withdrawals can be tracked.<sup>23</sup> Because traditional IRA investors are subject to different withdrawal rules at different ages (those younger than 59½ typically are subject to penalties if they take withdrawals, those aged 59½ to 70½ may withdraw without penalty, and those aged 70½ or older must take withdrawals), the consistent sample of traditional IRA investors is divided into three groups based on their ages at year-end 2016: traditional IRA investors aged 27 to 59, 60 to 69, and 70 or older. Contribution, rollover, and withdrawal activity is analyzed among these three groups of consistent traditional IRA investors.

Finally, investment returns affect the value of assets held in traditional IRAs and will vary depending upon the individual investor's portfolio. Traditional IRA investors' concentrations in equity holdings are analyzed from year-end 2007 to year-end 2016. It is not possible to calculate rates of return specific to traditional IRA investors in the database. However, aggregate market return data indicate the compound average annual return on large-cap equities was 7.1 percent from year-end 2007 to year-end 2016; the compound average annual return on small-cap equities was 8.1 percent; and the compound average annual return on bonds was 4.1 percent (Figure 1.3).

#### FIGURE 1.3

## Domestic Stock and Bond Market Total Return Indexes

Percent change, 2008-2016



<sup>1</sup> The S&P 500 is an index of 500 stocks chosen for market size, liquidity, and industry group representation.

<sup>2</sup> The Russell 2000 Index measures the performance of the 2,000 smallest US companies (based on total market capitalization) included in the Russell 3000 Index (which tracks the 3,000 largest US companies).

<sup>3</sup> Formerly the Lehman Brothers US Aggregate Bond Index, the Barclays Capital US Aggregate Bond Index is composed of securities covering government and corporate bonds, mortgage-backed securities, and asset-backed securities (rebalanced monthly by market capitalization). The index's total return consists of price appreciation/depreciation plus income as a percentage of the original investment.

Sources: Bloomberg, Barclays Global Investors, Frank Russell Company, and Standard & Poor's

## **Contribution Activity for Consistent Traditional IRA Investors, 2008–2016**

Contribution activity slowed a bit in the wake of the financial crisis. Though one might expect a significant reduction in contribution activity in times of financial stress, contribution activity declined only slightly among consistent traditional IRA investors from 2008 through 2016. For example, 9.4 percent of consistent traditional IRA investors aged 27 to 59 in 2016 made contributions in tax year 2016, while 10.9 percent of them made contributions to their traditional IRAs in tax year 2008, when they were 19 to 51 (Figure 1.4, first panel). Similarly, 7.6 percent of consistent traditional IRA investors aged 60 to 69 in 2016 made contributions in tax year 2016, while 10.6 percent of them made contributions to their traditional IRAs in tax year 2016, while 10.6 percent of them made contributions to their traditional IRAs in tax year 2008, when they were 52 to 61 (Figure 1.4, second panel). Because contributions are not allowed if an individual is aged 70½ by year-end, only a negligible share of traditional IRA investors aged 70 or older in 2016 made contributions in any given tax year between 2008 and 2016 (in tax year 2008, when they were 62 or older, 4.4 percent made contributions) (Figure 1.4, third panel).

Even during this economically stressful period, contribution activity persisted. For example, 22.1 percent of consistent traditional IRA investors aged 27 to 59 in 2016 made at least one contribution between tax year 2008 and tax year 2016 (Figure 1.5, second panel). Among those contributing during that nine-year period, 14.3 percent contributed in every year. Another 5.6 percent of those contributing between 2008 and 2016 contributed in eight of the nine years, 5.2 percent contributed in seven, 5.4 percent contributed in six, 6.2 percent contributed in five, 7.7 percent contributed in four, 10.1 percent contributed in three, and 15.1 percent contributed in two. The older consistent traditional IRA investors (aged 60 to 69) also had repeat contribution activity, with 22.6 percent making contributions in at least one year between tax year 2008 and tax year 2016 (Figure 1.5, third panel). Among those contributing, 10.1 percent did so in all nine years. These repeat contributions occurred despite the recession (Figure 1.1) and poor stock market performance during part of this period (Figure 1.3).

### **Rollover Activity for Consistent Traditional IRA Investors, 2008–2016**

Rollover activity tends to run at low levels because it occurs after job changes or retirement, which generally are not annual events. Rollover activity edged down a bit in the wake of the financial crisis. For example, 3.4 percent of the consistent traditional IRA investors aged 27 to 59 in 2016 made rollovers into their traditional IRAs in 2016, while 4.5 percent made rollovers in 2008 when they were aged 19 to 51 (Figure 1.4, first panel).<sup>24</sup> Similarly, while 4.1 percent of the consistent traditional IRAs in 2016, 4.6 percent made rollovers in 2008 when they were aged 52 to 61 (Figure 1.4, second panel). And, while 1.6 percent of the consistent traditional IRA investors aged 70 or older in 2016 made rollovers into their traditional IRAs in 2016, 4.3 percent made rollovers in 2008 when they were aged 62 or older (Figure 1.4, third panel).

### Withdrawal Activity for Consistent Traditional IRA Investors, 2008–2016

Withdrawal activity generally declined in response to the suspension of RMDs in 2009, before edging up a bit, on average, between 2010 and 2016. Only a small share of traditional IRA investors younger than 60 take withdrawals in any given year, likely reflecting, in part, the early withdrawal penalty that typically applies.<sup>25</sup> This also was the case among the consistent group of traditional IRA investors aged 27 to 59 at year-end 2016. In 2008, 5.3 percent of them took withdrawals when they were aged 19 to 51 (Figure 1.4, first panel). This fell to 4.4 percent in 2009, likely reflecting the suspension of RMDs that year, which would have affected young traditional IRA investors with inherited traditional IRAs. Withdrawal activity edged up a bit, on average, in 2010 through 2016 compared with the earlier years. In 2010, 7.1 percent of these consistent traditional IRA investors took withdrawals (when they were 21 to 53), 6.1 percent took withdrawals in 2011 (when they were 22 to 54), 6.0 percent took withdrawals in 2012 (when they were 23 to 55), 6.1 percent took withdrawals in 2013 (when they were 24 to 56), 6.2 percent took withdrawals in 2014 (when they were 25 to 57), 6.2 percent took withdrawals in 2014 (when they were 25 to 57), 6.2 percent took withdrawals in 2014 (when they were 25 to 57), 6.2 percent took withdrawals in 2015 (when they were 26 to 58), and 6.3 percent took withdrawals in 2016.

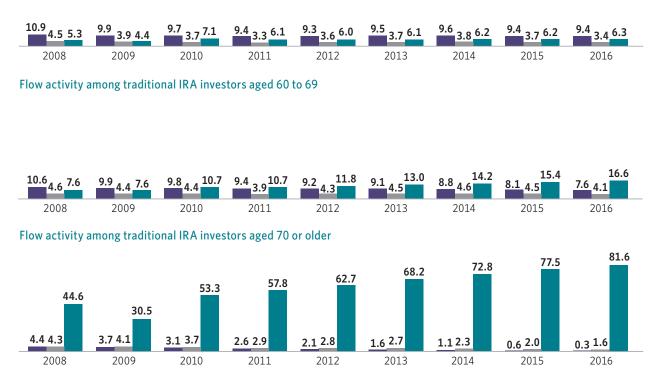
Among traditional IRA investors aged 60 to 69 in 2016, movement into penalty-free withdrawal ages appears to have compensated for the suspension of RMDs in 2009. In 2008, when they were aged 52 to 61, 7.6 percent of this group took withdrawals (Figure 1.4, second panel); in 2009, when they were aged 53 to 62, 7.6 percent of this group took withdrawals. Withdrawal activity edged up between 2010 and 2016, rising to 16.6 percent in 2016.

# Factors Influencing Changes in Consistent Individual Investors' Traditional IRA Balances, 2008–2016

Percentage of traditional IRA investors with account balances at the end of each year from 2007 to 2016

Contribution Rollover Withdrawal

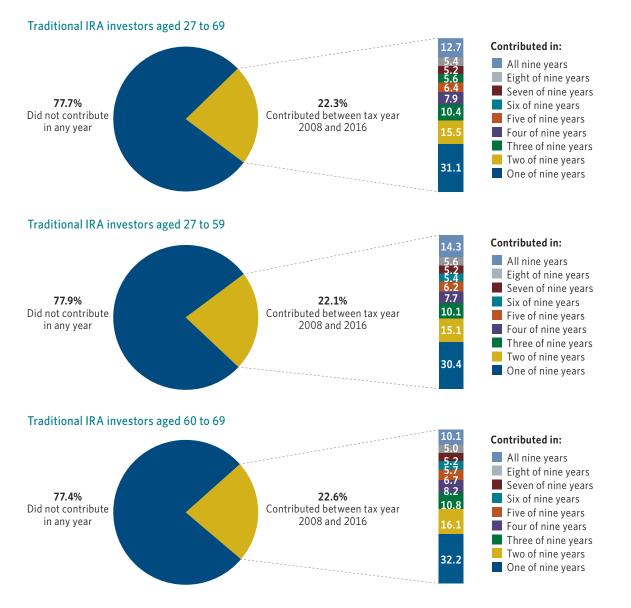
Flow activity among traditional IRA investors aged 27 to 59



Note: The sample is 4.5 million traditional IRA investors aged 27 or older with traditional IRA balances at the end of each year between 2007 and 2016. Age is based on the age of the traditional IRA investor in 2016. Activity is for the tax year indicated. Source: The IRA Investor Database™

## **Contribution Activity for Consistent Traditional IRA Investors, 2008–2016**

Percentage of traditional IRA investors with account balances at the end of each year from 2007 to 2016



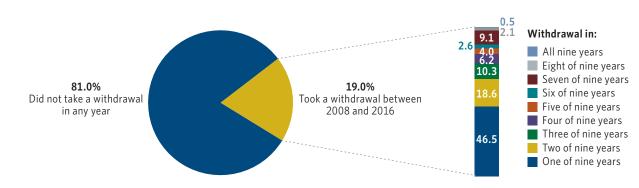
Note: The samples are 3.3 million traditional IRA investors aged 27 to 69 in 2016, 2.1 million traditional IRA investors aged 27 to 59 in 2016, and 1.2 million traditional IRA investors aged 60 to 69 in 2016, all holding traditional IRA balances at the end of each year between 2007 and 2016. Age is based on the age of the traditional IRA investor in 2016. Components may not add to 100 percent because of rounding. Source: The IRA Investor Database<sup>™</sup>

Withdrawal activity among traditional IRA investors aged 70 or older runs at higher levels compared with the younger investors; these older investors also responded more dramatically to the suspension of RMDs in 2009. Traditional IRA investors aged 70 or older are allowed to take withdrawals without penalty, and those aged  $70\frac{1}{2}$  or older are required to do so. While 44.6 percent of consistent traditional IRA investors took withdrawals in 2008 when they were aged 62 or older, only 30.5 percent of consistent traditional IRA investors took withdrawals in 2009 when they were aged 63 or older (Figure 1.4, third panel). In 2010, 53.3 percent of consistent traditional IRA investors took withdrawals when they were aged 64 or older; in 2011, 57.8 percent took withdrawals when they were aged 65 or older; in 2012, 62.7 percent took withdrawals when they were aged 66 or older; in 2013, 68.2 percent took withdrawals when they were aged 67 or older; in 2014, 72.8 percent took withdrawals when they were aged 68 or older; in 2015, 77.5 percent took withdrawals when they were aged 69 or older; and 81.6 percent took withdrawals in 2016 when they were aged 70 or older. Some of the increase in withdrawal activity over this period for the consistent group reflects their aging by eight years, which caused some of the consistent traditional IRA investors in this group to become old enough to start taking RMDs.

Withdrawal activity is rare among traditional IRA investors younger than 60, and financial stresses appear to have influenced the withdrawal activity of only a small number of traditional IRA investors in the wake of the financial crisis. Among consistent traditional IRA investors aged 27 to 59 in 2016, 19.0 percent took withdrawals in at least one year between 2008 and 2016 (Figure 1.6). Among those taking withdrawals, nearly half (46.5 percent) only took withdrawals in one of the nine years (2008 through 2016), and 18.6 percent only took withdrawals in two of the nine years.

### FIGURE 1.6

### Withdrawal Activity for Consistent Traditional IRA Investors, 2008–2016



Percentage of traditional IRA investors aged 27 to 59 in 2016 with account balances at the end of each year from 2007 to 2016

Note: The sample is 2.1 million traditional IRA investors aged 27 to 59 in 2016 with traditional IRA balances at the end of each year between 2007 and 2016. Components may not add to 100 percent because of rounding. Source: The IRA Investor Database™

In 2010, income limits restricting Roth IRA conversions were removed.<sup>26</sup> In addition, in 2010, taxpayers taking advantage of the Roth conversions could choose to pay taxes on the taxable amount in 2011 and 2012. The IRA Investor Database does not have complete information on the amounts that have been converted from traditional to Roth IRAs; nevertheless, aggregate IRA data show that a significant increase in Roth IRA conversion activity occurred in 2010 (Figure 1.2). This could create a downward drag on average traditional IRA balances.

### Equity Investing in Traditional IRAs Before and After the Financial Crisis

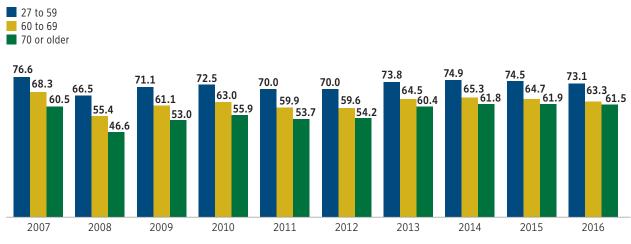
Because, on average, the majority of traditional IRA assets tend to be invested in equity holdings, the movement of the stock market had a significant impact on traditional IRA balances between year-end 2007 and year-end 2016. On average, the sample of consistent traditional IRA investors, when they were aged 18 to 50 at year-end 2007, had 76.6 percent of their traditional IRA assets invested in equity holdings—equities, equity funds, and the equity portion of balanced funds (Figure 1.7). As stock values declined in 2008 (Figures 1.1 and 1.3), equity holdings fell to 66.5 percent of this group's traditional IRA assets at year-end 2009 and 2016, equity holdings rose to 74.9 percent of this group's traditional IRA assets at year-end 2014, before falling slightly to 73.1 percent at year-end 2016 when they were aged 27 to 59.

Older traditional IRA investors generally had lower average allocations to equity holdings, although equity holdings represented significant shares of their assets over the entire period (Figure 1.7). The average allocation to equity holdings among the older consistent traditional IRA investors also mirrored the stock market movement. For example, consistent traditional IRA investors aged 60 to 69 in 2016 had 68.3 percent of their traditional IRA assets invested in equity holdings at year-end 2007, when they were aged 51 to 60. Their average allocation to equity holdings fell to 55.4 percent at year-end 2008, before rising to 65.3 percent at year-end 2014 and settling at 63.3 percent at year-end 2016.

Movement in the share of equity holdings in traditional IRA investors' accounts results from changes in stock values, in addition to reallocation activity by investors. Although information on specific trading activity of traditional IRA investors is not available in the database, it is possible to discern activity into or out of zero equity holdings or equity holdings that are 100 percent of the individual's traditional IRA balance.

### Equity Holdings Account for Majority of Assets in Traditional IRAs

Percentage of traditional IRA assets<sup>1</sup> invested in equity holdings<sup>2</sup> by investor age, <sup>3</sup> 2007-2016



### Age of traditional IRA investor<sup>3</sup>

<sup>1</sup> Percentages are dollar-weighted averages.

<sup>2</sup> Equity holdings include equities, equity funds, and the equity portion of balanced funds.

<sup>3</sup> Age is based on the age of the traditional IRA investor in 2016.

Note: The sample is 4.5 million traditional IRA investors aged 27 or older with traditional IRA balances at the end of each year between 2007 and 2016.

Source: The IRA Investor Database™

Between year-end 2007 and year-end 2016, few traditional IRA investors changed to or from equity concentrations of zero or 100 percent of their traditional IRA balances. For example, analyzing consistent traditional IRA investors aged 27 to 59 at year-end 2016, the data show that 1.8 percent, on net, moved to a zero equity holding allocation—16.9 percent of this group had no equity holdings at year-end 2007 and 18.7 percent had no equity holdings at year-end 2016 (Figure 1.8, upper panel). This net change reflects 3.7 percent moving from zero equity holdings to at least some, 5.4 percent moving from some to zero, and 13.3 percent sticking with zero holdings in both 2007 and 2016 (Figure 1.9). Older traditional IRA investors displayed slightly higher reallocation activity toward zero equity holdings, but some of their activity may have resulted simply from reallocation in anticipation of retirement rather than in response to the financial market movements. Indeed, household survey information indicates that households anticipate rebalancing their portfolios as they age.<sup>27</sup>

# Changes in Concentration of Traditional IRA Investors' Equity Holdings Between 2007 and 2016

2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

#### Zero allocation to equity holdings<sup>1</sup>

Percentage of traditional IRA investors with no equity holdings<sup>1</sup> by age,<sup>2</sup> 2007-2016



### 100 percent allocation to equity holdings<sup>1</sup>

Percentage of traditional IRA investors with 100 percent equity holdings<sup>1</sup> by age,<sup>2</sup> 2007-2016



<sup>1</sup> Equity holdings include equities, equity funds, and the equity portion of balanced funds.

<sup>2</sup> Age is based on the age of the traditional IRA investor in 2016.

Note: The sample is 4.5 million traditional IRA investors aged 27 or older with traditional IRA balances at the end of each year between 2007 and 2016.

Source: The IRA Investor Database™

## **Changes in Zero Allocation to Equity Holdings Among Consistent Traditional IRA Investors**

Percentage of traditional IRA investors by age, 2007 and 2016

Age	Zero in 2007	Moved away from zero by 2016	Remained at zero	Moved to zero by 2016	Net change	Zero in 2016
27 to 29	25.4	-6.7	18.7	4.1	-2.6	22.8
30 to 34	40.0	-8.0	32.0	4.2	-3.8	36.2
35 to 39	30.1	-6.0	24.1	4.9	-1.1	29.0
40 to 44	21.1	-4.3	16.8	5.4	1.1	22.2
45 to 49	16.5	-3.4	13.1	5.3	1.9	18.4
50 to 54	14.7	-3.3	11.4	5.4	2.1	16.8
55 to 59	13.6	-3.2	10.4	5.7	2.5	16.1
60 to 64	13.5	-3.5	10.0	6.4	2.9	16.4
65 to 69	13.2	-3.8	9.4	7.2	3.4	16.6
70 to 74	13.3	-4.0	9.3	7.2	3.2	16.5
75 or older	14.2	-3.2	11.0	6.8	3.6	17.8
All	15.1	-3.6	11.5	6.2	2.6	17.7
27 to 59	16.9	-3.7	13.3	5.4	1.8	18.7
60 to 69	13.3	-3.6	9.7	6.8	3.2	16.5
70 or older	13.8	-3.5	10.3	6.9	3.4	17.2

Note: The sample is 4.5 million traditional IRA investors aged 27 or older in 2016 with traditional IRA balances at the end of each year between 2007 and 2016. Equity holdings include equities, equity funds, and the equity portion of balanced funds. Source: The IRA Investor Database™

A significant minority of consistent traditional IRA investors had all of their traditional IRA balances invested in equity holdings, and few investors moved away from that full concentration between year-end 2007 and year-end 2016. To be 100 percent invested in equity holdings, the traditional IRA investor would have allocated their full traditional IRA balance to equities or equity funds.<sup>28</sup> Analyzing consistent traditional IRA investors aged 27 to 59 at year-end 2016, the data show that 5.4 percent, on net, moved away from a 100 percent equity holding allocation—33.6 percent of this group at year-end 2007 and 28.2 percent at year-end 2016 were 100 percent invested in equity holdings (Figure 1.8, lower panel). This net change reflects 8.4 percent moving away from the 100 percent allocation to something less, 3.0 percent moving to a 100 percent allocation, and 25.1 percent sticking with 100 percent equity holdings in both 2007 and 2016 (Figure 1.10). Traditional IRA investors aged 60 to 69 in 2016 displayed slightly higher reallocation activity away from 100 percent equity holdings, but again, some of their activity may have resulted simply from reallocation in anticipation of retirement, rather than in response to the financial market movements.

#### FIGURE 1.10

# Changes in 100 Percent Allocation to Equity Holdings Among Consistent Traditional IRA Investors

Percentage of traditional IRA investors by age, 2007 and 2016

Age	100 percent in 2007	Moved away from 100 percent by 2016	Remained at 100 percent	Moved to 100 percent by 2016	Net change	100 percent in 2016
27 to 29	32.1	-5.1	27.0	3.1	-2.0	30.1
30 to 34	21.2	-4.8	16.4	3.0	-1.8	19.4
35 to 39	23.6	-5.8	17.8	3.1	-2.7	20.9
40 to 44	29.7	-7.3	22.4	3.2	-4.1	25.6
45 to 49	34.4	-8.0	26.4	3.1	-4.9	29.5
50 to 54	35.8	-8.8	27.0	3.1	-5.7	30.1
55 to 59	35.3	-9.6	25.7	2.9	-6.7	28.6
60 to 64	33.1	-10.3	22.8	2.8	-7.5	25.6
65 to 69	29.9	-10.4	19.5	2.9	-7.5	22.4
70 to 74	25.3	-8.6	16.7	3.4	-5.2	20.1
75 or older	24.1	-5.7	18.4	4.2	-1.5	22.6
All	30.6	-8.5	22.1	3.2	-5.3	25.3
27 to 59	33.6	-8.4	25.1	3.0	-5.4	28.2
60 to 69	31.5	-10.3	21.2	2.8	-7.5	24.0
70 or older	24.6	-6.8	17.7	3.8	-3.0	21.6

Note: The sample is 4.5 million traditional IRA investors aged 27 or older in 2016 with traditional IRA balances at the end of each year between 2007 and 2016. Equity holdings include equities, equity funds, and the equity portion of balanced funds. Source: The IRA Investor Database™

# Changes in Consistent Individual Investors' Traditional IRA Balances Between 2007 and 2016 by Investor Age

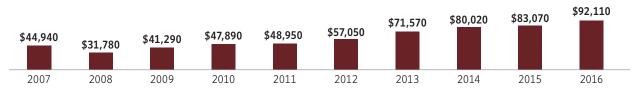
Analysis of the group of 4.5 million traditional IRA investors who were aged 27 or older in 2016 and had accounts at the end of each year from 2007 to 2016 finds that investor actions and the impact of the financial crisis varied across traditional IRA investors by age. Though exposure to equity holdings, on average, was higher for younger traditional IRA investors, only a negligible share of traditional IRA investors of any age completely eschewed equities between 2007 and 2016 (Figures 1.8 and 1.9). Contribution and rollover activity edged back only a bit in the wake of the financial crisis (Figure 1.4), but both can provide boosts to traditional IRA balances, particularly for younger traditional IRA investors. Withdrawal activity edged up a bit between 2010 and 2016 (Figure 1.4), and as will be discussed below, withdrawal requirements took their toll on older traditional IRA investors' balances. Altogether, these forces combined to influence the balances held in traditional IRAs.

Traditional IRA investors aged 27 to 59 at year-end 2016 generally saw growth in their balances between year-end 2007 and year-end 2016. All told, the average traditional IRA balance among the consistent traditional IRA investors in this group was \$92,110 at year-end 2016, up nearly \$50,000 compared with the year-end 2007 average balance of \$44,940 (Figure 1.11, upper panel). The average traditional IRA balance among this group fell to \$31,780 in 2008, and rose each successive year, reaching \$92,110 at year-end 2016. Movement in the average account balance is not as dramatic as the changes observed in the stock market because the majority of these investors had at least some non-equity investments in their traditional IRAs.<sup>29</sup> In addition, in any given year, about one in 10 had contributions, about one in 25 had rollovers, and fewer than one in 10 had withdrawals (Figure 1.4). Within this broad age group, changes in the average account balance varied with investor age. For example, the youngest traditional IRA investors, who tend to have smaller account balances, generally experienced higher percent growth, compared with the group aged 27 to 59 in 2016 as a whole (Figure 1.12). Percent growth in average traditional IRA balances tended to be lower, the older the traditional IRA investor. For traditional IRA investors aged 70 or older, average account balances can be pulled down because they generally are not allowed to contribute and likely are taking RMDs.

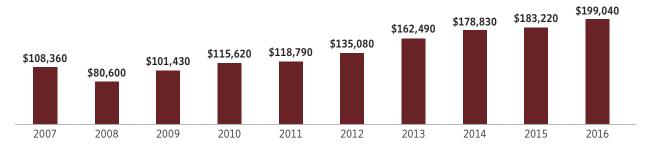
## **Traditional IRA Balances Among Consistent Traditional IRA Investors**

Average traditional IRA balance for consistent traditional IRA investors, 2007-2016

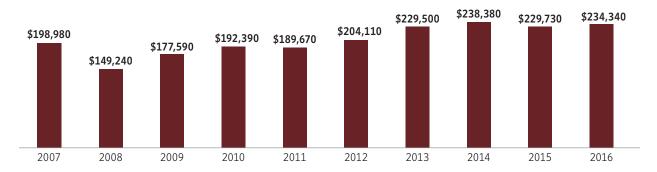
#### Traditional IRA investors aged 27 to 59



Traditional IRA investors aged 60 to 69



Traditional IRA investors aged 70 or older



Note: The sample is 4.5 million traditional IRA investors aged 27 or older in 2016 with traditional IRA balances at the end of each year between 2007 and 2016. See Figure 1.12 for additional detail.

Source: The IRA Investor Database™

### Traditional IRA Balances Among Consistent Traditional IRA Investors by Investor Age

Average traditional IRA balance for consistent traditional IRA investors, 2007-2016

Age	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
27 to 29	\$11,080	\$7,950	\$10,150	\$11,560	\$11,560	\$13,190	\$16,440	\$18,290	\$19,120	\$20,610
30 to 34	5,700	4,400	5,840	7,030	7,460	8,970	11,730	13,560	14,560	16,660
35 to 39	10,780	7,820	10,540	12,680	13,340	16,220	21,120	24,260	25,830	29,380
40 to 44	21,120	14,970	20,010	23,720	24,580	29,440	37,820	42,820	44,850	50,540
45 to 49	33,050	23,180	30,640	35,930	36,920	43,540	55,310	62,090	64,710	72,180
50 to 54	49,310	34,610	45,050	52,250	53,160	61,890	77,740	86,770	89,950	99,560
55 to 59	67,470	47,980	61,630	70,920	72,340	83,560	103,750	115,600	119,650	132,030
60 to 64	89,210	65,080	82,990	95,340	98,260	113,000	138,370	153,770	159,290	174,730
65 to 69	129,730	97,910	121,990	138,230	141,690	159,720	189,400	206,780	209,900	226,160
70 to 74	185,330	141,610	171,000	189,400	191,500	211,680	243,490	257,620	252,780	261,730
75 or older	208,190	154,390	182,040	194,400	188,430	198,990	220,070	225,400	214,190	215,860
All	102,670	75,920	93,470	104,280	104,930	116,920	137,810	148,520	148,860	158,580
25 to 59	44,940	31,780	41,290	47,890	48,950	57,050	71,570	80,020	83,070	92,110
60 to 69	108,360	80,600	101,430	115,620	118,790	135,080	162,490	178,830	183,220	199,040
70 or older	198,980	149,240	177,590	192,390	189,670	204,110	229,500	238,380	229,730	234,340

Note: The sample is 4.5 million traditional IRA investors aged 27 or older in 2016 with traditional IRA balances at the end of each year between 2007 and 2016.

Source: The IRA Investor Database™

Traditional IRA investors aged 60 to 69 at year-end 2016, as a group, saw an increase in their average traditional IRA balance between year-end 2007 and year-end 2016. All told, the average traditional IRA balance at year-end 2016 among the consistent traditional IRA investors aged 60 to 69 was \$199,040, up from the year-end 2007 average balance of \$108,360 (Figure 1.11, middle panel). The average traditional IRA balance among this group fell to \$80,600 in 2008, before rising to \$199,040 by year-end 2016. Compared with the younger group of traditional IRA investors, these traditional IRA investors had slightly lower rates of contribution activity, slightly higher rates of rollover activity, and higher rates of withdrawal activity (because they are generally allowed to take penalty-free withdrawals). In any given year, nearly one in 10 had contributions, on average, and nearly one in 20 had rollovers (Figure 1.4). Asset diversification also muted the impact of the stock market on these traditional IRA balances.<sup>30</sup> However, with many old enough to take penalty-free distributions over most of the period, withdrawal activity exerted some downward pressure on balances, particularly from 2010 through 2016, when more than one in 10 had withdrawals.

Traditional IRA investors aged 70 or older at year-end 2016, as a group, saw a slight increase in their average traditional IRA balance between year-end 2007 and year-end 2016, as withdrawal activity—much of it required—took its toll. The average traditional IRA balance among the consistent traditional IRA investors aged 70 or older had some ups and downs, but all told, the average at year-end 2016 was \$234,340, up from \$198,980 at year-end 2007 (Figure 1.11, lower panel). Compared with the younger groups of traditional IRA investors, these traditional IRA investors had almost no contribution activity (indeed, many of them would not have been allowed to contribute during most of the time analyzed), lower rates of rollover activity, and much higher rates of withdrawal activity (because they were generally required to take withdrawals) (Figure 1.4).

# CHAPTER 2 Traditional IRA Investors' Contribution Activity in 2016

From their inception, traditional IRAs were designed so that investors could accumulate retirement assets either by rolling over balances from employer-sponsored retirement plans (to help workers consolidate and preserve these assets) or through contributions. In the early and mid-1980s, after Congress eased the restrictions on contributions to IRAs, many more individuals made contributions.<sup>31</sup> However, since 1986, after Congress tightened the tax rules for making IRA contributions, many fewer IRA investors have contributed to these accounts. This chapter analyzes the contribution activity of traditional IRA investors, primarily focusing on variation in contribution activity in 2016 by investor age.

# **Contributions to Traditional IRAs**

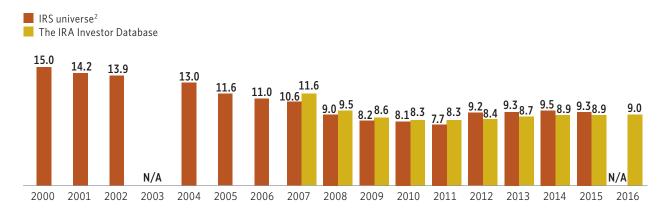
During the past decade, the percentage of households with traditional IRAs that make contributions has continued to decline. For example, 15 percent of traditional IRA investors made contributions in tax year 2000, but in tax year 2015, fewer than one in 10 traditional IRA investors contributed to their traditional IRAs (Figure 2.1). Although more recent data are not available from the IRS, The IRA Investor Database shows that the percentage of traditional IRA investors aged 25 to 69 making contributions stayed about the same between tax year 2015 and tax year 2016.

This low level of activity likely results from several factors. Some traditional IRA investors may find that saving through their employer-sponsored retirement plans meets their savings needs. In addition, for some traditional IRA investors, the availability of employer-sponsored plans may curtail their ability to make deductible contributions to their traditional IRAs.<sup>32</sup> As more people make rollovers into traditional IRAs, it becomes increasingly likely that the availability of employer-sponsored plans is curbing IRA contribution activity. Some other traditional IRA investors may prefer to direct savings into their Roth IRAs.<sup>33</sup> In addition, some evidence shows that confusion about IRA rules may prevent some individuals from contributing to IRAs.<sup>34</sup> Difficulty in determining eligibility for a tax-deductible contribution may deter some individuals from making any contribution. For other individuals, the primary focus of current household saving may not be for retirement. Households may be focused on saving for other more immediate goals, such as saving for emergencies, education, or housing.<sup>35</sup>

#### FIGURE 2.1

### **Traditional IRA Contribution Rates**

Percentage of traditional IRA investors aged 25 to 69 with contributions,<sup>1</sup> 2000-2016



<sup>1</sup> This group is traditional IRA investors (aged 25 to 69) who made contributions to their traditional IRAs in the tax year indicated.

<sup>2</sup> In the IRS universe, data are for traditional IRA investors of all ages.

N/A = not available

Note: Contributions include both deductible and nondeductible traditional IRA contribution amounts. Sources: The IRA Investor Database<sup>™</sup> and Internal Revenue Service Statistics of Income Division

## Contributions to Traditional IRAs in 2016 by Investor Age

Younger traditional IRA investors were somewhat more likely to contribute to their traditional IRAs than were older investors (Figure 2.2). In part, the lower incidence of contribution activity among older investors results from a higher percentage of older investors having traditional IRAs, and the fact that many of these investors created the traditional IRAs to hold rollovers. Smaller percentages of younger investors have traditional IRAs, and younger investors are somewhat more likely to create them with a contribution.

The highest level of contribution activity in tax year 2016, 11.1 percent, was observed among traditional IRA investors aged 25 to 29 (Figure 2.2). Nevertheless, more than 9 percent of traditional IRA investors in their forties and fifties contributed to their traditional IRAs. The lowest incidence of contribution activity, 5.6 percent, was seen among traditional IRA investors aged 65 to 69, who are more likely to be approaching or in retirement and focusing on drawing down their assets.

### FIGURE 2.2

### Contribution Activity of Traditional IRA Investors by Investor Age

Number of traditional IRA investors and traditional IRA contributors<sup>1</sup> by age, 2016

	Traditional IF	RA investors	Traditional IRA	ontributors <sup>1</sup>	Memo: percentage	Percentage of
Age	<b>Number</b> Thousands	<b>Share³</b> Percent	<b>Number</b> Thousands	Share <sup>3</sup> Percent	of traditional IRA investors who made contributions <sup>1</sup>	contributions that created new traditional IRAs <sup>2</sup>
25 to 29	363.9	3.7%	40.2	4.5%	11.1%	40.2%
30 to 34	642.3	6.5	70.0	7.8	10.9	28.9
35 to 39	840.3	8.5	87.2	9.7	10.4	20.4
40 to 44	966.0	9.7	95.1	10.6	9.8	15.2
45 to 49	1,217.1	12.2	115.0	12.8	9.4	12.0
50 to 54	1,412.3	14.2	134.4	15.0	9.5	10.7
55 to 59	1,594.1	16.0	150.9	16.8	9.5	9.9
60 to 64	1,562.7	15.7	131.1	14.6	8.4	8.7
65 to 69	1,342.3	13.5	75.1	8.3	5.6	7.7
All	9,941.0	100.0	899.0	100.0	9.0	14.3
Memo:						
25 to 49	4,029.6	40.5	407.5	45.3	10.1	20.3
50 to 69	5,911.5	59.5	491.5	54.7	8.3	9.5

<sup>1</sup> This group is traditional IRA investors aged 25 to 69 who made contributions to their traditional IRAs in tax year 2016.

<sup>2</sup> New traditional IRAs are accounts that did not exist in the IRA Investor Database in 2015.

<sup>3</sup> Share is the percentage of the total.

Note: Contributions include both deductible and nondeductible traditional IRA contribution amounts. Components may not add to the total because of rounding.

### Traditional IRA Contribution Amounts in 2016 by Investor Age

Even though older IRA investors are less likely to make contributions, they tend to make larger contributions than do younger investors. Among traditional IRA contributors aged 25 to 29, the median contribution amount was \$2,500 in tax year 2016 (Figure 2.3). For contributors in their forties, the median contribution amount was \$5,500, the full amount allowed by law for individuals younger than 50. Among contributors aged 50 to 69, the median contribution amount was \$6,500, the full amount allowed by law, including catch-up contributions.

### FIGURE 2.3

### **Traditional IRA Contribution Amounts by Investor Age**

	Traditio contrib			onal IRA outions <sup>1</sup>	Traditional IRA contribution amount		
Age	<b>Number</b> Thousands	<b>Share²</b> Percent	Amount Millions	<b>Share²</b> Percent	Median	Mean	
25 to 29	40.2	4.5%	\$118.6	3.2%	\$2,500	\$2,946	
30 to 34	70.0	7.8	234.1	6.3	4,000	3,346	
35 to 39	87.2	9.7	313.0	8.4	5,240	3,589	
40 to 44	95.1	10.6	358.0	9.6	5,500	3,765	
45 to 49	115.0	12.8	441.7	11.8	5,500	3,841	
50 to 54	134.4	15.0	598.5	16.0	6,500	4,453	
55 to 59	150.9	16.8	689.9	18.5	6,500	4,571	
60 to 64	131.1	14.6	618.1	16.6	6,500	4,715	
65 to 69	75.1	8.3	357.7	9.6	6,500	4,766	
All	899.0	100.0	3,729.6	100.0	5,500	4,148	

Number and amount of contributions<sup>1</sup> to traditional IRAs by age, tax year 2016

<sup>1</sup> This group is traditional IRA investors aged 25 to 69 who made contributions to their traditional IRAs in tax year 2016.

<sup>2</sup> Share is the percentage of the total.

Note: Contributions include both deductible and nondeductible traditional IRA contribution amounts. Components may not add to the total because of rounding.

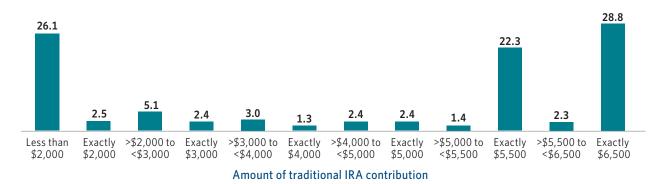
### **Traditional IRA Investors' Contribution Amounts Varied in 2016**

Although half of traditional IRA contributors contributed the maximum amount in tax year 2016, the amounts investors contributed varied widely. For example, while 26.1 percent of contributors contributed less than \$2,000, another 22.3 percent contributed \$5,500 (the 2016 contribution limit), and 31.1 percent made at least some portion of a catch-up contribution—contributing more than \$5,500 up to the maximum of \$6,500 (Figure 2.4). Overall, 50.6 percent of all traditional IRA contributors contributed the maximum amount allowed by law, including catch-up contributions for traditional IRA investors aged 50 or older (Figures 2.5 and 2.6). In fact, 52.7 percent of traditional IRA investors aged 50 to 69 made the full age-allowed contribution of \$6,500 in tax year 2016. These estimates are the lower bounds on the percentage of traditional IRA contributors at the limit with respect to deductible contributions. Some individuals may have been constrained in their deductible contribution amount and may not have elected to make a total contribution that would reach the limit. It is not possible to determine how many such individuals are in the database.

#### FIGURE 2.4

### **Distribution of Traditional IRA Contribution Amounts**

Percentage of traditional IRA contributors, tax year 2016



Note: This group is traditional IRA investors aged 25 to 69 who made contributions to their traditional IRAs in tax year 2016. Contributions include both deductible and nondeductible traditional IRA contribution amounts. The sample is 0.9 million traditional IRA investors aged 25 to 69 with contributions in tax year 2016.

### FIGURE 2.5

### Half of Traditional IRA Contributors Contributed at the Limit in 2016

Percentage of traditional IRA contributors<sup>1</sup> contributing the amount indicated by age, tax year 2016

	Amount of traditional IRA contribution <sup>2</sup>											
Age	<\$2,000	\$2,000	>\$2,000- <\$3,000	\$3,000	>\$3,000- <\$4,000	\$4,000	>\$4,000- <\$5,000	\$5,000	>\$5,000- <\$5,500	\$5,500 <sup>3</sup>	>\$5,500- <\$6,500³	\$6,500 <sup>3</sup>
25 to 29	42.6	3.6	6.5	2.7	3.1	1.3	2.5	1.8	1.4	34.5	0.0	0.0
30 to 34	36.3	2.3	6.0	2.0	3.2	0.9	2.6	1.6	1.9	43.2	0.0	0.0
35 to 39	32.1	1.8	5.5	1.9	2.9	0.8	2.6	1.8	2.2	48.3	0.0	0.0
40 to 44	28.7	1.7	5.3	1.9	2.9	0.9	2.6	2.1	2.3	51.7	0.0	0.0
45 to 49	26.8	2.1	5.3	2.1	2.8	1.0	2.6	2.5	2.2	52.6	0.0	0.0
50 to 54	24.5	2.6	4.9	2.5	3.0	1.3	2.3	2.7	0.9	1.7	3.4	50.1
55 to 59	22.0	3.1	4.8	2.9	3.2	1.6	2.1	2.5	0.8	0.7	4.4	52.0
60 to 64	19.5	2.9	4.6	2.9	3.1	1.7	2.2	2.7	0.7	0.7	4.6	54.3
65 to 69	19.4	2.6	4.1	2.5	3.1	1.6	2.4	2.7	0.7	0.7	4.5	55.8
All	26.1	2.5	5.1	2.4	3.0	1.3	2.4	2.4	1.4	22.3	2.3	28.8
Memo:												
25 to 49	31.6	2.1	5.6	2.1	2.9	0.9	2.6	2.0	2.1	48.0	0.0	0.0
50 to 69	21.6	2.8	4.6	2.7	3.1	1.6	2.2	2.6	0.8	1.0	4.2	52.7

<sup>1</sup> This group is traditional IRA investors aged 25 to 69 who made contributions to their traditional IRAs in tax year 2016.

<sup>2</sup> The contribution limit in tax year 2016 was \$5,500 for traditional IRA investors younger than 50 and \$6,500 for traditional IRA investors aged 50 or older. Income limits may phase these amounts down for deductible contributions for some taxpayers.

<sup>3</sup> In total, 50.6 percent of traditional IRA contributors appear to have contributed at the limit. If individuals who were apparently eligible for catch-up contributions, and who contributed at least \$5,500 are included, 53.4 percent of traditional IRA contributors made contributions at the limit.

Note: Contributions include both deductible and nondeductible traditional IRA contribution amounts. The sample is 0.9 million traditional IRA investors aged 25 to 69 with contributions in tax year 2016. Row percentages may not add to 100 percent because of rounding. Source: The IRA Investor Database™

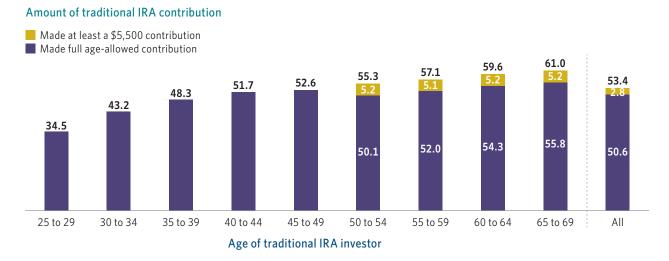
## **Older Traditional IRA Contributors Were More Likely to Contribute at the Limit in 2016**

Half of all traditional IRA contributors contributed at the limit in tax year 2016, but older traditional IRA contributors were more likely to do so. For example, 34.5 percent of traditional IRA contributors aged 25 to 29 and 43.2 percent of traditional IRA contributors aged 30 to 34 contributed at the \$5,500 limit in tax year 2016 (Figure 2.6). Among contributors in their fifties and sixties, more than half contributed the full \$6,500 limit, including catch-up contributions. If investors who contributed at least \$5,500 are considered, then about six in 10 contributors in their sixties reached the limit. Overall, 53.4 percent of traditional IRA contributors in tax year 2016 contributed at least \$5,500 to their traditional IRAs.

### FIGURE 2.6

### Older Traditional IRA Contributors Were More Likely to Contribute at the Limit in 2016

Traditional IRA contributors<sup>1</sup> at the limit<sup>2</sup> as a percentage of traditional IRA contributors by age, tax year 2016



<sup>1</sup> This group is traditional IRA investors aged 25 to 69 who made contributions to their traditional IRAs in tax year 2016.

<sup>2</sup> The contribution limit in tax year 2016 was \$5,500 for traditional IRA investors younger than 50 and \$6,500 for traditional IRA investors aged 50 or older. Income limits may phase these amounts down for deductible contributions for some taxpayers.

Note: Contributions include both deductible and nondeductible traditional IRA contribution amounts. Components may not add to the total because of rounding. The sample is 0.9 million traditional IRA investors aged 25 to 69 with contributions in tax year 2016. Source: The IRA Investor Database™

### Persistence in Contribution Activity Among Traditional IRA Investors from 2015 to 2016

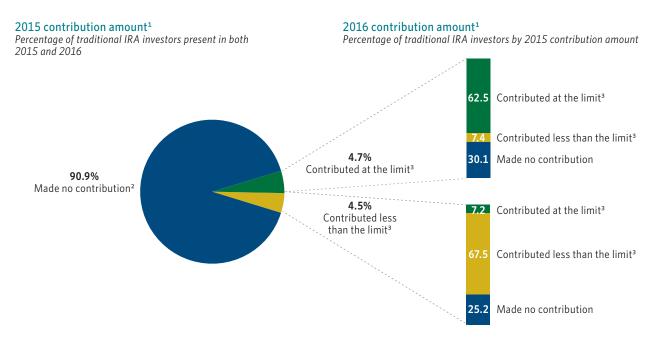
In The IRA Investor Database for 2016, there are 8.9 million traditional IRA investors aged 25 to 69 who also had traditional IRAs at the same financial services firm in the 2015 database. The tracking of the same individual IRA investors over time makes it possible to analyze persistence in contribution activity. The persistence in both the decision to contribute at all and the decision to contribute at the age-allowed limit is very high. This reinforces a key insight about IRA contributors that emerges from the earlier analysis: for traditional IRA investors who make contributions in a given year, the IRA is likely a key saving vehicle. The overall persistence in traditional IRA contribution activity between 2015 and 2016 is 72 percent, which means that more than seven in 10 traditional IRA investors who contributed in tax year 2015 also contributed in tax year 2016 (Figure 2.7).

### **Contributions at the Limit Tend to Persist**

A majority of traditional IRA investors who contributed at the full legal limit in 2015 continued to contribute in 2016 and again did so at the limit. Among traditional IRA investors aged 25 to 69 in 2016 with account balances in both 2015 and 2016, 9.1 percent contributed to their traditional IRAs in 2015, with 4.7 percent reaching the limit (Figure 2.7). Among those contributing at the limit in 2015, about seven in 10 contributed again in 2016, with 62.5 percent continuing to contribute at the limit. Among those contributing less than the limit in 2015, about seven in 2016, with 67.5 percent continuing to contribute less than the limit, and 7.2 percent increasing their contributions up to the full limit. This includes IRA investors turning 50 who would have to recognize their eligibility for catch-up contributions in moving to the limit in 2016.

#### FIGURE 2.7

## Three-Fifths of Traditional IRA Investors at the Limit in Tax Year 2015 Continued to Contribute at the Limit in Tax Year 2016



<sup>1</sup> Contributions include both deductible and nondeductible traditional IRA contribution amounts.

- <sup>2</sup> Among the 90.9 percent of traditional IRA investors who did not contribute in 2015, 1.2 percent contributed at the limit in 2016 and 1.0 percent contributed below the limit in 2016.
- <sup>3</sup> The contribution limit in tax years 2015 and 2016 was \$5,500 for traditional IRA investors younger than 50 and \$6,500 for traditional IRA investors aged 50 or older. Income limits may phase these amounts down for deductible contributions for some taxpayers. Investors were considered at the limit if they contributed their full age-allowed amount.

Note: The sample is 8.9 million traditional IRA investors aged 25 to 69 in 2016 with traditional IRA balances at both year-end 2015 and year-end 2016. Percentages may not add to 100 percent because of rounding.

## CHAPTER 3 Traditional IRA Investors' Rollover Activity in 2016

Congress created traditional IRAs to provide eligible workers with: (1) a contributory retirement account, originally for those without employer-sponsored pension plans; and (2) a rollover vehicle to preserve pension assets at job change or retirement.<sup>36</sup> Although contribution activity expanded between 1982 and 1986 when there were no income limits restricting traditional IRA contributions,<sup>37</sup> in more recent years rollovers have been the key inflows into traditional IRAs (see Figure 1.2). This chapter analyzes the rollover activity of traditional IRA investors, primarily focusing on variation in rollover activity in 2016 by investor age. Rollovers can provide a significant boost to traditional IRA balances, given the higher contribution limits into employer-sponsored plans and the ability of workers to accumulate significant balances over their careers. This chapter also explores the variation in traditional IRA balances in 2016 by the presence of recent rollovers.

# **Rollovers Often Were the Source of New Traditional IRAs in 2016**

Although traditional IRAs can be opened with either rollovers or contributions, rollovers tend to be the most common source for new traditional IRAs. In 2016, two-thirds (67.2 percent) of new traditional IRAs in The IRA Investor Database were opened only with a rollover (Figure 3.1). Another 2.4 percent were opened with both a rollover and a contribution, and 10.0 percent were opened only with a contribution. The remaining new traditional IRAs were transfers from one financial services firm to another and thus were unlikely to represent new IRAs. If these transfer accounts are excluded, 84.4 percent of new traditional IRAs in 2016 were opened exclusively with rollovers.

### FIGURE 3.1

### Sources of New Traditional IRAs by Investor Age

Percentage of new traditional IRAs<sup>1</sup> by age, 2016

		Source of new t	raditional IRA <sup>1, 2</sup>	
Age	Only rollover	Both rollover and contribution	Only contribution	Changed financial services firm <sup>3</sup>
25 to 29	79.3%	2.9%	10.2%	7.6%
30 to 34	73.4	3.2	12.6	10.8
35 to 39	70.4	2.9	13.0	13.6
40 to 44	68.8	2.5	12.3	16.4
45 to 49	66.9	2.4	10.7	19.9
50 to 54	63.1	2.2	10.5	24.3
55 to 59	59.5	2.3	9.9	28.3
60 to 64	64.4	2.0	6.9	26.6
65 to 69	60.7	1.7	5.5	32.1
70 to 74	53.3	0.2	0.9	45.6
All	67.2	2.4	10.0	20.3

<sup>1</sup> New traditional IRAs are accounts that did not exist in The IRA Investor Database in 2015.

 $^{\rm 2}$  Row percentages may not add to 100 percent because of rounding.

<sup>3</sup> These accounts are often asset transfers to a new provider and thus are unlikely to represent a new traditional IRA investor. Note: The sample is 1.0 million new traditional IRA investors aged 25 to 74 in The IRA Investor Database in 2016. Source: The IRA Investor Database<sup>™</sup>

## Traditional IRA Rollover Activity in 2016 by Investor Age

Although younger traditional IRA investors were more likely to have rollovers in 2016, rollovers were distributed across all age groups. Indeed, half of the rollovers in 2016 were made by investors aged 50 to 74 (Figure 3.2). Younger investors were more likely to have rollovers, with 30.5 percent of traditional IRA investors aged 25 to 29 having rollovers in 2016, compared with 4.5 percent of traditional IRA investors aged 70 to 74. In fact, the only exception to the general pattern of declining rollover incidence as age increases is among investors aged 60 to 64. While 8.3 percent of traditional IRA investors aged 55 to 59 had rollovers in 2016, 9.9 percent of traditional IRA investors aged 55 to 59 had rollovers in 2016, 9.9 percent of traditional IRA investors aged 60 to 64 had rollovers in 2016, likely due in part to investors in this age group retiring and rolling their retirement accounts into IRAs.<sup>38</sup> Overall, 10.3 percent of traditional IRA investors aged 25 to 74 had rollovers in 2016.

### FIGURE 3.2

### **Rollover Activity of Traditional IRA Investors by Investor Age**

_	Traditional II	RA investors	Traditional IRA investors with rollovers <sup>1</sup>		Memo: percentage of – traditional IRA	Percentage of rollovers that
Age	<b>Number</b> Thousands	Share <sup>3</sup> Percent	<b>Number</b> Thousands	Share <sup>3</sup> Percent	investors who had rollovers <sup>1</sup>	created new traditional IRAs <sup>2</sup>
25 to 29	363.9	3.4%	111.1	10.0%	30.5%	91.3%
30 to 34	642.3	5.9	119.9	10.8	18.7	82.0
35 to 39	840.3	7.7	109.8	9.9	13.1	74.3
40 to 44	966.0	8.9	102.5	9.2	10.6	68.0
45 to 49	1,217.1	11.2	114.3	10.3	9.4	64.0
50 to 54	1,412.3	13.0	123.3	11.1	8.7	60.1
55 to 59	1,594.1	14.7	132.8	11.9	8.3	56.8
60 to 64	1,562.7	14.4	154.4	13.9	9.9	54.5
65 to 69	1,342.3	12.4	103.4	9.3	7.7	48.7
70 to 74	903.6	8.3	40.3	3.6	4.5	43.0
All	10,844.6	100.0	1,111.9	100.0	10.3	65.3

Number of traditional IRA investors and traditional IRA investors with rollovers<sup>1</sup> by age, 2016

<sup>1</sup> This group is traditional IRA investors aged 25 to 74 who had rollovers into their traditional IRAs in tax year 2016.

<sup>2</sup> New traditional IRAs are accounts that did not exist in the IRA Investor Database in 2015.

<sup>3</sup> Share is the percentage of the total.

Note: Components may not add to the total because of rounding. Source: The IRA Investor Database™ For the bulk of younger investors with rollovers, the rollover event opened a new account. Indeed, for more than nine in 10 traditional IRA investors aged 25 to 29 with rollovers in 2016, the rollover opened a new traditional IRA (Figure 3.2). Still, even among traditional IRA investors aged 70 to 74 with rollovers in 2016, 43.0 percent opened new accounts with those rollovers. This pattern also helps explain the higher rollover incidence among younger traditional IRA investors. Because the rollover is often the event that opens the IRA for younger investors, they are less likely to own an IRA if they did not have a rollover, whereas older investors are more likely to have already opened an IRA.

### Traditional IRA Rollover Amounts in 2016 by Investor Age

Rollover amounts tend to rise with investor age, reflecting the longer horizon older investors have had to build retirement plan accumulations.<sup>39</sup> The median rollover amount among traditional IRA investors aged 25 to 29 in 2016 was \$2,884, \$74,138 for traditional IRA investors aged 65 to 69, and \$65,498 for investors aged 70 to 74 (Figure 3.3). Although traditional IRA investors aged 50 to 74 accounted for half of rollovers, four-fifths of the money rolled over in 2016 came from this group. In fact, traditional IRA investors aged 60 to 64 accounted for more than one-quarter of all rollover money, reflecting their high average rollover amounts as well as the large number of rollovers that came from this age group.

#### FIGURE 3.3

### Traditional IRA Investors with Rollovers by Investor Age

Number and amount of rollovers<sup>1</sup> to traditional IRAs by age, 2016

	Traditional IRA rollov			onal IRA overs <sup>1</sup>		Traditional IRA rollover amount		
Age	<b>Number</b> Thousands	Share <sup>2</sup> Percent	<b>Amount</b> Millions	<b>Share²</b> Percent	Median	Mean		
25 to 29	111.1	10.0%	\$793.2	0.8%	\$2,884	\$7,137		
30 to 34	119.9	10.8	2,047.6	2.1	4,518	17,082		
35 to 39	109.8	9.9	3,524.2	3.5	9,215	32,084		
40 to 44	102.5	9.2	5,164.4	5.2	15,754	50,366		
45 to 49	114.3	10.3	7,595.4	7.6	20,906	66,438		
50 to 54	123.3	11.1	10,641.7	10.7	27,565	86,275		
55 to 59	132.8	11.9	16,504.6	16.6	38,287	124,307		
60 to 64	154.4	13.9	26,613.0	26.8	65,848	172,365		
65 to 69	103.4	9.3	18,926.2	19.1	74,138	183,041		
70 to 74	40.3	3.6	7,500.2	7.6	65,498	186,091		
All	1,111.9	100.0	99,310.7	100.0	19,531	89,314		

<sup>1</sup> This group is traditional IRA investors aged 25 to 74 who had rollovers into their traditional IRAs in tax year 2016.

<sup>2</sup> Share is the percentage of the total.

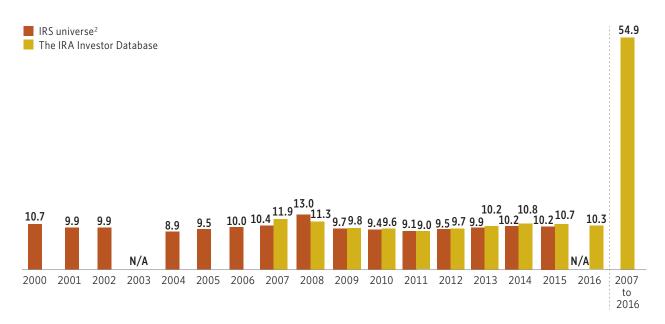
Note: Components may not add to the total because of rounding.

Like contribution activity, rollovers among traditional IRA investors are relatively infrequent in any given year. However, unlike contributions—where there appears to be some persistence among traditional IRA investors from year to year—different groups of people tend to have rollovers from year to year. About one in 10 traditional IRA investors aged 25 to 74 had a rollover in any year between 2007 and 2016 (Figure 3.4). However, among traditional IRA investors with an account balance at year-end 2016, more than half had a rollover at some point between 2007 and 2016.<sup>40</sup>

#### FIGURE 3.4

### Many Traditional IRA Investors Have Made Rollovers

Percentage of traditional IRA investors aged 25 to 74 with rollovers,<sup>1</sup> 2000-2016



<sup>1</sup> This group is traditional IRA investors aged 25 to 74 who had rollovers into their traditional IRAs in the year or years indicated.

<sup>2</sup> In the IRS universe, data are for traditional IRA investors of all ages.

N/A = not available

Note: Rollovers made prior to 2007, as well as rollovers made prior to a change in financial services providers, cannot be identified in the database.

Sources: The IRA Investor Database<sup>™</sup> and Internal Revenue Service Statistics of Income Division

This increase in rollover incidence when expanding the period of observation is consistent with expectations based on labor market dynamics and the work life cycle. In any given year, a certain number of workers with employer-sponsored coverage will separate from their employers, and when they do, it is possible that separation will generate a rollover event. Because separating from one's employer is not an annual event for most workers and not all workers roll over money from their employer plan into a traditional IRA after job separation, rollovers to traditional IRAs by a given individual will tend to be sporadic.

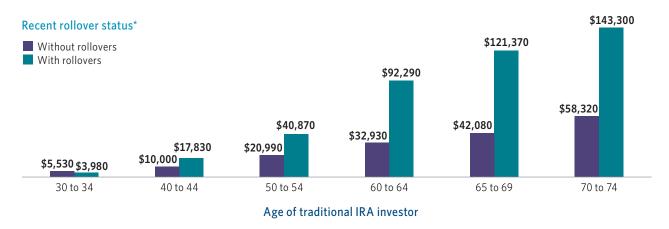
# Rollovers Tend to Have a Strong Positive Impact on Traditional IRA Balances

Because of the higher contribution limits for employer-sponsored retirement plans, and the steady buildup of assets that can occur in these plans over the course of a career, rollovers into traditional IRAs appear to have a substantial, positive impact on the size of account balances. The impact of recent rollovers can be seen most clearly among older traditional IRA investors. For example, among traditional IRA investors aged 70 to 74 with rollovers between 2007 and 2016, the median traditional IRA balance at year-end 2016 was \$143,300, compared with \$58,320 for those without rollovers, or nearly two and a half times as much (Figure 3.5). Household survey data also find a substantial positive effect of rollovers on traditional IRA balances.<sup>41</sup>

### FIGURE 3.5

### **Recent Rollovers Provide a Significant Boost to Traditional IRA Balances**

Median account balances among traditional IRA investors, selected ages, 2016



\* Rollovers made prior to 2007, as well as rollovers made prior to a change in financial services providers, cannot be identified in the database. Note: See Figure 3.2 for sample counts by age group. Source: The IRA Investor Database™

## CHAPTER 4 Traditional IRA Investors' Withdrawal Activity in 2016

IRA investors can decide when and how to draw down the assets they hold inside their traditional IRAs, although IRS penalties, taxes, or distribution requirements may apply. This chapter first briefly reviews the distribution, or withdrawal, rules governing traditional IRAs. It also analyzes the withdrawal activity of traditional IRA investors, primarily focusing on variation in withdrawal activity in 2016 by investor age. Finally, withdrawal amounts are analyzed in the context of required minimum distribution (RMD) rules.

### **Traditional IRA Withdrawal Activity**

Many complex distribution rules govern investors' access to traditional IRAs, involving the investor's age, the investor's spouse's age (if married), whether the IRA is inherited, and exceptions for certain distributions. For investors under age 59½, distributions from traditional IRAs generally are subject to income tax as well as a 10 percent penalty. However, there are some exceptions to the penalty, including distributions for the purchase of a first home (up to \$10,000) or certain qualified higher-education expenses.<sup>42</sup> In addition, individuals with inherited traditional IRAs may be required to take distributions and are able to take distributions without penalty. Given the possibility of penalty in most cases, there is little traditional IRA investor withdrawal activity prior to age 59½.<sup>43</sup> Taxpayers older than 59½ but younger than 70½ may take withdrawals without penalty, but generally are not required to do so. Beginning at age 70½, traditional IRA investors typically are required to take annual distributions from their IRAs, referred to as required minimum distributions, or RMDs.<sup>44</sup> However, in response to the decline in the stock market and the related financial market volatility, policymakers suspended RMDs for 2009 (see Figure 1.1).<sup>45</sup>

The percentage of traditional IRA investors taking distributions from their traditional IRAs in any given year has risen somewhat since 2007. Analysis of traditional IRA investors in 2007 and 2008 shows that about 18 percent of traditional IRA investors had distributions (Figure 4.1, first panel). The percentage taking distributions dropped to 14 percent in 2009 (due at least in part to the suspension of RMDs), before rising to nearly 24 percent in 2015 and 2016. Some of this increase is attributable to the changing age composition of investors in The IRA Investor Database. As the population grows older and more investors move into their sixties and seventies, where withdrawal activity is not penalized and in many instances is required, the overall withdrawal rate is likely to increase.<sup>46</sup>

### Traditional IRA Withdrawal Activity in 2016 by Investor Age

Withdrawal activity is highly concentrated among older traditional IRA investors. Investors aged 70 or older, who typically have RMDs, were much more likely to withdraw money than younger investors. Traditional IRA withdrawal activity is much lower among younger investors for whom penalties often apply. Nevertheless, a slight uptick in their low levels of withdrawal activity is apparent in the wake of the financial crisis (2010–2016). On average, about 7 percent of traditional IRA investors aged 25 to 59 took withdrawals in 2007, 2008, or 2009 (Figure 4.1, second panel). Withdrawal activity for this age group ticked up to 9.7 percent in 2010 and was around 9 percent in each year between 2011 and 2016. A similar pattern is discernable among traditional IRA investors aged 60 to 69, who may withdraw without penalty. In 2007 and 2008, about 18 percent of this age group took withdrawals; in each year between 2010 and 2016, it was about one in five (Figure 4.1, third panel). The pattern of withdrawal activity for the traditional IRA investors aged 70 or older mainly reflects the suspension of RMDs in 2009 (Figure 4.1, fourth panel).<sup>47</sup>

Although traditional IRA investors across all age groups withdrew money from their traditional IRAs in 2016, withdrawal activity is concentrated among older traditional IRA investors. In The IRA Investor Database, 23.5 percent of traditional IRA investors took withdrawals from their traditional IRAs in 2016, and this varied considerably by age (Figure 4.2). For example, 72.2 percent of traditional IRA investors aged 70 to 74 and 84.9 percent of investors aged 75 or older took withdrawals in 2016, compared with 22 percent of traditional IRA investors in their sixties and less than 10 percent of traditional IRA investors aged 60 or older, where penalties generally do not apply to the distributions and RMDs often apply. Indeed, while traditional IRA investors aged 60 or older only accounted for 77.9 percent of traditional IRA investors with withdrawals in 2016.

The IRA Investor Database does not show universal withdrawal rates among traditional IRA investors aged 70 or older, even though traditional IRA investors are required to take distributions beginning at age 70½, for a few reasons. First, because age in the database refers to age at the end of 2016, some traditional IRA investors in this group did not turn 70½ until 2017 and would not have been required to take a distribution until then.<sup>48</sup> In addition, The IRA Investor Database may not capture the complete IRA portfolio of a traditional IRA investor because some traditional IRA investors may have multiple IRAs and may have chosen to take their RMD from a traditional IRA that was not held at a provider in the sample. Although the IRS universe separates individuals younger than age 70½ from those 70½ or older and has a complete picture of an investor's total IRA portfolio, withdrawal rates are still not universal.<sup>49</sup>

### FIGURE 4.1

### **Traditional IRA Withdrawal Rates**

Percentage of traditional IRA investors with withdrawals, 2007-2016

### All traditional IRA investors aged 25 or older



Note: The samples are 7.4 million traditional IRA investors aged 25 or older in 2007, 7.8 million traditional IRA investors aged 25 or older in 2008, 10.0 million traditional IRA investors aged 25 or older in 2009, 10.1 million traditional IRA investors aged 25 or older in 2010, 10.2 million traditional IRA investors aged 25 or older in 2011, 10.4 million traditional IRA investors aged 25 or older in 2012, 10.7 million traditional IRA investors aged 25 or older in 2013, 11.0 million traditional IRA investors aged 25 or older in 2013, 11.0 million traditional IRA investors aged 25 or older in 2014, 11.5 million traditional IRA investors aged 25 or older in 2014, 11.5 million traditional IRA investors aged 25 or older in 2015, and 11.9 million traditional IRA investors aged 25 or older in 2016.

### Traditional IRA Withdrawal Amounts in 2016 by Investor Age

Traditional IRA withdrawal amounts varied with investor age and were largest for investors in their sixties, who can withdraw without penalty but generally are not required to take withdrawals (Figure 4.3). In 2016, the median distribution among traditional IRA investors aged 25 to 29 with withdrawals was \$2,890. This number rose with age, peaking at \$12,000 for investors aged 65 to 69. For investors aged 70 to 74 with withdrawals, the median withdrawal amount was \$6,666; it was \$6,000 for investors aged 75 or older, perhaps reflecting RMDs that force the withdrawal of a small percentage of the account.

### FIGURE 4.2

### Withdrawal Activity of Traditional IRA Investors in 2016 by Investor Age

	Traditional I	RA investors		RA investors Idrawals <sup>1</sup>	Memo: percentage of traditional IRA	
Age	<b>Number</b> Thousands	<b>Share²</b> Percent	<b>Number</b> Thousands	<b>Share²</b> Percent	investors who had withdrawals <sup>1</sup>	
25 to 29	363.9	3.1%	21.0	0.7%	5.8%	
30 to 34	642.3	5.4	42.3	1.5	6.6	
35 to 39	840.3	7.1	61.1	2.2	7.3	
40 to 44	966.0	8.1	75.7	2.7	7.8	
45 to 49	1,217.1	10.2	105.7	3.8	8.7	
50 to 54	1,412.3	11.9	139.5	5.0	9.9	
55 to 59	1,594.1	13.4	172.2	6.1	10.8	
60 to 64	1,562.7	13.1	294.1	10.5	18.8	
65 to 69	1,342.3	11.3	334.3	11.9	24.9	
70 to 74	903.6	7.6	652.0	23.2	72.2	
75 or older	1,067.9	9.0	907.2	32.3	84.9	
All	11,912.5	100.0	2,805.0	100.0	23.5	
Memo:						
25 to 59	7,035.9	59.1	617.5	22.0	8.8	
60 to 69	2,905.1	24.4	628.4	22.4	21.6	
70 or older	1,971.5	16.5	1,559.1	55.6	79.1	

Number of traditional IRA investors and traditional IRA investors with withdrawals<sup>1</sup> by age, 2016

<sup>1</sup> This group is traditional IRA investors aged 25 or older who had withdrawals from their traditional IRAs in tax year 2016.

<sup>2</sup> Share is the percentage of the total.

Note: Components may not add to the total because of rounding.

### FIGURE 4.3

### Traditional IRA Withdrawals in 2016 by Investor Age

	Traditional II with with			onal IRA awals¹	Traditional IRA withdrawal amount		
Age	<b>Number</b> Thousands	<b>Share²</b> Percent	<b>Amount</b> Millions	<b>Share²</b> Percent	Median	Mean	
25 to 29	21.0	0.7%	\$152.9	0.3%	\$2,890	\$7,293	
30 to 34	42.3	1.5	389.6	0.8	5,200	9,209	
35 to 39	61.1	2.2	732.5	1.6	5,500	11,992	
40 to 44	75.7	2.7	1,140.7	2.4	5,500	15,060	
45 to 49	105.7	3.8	1,790.0	3.8	5,800	16,932	
50 to 54	139.5	5.0	2,372.4	5.0	6,488	17,006	
55 to 59	172.2	6.1	2,870.2	6.1	6,000	16,669	
60 to 64	294.1	10.5	6,781.2	14.4	10,100	23,060	
65 to 69	334.3	11.9	7,596.7	16.1	12,000	22,723	
70 to 74	652.0	23.2	9,842.5	20.9	6,666	15,096	
75 or older	907.2	32.3	13,370.8	28.4	6,000	14,739	
All	2,805.0	100.0	47,039.4	100.0	6,960	16,770	

Number and amount of withdrawals<sup>1</sup> from traditional IRAs by age, 2016

<sup>1</sup> This group is traditional IRA investors aged 25 or older who had withdrawals from their traditional IRAs in tax year 2016.

<sup>2</sup> Share is the percentage of the total.

Note: Components do not add to the total because of rounding.

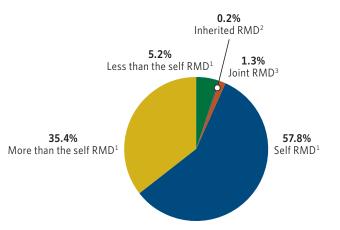
## Many Traditional IRA Investors Determine Withdrawal Amounts Using RMD Rules

According to household survey results, traditional IRA-owning households with withdrawals often indicate that they calculated the withdrawal amount to meet the RMD rule.<sup>50</sup> Traditional IRA investors in The IRA Investor Database also often use the RMD rule to determine their withdrawal amounts. It is possible to identify withdrawal amounts that fulfill the RMD by using the IRS distribution tables. Among investors who (1) had traditional IRAs at year-end 2015 and 2016, (2) were aged 70 or older at year-end 2016, and (3) took withdrawals in 2016, more than half withdrew the RMD amount. Specifically, 57.8 percent took exactly the RMD amount based on the Uniform Lifetime table published by the IRS (self RMD); 1.3 percent appear to have used the Joint and Last Survivor Expectancy table (joint RMD); and another 0.2 percent appear to be taking distributions from an inherited IRA (inherited RMD) (Figure 4.4). Additionally, 35.4 percent of these older traditional IRA investors with withdrawals took more than the self RMD amount and 5.2 percent took less than that amount.<sup>51</sup>

### FIGURE 4.4

## **Required Minimum Distributions Often Were Used to Determine Withdrawal Amounts in 2016**

Percentage of traditional IRA investors aged 70 or older in 2016 with account balances at year-end 2015 and year-end 2016 who took withdrawals in 2016



- <sup>1</sup> The self RMD amount applies to traditional IRA investors who are (1) unmarried, (2) married to a spouse who is no more than 10 years younger, or (3) married to a spouse who is not the sole beneficiary of the IRA.
- <sup>2</sup> The inherited RMD amount applies to beneficiaries who inherited the traditional IRA.
- <sup>3</sup> The joint RMD amount applies to traditional IRA investors who are married to spouses who are more than 10 years younger and are the sole beneficiaries of the IRA.

Note: The sample is 1.0 million traditional IRA investors aged 70 or older in 2016 with account balances at year-end 2015 and year-end 2016 who took withdrawals in 2016.

### Traditional IRA Withdrawal Activity in 2016 by Age and Account Balance

Traditional IRA withdrawals also varied by size of account balance. Traditional IRA investors with larger account balances tended to be more likely to take withdrawals in 2016. For example, among investors aged 65 to 69, fewer than 20 percent with account balances less than \$20,000 took withdrawals compared with more than one-third of those with account balances of \$200,000 or more (Figure 4.5). This was especially true for the youngest investors, for whom the large account balances are likely to be inherited, and thus have required withdrawals. For example, among traditional IRA investors aged 25 to 29, fewer than one in 10 with account balances less than \$20,000 took withdrawals in 2016, compared with nearly 90 percent of those with account balances of \$200,000 or more.

### FIGURE 4.5

### Traditional IRA Investors with Larger Balances Tend to Be More Likely to Take Withdrawals

Percentage of traditional IRA investors with account balances in both 2015 and 2016 who took a withdrawal in 2016 by age and account balance

	Size of traditional IRA balance at year-end 2015									
Age	<\$5,000	\$5,000 to <\$10,000	\$10,000 to <\$20,000	\$20,000 to <\$30,000	\$30,000 to <\$40,000	\$40,000 to <\$70,000	\$70,000 to <\$100,000	\$100,000 to <\$200,000	\$200,000 or more	
25 to 29	2.9	6.9	8.7	13.7	17.9	28.2	47.2	66.3	87.6	
30 to 34	3.3	6.9	7.0	8.1	8.7	9.5	11.9	16.6	46.9	
35 to 39	4.5	7.0	6.6	7.6	8.0	8.3	8.4	9.1	14.4	
40 to 44	5.1	7.4	6.9	7.9	7.9	8.6	8.5	8.4	9.3	
45 to 49	5.4	8.1	7.8	8.7	9.3	9.6	9.7	9.6	9.6	
50 to 54	5.6	8.9	9.3	10.4	10.8	11.2	11.2	10.9	10.9	
55 to 59	5.8	9.6	10.2	11.0	11.5	12.0	12.2	12.2	13.3	
60 to 64	7.3	12.9	15.2	16.8	18.0	18.9	20.5	22.1	27.7	
65 to 69	7.9	15.5	18.7	20.7	22.4	24.1	26.5	28.8	36.6	
70 to 74	24.8	62.3	69.3	72.5	74.6	76.4	78.9	80.6	84.6	
75 or older	42.0	80.9	84.6	86.2	87.6	88.6	89.5	90.7	93.4	

Note: The sample is 10.8 million traditional IRA investors aged 25 or older in 2016 with traditional IRA balances at both year-end 2015 and year-end 2016. Age is the traditional IRA investors' age at year-end 2016. Account balance is at year-end 2015. Source: The IRA Investor Database<sup>™</sup>

The impact of the rules surrounding inherited IRAs can also be seen in the amounts that traditional IRA investors withdraw. For example, traditional IRA investors aged 25 to 29 with withdrawals in 2016 withdrew a median of 1.8 percent of their prior year's account balance for those with account balances of \$70,000 or more (Figure 4.6). This is significant, because IRS rules require investors aged 25 to 29 with inherited traditional IRAs to withdraw a minimum of 1.7 percent to 1.8 percent (depending on age) of the prior year's account balance. Similarly, the IRS requires individuals aged 30 to 34 to withdraw a minimum of 1.9 percent to 2.0 percent of the prior year's balance, which corresponds to the median percentage withdrawn of 2.0 percent for traditional IRA investors aged 30 to 34 in 2016 with account balances of \$200,000 or more.

In general, traditional IRA investors with larger balances tended to withdraw a smaller percentage of their balances. For example, for traditional IRA investors aged 40 to 44, the median investor with an account balance of less than \$20,000 withdrew more than 40 percent of their prior year's balance, compared with less than 5 percent for investors with \$200,000 or more (Figure 4.6). For the oldest groups of traditional IRA investors, who are generally required to take distributions, RMD rules appear to influence how much investors withdraw. For example, among traditional IRA investors aged 70 to 74, the median investor withdrew about 4 percent of their prior year's account balance in 2016.<sup>52</sup>

### FIGURE 4.6

## Traditional IRA Investors with Larger Account Balances and Withdrawals Tended to Withdraw a Smaller Portion of Their Balances

	Size of traditional IRA balance at year-end 2015									
Age	<\$5,000	\$5,000 to <\$10,000	\$10,000 to <\$20,000	\$20,000 to <\$30,000	\$30,000 to <\$40,000	\$40,000 to <\$70,000	\$70,000 to <\$100,000	\$100,000 to <\$200,000	\$200,000 or more	
25 to 29	93.4	32.9	34.5	19.6	8.0	2.5	1.8	1.8	1.8	
30 to 34	96.0	47.9	45.9	32.9	24.8	18.2	7.4	2.9	2.0	
35 to 39	93.5	48.8	48.2	35.8	29.9	21.5	13.8	7.6	2.2	
40 to 44	88.8	44.9	45.9	36.8	29.8	23.3	18.0	10.5	2.6	
45 to 49	83.0	40.9	38.9	30.7	25.9	20.9	14.9	9.9	3.0	
50 to 54	79.6	33.5	32.4	23.9	19.7	15.5	12.8	7.9	3.3	
55 to 59	69.5	22.6	21.1	16.8	14.2	11.4	9.1	6.7	3.7	
60 to 64	76.1	33.0	27.7	23.7	21.3	16.9	13.1	9.7	5.1	
65 to 69	69.8	34.7	28.5	23.2	19.1	15.4	11.6	8.6	5.1	
70 to 74	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	
75 or older	6.5	6.5	6.5	6.4	6.1	6.1	5.8	5.8	5.5	

Median percentage of year-end 2015 account balance withdrawn among traditional IRA investors with account balances in both 2015 and 2016 and withdrawals in 2016 by age and account balance

Note: The sample is 2.6 million traditional IRA investors aged 25 or older in 2016 with traditional IRA balances at both year-end 2015 and year-end 2016 and withdrawals in 2016. Age is the traditional IRA investors' age at year-end 2016. Account balance is at year-end 2015. Source: The IRA Investor Database<sup>™</sup>

## CHAPTER 5 Traditional IRA Investors' Balances at Year-End 2016

The amounts accumulated in traditional IRAs depend on contributions, rollovers, withdrawals, and investment returns, which are based on the asset allocation selected by the IRA investors.<sup>53</sup> Contribution, rollover, and withdrawal activities in traditional IRAs are governed by Internal Revenue Code regulations. Traditional IRA investors have access to a wide range of investment options in the retail financial services market.<sup>54</sup> This chapter analyzes the variation in traditional IRA balances in 2016 by investor age.

### Traditional IRA Balances in 2016 by Investor Age

Traditional IRA balances generally increase with investor age. The median traditional IRA balance was \$29,740 at year-end 2016, but the amount invested varied widely across investors (Figure 5.1). Older investors tended to have larger traditional IRA balances. The median balance for investors aged 25 to 29 was \$2,780, compared with \$86,910 for investors aged 70 to 74.

FIGURE 5.1

### Traditional IRA Balances in 2016 Tended to Increase with Investor Age

25th percentile, median, and 75th percentile account balances among traditional IRA investors by age, year-end 2016



Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Source: The IRA Investor Database™ Traditional IRA balances varied even among traditional IRA investors of similar ages, as evidenced by the difference between the 25th percentile, median (50th percentile), and 75th percentile for individual age groups. For example, among traditional IRA investors aged 60 to 64, the median balance was \$51,420 at year-end 2016, but the 25th percentile balance was \$11,720, and the 75th percentile balance was \$169,110 (Figure 5.1). This range reflects the variety of histories for these IRA investors, which are affected by differences in factors such as timing and patterns of contribution and rollover activity, asset allocations, withdrawals, and length of time investing in the IRAs.

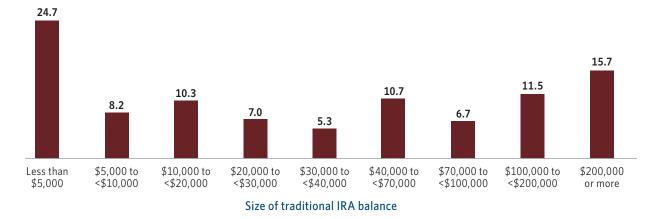
### **Distribution of Traditional IRA Balances by Size in 2016**

Some of the variation in traditional IRA balances is explained by different job histories and participation in employer-sponsored retirement plans. Traditional IRA investors can accumulate assets inside their IRAs through contributions, rollovers, and asset appreciation. Although contributions and asset appreciation generally cause relatively small changes in traditional IRA balances in any given year, rollover events are often larger because they can contain many years of contributions to employer-sponsored retirement plans at higher legal limits than those for IRAs.<sup>55</sup> Because of this, as well as differing contribution and withdrawal activity and asset allocation, there is a wide distribution of the resulting traditional IRA balance amounts. While 24.7 percent of traditional IRA investors had balances of less than \$5,000, 27.2 percent had account balances of \$100,000 or more (Figure 5.2).

### FIGURE 5.2

### **Distribution of Traditional IRA Balances by Size**

Percentage of traditional IRA investors by size of traditional IRA balance, year-end 2016



Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Percentages do not add to 100 percent because of rounding. See Figure 5.3 for additional detail.

The range of traditional IRA balances is most pronounced by age. Younger traditional IRA investors were more likely to have small balances than older traditional IRA investors in 2016. For example, although 70.7 percent of traditional IRA investors aged 25 to 29 had balances of less than \$5,000, that percentage fell for each successive age group, reaching a low of 8.3 percent for traditional IRA investors aged 75 or older (Figure 5.3). On the other end, while a negligible number (0.6 percent) of traditional IRA investors aged 25 to 29 had balances of \$100,000 or more, this percentage rose with age, reaching its peak at 46.6 percent of traditional IRA investors aged 75 or older, likely due in part to the cumulative effect of RMDs and the higher RMD percentages required for older investors.<sup>56</sup>

### FIGURE 5.3

### **Traditional IRA Balances by Investor Age**

		Size of traditional IRA balance at year-end 2016									
Age	Less than \$5,000	\$5,000 to <\$10,000	\$10,000 to <\$20,000	\$20,000 to <\$30,000	\$30,000 to <\$40,000	\$40,000 to <\$70,000	\$70,000 to <\$100,000	1	\$200,000 or more		
25 to 29	70.7	12.4	9.0	3.3	1.6	1.8	0.5	0.4	0.2		
30 to 34	53.8	13.0	12.6	6.4	3.9	5.7	2.2	2.0	0.4		
35 to 39	43.0	11.9	12.8	7.4	5.1	8.6	4.1	5.1	2.1		
40 to 44	35.2	10.5	12.1	7.6	5.4	10.0	5.6	8.2	5.5		
45 to 49	29.6	9.4	11.5	7.6	5.6	10.8	6.4	10.2	8.9		
50 to 54	24.8	8.6	10.9	7.5	5.6	11.3	7.0	11.7	12.6		
55 to 59	20.4	7.9	10.4	7.5	5.7	11.7	7.3	12.7	16.4		
60 to 64	16.3	6.9	9.4	7.0	5.4	11.6	7.6	13.9	21.9		
65 to 69	12.8	5.8	8.3	6.4	5.1	11.5	7.9	15.3	27.0		
70 to 74	9.9	4.8	7.6	6.1	5.0	11.6	8.3	16.4	30.2		
75 or older	8.3	5.3	9.2	7.3	6.0	13.2	8.9	16.2	25.6		
All	24.7	8.2	10.3	7.0	5.3	10.7	6.7	11.5	15.7		

Percentage of traditional IRA investors by age, year-end 2016

Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Row percentages may not add to 100 percent because of rounding.

## CHAPTER 6 Snapshots of Investments in Traditional IRAs at Year-End 2007 and Year-End 2016

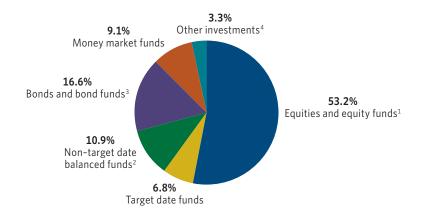
IRA investors decide how to allocate their IRA assets to investments such as individual securities (e.g., stocks and bonds), mutual funds, exchange-traded funds (ETFs), closedend funds, annuities, deposits, and other investments. This chapter analyzes the average dollar-weighted asset allocation of traditional IRA balances at year-end 2016 by investor age. Snapshots of traditional IRA asset allocations at year-end 2016 are compared with the asset allocation at year-end 2007. In addition, snapshots of individual traditional IRA investors' concentrations in equity holdings—that is, the percentage of individual traditional IRA balances invested in equities, equity funds, and the equity portion of balanced funds—between year-end 2007 and year-end 2016 are compared. Finally, this chapter analyzes the concentration of equity holdings in traditional IRAs with low balances (\$5,000 or less), as well as money market fund allocations for small rollovers, because account size appears to figure into traditional IRA investors' asset allocations.

On average, equities and equity funds represent the largest investment category among traditional IRA investors. At year-end 2016, on average, equities and equity funds were 53.2 percent of traditional IRA assets held by individuals aged 25 or older (Figure 6.1). Balanced (or hybrid) funds, which invest in a mix of equities and fixed-income securities and include target date funds,<sup>57</sup> were the next largest component, accounting for 17.7 percent of traditional IRA assets. Another 16.6 percent of traditional IRA assets were held in bonds and bond funds, and 9.1 percent were in money market funds.

#### FIGURE 6.1

### **Equity Holdings Figure Prominently in Traditional IRA Investments**

Percentage of traditional IRA balances, year-end 2016



<sup>1</sup> Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

<sup>2</sup> Balanced funds invest in a mix of equities and fixed-income securities.

<sup>3</sup> Bond funds include bond mutual funds, bond closed-end funds, and bond ETFs.

 $^{\rm 4}$  Other investments include certificates of deposit and unidentifiable assets.

Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Percentages are dollar-weighted averages. Components do not add to 100 percent because of rounding.

Source: The IRA Investor Database™

### Investments in Traditional IRAs in 2016 by Investor Age

Equities and equity funds were the largest component of traditional IRA investors' accounts, on average, representing 53.2 percent of traditional IRA assets at year-end 2016 (Figure 6.2). Investors also may hold equities through balanced funds; at year-end 2016, 64.0 percent of traditional IRA assets were invested in equity holdings (equities, equity funds, and the equity portion of balanced funds). With the exception of the youngest groups of traditional IRA investors, the age pattern of allocation to equity holdings was as expected by financial theory and other research: older investors tend to have lower shares in equity holdings. Traditional IRA investors aged 30 to 54 had more than 70 percent of their assets invested in equity holdings, on average. The share invested in equity holdings generally declined through the age groups, with those aged 65 or older having about three-fifths of their assets invested in equity holdings. Traditional IRA investors aged 25 to 29 had 62.6 percent of their assets invested in equity holdings, on average, at year-end 2016.

Younger traditional IRA investors generally had allocated more of their assets to target date funds, compared with older traditional IRA investors. At year-end 2016, 18.2 percent of the traditional IRA assets held by investors aged 25 to 29 were invested in target date funds, on average, rising to 22.0 percent of assets for investors aged 30 to 34 (Figure 6.2). The percentage of traditional IRA assets invested in target date funds fell to a low of 2.3 percent of the assets held by those aged 75 or older. This pattern of target date fund use was expected because target date funds are relatively new investment products and younger investors are more likely to have been introduced to them either in 401(k) plans or recently opened IRAs.<sup>58</sup>

### FIGURE 6.2

### Investments in Traditional IRAs by Investor Age

			Balanced	funds²					
	– Equities –	Equity portion		Non-equity portion		Bonds	Money		Memo:
Age	and equity funds <sup>1</sup>	Target date	Non-target date	Target date	Non-target date		market funds	Other investments⁴	equity holdings⁵
25 to 29	42.8	15.9	3.9	2.3	2.6	4.1	17.0	11.4	62.6
30 to 34	47.9	19.1	4.2	2.9	2.7	4.4	10.3	8.6	71.2
35 to 39	52.7	16.8	4.3	2.6	2.8	5.4	9.0	6.4	73.7
40 to 44	56.8	12.9	4.2	2.5	2.8	6.7	8.9	5.2	74.0
45 to 49	59.7	9.7	4.5	2.6	3.0	7.7	8.9	4.3	73.8
50 to 54	59.0	7.1	5.1	2.9	3.4	9.6	9.1	3.8	71.2
55 to 59	56.3	5.0	5.9	3.1	3.9	12.9	9.3	3.7	67.2
60 to 64	52.1	3.6	6.6	3.0	4.3	17.3	9.3	3.8	62.3
65 to 69	49.9	2.6	7.2	3.0	4.7	20.2	9.3	3.2	59.6
70 to 74	50.9	1.6	7.3	2.5	4.8	21.2	9.1	2.5	59.9
75 or olde	r 52.6	0.9	8.4	1.4	5.5	21.3	8.3	1.6	61.9
All	53.2	4.2	6.6	2.6	4.3	16.6	9.1	3.3	64.0

Percentage of traditional IRA balance by investor age, year-end 2016

<sup>1</sup> Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

<sup>2</sup> Balanced funds invest in a mix of equities and fixed-income securities. Most target date and lifestyle funds are counted in this category.

<sup>3</sup> Bond funds include bond mutual funds, bond closed-end funds, and bond ETFs.

<sup>4</sup> Other investments include certificates of deposit and unidentifiable assets.

<sup>5</sup> Equity holdings are the sum of equities and equity funds and the equity portion of target date and non-target date balanced funds.

Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Percentages are dollar-weighted averages. Row percentages may not add to 100 percent because of rounding. See Figure A.1 for broader age groups. Source: The IRA Investor Database™

At year-end 2016, target date funds were 6.8 percent of traditional IRA assets (Figure 6.2) and 12.7 percent of traditional IRA investors in The IRA Investor Database owned target date funds.<sup>59</sup> Among traditional IRA investors who owned target date funds, most owned one target date fund, and the bulk of the remainder owned two (Figure 6.3). At year-end 2016, 91.6 percent of traditional IRA investors aged 25 or older who owned target date funds owned one, and another 6.8 percent owned two target date funds. Only 1.1 percent owned three target date funds, and 0.5 percent owned four or more.

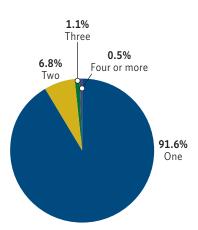
Older traditional IRA investors had higher allocations to bonds and bond funds in their traditional IRAs than younger investors, which follows the typical age-based pattern of bond investing seen in other research.<sup>60</sup> At year-end 2016, 4.1 percent of the traditional IRA assets held by investors aged 25 to 29 were invested in bonds and bond funds, compared with 21.3 percent of the assets held by those aged 75 or older (Figure 6.2).

Money market fund allocations in traditional IRAs followed a generally declining pattern by age, with the highest average allocation occurring among the youngest traditional IRA investors (Figure 6.2). Some of this pattern is the result of an interaction between the variation in the size of the traditional IRA balance across the age groups and the tendency of the smallest traditional IRA balances to have higher investments in money market funds (see discussion on page 65).

### FIGURE 6.3

### Number of Target Date Funds Owned by Traditional IRA Investors in 2016

Among traditional IRA investors owning target date funds,\* percentage of traditional IRA investors by number of target date funds owned, year-end 2016



\* A target date fund typically rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date of the fund, which is usually included in the fund's name.

Note: The sample is 1.5 million traditional IRA investors aged 25 or older who owned target date funds at year-end 2016. Source: The IRA Investor Database™

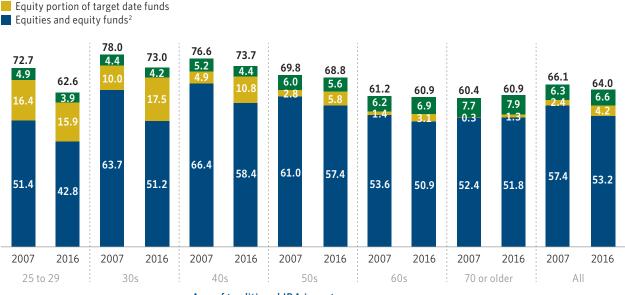
# **Snapshots of Allocation to Equity Holdings Between 2007 and 2016**

At year-end 2016, the percentage of traditional IRA balances invested in equity holdings (equities, equity funds, and the equity portion of balanced funds) was slightly lower than the level at year-end 2007. At year-end 2007, 66.1 percent of traditional IRA balances held by investors aged 25 or older were invested, on average, in equity holdings (Figure 6.4). At year-end 2016, that share was 64.0 percent. Although equity holdings declined for the youngest investors—with the share of traditional IRA balances in equity holdings held by investors aged 25 to 29 decreasing from 72.7 percent at year-end 2007 to 62.6 percent at year-end 2016—older IRA investors stayed about the same. For example, 60.4 percent of traditional IRA balances for investors aged 70 or older were invested in equity holdings in 2007, similar to the 60.9 percent by year-end 2016. This decline among younger investors was most pronounced in the category of equities and equity funds, with the share of traditional IRA balances allocated to equities and equity funds for investors aged 25 to 29 falling from 51.4 percent at year-end 2007 to 42.8 percent at year-end 2016. This analysis looks at dollar-weighted averages, and some of the change reflects the relative performance of equity holdings over the period.

### FIGURE 6.4

## Share of Traditional IRA Balances Allocated to Equity Holdings Little Changed Between 2007 and 2016

Percentage of traditional IRA balance by investor age, year-end 2007 and year-end 2016





<sup>1</sup> Balanced funds invest in a mix of equities and fixed-income securities.

Equity portion of non-target date balanced funds<sup>1</sup>

<sup>2</sup> Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

Note: The samples are 7.4 million traditional IRA investors aged 25 or older in 2007 and 11.9 million traditional IRA investors aged 25 or older in 2016. Percentages are dollar-weighted averages. Percentages may not add to the total because of rounding. Source: The IRA Investor Database™

In addition to observing how traditional IRA balances are invested in aggregate, another way to explore the changes in allocation to equity holdings is by looking at the distribution of the shares in equity holdings held by individual investors. Looking at the data this way shows that the reduction in the share of balances invested in equity holdings is partly a move toward more-diversified portfolios. For example, at year-end 2007, 49.5 percent of traditional IRA investors had more than 80 percent of their balances invested in equity holdings, compared with 36.8 percent at year-end 2016 (Figure 6.5). Some of this decline was balanced by an increase in more-moderate allocations to equity holdings. At year-end 2007, 34.4 percent of traditional IRA investors had some equity holdings, but allocated no more than 80 percent of their account balances to equity holdings. That share rose to 37.6 percent by year-end 2016. The share of traditional IRA investors with no equity holdings also increased, from 16.2 percent at year-end 2007 to 25.6 percent at year-end 2016.

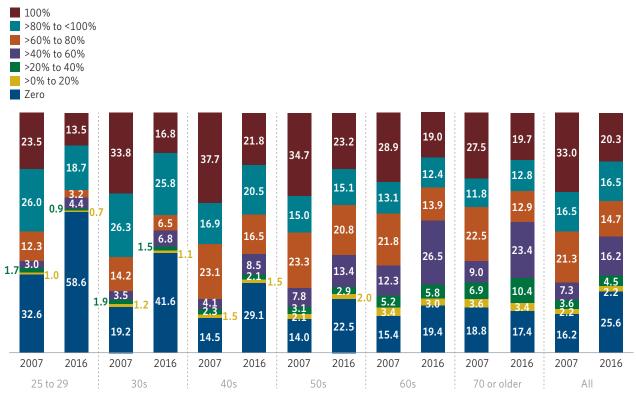
The decline in the percentage of investors with high allocations to equity holdings and the increase in the percentage of investors without any equity holdings were most prominent among the youngest traditional IRA investors. For example, although the share of traditional IRA investors aged 70 or older with more than 80 percent of their traditional IRA balances invested in equity holdings decreased from 39.3 percent at year-end 2007 to 32.5 percent at year-end 2016 (a 6.8 percentage point drop), the reduction for traditional IRA investors aged 25 to 29 was two and a half times as large, falling from 49.5 percent at year-end 2007 to 32.2 percent at year-end 2016—a 17.3 percentage point drop (Figure 6.5). Similarly, while the share of traditional IRA investors aged 70 or older with no equity holdings decreased slightly between year-end 2007 and year-end 2016, falling from 18.8 percent at year-end 2007 to 17.4 percent at year-end 2016, the share of investors aged 25 to 29 with no equity holdings increased from 32.6 percent at year-end 2007 to 58.6 percent at year-end 2016.

### FIGURE 6.5

### Investor Exposure to Equity Holdings Declined Among Traditional IRA Investors Between 2007 and 2016

Percentage of traditional IRA investors by age, year-end 2007 and year-end 2016

### Percentage of account balance invested in equity holdings



Age of traditional IRA investor

Note: The samples are 7.4 million traditional IRA investors aged 25 or older in 2007 and 11.9 million traditional IRA investors aged 25 or older in 2016. Equity holdings include equity funds, individual stocks, and the equity portion of balanced funds. Components may not add to 100 percent because of rounding.

## Default Rollover Rules Likely Affect Equity Exposure in Smaller Traditional IRAs

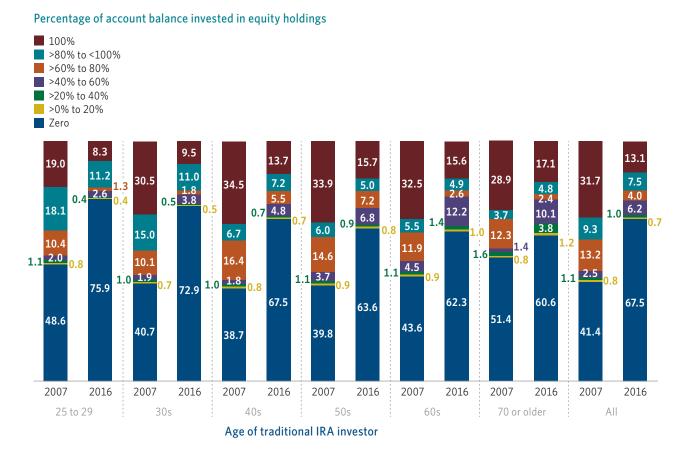
Many factors likely affected equity ownership inside traditional IRAs between 2007 and 2016, including the fluctuations in equity values over that period. The asset allocations in smaller traditional IRAs appear to have their own set of special forces at play. For example, default rules governing rollovers from employer-sponsored retirement plans appear to have had a noticeable impact. Since 2005, employer-sponsored retirement plans that cash out balances of \$5,000 or less when the employee separates from employment generally are required to roll over any account that is more than \$1,000, but no more than \$5,000, into an IRA unless the plan participant affirmatively chooses otherwise.<sup>61</sup> The money must be invested in "an investment product designed to preserve principal and provide a reasonable rate of return." Typical examples include money market funds, certificates of deposit (CDs), and interest-bearing savings accounts. Small accounts also may be more likely to be invested in money market funds because of the economics of managing such small amounts. Furthermore, some younger traditional IRA investors may have shorter-term goals for the money (e.g., education or home purchase) and desire liquidity in their traditional IRA balances. Financial uncertainty between 2007 and 2016 may have increased some investors' demand for liquidity.<sup>62</sup>

Because of the special rules and forces that apply to smaller account balances, it is important to analyze traditional IRA asset allocation by age while controlling for the size of the account balance. The default rollover rules appear to affect the share allocated to equity holdings in traditional IRAs with balances of \$5,000 or less. For example, although 25.6 percent of traditional IRA investors owned no equity holdings at year-end 2016 (Figure 6.5), 67.5 percent of investors with account balances of \$5,000 or less had no equity holdings (Figure 6.6). In contrast, among investors with account balances of more than \$5,000, only 11.9 percent owned no equity holdings at year-end 2016 (Figure 6.7). This distinction is particularly evident among younger traditional IRA investors. While 75.9 percent of traditional IRA investors aged 25 to 29 with account balances of \$5,000 or less owned no equity holdings at year-end 2016 (Figure 6.6), only 16.9 percent of similarly aged investors with account balances of more than \$5,000 or less owned no equity holdings at year-end 2016 (Figure 6.6), only 16.9 percent of similarly aged investors with account balances of more than \$5,000 owned no equity holdings at year-end 2016 (Figure 6.7).

### FIGURE 6.6

### Equity Holdings in Traditional IRAs with Balances of \$5,000 or Less

Percentage of traditional IRA investors by age, year-end 2007 and year-end 2016

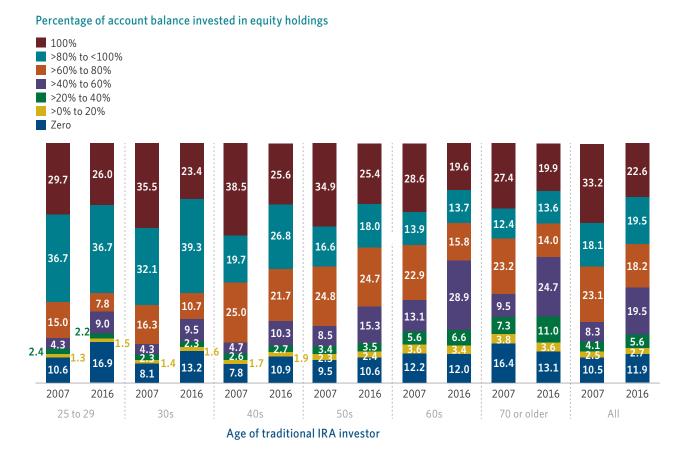


Note: The samples are 1.3 million traditional IRA investors aged 25 or older with traditional IRA balances of \$5,000 or less in 2007 and 2.9 million traditional IRA investors aged 25 or older with traditional IRA balances of \$5,000 or less in 2016. Equity holdings include equity funds, individual stocks, and the equity portion of balanced funds. Components may not add to 100 percent because of rounding. Source: The IRA Investor Database™

#### FIGURE 6.7

### Equity Holdings in Traditional IRAs with Balances of More Than \$5,000

Percentage of traditional IRA investors by age, year-end 2007 and year-end 2016



# Note: The samples are 6.1 million traditional IRA investors aged 25 or older with traditional IRA balances of more than \$5,000 in 2007 and 9.0 million traditional IRA investors aged 25 or older with traditional IRA balances of more than \$5,000 in 2016. Equity holdings include equity funds, individual stocks, and the equity portion of balanced funds. Components may not add to 100 percent because of rounding. Source: The IRA Investor Database™

The share of smaller traditional IRAs with no exposure to equity holdings also increased significantly more between 2007 and 2016 than for larger traditional IRAs. At year-end 2007, 41.4 percent of traditional IRAs with balances of \$5,000 or less owned no equity holdings (Figure 6.6). By year-end 2016, that share had increased to 67.5 percent. For traditional IRAs with more than \$5,000, the share with no equity holdings increased less, from 10.5 percent at year-end 2007 to 11.9 percent at year-end 2016 (Figure 6.7). For traditional IRA investors aged 25 to 29 with account balances of more than \$5,000, the percentage with no equity holdings increased from 10.6 percent at year-end 2007 to 16.9 percent at year-end 2016. However, for those younger traditional IRA investors with account balances of \$5,000 or less, the share without equity holdings increased from 48.6 percent at year-end 2007 to 75.9 percent at year-end 2016. Although the default rollover rules were in place in 2007, they were relatively new, and it is likely that fewer investors would have been affected by them.

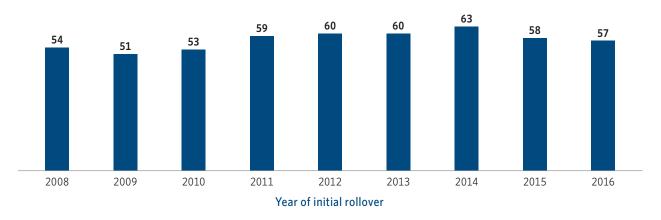
### **Small Rollovers Often Are Invested in Money Market Funds**

It also is possible to examine accounts opened with small rollovers directly in The IRA Investor Database to investigate the impact of default rollover rules.<sup>63</sup> Small rollovers may have been automatically rolled over and, if so, regulations require that the assets be invested in a principal-preserving product such as a money market fund. In any given year, a majority of accounts opened with small rollovers are fully invested in money market funds at the end of the year (Figure 6.8). Once these accounts are opened, they often remain in money market funds for many years. For example, among small rollovers that were initially invested in money market funds in 2008, 83 percent were still fully invested in money market funds one year later at year-end 2009, 73 percent two years later, 65 percent three years later, 58 percent four years later, 53 percent five years later, 49 percent six years later, 46 percent seven years later, and 43 percent eight years later (Figures 6.9 and A.2). Money market allocations in traditional IRAs opened with small rollovers in other years follow a similar pattern.

#### FIGURE 6.8

#### Many Small Rollovers Are Invested in Money Market Funds

Percentage of traditional IRAs opened with small rollovers fully invested in money market funds at the end of the year of the initial rollover, 2008–2016

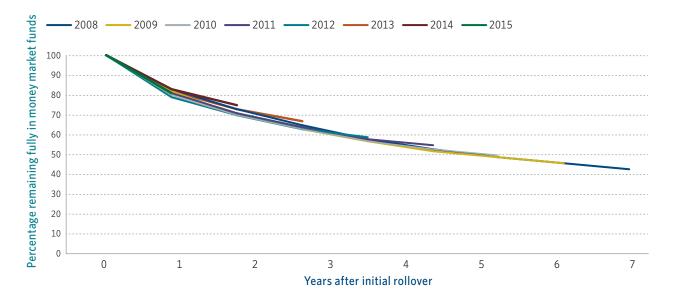


Note: The sample is traditional IRAs opened solely with a rollover of more than \$1,000, but no more than \$5,000, in the year indicated. Source: The IRA Investor Database<sup>™</sup>

#### FIGURE 6.9

# Small Rollovers Initially Invested in Money Market Funds Often Remain in Money Market Funds

Percentage of small traditional IRA rollovers that remain fully invested in money market funds, year-end 2008-2016



Note: Small traditional IRA rollovers are IRAs created solely with a rollover of more than \$1,000, but no more than \$5,000. The figure reports the percentage remaining fully invested in money market funds among those fully invested in money market funds at the end of the year of the initial rollover. Traditional IRAs that are transferred to a different service provider are treated as no longer being invested in money market funds. For more detailed information, see Figure A.2.

Source: The IRA Investor Database™

#### Additional Reading

» The IRA Investor Profile

www.ici.org/research/retirement/retirement\_security/ira\_database

- » The IRA Investor Profile: Roth IRA Investors' Activity, 2007-2016 www.ici.org/pdf/rpt\_18\_ira\_roth.pdf
- » The Role of IRAs in US Households' Saving for Retirement, 2017 www.ici.org/pdf/per23-10.pdf
- » Ten Important Facts About IRAs www.ici.org/pdf/ten\_facts\_iras.pdf
- » Ten Important Facts About Roth IRAs www.ici.org/pdf/ten\_facts\_roth\_iras.pdf
- » Individual Retirement Account Resource Center www.ici.org/iraresource
- » Quarterly Retirement Market Data www.ici.org/research/stats/retirement

# Appendix

#### FIGURE A.1

## Investments in Traditional IRAs in 2016 by Broad Investor Age

Percentage of traditional IRA balance by investor age, year-end 2016

			Balance	ed funds <sup>2</sup>					
Age		Equity portion		Non-equity portion		-			
	Equities and equity funds <sup>1</sup>	Target date	Non- target date	Target date	Non- target date	Bonds and bond funds <sup>3</sup>	Money market funds	Other investments⁴	Memo: equity holdings⁵
25 to 29	42.8	15.9	3.9	2.3	2.6	4.1	17.0	11.4	62.6
30s	51.2	17.5	4.2	2.7	2.8	5.1	9.4	7.1	73.0
40s	58.4	10.8	4.4	2.6	2.9	7.4	8.9	4.6	73.7
50s	57.4	5.8	5.6	3.0	3.7	11.6	9.2	3.7	68.8
60s	50.9	3.1	6.9	3.0	4.5	18.8	9.3	3.5	60.9
70 or older	51.8	1.3	7.9	1.9	5.1	21.3	8.7	2.0	60.9
All	53.2	4.2	6.6	2.6	4.3	16.6	9.1	3.3	64.0

<sup>1</sup> Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

<sup>2</sup> Balanced funds invest in a mix of equities and fixed-income securities. Most target date and lifestyle funds are counted in this category.

<sup>3</sup> Bond funds include bond mutual funds, bond closed-end funds, and bond ETFs.

<sup>4</sup> Other investments include certificates of deposit and unidentifiable assets.

<sup>5</sup> Equity holdings are the sum of equities and equity funds and the equity portion of target date and non-target date balanced funds. Note: The sample is 11.9 million traditional IRA investors aged 25 or older in 2016. Percentages are dollar-weighted averages. Row percentages may not add to 100 percent because of rounding.

Source: The IRA Investor Database™

#### FIGURE A.2

### Movement of Small Rollover Traditional IRAs out of Money Market Funds

Percentage of small traditional IRA rollovers that remain fully invested in money market funds, year-end 2008-2015

Year of initial rollover	Years after initial rollover									
	0	1	2	3	4	5	6	7	8	
2008	100	83	73	65	58	53	49	46	43	
2009	100	82	70	63	57	52	49	46		
2010	100	80	70	63	57	53	50			
2011	100	81	71	64	58	55				
2012	100	79	70	63	59					
2013	100	82	73	67						
2014	100	83	75							
2015	100	81								

Note: Small traditional IRA rollovers are IRAs created solely with a rollover of more than \$1,000, but no more than \$5,000. The figure reports the percentage remaining fully invested in money market funds among those fully invested in money market funds at the end of the year of the initial rollover. Traditional IRAs that are transferred to a different service provider are treated as no longer being invested in money market funds.

Source: The IRA Investor Database™

#### FIGURE A.3

## Age Distribution of Traditional IRA Investors

Number of traditional IRA investors and amount of traditional IRA assets by age, year-end 2016

	Traditional II	RA investors	Traditional IRA assets		
Age	<b>Number</b> Thousands	<b>Share*</b> Percent	<b>Dollars</b> Billions	<b>Share*</b> Percent	
18 to 24	76.5	0.6%	\$0.6	(*)	
25 to 29	363.9	3.0	2.8	0.2	
30 to 34	642.3	5.4	10.0	0.7	
35 to 39	840.3	7.0	23.7	1.7	
40 to 44	966.0	8.1	44.7	3.2	
45 to 49	1,217.1	10.2	78.8	5.6	
50 to 54	1,412.3	11.8	122.7	8.7	
55 to 59	1,594.1	13.3	184.6	13.2	
60 to 64	1,562.7	13.0	247.4	17.6	
65 to 69	1,342.3	11.2	267.6	19.1	
70 to 74	903.6	7.5	208.7	14.9	
75 or older	1,067.9	8.9	211.2	15.1	
All	11,989.0	100.0	1,402.8	100.0	
Memo:					
25 to 49	4,029.6	33.6	160.0	11.4	
50 to 69	5,911.5	49.3	822.3	58.6	
70 or older	1,971.5	16.4	419.8	29.9	

(\*)= less than 0.05 percent

\* Share is the percentage of the total.

Note: Components may not add to the total because of rounding.

Source: The IRA Investor Database™

## Notes

- <sup>1</sup> For a history of IRAs, see Holden et al. 2005. For a discussion of the changing role of IRAs, see Sabelhaus and Schrass 2009.
- <sup>2</sup> For additional discussion of IRA-owning households, see Holden and Schrass 2017a and 2017b.
- <sup>3</sup> ICI reports total IRA and total retirement market assets on a quarterly basis. For additional information on the US retirement market through 2018:Q1, see Investment Company Institute 2018.
- <sup>4</sup> The Federal Reserve Board reports US households' financial assets on a quarterly basis (see US Federal Reserve Board 2018); at year-end 2016, household financial assets were \$74.9 trillion.
- <sup>5</sup> See Holden and Schrass 2017a and Investment Company Institute 2018.
- <sup>6</sup> At retirement, defined contribution plan account owners often choose to roll over their balances to IRAs. See Sabelhaus, Bogdan, and Holden 2008 and Utkus and Young 2018.
- <sup>7</sup> One of the frequently analyzed household surveys is the Survey of Consumer Finances (SCF), which is administered by the Federal Reserve Board. The SCF is a triennial interview survey of US families sponsored by the Board of Governors of the Federal Reserve System and the US Department of Treasury. The sample design of the survey aims to measure a broad range of financial characteristics. The sample has two parts: (1) a standard geographically based random sample and (2) a specially constructed oversampling of wealthy families. Weights are used to combine the two samples to represent the full population of US families. The 2016 SCF interviewed 6,254 families, representing 126.0 million families. Data available on the Federal Reserve Board's website are altered to protect the privacy of individual respondents and include weights. For an overview of the 2016 SCF results, see Bricker et al. 2017. For a full description of the SCF and recent SCF data, see www.federalreserve. gov/econres/scfindex.htm. For a special panel analysis that resurveyed households from the 2007 SCF in 2009, see Bricker et al. 2011. For an overview of the 2013 SCF results, see Bricker et al. 2017.

Researchers interested in the behavior of older households use another publicly available household survey, the Health and Retirement Study (HRS), which is administered by the University of Michigan. For an extensive bibliography of papers using HRS data, see https://hrs.isr.umich.edu/publications/ biblio.

The Survey of Income and Program Participation (SIPP), which is administered by the US Census Bureau, is another commonly used household survey. For a complete description, see www.census. gov/sipp.

<sup>8</sup> ICI conducts the Annual Mutual Fund Shareholder Tracking Survey each year to gather information on the demographic and financial characteristics of US households. The most recent survey was conducted from May to July 2017 and was based on a dual frame sample of 5,000 US households (2,500 households from a landline random digit dial [RDD] frame and 2,500 households from a cell phone RDD frame), of which 34.8 percent owned IRAs. All interviews were conducted over the telephone with the member of the household who was the sole or co-decisionmaker most knowledgeable about the household's savings and investments. The standard error for the 2017 sample of households is ±1.4 percentage points at the 95 percent confidence level. For the 2017 survey results, see Holden, Schrass, and Bogdan 2017. For reporting of 2017 IRA incidence, see Holden and Schrass 2017a.

- <sup>9</sup> ICI conducts the IRA Owners Survey each year to gather information on the characteristics and activities of IRA-owning households in the United States. The most recent survey was conducted in June 2017 using the KnowledgePanel®, a probability-based online panel designed to be representative of the US population. The KnowledgePanel® was designed and administered by GfK, an online consumer research company. The 2017 sample of IRA owners included 3,205 representative US households owning traditional IRAs or Roth IRAs. All surveys were conducted online with the member of the household aged 18 or older who was the sole or co-decisionmaker most knowledgeable about the household's savings and investments. The standard error for the total sample is ±1.7 percentage points at the 95 percent confidence level. In 2017, households owning traditional or Roth IRAs were surveyed, and thus households only owning employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs) or Coverdell Education Savings Accounts (formerly called education IRAs) are not included. For results from the 2017 survey, see Holden and Schrass 2017a and 2017b.
- <sup>10</sup> For the latest tabulations, see Internal Revenue Service, Statistics of Income Division 2018.
- <sup>11</sup> Though it is possible to track the same individuals over time within the same data provider, it is not possible to link individuals across providers. Therefore, it is possible that some IRA investors will be counted more than once if they own IRAs across multiple service providers. For additional detail on the variables collected and the data collection methodology, see Holden and Bass 2012.
- <sup>12</sup> Another significant annual drop occurred in 1937, when large-cap stocks contracted 35.0 percent in value. See Ibbotson 2017.
- <sup>13</sup> This change is based on the S&P 500 total return index.
- <sup>14</sup> See Citigroup corporate 10+ year bond index.
- <sup>15</sup> See National Bureau of Economic Research 2010.
- <sup>16</sup> For unemployment statistics, see US Bureau of Labor Statistics 2018. For information on households' balance sheets and disposable personal income, see US Federal Reserve Board 2018.
- <sup>17</sup> See Standard & Poor's Case-Shiller Home Price Indices.
- <sup>18</sup> Congress enacted the suspension of RMDs as part of the Worker, Retiree, and Employer Recovery Act of 2008. For more information, see Joint Committee on Taxation 2009.
- <sup>19</sup> The ability to contribute to Roth IRAs is restricted based on household income. Prior to 2010, there were restrictions on conversions based on household income; in 2010, the income limits for Roth conversions were lifted. For additional detail, see Internal Revenue Service 2011.
- <sup>20</sup> Distributions also can result from recharacterization of contributions, but historically, these amounts have been negligible.
- <sup>21</sup> In 1998, individuals making Roth IRA conversions could spread the tax bill generated over four years (1998 to 2001). In 1998, \$39.3 billion was converted (see Figure 1.2). For more information, see discussion in Campbell, Parisi, and Balkovic 2000.
- <sup>22</sup> See also Bryant and Gober 2013.
- <sup>23</sup> Although it is possible to analyze conversions into Roth IRAs using The IRA Investor Database, it is not possible to fully identify conversions out of traditional IRAs.
- <sup>24</sup> Rollover rates are lower among these consistent traditional IRA investors than in the annual cross-sectional snapshots (see Figure 3.4) because rollovers often open new traditional IRAs (see Figure 3.2) and these individuals have existing traditional IRAs by 2008.
- <sup>25</sup> See Internal Revenue Service 2018b and Holden and Reid 2008.
- <sup>26</sup> See Internal Revenue Service 2011.

- <sup>27</sup> See Sabelhaus, Bogdan, and Schrass 2008.
- <sup>28</sup> Because no target date fund has a 100 percent equity allocation, investors with a 100 percent allocation to target date funds would not be counted as having 100 percent equity holdings.
- <sup>29</sup> At year-end 2007, 66.4 percent of consistent traditional IRA investors aged 25 to 59 had less than a full allocation to equity holdings, including 16.9 percent who had no equity holdings at all (see Figure 1.8). At year-end 2016, 71.8 percent had less than a full allocation to equity holdings, including 18.7 percent who had no equity holdings at all.
- <sup>30</sup> At year-end 2007, 68.5 percent of consistent traditional IRA investors aged 60 to 69 had less than a full allocation to equity holdings, including 13.3 percent who had no equity holdings at all (see Figure 1.8). At year-end 2016, 76.0 percent had less than a full allocation to equity holdings, including 16.5 percent who had no equity holdings at all.
- <sup>31</sup> For a history of IRA contribution activity, see Holden et al. 2005.
- <sup>32</sup> See Internal Revenue Service 2018a for the rules governing IRA contribution eligibility.
- <sup>33</sup> For example, in 2016, contribution rates among traditional IRA investors aged 25 to 69 increased from 9.0 percent to 13.3 percent if contributions to Roth IRAs at the same financial services firm were included.
- <sup>34</sup> See discussion and references in Holden et al. 2005.
- <sup>35</sup> Analysis of Survey of Consumer Finances data shows that younger and lower-income households were less likely to cite retirement as the primary reason they save. These households were more likely to be focused primarily on saving to fund education, to purchase a house, to fund other purchases, or to have cash on hand for an unexpected need. The tendency of younger workers to focus less on retirement savings is consistent with economic models of life-cycle consumption, which predict that most workers will delay saving for retirement until later in their working careers. For more information, see Brady and Bass 2018.
- <sup>36</sup> See Holden et al. 2005 and Sabelhaus and Schrass 2009.
- <sup>37</sup> See Holden et al. 2005.
- <sup>38</sup> In 2017, 34 percent of households owning traditional IRAs that included rollovers responded that retirement was one of the reasons they chose to roll over the money (see Holden and Schrass 2017a).
- <sup>39</sup> The EBRI/ICI 401(k) database finds that 401(k) balances tend to rise with investor age and job tenure. See Holden et al. 2018.
- <sup>40</sup> This statistic undercounts the percentage of traditional IRA investors in 2016 with rollovers in their traditional IRAs because some will have rolled over money prior to 2007 and those rollovers cannot be identified in the database. In addition, rollovers made at a prior financial services firm cannot be identified in the database.
- <sup>41</sup> See Holden and Schrass 2017a and 2017b.
- <sup>42</sup> For more information, see Internal Revenue Service 2018b.
- <sup>43</sup> For analysis of withdrawal activity among traditional IRA-owning households, see Holden and Schrass 2017a. Regression analysis in Holden and Reid 2008 suggests that the additional 10 percent tax puts a damper on withdrawal activity.
- <sup>44</sup> The IRS rules indicate a traditional IRA investor must commence RMDs by April 1 following the calendar year in which the investor turns 70½. For additional details, see Internal Revenue Service 2018b.
- <sup>45</sup> As part of the Worker, Retiree, and Employer Recovery Act of 2008, RMDs were waived for 2009. See Joint Committee on Taxation 2009.

- <sup>46</sup> Some of the increase in withdrawal activity results from the aging of traditional IRA investors. In fact, if the age distribution in The IRA Investor Database had remained unchanged since 2007, then 19.8 percent of all traditional IRA investors aged 25 or older would have taken a withdrawal in 2016, which suggests 3.7 percentage points of the 23.5 percent of traditional IRA investors with withdrawals in 2016 results simply from investor aging. At year-end 2007, the share of traditional IRA investors aged 60 or older in the database was 32.9 percent; their share rose to 41.0 percent at year-end 2016.
- <sup>47</sup> There is evidence that some IRA investors taking withdrawals do not need the money for current consumption. Holden and Schrass 2017a finds that 39 percent of retired traditional IRA-owning households taking distributions reinvested the money into another account. Among the 39 percent that reported reinvesting or saving the amount of the traditional IRA withdrawal into another account, 94 percent reported withdrawing the amount based on the RMD. Other research based on a survey of affluent retiree households finds that about 78 percent of wealthier retiree households made a withdrawal from their financial accounts, yet only seven in 10 households used withdrawals for spending (see Madamba and Utkus 2016).
- <sup>48</sup> See Internal Revenue Service 2018b. In addition, Mortenson, Schramm, and Whitten 2016, analyzing a panel drawn from the IRS data, also find some older traditional IRA investors who have not made withdrawals.
- <sup>49</sup> See Figure 12 in Holden and Bass 2012.
- <sup>50</sup> For more information, see Holden and Schrass 2017a and 2017b. For information on retirement plan participants' reactions to the RMD suspension of 2009, see Brown, Poterba, and Richardson 2014. For a discussion of how RMD rules affect traditional IRA withdrawals, see Mortenson, Schramm, and Whitten 2016.
- <sup>51</sup> Among those traditional IRA investors with withdrawals taking less than the self RMD amount, it is possible that they used a traditional IRA at another financial services firm to fulfill the RMD. In addition, some may not be required to take RMDs yet (see note 44).
- <sup>52</sup> For traditional IRA investors aged 70 to 74 who are unmarried, whose spouses are not more than 10 years younger, or whose spouses are not the sole beneficiaries of their IRAs, the RMD percentage ranges between 3.6 percent (for 70-year-olds) and 4.2 percent (for 74-year-olds) (see Internal Revenue Service 2018b).
- <sup>53</sup> Conversion activity also can affect traditional IRA balances. Generally, there are low levels of conversions, although lifting the income limits on Roth conversion activity in 2010 with special tax treatment in that year increased conversion activity. See Figure 1.2 and Bryant and Gober 2013.
- <sup>54</sup> See Internal Revenue Service 2018a for investment restrictions. Traditional IRA investors can generally select from the full range of mutual funds, exchange-traded funds, closed-end funds, stocks, bonds, and bank products.
- <sup>55</sup> The ICI IRA Owners Survey finds that households with rollovers in their traditional IRAs tend to have higher balances, on average, than those without rollovers. For additional detail, see Holden and Schrass 2017a and 2017b. The IRA Investor Database also finds this result (see Figure 3.5).
- <sup>56</sup> Because RMD amounts are based on average life expectancy, older RMD-aged traditional IRA investors generally must withdraw a larger percentage of their account balances than younger RMD-aged investors. For example, while unmarried 70-year-old traditional IRA investors would have been required to withdraw 3.6 percent of their balances in 2016, that number was 5.3 percent for 80-year-olds, and 8.8 percent for 90-year-olds. For more information, see Internal Revenue Service 2018b.

- <sup>57</sup> A target date fund pursues a long-term investment strategy, using a mix of asset classes, or asset allocation, that the fund provider adjusts to become less focused on growth and more focused on income as the fund approaches and passes the target date, which is usually mentioned in the fund's name. The asset allocation path that the target date fund follows to shift its focus from growth to income is typically referred to as the glide path. Because discussions of asset allocation usually focus on the percentage of the portfolio invested in equities, the glide path generally reflects the declining percentage of equities in the portfolio as it approaches and passes the target date. The target date generally is the date at which the typical investor for whom that fund is designed would reach retirement age and stop making new investments in the fund. For additional information on target date funds, see ICI's Target Retirement Date Funds Resource Center at www.ici.org/trdf.
- <sup>58</sup> For the pattern of use of target date funds in 401(k) plans, see Holden et al. 2018.
- <sup>59</sup> Target date fund use is a little bit higher in Roth IRAs—at year-end 2016, target date funds were 8.6 percent of Roth IRA assets, and 15.2 percent of Roth IRA investors in The IRA Investor Database owned target date funds. See Holden and Schrass 2018. Target date fund use is much more widespread among 401(k) plan participants. At year-end 2016, target date funds were 21.3 percent of 401(k) assets, and 52.2 percent of 401(k) plan participants invested at least some of their accounts in target date funds (including target date mutual funds and target date collective investment trusts). See Holden et al. 2018.
- <sup>60</sup> For discussion of how US households' investments change over the life cycle, see Sabelhaus, Bogdan, and Schrass 2008. For the pattern of equity versus bond investing across Roth IRA investors by age, see Holden and Schrass 2018. For the pattern of equity versus bond investing across 401(k) participants by age, see Holden et al. 2018.
- <sup>61</sup> For more information on the rules governing automatic rollovers, see US Department of Labor 2004.
- <sup>62</sup> Household survey results from this period indicate that households' willingness to take financial risk declined in the wake of the financial crisis. See Holden, Schrass, and Bogdan 2017.
- <sup>63</sup> For a discussion of the rules governing default rollovers of small balances, see page 62.

## References

Brady, Peter, and Steven Bass. 2018. "Who Participates in Retirement Plans, 2014." *ICI Research Perspective* 24, no. 1 (April). Available at www.ici.org/pdf/per24-01.pdf.

Bricker, Jesse, Brian Bucks, Arthur Kennickell, Traci Mach, and Kevin Moore. 2011. "Surveying the Aftermath of the Storm: Changes in Family Finances from 2007 to 2009." FEDS Working Paper, no. 2011-17. Washington, DC: Federal Reserve Board (March). Available at www.federalreserve.gov/pubs/feds/2011/201117/201117pap.pdf.

Bricker, Jesse, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Kevin B. Moore, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle. 2014. "Changes in US Family Finances from 2010 to 2013: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin* 100, no. 4 (September). Washington, DC: Federal Reserve Board. Available at www.federalreserve.gov/publications/files/scf17.pdf.

Bricker, Jesse, Lisa J. Dettling, Alice Henriques, Joanne W. Hsu, Lindsay Jacobs, Kevin B. Moore, Sarah Pack, John Sabelhaus, Jeffrey Thompson, and Richard A. Windle. 2017. "Changes in US Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin* 103, no. 3 (September). Washington, DC: Federal Reserve Board. Available at www.federalreserve.gov/pubs/bulletin/2014/pdf/scf14.pdf.

Brown, Jeffrey R., James Poterba, and David Richardson. 2014. "Do Required Minimum Distributions Matter? The Effect of the 2009 Holiday on Retirement Plan Distributions." NBER Working Paper, no. 20464. Cambridge, MA: National Bureau of Economic Research. Available at www.nber.org/papers/w20464.

Bryant, Victoria L. 2008. "Accumulation and Distribution of Individual Retirement Arrangements, 2004." *Statistics of Income Bulletin* (Spring): 90–101. Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/ irs-soi/04inretirebul.pdf.

Bryant, Victoria L. 2012. "Accumulation and Distribution of Individual Retirement Arrangements, 2008." *Statistics of Income Bulletin* (Spring): 89–104. Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/ irs-soi/12insprbulretirement.pdf. Bryant, Victoria L., and Jon Gober. 2013. "Accumulation and Distribution of Individual Retirement Arrangements, 2010." *Statistics of Income Bulletin* (Fall): 193–210. Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/ irs-soi/13fallbul.pdf.

Bryant, Victoria L., and Peter J. Sailer. 2006. "Accumulation and Distribution of Individual Retirement Arrangements, 2001–2002." *Statistics of Income Bulletin* (Spring): 233–254. Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/irs-soi/02iraart.pdf.

Campbell, David, Michael Parisi, and Brian Balkovic. 2000. "Individual Income Tax Returns, 1998." *Statistics of Income Bulletin* (Fall): 8–46. Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/irs-soi/98indtr.pdf.

Citigroup corporate 10+ year bond index. New York: Citigroup.

Holden, Sarah, and Steven Bass. 2011. "The IRA Investor Profile: Traditional IRA Investors' Asset Allocation, 2007 and 2008." *ICI Research Report* (September). Available at www.ici.org/pdf/rpt\_11\_ira\_asset.pdf.

Holden, Sarah, and Steven Bass. 2012. "The IRA Investor Profile: Traditional IRA Investors' Withdrawal Activity, 2007 and 2008." *ICI Research Report* (July). Available at www.ici.org/pdf/rpt\_12\_ira\_withdrawals.pdf.

Holden, Sarah, and Steven Bass. 2013. "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2011." *ICI Research Report* (October). Available at www.ici.org/pdf/rpt\_13\_ira\_investors.pdf.

Holden, Sarah, and Steven Bass. 2014. "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2012." *ICI Research Report* (March). Available at www.ici.org/pdf/rpt\_14\_ira\_traditional.pdf.

Holden, Sarah, and Steven Bass. 2015. "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007-2013." *ICI Research Report* (July). Available at www.ici.org/pdf/rpt\_15\_ira\_traditional.pdf.

Holden, Sarah, and Steven Bass. 2016. "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007–2014." *ICI Research Report* (August). Available at www.ici.org/pdf/rpt\_16\_ira\_traditional.pdf.

Holden, Sarah, and Steven Bass. 2017. "The IRA Investor Profile: Traditional IRA Investors' Activity, 2007-2015." *ICI Research Report* (June). Available at www.ici.org/pdf/rpt\_17\_ira\_traditional.pdf.

Holden, Sarah, Kathy Ireland, Vicky Leonard-Chambers, and Michael Bogdan. 2005. "The Individual Retirement Account at Age 30: A Retrospective." *Investment Company Institute Perspective* 11, no. 1 (February). Available at www.ici.org/pdf/per11-01.pdf.

Holden, Sarah, and Brian Reid. 2008. "The Role of Individual Retirement Accounts in US Retirement Planning." In *Recalibrating Retirement Spending and Saving*, edited by John Ameriks and Olivia S. Mitchell. Oxford; New York: Oxford University Press.

Holden, Sarah, John Sabelhaus, and Steven Bass. 2010. "The IRA Investor Profile: Traditional IRA Investors' Contribution Activity, 2007 and 2008." *ICI Research Report* (July). Available at www.ici.org/pdf/rpt\_10\_ira\_contributions.pdf.

Holden, Sarah, John Sabelhaus, and Steven Bass. 2010. "The IRA Investor Profile: Traditional IRA Investors' Rollover Activity, 2007 and 2008." *ICI Research Report* (December). Available at www.ici.org/pdf/rpt\_10\_ira\_rollovers.pdf.

Holden, Sarah, and Daniel Schrass. 2017a. "The Role of IRAs in US Households' Saving for Retirement, 2017." *ICI Research Perspective* 23, no. 10 (December). Available at www.ici.org/pdf/per23-10.pdf.

Holden, Sarah, and Daniel Schrass. 2017b. "Appendix: Additional Data on IRA Ownership in 2017." *ICI Research Perspective* 23, no. 10A (December). Available at www.ici.org/pdf/per23-10a.pdf.

Holden, Sarah, and Daniel Schrass. 2018. "The IRA Investor Profile: Roth IRA Investors' Activity, 2007-2016." *ICI Research Report* (September). Available at www.ici.org/pdf/rpt\_18\_ira\_roth.pdf.

Holden, Sarah, Daniel Schrass, and Michael Bogdan. 2017. "Ownership of Mutual Funds, Shareholder Sentiment, and Use of the Internet, 2017." *ICI Research Perspective* 23, no. 7 (October). Available at www.ici.org/pdf/per23-07.pdf.

Holden, Sarah, Jack VanDerhei, Luis Alonso, and Steven Bass. 2018. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2016." *ICI Research Perspective* 24, no. 6, and *EBRI Issue Brief*, no. 458 (September). Washington, DC: Investment Company Institute and Employee Benefit Research Institute. Available at www.ici.org/pdf/per24-06.pdf.

Ibbotson, Roger G., Roger J. Grabowski, James P. Harrington, and Carla Nunes. 2017. 2017 SBBI Yearbook: Stocks, Bonds, Bills, and Inflation—US Capital Markets Performance by Asset Class 1926–2016. Hoboken: John Wiley & Sons, Inc.

Internal Revenue Service. 2011. Publication 590, *Individual Retirement Arrangements (IRAs) for Use in Preparing 2010 Returns*. Available at www.irs.gov/pub/irs-prior/p590--2010.pdf.

Internal Revenue Service. 2017. *Individual Income Tax Returns 2015, Publication 1304* (Rev. 09-2017). Washington, DC: Internal Revenue Service Statistics of Income Division. Available at www.irs.gov/pub/irs-soi/15inalcr.pdf.

Internal Revenue Service. 2018a. Publication 590-A, Contributions to Individual Retirement Arrangements (IRAs) for Use in Preparing 2017 Returns. Available at www.irs.gov/pub/irs-pdf/p590a.pdf.

Internal Revenue Service. 2018b. Publication 590-B, *Distributions from Individual Retirement Arrangements (IRAs) for Use in Preparing 2017 Returns*. Available at www.irs.gov/pub/irs-pdf/p590b.pdf.

Internal Revenue Service, Statistics of Income Division. 2018. IRA data for 2015. Available at www.irs.gov/pub/irs-soi/15in01ira.xls and www.irs.gov/statistics/soi-tax-stats-accumulation-and-distribution-of-individual-retirement-arrangements.

Investment Company Institute. 2017. "The US Retirement Market, First Quarter 2018" (June). Available at www.ici.org/research/stats/retirement.

Joint Committee on Taxation. 2009. "General Explanation of Tax Legislation Enacted in the 110th Congress" (March). Available at www.jct.gov/publications.html?func=startdown &id=1990.

Madamba, Anna, and Stephen P. Utkus. 2016. *Withdrawals from Financial Accounts in Retirement*. Valley Forge, PA: The Vanguard Group, Vanguard Center for Retirement Research. Available at https://institutional.vanguard.com/iam/pdf/WTHDCRR.pdf.

Mortenson, Jacob A., Heidi R. Schramm, and Andrew Whitten. 2016. "The Effect of Required Minimum Distribution Rules on Withdrawals from Traditional Individual Retirement Accounts" (May). Available at http://ssrn.com/abstract=2764435.

National Bureau of Economic Research. 2010. US Business Cycle Expansions and Contractions. Cambridge, MA: National Bureau of Economic Research. Available at www.nber.org/cycles/ cyclesmain.html.

Sabelhaus, John, Michael Bogdan, and Sarah Holden. 2008. *Defined Contribution Plan Distribution Choices at Retirement: A Survey of Employees Retiring Between 2002 and 2007.* Washington, DC: Investment Company Institute. Available at www.ici.org/pdf/rpt\_08\_dcdd.pdf.

Sabelhaus, John, Michael Bogdan, and Daniel Schrass. 2008. *Equity and Bond Ownership in America*, 2008. Washington, DC: Investment Company Institute (December). Available at www.ici.org/pdf/rpt\_08\_equity\_owners.pdf.

Sabelhaus, John, and Daniel Schrass. 2009. "The Evolving Role of IRAs in US Retirement Planning." *Investment Company Institute Perspective* 15, no. 3 (November). Available at www.ici.org/pdf/per15-03.pdf.

Sailer, Peter J., and Sarah E. Nutter. 2004. "Accumulation and Distribution of Individual Retirement Arrangements, 2000." *Statistics of Income Bulletin* (Spring): 121–134. Washington, DC: Internal Revenue Service. Available at www.irs.gov/pub/irs-soi/00retire.pdf.

Sailer, Peter J., Michael E. Weber, and Kurt S. Gurka. 2003. "Are Taxpayers Increasing the Buildup of Retirement Assets? Preliminary Results from a Matched File of Tax Year 1999 Tax Returns and Information Returns." In *Proceedings: Ninety-Fifth Annual Conference on Taxation*, edited by Ranjana Madhusudhan: 364–369. Washington, DC: National Tax Association. Available at www.irs.gov/pub/irs-soi/petenta.pdf.

Standard & Poor's Case-Shiller Home Price Indices. New York: Standard & Poor's. Available at www.spindices.com/index-family/real-estate/sp-case-shiller.

US Bureau of Labor Statistics. 2018. "Labor Force Statistics from the Current Population Survey." Available at http://data.bls.gov/timeseries/LNS14000000.

US Department of Labor. 2004. *Fiduciary Responsibility Under the Employee Retirement Income Security Act of 1974 Automatic Rollover Safe Harbor; Final Rule*. 29 C.F.R. Part 2550. Available at www.dol.gov/ebsa/regs/fedreg/final/2004021591.pdf.

US Federal Reserve Board. 2018. *Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, First Quarter 2018,* Z.1 Release (June). Washington, DC: Federal Reserve Board. Available at www.federalreserve.gov/releases/z1/Current/.

Utkus, Stephen P., and Jean A. Young. 2018. *How America Saves 2018: Vanguard 2017 Defined Contribution Plan Data*. Valley Forge, PA: The Vanguard Group, Vanguard Center for Retirement Research. Available at https://pressroom.vanguard.com/nonindexed/HAS18\_062018.pdf.

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