National policies that have created or enhanced tax-advantaged savings accounts have proven integral to helping Americans save for retirement and other long-term goals. Because many Americans use mutual funds in tax-advantaged accounts to reach these goals, ICI studies the US retirement market; the investors who use 401(k) plans, IRAs, 529 plans, and other tax-advantaged savings vehicles; and the role of mutual funds in the retirement and education savings markets. At year-end 2021, US retirement market assets totaled $39 trillion, and assets in 529 education savings plans were more than $450 billion.

IN THIS CHAPTER

135  The US Retirement System
141  US Retiree Income
143  Defined Contribution Retirement Plans
150  Individual Retirement Accounts
158  The Role of Mutual Funds in Retirement Savings
161  The Role of Mutual Funds in Education Savings
The US Retirement System

American households rely on a combination of resources in retirement, and the role each type of resource plays has changed over time and varies across households. The traditional analogy compares retirement resources to a three-legged stool, with resources divided equally among the legs—Social Security, employer-sponsored pension plans, and private savings. A better analogy, however, is to think of Americans’ retirement resources as a five-layer pyramid. Unlike the legs of a stool, pyramid layers need not be the same size.

Retirement Resource Pyramid

The retirement resource pyramid has five layers, which draw from government programs, compensation deferred until retirement, and other savings (Figure 8.1):

- Social Security
- Homeownership
- Employer-sponsored retirement plans (private-sector and government employer plans, including both defined benefit [DB] and defined contribution [DC] plans)
- Individual retirement accounts (IRAs), including rollovers
- Other assets

Though the use of each layer differs by household, together these resources have broadly enabled recent generations of retirees to maintain their standard of living in retirement.

![Figure 8.1 Retirement Resource Pyramid](source: Investment Company Institute, *The Success of the US Retirement System*)
The composition of each household’s retirement pyramid varies with income. For example, lower-income households tend to rely more on Social Security, reflecting the fact that Social Security benefits replace a higher share of pre-retirement earnings for workers with lower lifetime earnings.

The amount and composition of retirement resources also change with age. Younger households are more likely to save primarily for reasons other than retirement, such as for a home purchase, family, or education (Figure 8.2). By contrast, older households are more likely to save primarily for retirement, as many already have reached their other savings goals. The tendency of younger workers to focus less on saving for retirement is consistent with economic models of life-cycle consumption predicting that most workers delay saving for retirement until later in their careers, when they typically have higher earnings.

FIGURE 8.2
Primary Reason for Household Saving Changes with Age
Percentage of households by age of household head, 2019

Age of household head
- 21 to 29
- 30 to 39
- 40 to 44
- 45 to 54
- 55 to 64

Source: Investment Company Institute tabulations of the 2019 Federal Reserve Board Survey of Consumer Finances
Social Security, the base of the US retirement resource pyramid, is a substantial component of retiree income and the primary source of income for lower-income retirees. Social Security benefits are funded through a payroll tax equal to 12.4 percent of earnings of covered workers (split equally between employers and employees) up to a maximum taxable earnings amount ($142,800 in 2021). The benefit formula is highly progressive, with benefits representing a much higher percentage of earnings for workers with lower lifetime earnings.

By design, Social Security is the primary means of support for retirees with low lifetime earnings, and a substantial source of income for all retired workers. The Congressional Budget Office estimates that, for those in the lowest quintile (20 percent) of households ranked by lifetime household earnings, first-year Social Security benefits will replace 78 percent of inflation-indexed lifetime earnings, on average, for workers born in the 1960s who claim benefits at age 65 (Figure 8.3). That replacement rate drops to 58 percent for workers in the second quintile of households, and then declines more slowly as lifetime household earnings increase. Even for workers in the top 20 percent of households, Social Security benefits are projected to replace a considerable portion (31 percent) of earnings.

**FIGURE 8.3**

Social Security Benefit Formula Is Highly Progressive

Average scheduled Social Security replacement rates for workers in the 1960s birth cohort by quintile of lifetime household earnings, percent

<table>
<thead>
<tr>
<th>Quintile of lifetime household earnings</th>
<th>Lowest</th>
<th>Second</th>
<th>Middle</th>
<th>Fourth</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Rate</td>
<td>78</td>
<td>58</td>
<td>49</td>
<td>41</td>
<td>31</td>
</tr>
</tbody>
</table>

Note: The replacement rate is the ratio of Social Security benefits net of income tax to average inflation-indexed lifetime earnings. Replacement rates are for workers claiming benefits at age 65. For workers born in the 1960s, the Social Security full benefit retirement age is 67. If these workers claimed benefits at age 67, benefits would increase by about 15 percent.

Source: Congressional Budget Office, CBO’s 2021 Long-Term Projections for Social Security: Additional Information
For many near-retiree households, homeownership is the second most important retirement resource after Social Security. Older households are more likely to own their homes; more likely to own their homes without mortgage debt; and, if they still have mortgages, more likely to have small mortgages relative to the value of their homes. Retired households typically benefit from this resource simply by living in their homes rent-free.

Employer-sponsored retirement plans and IRAs, which complement Social Security benefits and are important resources for households regardless of income or wealth, increase in importance for households for which Social Security replaces a smaller share of earnings. In 2019, three-quarters of near-retiree households had accrued benefits in employer-sponsored retirement plans—DB and DC plans sponsored by private-sector and government employers—or IRAs (Figure 8.4).

Finally, although less important on average, retirees also rely on other assets in retirement. These assets can be financial—including bank deposits, stocks, bonds, and mutual funds owned outside employer-sponsored retirement plans and IRAs. They also can be

---

**FIGURE 8.4**

Near-Retiree Households Across All Income Groups Have Retirement Assets, DB Plan Benefits, or Both

Percentage of near-retiree households[^1] by income quintile[^2], 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest ($39,707 or less)</td>
<td>36</td>
<td>69</td>
<td>10</td>
</tr>
<tr>
<td>Second ($39,707 to $66,178)</td>
<td>46</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>Middle ($66,178 to $96,721)</td>
<td>43</td>
<td>45</td>
<td>24</td>
</tr>
<tr>
<td>Fourth ($96,721 to $178,171)</td>
<td>47</td>
<td>43</td>
<td>24</td>
</tr>
<tr>
<td>Highest ($178,171 or more)</td>
<td>41</td>
<td>75</td>
<td>9</td>
</tr>
</tbody>
</table>

[^1]: Near-retiree households are those with a head of household aged 55 to 64, and a working head of household or working spouse.

[^2]: Income is household income before taxes in 2018.

[^3]: Households currently receiving DB plan benefits and households with the promise of future DB plan benefits, whether from private-sector or government employers, are counted in this category.

[^4]: In this figure, retirement assets include DC plan assets (401(k), 403(b), 457, thrift, and other DC plans), whether from private-sector or government employers, and IRAs (traditional, Roth, SEP, SAR-SEP, and SIMPLE). Source: Investment Company Institute tabulations of the 2019 Federal Reserve Board Survey of Consumer Finances
nonfinancial—including business equity, investment real estate, second homes, vehicles, and consumer durables (long-lived goods such as household appliances and furniture). Higher-income households are more likely to have large holdings of assets in this category.

**Snapshot of US Retirement Market Assets**

Employer-sponsored retirement plans, IRAs (including rollovers), and annuities play an important role in the US retirement system, with assets totaling $39.4 trillion at year-end 2021 (Figure 8.5)—up 12 percent from year-end 2020. The largest components of retirement assets were IRAs and employer-sponsored DC plans (including 401(k) plans), which together represented 63 percent of all retirement market assets at year-end 2021. Other employer-sponsored plans include private-sector DB plans ($3.8 trillion), state and local government DB plans ($5.8 trillion), and federal government DB plans ($2.2 trillion). In addition, annuity reserves outside of retirement plans were $2.6 trillion at year-end 2021.

**FIGURE 8.5**

US Retirement Market Assets
Trillions of dollars, year-end

- Annuities
- Federal government DB plans
- State and local government DB plans
- Private-sector DB plans
- Other DC plans
- 401(k) plans
- IRAs

* Data are estimated.

Retirement assets include individual account-based savings (DC plans and IRAs) and assets held in DB plans. Traditional DB plans promise to pay benefits in retirement typically based on salary and years of service. Some DB plans, however, do not have sufficient assets to cover promised benefits that households have a legal right to expect. The total unfunded liabilities of DB plans were $5.2 trillion at year-end 2021, and underfunding is more pronounced in government-sector pension plans. As of year-end 2021, state and local government DB plans had $5.8 trillion in assets and $3.6 trillion in unfunded liabilities and federal DB plans had $2.2 trillion in assets and $1.6 trillion in unfunded liabilities. By comparison, private-sector DB plans had $3.8 trillion in assets and $7 billion in unfunded liabilities.

Ownership of Retirement Resources

Many US households have accumulated resources earmarked for retirement (Figure 8.6). Across all age groups, 63 percent of US households (82 million) reported that they had employer-sponsored retirement plans, IRAs, or both in 2021. Fifty-six percent of US households reported that they had employer-sponsored retirement plans—that is, they had assets in DC plan accounts, were receiving or expecting to receive benefits from DB plans, or both. Thirty-seven percent reported having assets in IRAs, including 30 percent that had both IRAs and employer-sponsored retirement plans. US households represent a wide range of ages at different points in the life cycle of savings. Focus on retirement savings tends to increase with age (Figure 8.2), and older households are more likely to have retirement resources; for example, three-quarters of near-retiree households have retirement accumulations (Figure 8.4).
US Retiree Income

Most American workers maintain or increase their spendable income after claiming Social Security, according to a study coauthored by ICI and Internal Revenue Service Statistics of Income Division staff. The study also finds that, after claiming, most get substantial amounts of both Social Security benefits and retirement income (from employer-sponsored retirement plans, annuities, or IRAs).

Lower-income workers typically had higher replacement rates of spendable income—income available after paying taxes and making contributions to retirement accounts (Figure 8.7). Three years after claiming, the median worker in the study had spendable income that was greater (103 percent) than spendable income in the year before claiming. Notably, median replacement rates were found to be highest for individuals in the lowest quintile of income in 1999 (123 percent) and lowest for individuals in the highest quintile (93 percent).
In addition to Social Security, the vast majority of workers analyzed had resources from employer-sponsored retirement plans, annuities, and IRAs (Figure 8.8). Over the five-year period from one year before an individual claims Social Security to three years after claiming, 81 percent received income—either directly or through a spouse—from employer plans, annuities, or IRAs. Another 8 percent had evidence of these resources—a Form 1099-R (reporting a rollover or other retirement account transaction that did not generate income), a Form 5498 (indicating IRA ownership), or both—but were not yet drawing on them.
Defined Contribution Retirement Plans

DC plans provide employees with a retirement account funded with employer contributions, employee contributions, or both, plus investment earnings or losses on those contributions, less withdrawals. Assets in employer-sponsored DC plans have grown faster than assets in DB plans over the past three decades, increasing from 31 percent of total DC and DB plan assets in 1991 to 48 percent at year-end 2021.

At the end of 2021, employer-sponsored DC plans—which include 401(k) plans, 403(b) plans, 457 plans, the federal Thrift Savings Plan (TSP), and other private-sector DC plans—held an estimated $11.0 trillion in assets (Figure 8.5). With $7.7 trillion in assets at year-end 2021, 401(k) plans held the largest share of employer-sponsored DC plan assets. 403(b) plans—which are similar to 401(k) plans and are offered by educational and certain nonprofit organizations—held another $1.3 trillion in assets. In addition, 457 plans—which serve employees of state and local governments and certain tax-exempt organizations—and the TSP held a total of $1.3 trillion. Other private-sector DC plans without 401(k) features held the remaining $0.7 trillion.

1 The sample consists of all working taxpayers aged 55 to 61 in 1999 who claimed Social Security retirement benefits between 2000 and 2007.
2 The period analyzed is the five-year period starting one year prior to claiming Social Security and ending three years after claiming.
3 For individuals filing a non-joint return, per capita income is income reported on the tax return. For married individuals filing a joint return, per capita income is income reported on the tax return divided by two.
4 Retirement income is income from DB and DC pensions, annuities, and IRAs.

Source: Using Panel Tax Data to Examine the Transition to Retirement, available at www.ici.org/transition_to_retirement
**401(k) and 403(b) Plan Design and Investment Lineup**

**Plan Design**

Employers that sponsor a 401(k) plan have the option to include features such as employer contributions, access to plan assets through participant loans, and automatic enrollment of employees into the plan to encourage participation. The most common of these plan features is employer contributions. In 401(k) plans, employers can make contributions without regard to employee contributions or by using a matching structure that gives employees an incentive to contribute to the plan. Recent analysis of large 401(k) plans by BrightScope and ICI found that 87 percent made employer contributions in plan year 2018. Nearly eight out of 10 (78 percent) large 401(k) plans had participant loans outstanding, and about three out of 10 (31 percent) included automatic enrollment in 2018. An analysis of large private-sector 403(b) plans found that they also offer a variety of combinations of these plan design features.

When designing 401(k) plans, employers tend to select a combination of features that their employees are likely to value. In 2018, 45 percent of large 401(k) plans had both employer contributions and participant loans outstanding but no automatic enrollment, making this the most common combination of plan activities. The next most common plan design combined all three activities—employer contributions, automatic enrollment, and outstanding loans—and was offered by 24 percent of large 401(k) plans. Fourteen percent of large 401(k) plans had employer contributions only, and about 3 percent did not report any of the three activities.

**Investment Lineup**

In addition to choosing how to structure contributions to the 401(k) plan, employers also select the investment options that are available to plan participants. In 2018, domestic equity funds, international equity funds, and domestic bond funds were offered in nearly all large 401(k) plans (Figure 8.9). Although these three fund types are equally likely to be offered, when these funds are available in the plan, employers tend to offer more domestic equity funds (10 funds on average) than domestic bond funds (three funds) or international equity funds (three funds). Target date funds also are common investment choices, with nearly 85 percent of large 401(k) plans offering 10 of these funds on average. In addition, 45 percent of large 401(k) plans offered one money fund on average and 70 percent offered one guaranteed investment contract (GIC). In total, the average large 401(k) plan offered 28 funds to participants in 2018. Large private-sector 403(b) plans also offer participants a diverse array of investment options.
FIGURE 8.9
Incidences of Investment Options Offered in Large 401(k) Plans by Type of Investment
Percentage of plans with audited 401(k) filings in the BrightScope database, 2018

<table>
<thead>
<tr>
<th>Type of investment option</th>
<th>Equity funds</th>
<th>Balanced funds</th>
<th>Bond funds</th>
<th>Other options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic</td>
<td>Internation</td>
<td>Domestic</td>
<td>Money funds</td>
</tr>
<tr>
<td></td>
<td>99.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>International</td>
<td></td>
<td>97.9</td>
<td></td>
</tr>
<tr>
<td>Target date funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>84.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non–target date balanced funds</td>
<td></td>
<td></td>
<td></td>
<td>44.8</td>
</tr>
<tr>
<td></td>
<td>61.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond funds</td>
<td></td>
<td></td>
<td></td>
<td>GICs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70.1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67.3</td>
</tr>
<tr>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index funds</td>
<td></td>
<td></td>
<td></td>
<td>93.8</td>
</tr>
</tbody>
</table>

1. The Investment Company Institute classifies balanced funds as hybrid in its data.
2. 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.
3. Other includes commodity funds, real estate funds, and individual stocks (including company stock) and bonds.

Note: The sample is 56,504 plans with 57.4 million participants and $4.3 trillion in assets. Participant loans are excluded. Funds include mutual funds, collective investment trusts, separate accounts, and other pooled investment products. BrightScope audited 401(k) filings generally include plans with 100 participants or more. Plans with fewer than four investment options or more than 100 investment options are excluded from BrightScope audited 401(k) filings for this analysis.

401(k) Participants: Asset Allocation, Account Balances, and Loan Activity

Asset Allocation

The amount of income that 401(k) plan accounts provide in retirement depends, in part, on the asset allocation decisions of plan participants.

According to research conducted by ICI and the Employee Benefit Research Institute (EBRI), the asset allocation of 401(k) participants varies with age. At year-end 2019, on average, 401(k) plan participants in their twenties had 31 percent of their 401(k) assets invested in equity funds, 54 percent in target date funds, 5 percent in non-target date balanced funds,* and 2 percent in company stock (Figure 8.10). By comparison, 401(k) plan participants in their sixties had higher allocations to equity funds (38 percent of their 401(k) assets), lower allocations to target date funds (29 percent), and similar allocations to non-target date balanced funds (4 percent) and company stock (5 percent). These older participants also had higher allocations to fixed-income investments. At year-end 2019, on average, 401(k) plan participants in their sixties had 21 percent of their 401(k) account assets in money funds, bond funds, and GICs and other stable value funds, while participants in their twenties allocated a much lower 6 percent to those investments, on average.

All told, younger participants allocate more of their portfolios to equities (which include equity funds; the equity portion of balanced funds, including target date funds; and company stock) compared with older participants. According to EBRI/ICI research, at year-end 2019, participants in their twenties had 84 percent of their 401(k) assets invested in equities, on average, while those in their sixties had 57 percent of their 401(k) assets invested in equities (Figure 8.10).

* The Investment Company Institute classifies balanced funds as hybrid in its data.
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.

The Investment Company Institute classifies balanced funds as hybrid in its data.

Equities include equity funds, company stock, and the equity portion of balanced funds.

Note: Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. Percentages are dollar-weighted averages.

Portfolio allocation also varies widely within age groups. At year-end 2019, 67 percent of 401(k) participants in their twenties held more than 80 percent of their account in equities, while participants in their sixties were much less inclined to hold such high equity allocations (less than 15 percent of them did so) (Figure 8.11). By comparison, 14 percent of those in their twenties and 40 percent of those in their sixties allocated 40 percent or less of their account to equities.

**FIGURE 8.11**
Asset Allocation to Equities Varies Widely Among 401(k) Plan Participants
Asset allocation distribution of 401(k) participant account balance to equities, percentage of participants, year-end 2019

<table>
<thead>
<tr>
<th>Percentage of 401(k) account balance invested in equities</th>
<th>Participants in their twenties</th>
<th>Participants in their sixties</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;80 percent</td>
<td>67</td>
<td>14</td>
</tr>
<tr>
<td>&gt;60 to 80 percent</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>&gt;40 to 60 percent</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>&gt;20 to 40 percent</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>&gt;0 to 20 percent</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Zero</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Equities include equity funds, company stock, and the equity portion of balanced funds. Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. The Investment Company Institute classifies balanced funds as hybrid in its data.

Target Date Funds

A target date fund (including both target date mutual funds and other pooled target date investments) follows a predetermined reallocation of assets over time based on a specified target retirement date. Typically, the fund rebalances its portfolio to become less focused on growth and more focused on income as it approaches and passes the target date, which is usually indicated in the fund’s name.

The use of target date funds in 401(k) plans has increased in recent years—from 8 percent of assets at year-end 2007 to 31 percent at year-end 2019 (Figure 8.12). Participant use of target date funds also has increased—from 26 percent of 401(k) plan participants at year-end 2007 to 60 percent at year-end 2019. Over the same time period, both the share of 401(k) plans that offered target date funds and the share of 401(k) plan participants who were offered target date funds have also increased. At year-end 2019, 87 percent of 401(k) plans offered target date funds, and 87 percent of 401(k) plan participants were offered target date funds.

FIGURE 8.12
Target Date Funds’ 401(k) Market Share
Percentage of total 401(k) market, year-end

Note: 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. Funds include mutual funds, bank collective trusts, life insurance separate accounts, and other pooled investment products.

Loan Activity

Most 401(k) participants do not borrow from their plans, although the majority (85 percent) have access to loans. At year-end 2019, 18 percent of participants eligible for loans had loans outstanding. Not all participants, however, have access to 401(k) plan loans—factoring in all 401(k) participants with and without loan access in the EBRI/ICI 401(k) database, only 15 percent had loans outstanding at year-end 2019. Unpaid loan balances among participants with loans averaged 8 percent of the remaining 401(k) account balance. In aggregate, US Department of Labor data indicate that outstanding loan amounts were less than 2 percent of 401(k) plan assets in 2019.

Individual Retirement Accounts

The first type of IRA—known as a traditional IRA—was created under the Employee Retirement Income Security Act of 1974 (ERISA). IRAs provide all workers with a contributory retirement savings vehicle and, through rollovers, give workers leaving jobs a means to preserve the tax benefits and growth opportunities that employer-sponsored retirement plans provide. Roth IRAs, first available in 1998, were created to provide a contributory retirement savings vehicle on an after-tax basis, with qualified withdrawals distributed tax-free. In addition, policymakers have added employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs) to encourage small businesses to provide retirement plans by simplifying the rules applicable to tax-qualified plans.

IRA assets totaled $13.9 trillion at year-end 2021, accounting for 35 percent of US retirement assets (Figure 8.13). Mutual funds were 45 percent of IRA assets ($6.2 trillion) at year-end 2021. The other assets category—which includes exchange-traded funds (ETFs), closed-end funds, individual stocks and bonds, and other non-mutual fund securities held through brokerage or trust accounts—had 46 percent of IRA assets ($6.5 trillion).
FIGURE 8.13
IRA Assets
Trillions of dollars, year-end

- Other assets\(^1\)
- Life insurance companies\(^2\)
- Bank and thrift deposits\(^3\)
- Mutual funds

1 Other assets includes individual stocks, individual bonds, closed-end funds, ETFs, and other assets held through brokerage or trust accounts.

2 Life insurance company IRA assets are annuities held by IRAs, excluding variable annuity mutual fund IRA assets, which are included in mutual funds.

3 Bank and thrift deposits include Keogh deposits.

\* Data are estimated.

Source: Investment Company Institute. For a complete list of sources, see Investment Company Institute, "The US Retirement Market, Fourth Quarter 2021."
IRA Investors

More than one-third of US households, or 48 million, owned at least one type of IRA in 2021 (Figure 8.14). Traditional IRAs were the most common type, owned by 37 million US households. Roth IRAs, created as part of the Taxpayer Relief Act of 1997, were owned by 27 million US households. Nearly nine million US households owned employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, or SIMPLE IRAs).

FIGURE 8.14
Millions of US Households Own IRAs

<table>
<thead>
<tr>
<th>Year created</th>
<th>Number of US households with type of IRA 2021</th>
<th>Percentage of US households with type of IRA 2021</th>
<th>Assets in IRAs Billions of dollars, year-end 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional IRA</td>
<td>1974 (Employee Retirement Income Security Act)</td>
<td>36.6 million</td>
<td>28.2%</td>
</tr>
<tr>
<td>SEP IRA</td>
<td>1978 (Revenue Act)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAR-SEP IRA</td>
<td>1986 (Tax Reform Act)</td>
<td>8.6 million</td>
<td>6.6%</td>
</tr>
<tr>
<td>SIMPLE IRA</td>
<td>1996 (Small Business Job Protection Act)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roth IRA</td>
<td>1997 (Taxpayer Relief Act)</td>
<td>27.3 million</td>
<td>21.0%</td>
</tr>
<tr>
<td>Any IRA</td>
<td></td>
<td>47.7 million</td>
<td>36.7%</td>
</tr>
</tbody>
</table>

* Data are estimated.

Note: Households may own more than one type of IRA. SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs are employer-sponsored IRAs.

Investment returns and rollovers from employer-sponsored retirement plans, more than new contributions, have fueled the growth of IRAs. For example, the Internal Revenue Service Statistics of Income Division reports that $554 billion was rolled over to IRAs in tax year 2019, compared with $76 billion that was contributed. Although most US households are eligible to make contributions to IRAs, few do so. Indeed, only 13 percent of US households contributed to traditional or Roth IRAs in tax year 2020 and very few eligible households made “catch-up” contributions (the additional contributions individuals aged 50 or older are allowed to make).

Analysis of the IRA Investor Database—which contains information on millions of IRA investors—finds that rollovers play a particularly important role in opening traditional IRAs. In 2018, most new traditional IRAs (76 percent) were opened only with rollovers (Figure 8.15). In contrast, most new Roth IRAs (76 percent) were opened solely with contributions.

**FIGURE 8.15**
New Roth IRAs Often Are Opened with Contributions; New Traditional IRAs Often Are Opened with Rollovers
Percentage of new IRAs opened in 2018 by type of IRA

<table>
<thead>
<tr>
<th>Combination of activities</th>
<th>Contribution only</th>
<th>Conversion only</th>
<th>Rollover only</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>19</td>
<td>76</td>
<td>76</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New Roth IRAs New traditional IRAs

Note: New IRAs are accounts that did not exist in the IRA Investor Database in 2017 and were opened by one of the paths indicated in 2018. The calculation excludes IRAs that changed financial services firms. The samples are 0.2 million new Roth IRA investors aged 18 or older at year-end 2018 and 0.3 million new traditional IRA investors aged 18 to 74 at year-end 2018.

A substantial share of traditional IRA investors have rolled over assets from an employer-sponsored retirement plan. In any given year, only a small portion of traditional IRA investors have a rollover, but, for the most part, the groups that make rollovers differ from year to year. For example, in each year from 2007 through 2018, about one in 10 traditional IRA investors in the IRA Investor Database had a rollover, but more than half of investors with traditional IRAs at year-end 2018 had a rollover at some point during this period.

Traditional IRA–owning households generally researched the decision to roll over money from their former employers’ retirement plans into traditional IRAs. The most common source of information was a professional financial adviser. Advisers were consulted by 65 percent of traditional IRA–owning households with rollovers; about half indicated that they primarily relied on these financial professionals. Older households were more likely to consult professional financial advisers than younger households when making their decision. Nine percent of traditional IRA–owning households with rollovers indicated their primary source of information was online materials from financial services firms, with younger households more likely to rely on online resources as their primary source of information than older households were. Eleven percent of households with rollovers primarily relied on information from their employers.

**IRA Portfolios**

As with 401(k) participants, younger IRA investors tend to have a larger share of their assets invested in equities, equity funds, and target date funds than older investors, according to the IRA Investor Database. Older investors tend to be more invested in bonds, bond funds, and non–target date balanced funds. In 2018, traditional IRA investors in their thirties had, on average, a combined 80 percent of their assets in equities, equity funds, and target date funds (Figure 8.16). Traditional IRA investors in their sixties held a lower share of their assets (58 percent) in these combined categories, while holding much higher allocations across bonds, bond funds, and non–target date balanced funds.

Roth IRA investors display a similar pattern of investing by age, although in all age groups, they tended to have higher allocations to equities and equity funds and lower allocations to bonds and bond funds compared with traditional IRA investors (Figure 8.16).
FIGURE 8.16
IRA Asset Allocation Varies with Investor Age
Average asset allocation of IRA balances, percentage of assets, year-end 2018

- Other investments\(^1\)
- Money market funds
- Bonds and bond funds\(^2\)
- Non–target date balanced funds\(^3\)
- Target date funds\(^4\)
- Equities and equity funds\(^5\)

Traditional IRA investors

Investors in their thirties

Investors in their sixties

Roth IRA investors

Investors in their thirties

Investors in their sixties

\(^1\) Other investments includes certificates of deposit and unidentifiable assets.

\(^2\) Bond funds include bond mutual funds, bond closed-end funds, and bond ETFs.

\(^3\) The Investment Company Institute classifies balanced funds as hybrid in its data.

\(^4\) 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.

\(^5\) Equity funds include equity mutual funds, equity closed-end funds, and equity ETFs.

Note: Percentages are dollar-weighted averages.

Distributions from IRAs

Withdrawals from IRAs tend to occur later in life, often to fulfill required minimum distributions (RMDs) under the law. An RMD is calculated as a percentage of the IRA balance, based on remaining life expectancy. Older traditional IRA owners generally must withdraw at least the minimum amount each year, or pay a penalty (historically, RMDs began at age 70½, but recently, the age was increased to 72). However, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) waived RMDs for 2020. In tax year 2019, 76 percent of households that took traditional IRA withdrawals said they calculated the withdrawal amount based on RMD rules. Only 61 percent of households that took traditional IRA withdrawals in tax year 2020 said they calculated the withdrawal amount based on RMD rules, likely related to the RMD waiver.

Withdrawal activity is lower among younger traditional and Roth IRA investors, likely related to early withdrawal penalties for distributions taken by individuals younger than 59½ (Figure 8.17). Withdrawal activity rises for investors in their sixties (where withdrawals are generally penalty free), and increases substantially for traditional IRA investors aged 70 or older, likely related to RMD rules. The withdrawal rate does not increase after age 70 for Roth IRA investors, who are not subject to RMDs during the owner’s lifetime.

FIGURE 8.17
Roth IRA Investors Rarely Take Withdrawals; Traditional IRA Investors Are Heavily Affected by RMDs
Percentage of IRA investors with withdrawals by type of IRA and investor age, 2018

<table>
<thead>
<tr>
<th>Age of IRA investor</th>
<th>Roth IRA investors</th>
<th>Traditional IRA investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 59</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>60 to 69</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>70 or older</td>
<td>7</td>
<td>82</td>
</tr>
</tbody>
</table>

Note: The samples are 4.1 million Roth IRA investors aged 18 or older at year-end 2018 and 6.3 million traditional IRA investors aged 18 or older at year-end 2018.
Withdrawals from IRAs tend to be retirement related. Of the 23 percent of traditional IRA–owning households in 2021 that reported taking withdrawals in 2020, 83 percent reported that the head of household, the spouse, or both were retired. Among retired traditional IRA–owning households in 2021 that reported taking withdrawals in 2020, 41 percent reported using some or all of the withdrawal amount to pay for living expenses (Figure 8.18). Other uses included reinvesting or saving in another account (36 percent); buying, repairing, or remodeling a home (16 percent); and using it for an emergency (4 percent).

FIGURE 8.18
Traditional IRA Withdrawals Among Retirees Often Are Used to Pay for Living Expenses
Percentage among retired traditional IRA–owning households that made withdrawals, 2021

<table>
<thead>
<tr>
<th>Purpose of traditional IRA withdrawal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Took withdrawals to pay for living expenses</td>
<td>41</td>
</tr>
<tr>
<td>Spent it on a car, boat, or big-ticket item other than a home</td>
<td>9</td>
</tr>
<tr>
<td>Spent it on a healthcare expense</td>
<td>4</td>
</tr>
<tr>
<td>Used it for an emergency</td>
<td>4</td>
</tr>
<tr>
<td>Used it for home purchase, repair, or remodeling</td>
<td>16</td>
</tr>
<tr>
<td>Reinvested or saved it in another account</td>
<td>36</td>
</tr>
<tr>
<td>Paid for education</td>
<td>1</td>
</tr>
<tr>
<td>Some other purpose</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: Multiple responses are included. The base of respondents includes the 19 percent of traditional IRA–owning households that were retired in 2021 and took withdrawals in tax year 2020. The household was considered retired if either the head of household or spouse responded affirmatively to the question: “Are you retired from your lifetime occupation?”

The Role of Mutual Funds in Retirement Savings

Mutual funds play a major role in employer-sponsored DC plans (such as 401(k) plans) and IRAs. At year-end 2021, mutual funds accounted for 58 percent of DC plan assets and 45 percent of IRA assets (Figure 8.19). Investors held slightly more mutual fund assets in DC plans ($6.4 trillion) than in IRAs ($6.2 trillion). Among DC plans, 401(k) plans held the most assets in mutual funds, with $5.0 trillion, followed by 403(b) plans ($670 billion), other private-sector DC plans ($539 billion), and 457 plans ($177 billion). Combined, the $12.6 trillion of mutual fund assets held in DC plans and IRAs at the end of 2021 accounted for 32 percent of the $39.4 trillion US retirement market.

Assets in DC plans and IRAs represent a large share of mutual fund assets overall, and long-term mutual fund assets in particular (Figure 8.19). The $12.6 trillion in mutual fund retirement assets made up 47 percent of all mutual fund assets at year-end 2021. DC plans and IRAs held 54 percent of equity, hybrid, and bond mutual fund assets, but only 11 percent of money market fund assets.

**FIGURE 8.19**
Substantial Amounts of Retirement Assets Are Invested in Mutual Funds
Assets, billions of dollars, year-end 2021

- **Other investments**
- **Mutual fund assets in retirement accounts**
- **Mutual funds held by other investors**
- **Mutual fund assets in retirement accounts**

<table>
<thead>
<tr>
<th>Assets, billions of dollars</th>
<th>DC plans</th>
<th>IRAs</th>
<th>Equity, hybrid, and bond mutual funds</th>
<th>Money market funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other investments</td>
<td>4,607</td>
<td>7,703*</td>
<td>4,227</td>
<td>529</td>
</tr>
<tr>
<td>Mutual fund assets in retirement accounts</td>
<td>6,368</td>
<td>6,210</td>
<td>12,049</td>
<td>4,756</td>
</tr>
<tr>
<td>Mutual funds held by other investors</td>
<td>10,975</td>
<td>13,913*</td>
<td>22,209</td>
<td>10,160</td>
</tr>
<tr>
<td>Data are estimated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Types of Mutual Funds Used by Retirement Investors

Retirement investors tend to hold equity investments. At year-end 2021, 59 percent of the $12.6 trillion in mutual fund retirement assets held in DC plans and IRAs were invested in equity funds. US domestic equity funds alone constituted $5.8 trillion, or 46 percent, of mutual fund assets held in DC plans and IRAs; world equity funds were an additional 13 percent.

Retirement investors also gain exposure to equities through hybrid funds, which invest in a mix of equity, bond, and money market securities. At year-end 2021, 23 percent of mutual fund assets held in DC plans and IRAs were held in hybrid funds.

The remaining 18 percent of mutual fund assets held in DC plans and IRAs at the end of 2021 were invested in bond funds and money market funds. Bond funds held $1.7 trillion, or 14 percent, of mutual fund assets held in DC plans or IRAs, and money market funds accounted for $529 billion, or 4 percent.

Target Date Mutual Funds in Retirement Accounts

Target date mutual funds, generally included in the hybrid fund category, have grown more popular among investors and retirement plan sponsors over the past decade. Assets in target date mutual funds totaled $1.8 trillion at year-end 2021, up from $1.6 trillion at year-end 2020, and $340 billion at year-end 2010 (Figure 8.20). At year-end 2021, most (85 percent) target date mutual fund assets were held in retirement accounts, predominantly DC plan accounts.
**FIGURE 8.20**

**Target Date Mutual Fund Assets by Account Type**

Billions of dollars, year-end

1. IRAs include traditional IRAs, Roth IRAs, and employer-sponsored IRAs (SEP IRAs, SAR-SEP IRAs, and SIMPLE IRAs).
2. DC plans include 401(k) plans, other private-sector DC plans without 401(k) features, 403(b) plans, and 457 plans.

Note: Data include mutual funds that invest primarily in other mutual funds. A target date mutual 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.

The Role of Mutual Funds in Education Savings

Twenty-four percent of households that owned mutual funds in 2021 cited education as a financial goal for their fund investments (Figure 7.6). Nevertheless, the demand for education savings vehicles has been moderate since their introduction in the 1990s, partly because of their limited availability and partly due to investors’ lack of familiarity with them. The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) enhanced the attractiveness of two education savings vehicles—Section 529 plans and Coverdell education savings accounts (ESAs)—by making them more flexible and allowing larger contributions. The 2006 Pension Protection Act (PPA) made the EGTRRA enhancements permanent. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 extended the EGTRRA enhancements to Coverdell ESAs for two years; the American Taxpayer Relief Act of 2012 made these enhancements permanent. The Setting Every Community Up for Retirement Enhancement Act of 2019 (SECURE Act) expanded the types of education costs that are coverable by 529 plans.

Assets in 529 Savings Plans

Assets in Section 529 savings plans were $453 billion at year-end 2021, up 14 percent from year-end 2020 (Figure 8.21). As of year-end 2021, there were 14.7 million 529 savings plan accounts, with an average account size of approximately $30,700.

FIGURE 8.21
Section 529 Savings Plan Assets
Billions of dollars, year-end

Note: Data were estimated for a few individual state observations in order to construct a continuous time series.
Characteristics of Households Saving for College

In 2021, as a group, households saving for college through 529 plans, Coverdell ESAs, or mutual funds held outside these accounts tended to be headed by younger individuals—about half (48 percent) were younger than 45 (Figure 8.22). Heads of households saving for college had a range of educational attainment. Sixty-five percent had completed college, 26 percent had an associate’s degree or some college, and 9 percent had a high school diploma or less. These households also represented a range of incomes: 35 percent of households saving for college had household income of less than $100,000. Finally, 63 percent of these households had children (younger than 18) in the home, and 43 percent had more than one child in the home.
### Characteristics of Households Saving for College

#### Percentage of US households saving for college,^{1} 2021

<table>
<thead>
<tr>
<th><strong>Age of head of household</strong></th>
<th><strong>%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger than 35</td>
<td>20</td>
</tr>
<tr>
<td>35 to 44</td>
<td>28</td>
</tr>
<tr>
<td>45 to 54</td>
<td>26</td>
</tr>
<tr>
<td>55 to 64</td>
<td>15</td>
</tr>
<tr>
<td>65 or older</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Education level of head of household</strong></th>
<th><strong>%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>High school diploma or less</td>
<td>9</td>
</tr>
<tr>
<td>Associate’s degree or some college</td>
<td>26</td>
</tr>
<tr>
<td>Completed college</td>
<td>23</td>
</tr>
<tr>
<td>Some graduate school or completed graduate school</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Household income</strong></th>
<th><strong>%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $50,000</td>
<td>10</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>25</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>22</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>16</td>
</tr>
<tr>
<td>$200,000 or more</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Number of children in home</strong></th>
<th><strong>%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>37</td>
</tr>
<tr>
<td>One</td>
<td>20</td>
</tr>
<tr>
<td>Two</td>
<td>25</td>
</tr>
<tr>
<td>Three or more</td>
<td>18</td>
</tr>
</tbody>
</table>

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1. Households saving for college are households that own education savings plans (Coverdell ESAs or 529 plans) or that said paying for education was one of their financial goals for their mutual funds.
2. Age and education level are based on the sole or co-decisionmaker for saving and investing.
3. Total reported is household income before taxes in 2020.
4. The number of children reported is children younger than 18 living in the home.