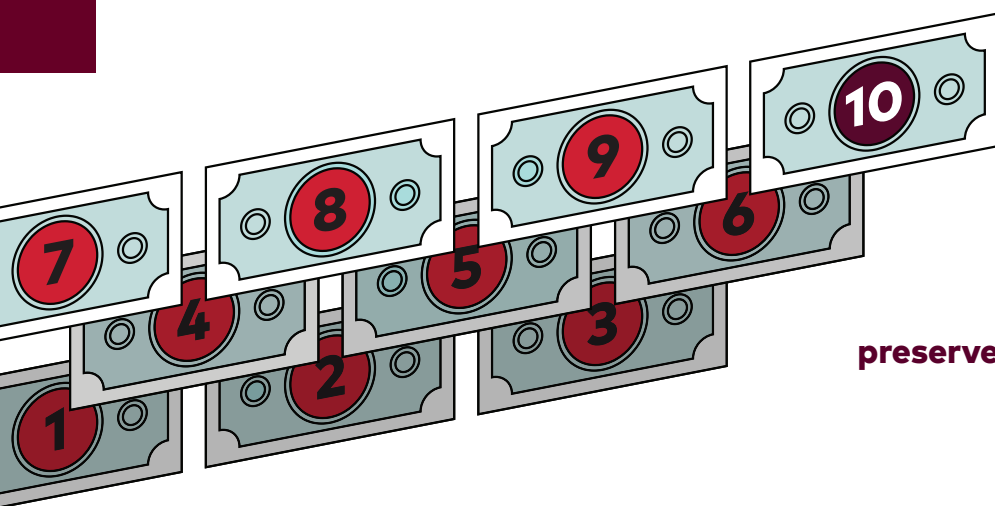


Research

February 2023

Retirement distribution decisions among DC participants



9 in 10

retirement dollars are
preserved in retirement accounts

- Nearly 7 in 10 retirement-age plan participants (those ages 60 and older and terminating from their employer) have preserved their savings in a tax-deferred account. In total, 9 in 10 retirement dollars are preserved, either in an IRA or employer plan account.
- The 3 in 10 retirement-age participants who cashed out from their employer's retirement plan over five years typically hold smaller balances. The average amount cashed out is approximately \$39,700, whereas participants preserving assets have average balances ranging from \$239,300 to \$418,900.
- Most retirement-age defined contribution (DC) plan participants leave their employer's retirement plan within five years of separation from service, mostly for a rollover to an IRA. However, when plans permit flexible distributions, retirement-age participants, and their assets, are more likely to remain in the employer's plan. The percentage of plans that offer this feature has nearly doubled in the past five years, along with an increasing demand for retiree-friendly plan designs, in-plan advice, and retirement income solutions.

Authors



Jeffrey W. Clark



Joseph C. Walsh

Introduction

After years—often decades—of saving in a DC retirement plan, what does a typical retiree (in our case, at least 60 years old and separated from their employer) do with the money they've accumulated? Leave it in their employer's plan? Take it out of the plan? A combination of both? These questions have increasingly piqued the interest of policymakers, plan sponsors, and recordkeepers as they try to understand participant behavior when those participants stop working.

Two questions are of particular interest. First, should the glide path of target-date funds be based on a "to retirement" or a "through retirement" approach? The former would suggest a more conservative glide path, assuming assets are used immediately at retirement; the latter, an investment strategy that recognizes that assets are generally kept in the plan and preserved for several years after retirement.

Second, should retirement plan designs offer and incorporate various retiree-friendly attributes that help participants convert their savings into sustainable income streams? Or is the IRA rollover marketplace the more likely destination for plan assets in retirement?

This paper examines the decisions made by participants ages 60 and older who have separated from service with their employer. For convenience, we define this group as "retirement-age" participants—although some will have separated from service with one employer only to continue to work with another.

A note on our data

This analysis is based on data from Vanguard's DC recordkeeping clients from January 1, 2011, through December 31, 2021.

We examined the plan distribution behavior through year-end 2021 of 504,400 participants ages 60 and older who terminated employment in calendar years 2011 through 2020 (**Figure 1**). The average before-termination account balance of participants in this sample ranged from \$153,200 to \$203,000, depending on the termination year cohort.

Overall, approximately half of the participants in our sample had account balances of less than \$50,000 (**Figure 2**). Three in 10 retirement-age participants had worked for the plan sponsor less than 10 years—which is one factor affecting the number of smaller balances since account balances rise with tenure. Forty-four percent of retirement-age participants had 20 years or more of job tenure. These longer-tenured participants had average account balances of about \$288,000.

FIGURE 1.
Participants ages 60 and older by year of termination cohort

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	All
Number of participants	29,400	31,900	39,300	42,200	47,900	54,200	52,800	60,600	67,500	78,600	504,400
Average balances											
Prior to termination	\$153,200	\$143,300	\$158,100	\$176,700	\$181,100	\$179,800	\$193,200	\$202,600	\$199,100	\$203,000	\$184,500
2021 year-end	\$164,400	\$180,700	\$192,000	\$207,000	\$213,600	\$220,200	\$227,300	\$233,400	\$230,900	\$235,200	\$216,600

Note: December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from the plan.

Source: Vanguard, 2023.

FIGURE 2.

Account balance and tenure characteristics

Participants ages 60 and older by year of termination cohort

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	All
Account balance (prior to termination)											
<\$1,000	8%	8%	8%	9%	9%	9%	10%	10%	10%	10%	9%
\$1,000–\$9,999	16%	16%	15%	15%	15%	15%	15%	15%	16%	17%	16%
\$10,000–\$24,999	12%	12%	11%	10%	11%	11%	11%	10%	10%	11%	11%
\$25,000–\$49,999	11%	12%	11%	11%	11%	11%	11%	11%	11%	10%	11%
Subtotal: <\$50,000	47%	48%	45%	45%	46%	46%	47%	46%	47%	48%	47%
\$50,000–\$99,999	14%	14%	14%	13%	13%	13%	13%	12%	12%	12%	13%
\$100,000–\$249,999	20%	21%	21%	19%	19%	19%	17%	17%	17%	17%	18%
\$250,000+	18%	18%	20%	22%	22%	22%	23%	24%	23%	23%	22%
Subtotal: \$50,000 or more	52%	53%	55%	54%	54%	54%	53%	53%	52%	52%	53%
Job tenure (years, prior to termination)											
<3	11%	10%	10%	12%	13%	13%	16%	18%	19%	19%	15%
4–9	17%	17%	17%	16%	16%	15%	15%	15%	16%	16%	16%
10–19	26%	25%	26%	27%	26%	27%	26%	26%	24%	23%	25%
20+	47%	48%	47%	46%	46%	45%	43%	42%	41%	42%	44%
Average account balance by job tenure											
<3	\$34,218	\$32,125	\$37,664	\$33,349	\$30,052	\$35,712	\$34,233	\$34,970	\$31,494	\$29,172	\$32,738
4–9	\$73,081	\$63,653	\$80,454	\$79,161	\$82,541	\$76,906	\$81,425	\$86,402	\$85,098	\$85,595	\$80,796
10–19	\$122,142	\$116,434	\$132,198	\$144,910	\$150,121	\$146,941	\$157,816	\$169,169	\$172,574	\$171,351	\$153,104
20+	\$226,017	\$207,403	\$231,847	\$263,085	\$272,130	\$271,402	\$298,232	\$334,581	\$331,923	\$343,038	\$288,340

Source: Vanguard, 2023.

Distribution options

DC plan participants who separate from service with an employer may choose among several options. They may:

- Remain in their employer’s plan without initiating installment payments.¹
- Remain in their employer’s plan while taking installment payments.
- Roll over their assets to an IRA.
- Take their account balance in cash.
- Pursue a combination of the above strategies.

During the 2011–2021 period, 77% of participants ages 60 and older who terminated employment chose a single option (100% of account disbursements fell into a single category); the remaining 23% chose a combination of the distribution options. In our analysis, we categorized participants based on whether 80% or more of their account disbursements fell into a particular category. We created a “combination” category for participants whose behavior could not be classified according to the 80% rule.²

¹Plan sponsors have the option of requiring participants with balances of less than \$5,000 to leave the plan. If the balance is greater than \$1,000 and the participant doesn’t make a distribution election, the plan sponsor must roll over the balance to an IRA; balances of less than \$1,000 can be distributed in cash (that is, as a check payable to the participant).

²See the Methodology section on page 11 for additional details regarding our classification scheme.

Participant distribution decisions

Our analysis is based on the calendar year of termination cohorts. Participants terminating in each of the calendar years in our sample, 2011 through 2020, are considered a distinct termination year cohort and are followed separately through year-end 2021. Thus, the 2011 cohort, which consists of participants ages 60 and older leaving their employer in 2011, is examined over 10 subsequent calendar years: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021. The 2020 cohort is analyzed over only one subsequent calendar year: 2021. We only analyzed participant DC plan behavior—participants who rolled over their DC balance to an IRA and then cashed out the IRA were not observed in this analysis. As the 2011 termination year cohort spans the longest period, it is perhaps the best illustration of the dynamics of plan distribution behavior over time (Figures 3 and 4).

In the 2011 termination year cohort:

- Approximately two-thirds of retirement-age participants had preserved assets in a tax-deferred account through the end of 2021 (Figure 3, first column). Specifically, 3% remained in the plan without taking installment payments, 4% remained in the plan while taking installment payments, and 57% completed an IRA rollover. About 3 in 10 retirement-age participants took a cash-out (cashing out either their entire account or more than 80%), accounting for 5% of assets.
- More than 8 in 10 retirement savings dollars were preserved through year-end 2021. Specifically, 8% of assets remained in the plan with no installment payments, 8% of assets remained in the plan with installment payments, and 66% of assets rolled over to an IRA.

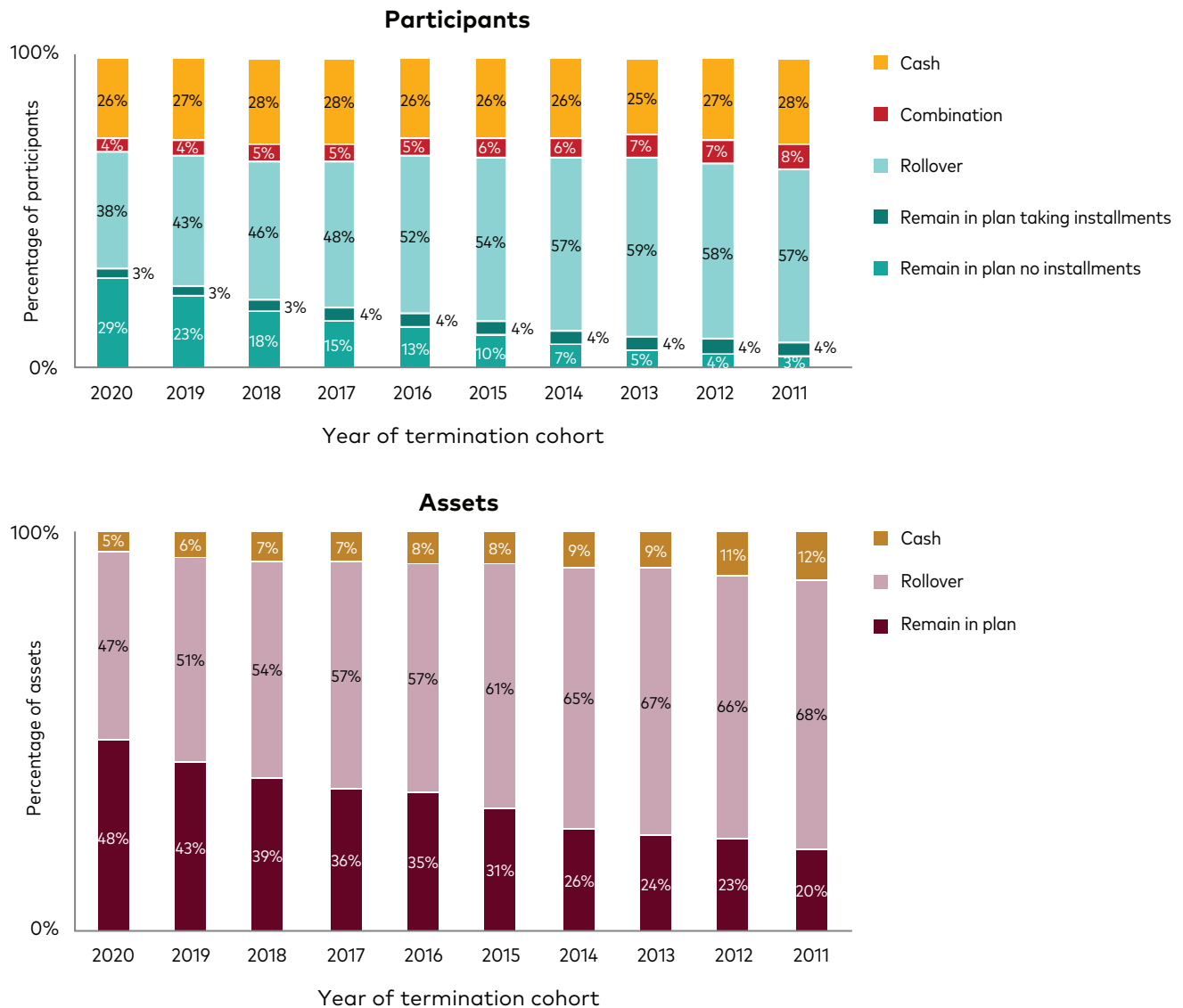
FIGURE 3.
Plan distribution behavior as of year-end 2021
Participants ages 60 and older by termination year cohort

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of participants at year-end 2021										
Remain in plan no installments	3%	4%	5%	7%	10%	13%	15%	18%	23%	29%
Remain in plan taking installments	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%
Rollover	57%	58%	59%	57%	54%	52%	48%	46%	43%	38%
<i>Preserved for retirement</i>	64%	66%	68%	68%	68%	69%	67%	67%	69%	70%
Combination	8%	7%	7%	6%	6%	5%	5%	5%	4%	4%
Cash	28%	27%	25%	26%	26%	26%	28%	28%	27%	26%
Percentage of assets at year-end 2021										
Remain in plan no installments	8%	12%	13%	15%	21%	25%	27%	30%	35%	41%
Remain in plan taking installments	8%	7%	7%	7%	6%	7%	6%	5%	5%	5%
Rollover	66%	65%	65%	64%	60%	56%	55%	53%	49%	45%
<i>Preserved for retirement</i>	82%	84%	85%	86%	87%	88%	88%	88%	89%	91%
Combination	13%	11%	10%	9%	8%	7%	6%	6%	6%	5%
Cash	5%	5%	5%	5%	5%	5%	6%	6%	5%	4%

Note: December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from the plan. Participants are categorized to cash, rollover, and installments if greater than 80% of their account disbursements fell into these categories. Participants are categorized as remain in plan if more than 80% of their account balance remains in the plan. All other participants were categorized to the combination category, as one disbursement type did not dominate their account disbursements and less than 80% of their account remains in the plan.

Source: Vanguard, 2023.

FIGURE 4.
Plan distribution behavior as of year-end 2021
Participants ages 60 and older by termination year cohort



Note: December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from the plan. Participants are categorized to cash, rollover, and installments if greater than 80% of their account disbursements fell into these categories. Participants are categorized as remain in plan if more than 80% of their account balance remains in the plan. All other participants were categorized to the combination category, as one disbursement type did not dominate their account disbursements and less than 80% of their account remains in the plan.

Source: Vanguard, 2023.

We regard the percentage of assets “preserved for retirement” as a low estimate because some of the “combination” participants also preserved part of their savings. The 8% of participants who used a combination strategy accounted for 13% of assets, some of which were preserved for retirement. The other cohorts—retirement-age participants terminating in calendar years 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2020—demonstrated similar behavior.

The main difference is that, given the shorter time periods until the end of 2021, a greater proportion of retirement-age participants and their assets remained in employer plans. For example, in the 2020 termination year cohort, 29% of participants remained in the plan with no installments (versus 3% in the 2011 cohort), and only 38% of participants rolled over to an IRA (versus 57% for the 2011 cohort).

FIGURE 5.

Distribution behavior and average balances

Participants ages 60 and older by termination year cohort

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Average
2021 average account balance by year of termination cohort											
Remain in plan no installments	\$449,200	\$464,900	\$476,300	\$437,400	\$458,100	\$421,200	\$405,200	\$387,000	\$358,700	\$331,500	\$418,900
Remain in plan taking installments	\$293,400	\$337,400	\$333,900	\$327,300	\$346,700	\$406,300	\$362,800	\$362,200	\$350,000	\$352,400	\$347,200
Rollover	\$190,800	\$202,500	\$213,100	\$234,300	\$236,800	\$239,000	\$262,900	\$269,400	\$267,300	\$276,400	\$239,300
Combination	\$283,000	\$287,900	\$283,600	\$292,300	\$277,500	\$286,000	\$262,100	\$290,600	\$288,200	\$345,800	\$289,700
Cash	\$31,100	\$33,400	\$35,800	\$39,600	\$40,400	\$43,200	\$45,400	\$47,500	\$41,900	\$38,200	\$39,700

Note: December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from the plan.

Source: Vanguard, 2023.

Impact of small balances

Cash distributions were strongly linked to smaller balances (Figure 5). The average balance of participants cashing out their entire account balance was around \$39,700 in all termination year cohorts. By comparison, the average balance for participants using any other strategy—remaining in the plan without installments, remaining in the plan with installments, rolling over to an IRA, or using a combination of these—was between \$190,800 and \$476,300, depending on the strategy and termination year cohort.

In-plan behavior

Participants across the “remain in plan no installments,” “remain in plan taking installments,” and “combination” categories had some assets in the plan at the end of our measurement period. For the 2011 cohort, 15% of plan participants had some assets remaining in an employer plan after 10 calendar years following the year of termination (Figure 6). In addition, 21% of the assets remained in the plan after 10 years. Data from the other calendar-year cohorts suggest a similar pattern, although participants who left in more recent years tend to have slightly higher percentages than participants who remained in the plan, compared with those who left employment 10 years ago, signaling a participant trend of preferring to remain in the plan.

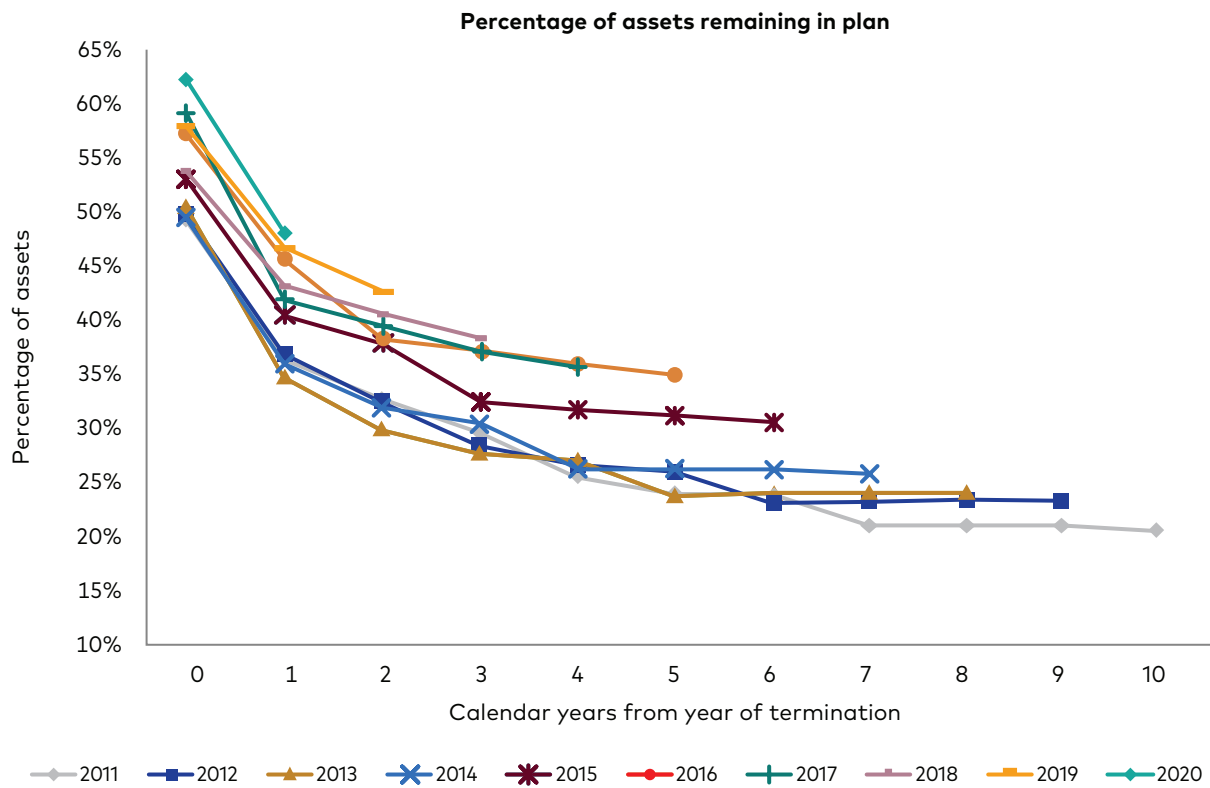
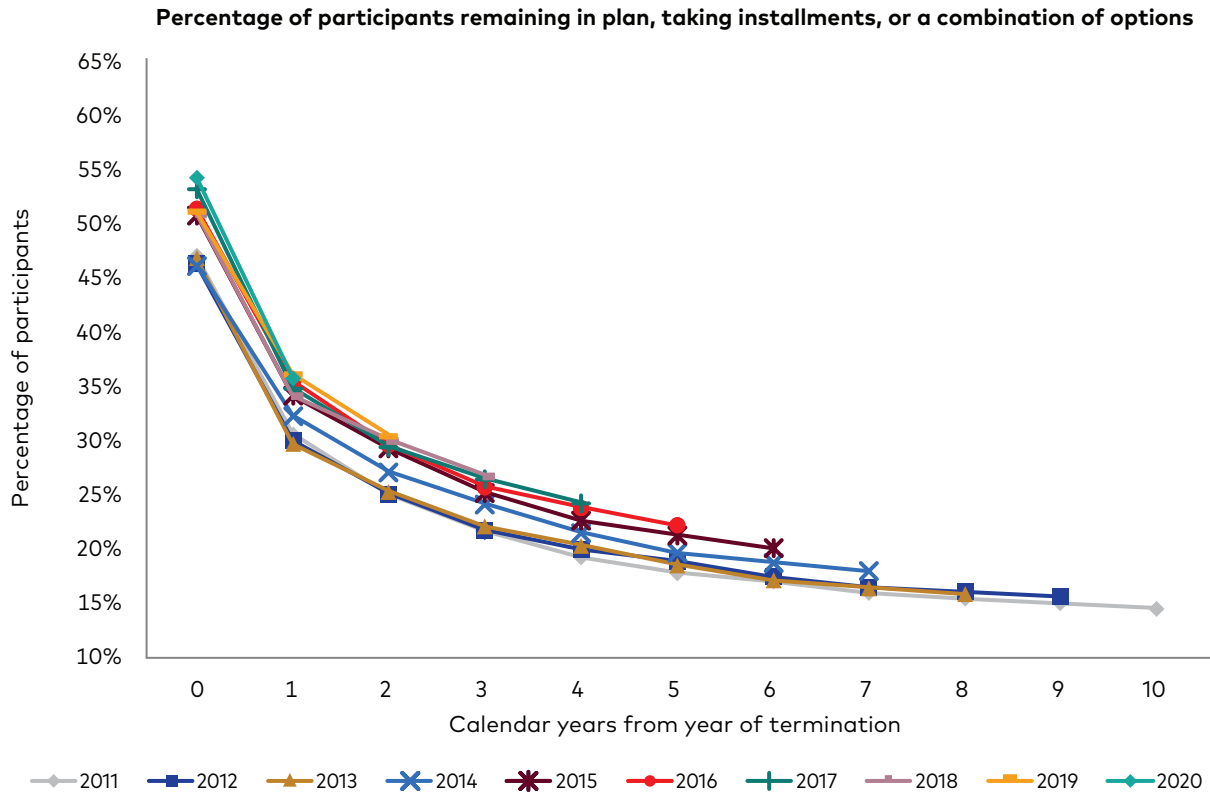
Impact of plan rules

How might plan rules on partial distributions affect participants’ willingness to stay in an employer’s plan? Sixty-three percent of Vanguard DC plans in 2021 required terminated participants to take a distribution of their entire account balance if an ad hoc partial distribution was desired.³ This means that a terminated participant with \$100,000 in savings who wished to make a one-time withdrawal of \$1,000 had to withdraw all of their savings from the plan—by, for example, rolling over the entire \$100,000 to an IRA and withdrawing the \$1,000 from the IRA or by executing an IRA rollover of \$99,000 and taking a \$1,000 cash distribution.

Thirty-seven percent of plans allowed terminated participants to take ad hoc partial distributions, and the adoption of the feature is increasing, with the percentage of plans allowing these distributions nearly doubling from 19% in 2016. In addition, this feature is more common with larger plans, as nearly 3 in 4 plans with 5,000 or more participants allow partial distributions. As a result, 72% of participants were in plans that allowed ad hoc partial distributions in 2021, up from 41% in 2016.

³Ad hoc partial distributions are distinct from the periodic regular installment payments discussed previously.

FIGURE 6.
In-plan behavior over time
Participants ages 60 and older by termination year cohort



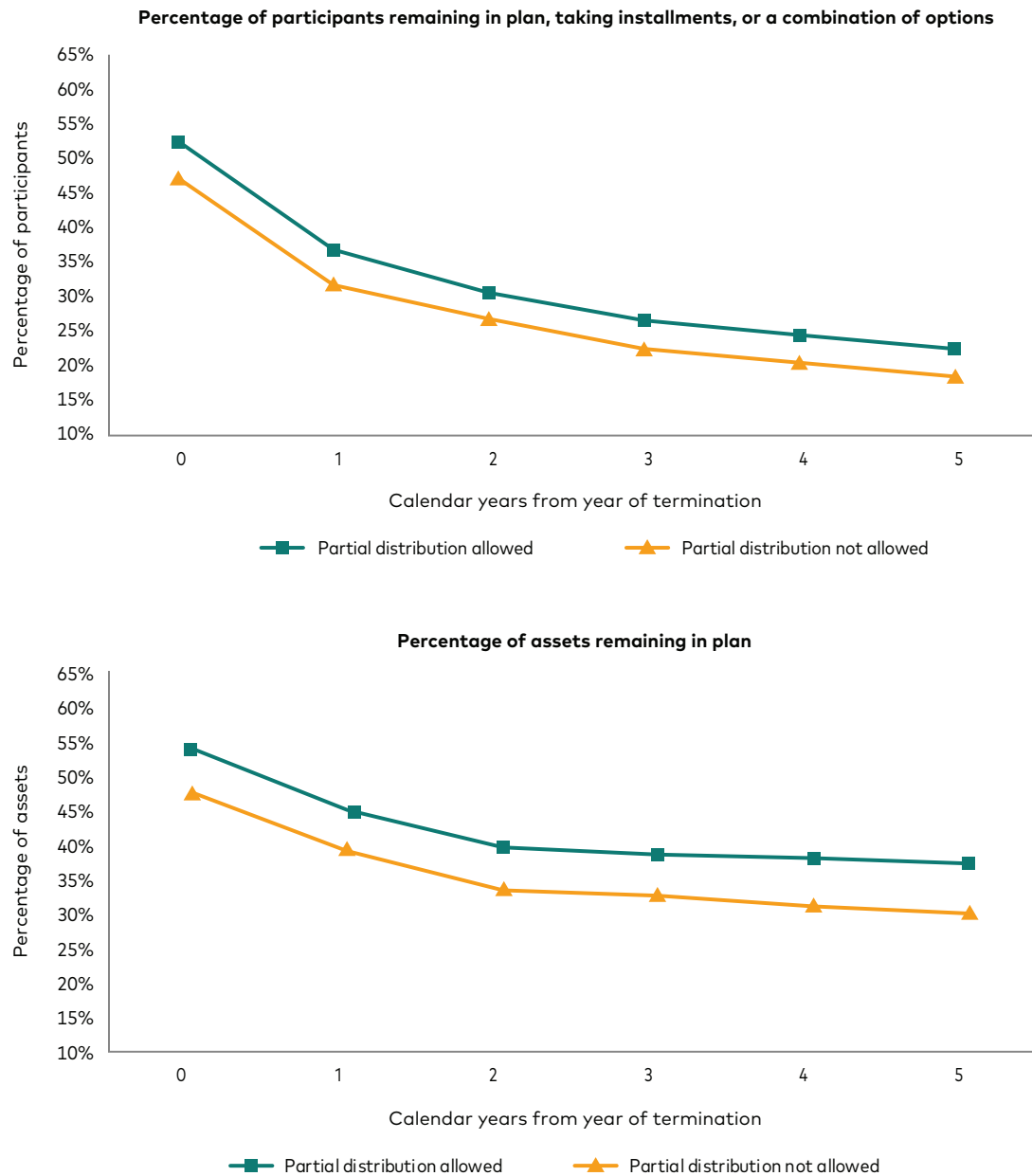
Note: The participant analysis includes the following participant categories: combination, installment, and remain in plan. The assets analysis represents the December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from plan for all five participant categories.

Source: Vanguard, 2023.

Participant behavior is affected by plan rules on partial distributions. For the 2016 termination year cohort, we analyzed participants in plans that allowed partial distributions separately from participants in plans that did not. Their distribution behavior followed a similar trend over time. However, nearly 20% more participants and 25% more assets remained in plans when ad hoc partial distributions were allowed (Figure 7).

In the 2016 cohort, five years after termination, 23% of participants and 38% of assets remained in plans allowing partial distributions compared with 19% of participants and 28% of assets for plans that did not. This suggests that not allowing partial distributions is a factor leading participants to leave their employer's plan.

FIGURE 7.
In-plan behavior and plan rules
Participants ages 60 and older for 2016 termination year cohort



Note: The participant analysis includes the following participant categories: combination, installment, and remain in plan. The assets analysis represents the December 31, 2021, value for assets remaining in the plan plus actual transaction value for assets distributed from plan for all five participant categories.

Source: Vanguard, 2023.

IRA withdrawal decisions

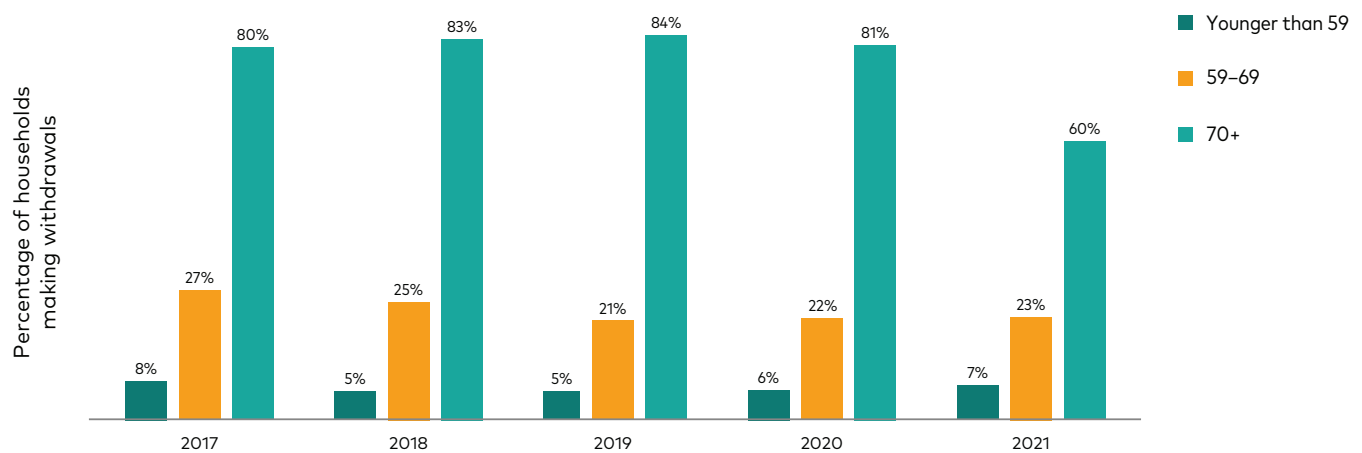
How do terminating participants rolling over assets to an IRA behave after the transfer? Our data does not permit us to track individual investor decisions across the various financial institutions they might roll over to; however, independent survey data provides some insights into IRA behavior. Generally, withdrawals from IRAs are infrequent until the required minimum distribution (RMD) rules apply.

The Investment Company Institute (ICI) found that 22% of households owning traditional IRAs and headed by an individual age 59 to 69 in 2020 reported withdrawals in tax year 2019 (Figure 8).⁴ By comparison, 81% of households headed by an individual age 70 or older reported a withdrawal in 2019. In addition, ICI noted among traditional IRA-owning households with a head of household age 70 or older, 85% indicated their withdrawal was based on the RMD rules in tax year 2020.

The Employee Benefit Research Institute (EBRI) analyzed IRA withdrawal behavior and found that for those younger than the RMD age, 20% took an IRA distribution, compared with 80% who did not.⁵ When observing those older than the RMD age, 84% took the required minimum distribution and 16% took more than the required minimum amount.

Overall, there is little evidence of widespread withdrawals from IRAs for participants before the RMD age.

FIGURE 8.
Percentage of households making IRA withdrawals by age
Households owning traditional IRAs



Note: The figure reports traditional IRA withdrawal activity for the prior year. For example, for traditional IRA-owning households in 2021, the figure reports withdrawal activity for tax year 2020.

Source: Holden and Schrass. *The Role of IRAs in U.S. Households' Saving for Retirement, 2021*. Investment Company Institute, January 2022.

⁴*The Role of IRAs in U.S. Households' Saving for Retirement, 2021*. Investment Company Institute, January 2022.

⁵*In Data There Is Truth: Understanding How Households Actually Support Spending in Retirement*. EBRI Issue Brief, June 2021.

Implications

Our analysis of retirement-age participants from 2011 through 2021 reveals several important findings regarding plan distribution behavior among our calendar-year cohorts. First, 7 in 10 participants took steps to preserve assets, and 9 in 10 plan dollars were preserved for retirement. Second, cash-out behavior was strongly linked to smaller account balances. Those cashing out had average balances of \$39,700. Other behaviors—remaining in the plan, rolling over to an IRA, or using a combination of strategies—were linked to average balances of \$190,800 and \$476,300 (depending on the year of termination). Third, about one-quarter of retirement-age participants and one-third of assets remained in the employer plan after five calendar years following the year of termination. However, there is a trend in more recent retirement-age participants remaining in the plan, perhaps incentivized as retirement plans provide features that increase withdrawal flexibility. Finally, most retirement-age IRA-owning households and most IRA assets were not accessed until after age 70, when the RMD rules apply.

These findings have implications for two issues: the “to versus through” debate in the design of the glide path for target-date funds and the expected demand for in-plan retirement income programs.

In terms of target-date funds, our findings suggest that most plan assets are preserved in tax-deferred retirement accounts. Participants’ strong tendency to preserve assets for retirement supports a “through” glide path in target-date funds—in other words, a glide path that assumes that participants will remain invested into retirement.

In terms of retirement income programs, as participants are increasingly remaining in their plan, plan sponsors may want to consider various retiree-friendly plan designs to help their retired participants. Features such as ad hoc distributions, installment services, eliminating age restrictions, and allowing rollover assets into the plan for terminated participants can all help provide a more hospitable environment for retirees. When these types of features are paired with benefits such as cost-effective advice, institutional pricing, and ongoing fiduciary oversight, many retirees may find additional value in remaining in the plan.

Methodology

DC plan participants who separate from service with an employer may choose among several options. They may:

- Remain in their employer's plan without initiating installment payments.⁶
- Remain in their employer's plan while taking installment payments.
- Roll over their assets to an IRA.
- Take their account balance in cash.
- Pursue a combination of the above strategies.

In analyzing those remaining in their employer's plan, we distinguished those who remained in their employer plan from those who established installment payments from their account. Sixty-four percent of plans on the Vanguard recordkeeping system in 2021 allowed participants to establish installment payments—periodic monthly, quarterly, or annual payments from their account. Nearly all plans have automated RMD payments. During the 2011–2021 period, 77% of participants ages 60 and older who terminated employment chose a single option (100% of account disbursements fell into a single category); one-fifth chose a combination of the distribution options.

We categorized participants based on whether 80% or more of their account disbursements fell into a particular category. We were able to categorize participant assets based on both the participant category and the actual dollar flows. For example, suppose that three years after termination, a participant had taken a cash distribution equal to 15% of their account balance, with 85% of assets remaining in the plan account. In terms of participant category, the participant would be classified as remaining in the plan; in terms of asset flows, 15% of flows could be categorized as "cash" and 85% of flows as "remaining in the plan."

We created a "combination" category for participants whose behavior could not be classified according to the 80% rule. For example, if a participant cashed out 50% of assets and rolled over 50% of assets to an IRA, they were classified as a "combination" participant because neither strategy (cash-out or rollover) dominated the distribution decision by exceeding 80% of assets. In our analysis of aggregate asset flows, the assets are classified based on actual flows—50% rollover and 50% cash distribution.

The value of advice

As Vanguard's paper *The Value of Personalized Advice* illustrates, investors can get substantial value from receiving personalized advice that meets their individual goals—value that can extend beyond simply investment performance. The case studies presented in the paper show value for hypothetical sets of clients ranging from 83 to 285 basis points annually. However, the value for any investor could be above or below that range.

Vanguard offers its own proprietary advice services and advice powered by Edelman Financial Engines®, a third-party advisor—and the services are gaining attention. During the past five years, the percentage of plans offering a managed account advice program has grown by more than 30%, and in turn, the percentage of participants offered the service has grown by a similar amount. And in 2021:

- Forty-one percent of all plans offered managed account advice.
- Nearly 8 in 10 larger plans (those with at least 5,000 participants) offered advice.
- Because larger plans are more likely to offer advice, 3 in 4 participants had access to advice.

⁶Plan sponsors have the option of requiring participants with balances of less than \$5,000 to leave the plan. If the balance is greater than \$1,000 and the participant doesn't make a distribution election, the plan sponsor must roll over the balance to an IRA; balances of less than \$1,000 can be distributed in cash (that is, as a check payable to the participant).

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Investments in target-date funds are subject to the risks of their underlying funds. The year in the fund name refers to the approximate year (the target date) when an investor in the fund would retire and leave the workforce. The fund will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in target-date funds is not guaranteed at any time, including on or after the target date.

When taking withdrawals from a tax-deferred plan before age 59½, you may have to pay ordinary income tax plus a 10% federal penalty tax. Nonqualified withdrawals from a health savings account may be subject to taxes and a 20% federal penalty tax.

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