Target-date fund adoption in 2020

Vanguard Research Note | March 2021

In 2020, 62% of Vanguard participants in defined contribution (DC) plans were invested in a professionally managed account option, including 54% who were invested in a single target-date fund (TDF). Use of TDFs in DC plans continues to grow. At year-end 2020, 95% of plans offered a TDF, 80% of all participants had a position in one, and the funds accounted for 37% of plans' assets and 60% of total plan contributions.

Introduction

TDFs continue to grow in importance in DC plan investment menus.[1] They replace the complex task of portfolio construction with the simplified choice of an expected date of retirement and provide automatic age-based rebalancing over time. They are likely to appeal to less-sophisticated or less-engaged investors looking for a streamlined portfolio decision, as well as to sponsors seeking a default investment for automatic enrollment. TDFs are an eligible qualified default investment alternative (QDIA) under the Pension Protection Act of 2006 (PPA).[2]

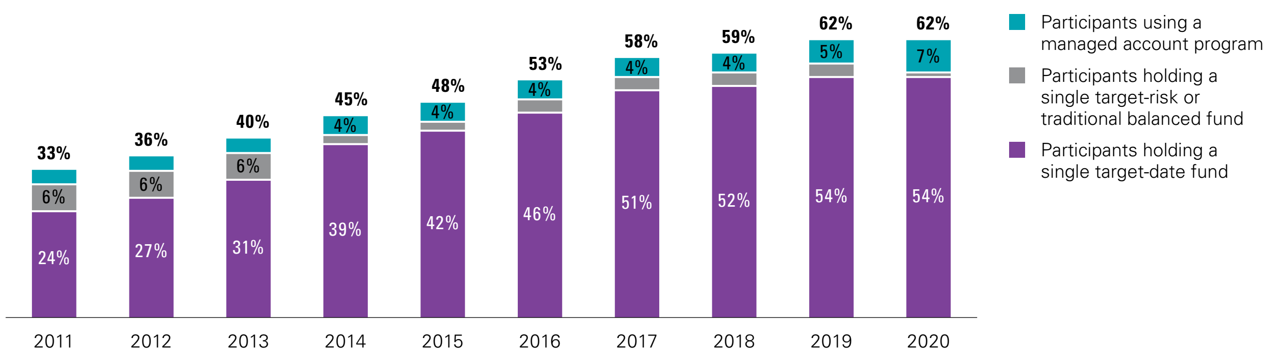
Figure 1 on page 2 shows that the percentage of participants with professionally managed allocations has grown steadily since 2011. In 2020, 62% of Vanguard participants were invested in a professionally managed allocation—in other words, their entire account balances were invested in a single TDF, a single target-risk or traditional balanced fund, or a managed account advisory service. Driving this development is the growing use of TDFs. Fifty-four percent of participants were invested in a single TDF in 2020—a percentage that has more than doubled over the past ten years. **Figure 2** on page 2 shows that the percentage of new plan entrants (those entering the plan for the first time) with professionally managed allocations has also grown since 2011. Among new plan entrants, 84% were invested in a single TDF in 2020.

1 Our analysis is based on data from plans for which Vanguard provided direct recordkeeping services. We analyzed 4.7 million participants in 1,700 DC plans.

2 QDIAs include target-date funds, other balanced funds, and managed account advisory services.

Figure 1. Participants with professionally managed allocations

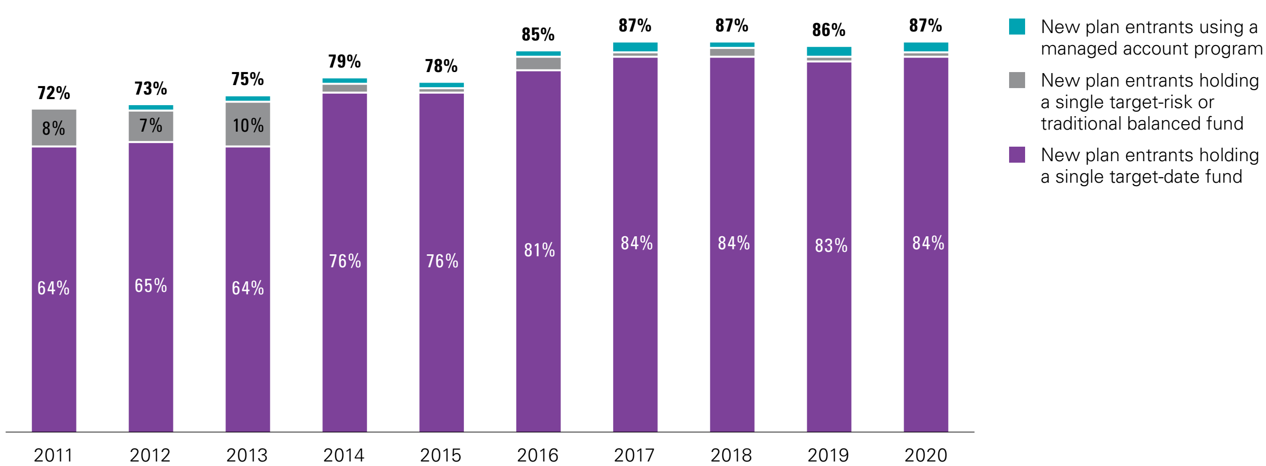
Vanguard defined contribution plans



Source: Vanguard, 2021.

Figure 2. New plan entrants with professionally managed allocations

Vanguard defined contribution plans



Source: Vanguard, 2021.

Target-date fund adoption

Figure 3 illustrates how plan use of TDFs according to several metrics has increased. TDF adoption by Vanguard plan sponsors grew from 82% of plans in 2011 to 95% of plans in 2020. TDFs accounted for 37% of total Vanguard DC plan assets and 60% of total DC plan contributions in 2020.

Plan design and target-date funds

Automatic enrollment—and the choice of the TDF series as a default investment—is a major factor in the rise of TDFs. By year-end 2020, slightly more than half of Vanguard plans had adopted automatic enrollment.[3] Its use by Vanguard plan sponsors has grown by about 80% since 2011. Among plans with more than 1,000 participants, nearly three-quarters had adopted the feature by 2020. Among all Vanguard participants, 64% were in automatic enrollment plans.

Figure 4 shows the default fund designations in 2020. Whether or not they used automatic enrollment, 92% of all Vanguard plans had selected a target-date or balanced fund as a default investment by year-end. Among plans with automatic enrollment, 98% were using TDFs as their default. Eighty-seven percent of plans had specifically designated a QDIA, which offers plan sponsors additional fiduciary protection. Typically, these plans use automatic enrollment or make employer contributions other than a match (such as a nonelective profit-sharing contribution). Among plans designating a QDIA, 97% were target-date options and 3% were balanced funds.

Figure 3. Plan use of target-date funds

Vanguard defined contribution plans

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage of plans offering TDFs	82%	84%	86%	88%	90%	92%	92%	93%	94%	95%
Percentage of assets in TDFs	14	17	19	23	26	28	33	35	37	37
Percentage of contributions in TDFs	27	31	34	41	46	49	54	57	59	60
Percentage of participants using TDFs	47	51	55	64	69	72	75	77	78	80

Source: Vanguard, 2021.

Figure 4. Default fund designations, 2020

Vanguard defined contribution plans

		QDIA plans	Non-QDIA plans	All plans
Among all plans	Target-date fund	84%	4%	88%
	Balanced fund	3	1	4
		87%	**5%**	**92%**
	Money market or stable value		6%	6%
	Total plans designating default	**87%**	**11%**	**98%**
Among plans designating a QDIA	Target-date fund	97%		
	Balanced fund	3		
	Total plans designating QDIA	**100%**		

Source: Vanguard, 2021.

3 For an in-depth analysis of automatic enrollment, see Clark, Jeffrey W., and Jean A. Young, 2021, *Automatic Enrollment: The Power of the Default*, available at institutional.vanguard.com.

Participant use of target-date funds

Figure 5 shows how participant use of TDFs according to several metrics has increased. By year-end 2020, nearly all Vanguard participants (99%) were in plans offering TDFs. Eighty percent of those had an investment in TDFs, and 59% of those account balances on average were invested in these funds. Participants holding TDFs directed 81% of their 2020 total contributions to TDFs.

We characterize participants who invest in TDFs in one of two ways. "Pure investors" are those who hold only a single TDF. They accounted for 68% of all target-date investors in 2020. Of this total, about six in ten joined their plan under automatic enrollment, where they typically were enrolled in a single fund by default. About four in ten joined through voluntary enrollment, where they typically actively chose a single TDF. Our research shows that pure target-date investors are more likely to be younger, lower-wage, shorter-tenured participants with lower 401(k) account balances than other investors. Sixty-two percent of single-TDF investors were younger than 45.

The remaining target-date participants are "mixed investors." They hold a TDF in combination with other investments (or, rarely, hold multiple TDFs). In 2020, 32% of all target-date investors were in this category. Mixed target-date investors appear very much like non-target-date investors in terms of their demographic and portfolio characteristics.

Our research indicates that about half of mixed investors become so because of plan sponsor action, including employer contributions in company stock, nonelective contributions to the plan's default fund, recordkeeping corrections applied to the plan's default fund, or mapping of assets from an existing investment option to a target-date default because of a plan menu change.[4]

The remaining mixed investors intentionally construct a portfolio of both target-date and non-target-date strategies. Many of them are pursuing what appear to be reasonable diversification strategies, although they do not fit within the "all-in-one" portfolio approach of target-date funds. Vanguard survey results show that most target-date investors understand the basic risk and return features of TDFs.[5] Large percentages of them report that they hold other assets to make their portfolio allocation more conservative, more aggressive, or more customized. Forty percent cite diversification as a reason for holding additional investments.

Equity allocation extremes

Figure 6 shows the distribution of equity exposure in 2020 by four investor types: three professionally managed (single TDF, single-balanced fund, and managed account), and "all other" participants. Increased TDF adoption by sponsors and participants is reshaping participant portfolios. One of the benefits of TDFs is that they eliminate extreme equity allocations. About two in ten of the "all other" or "do-it-yourself" participants tend to hold greater extremes in equity exposure (no equities or only equities). Investors using professional management avoid extreme positions because professionally managed options include both equity and fixed income asset classes. Do-it-yourself investors exhibit less variation in equity exposure by age, while single-TDF investors' equity exposures do vary by age.

Figure 5. Participant use of target-date funds

Vanguard defined contribution plan participants using target-date funds

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Percentage offered TDFs	87%	88%	90%	97%	98%	97%	97%	97%	98%	99%
Percentage using TDFs when offered	54	58	61	66	70	74	77	79	80	80
Percentage of account balances in TDFs	43	46	48	50	51	53	57	58	60	59
Percentage of contributions in TDFs	71	72	74	75	76	78	80	81	81	81
Percentage with 100% of assets in TDFs	53	56	58	62	63	66	69	70	71	70
Percentage with 100% of contributions in TDFs	69	69	71	69	73	76	79	80	79	78
Percentage holding a single TDF	52	54	56	60	62	65	68	68	69	68

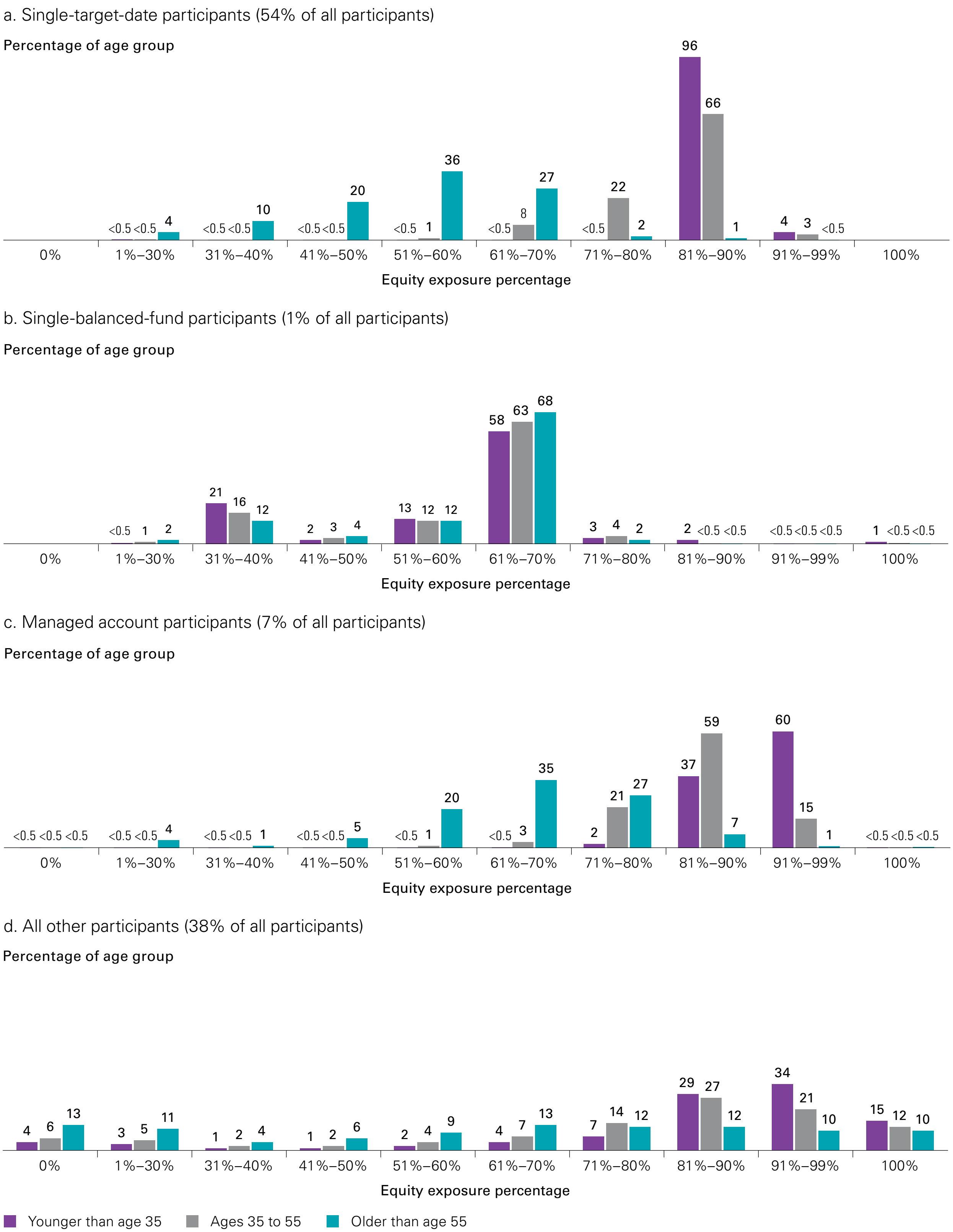
Source: Vanguard, 2021.

4 Pagliaro, Cynthia A., and Stephen P. Utkus, 2017, *A Different Kind of Target-Date Investor.* Valley Forge, Pa.: The Vanguard Group.

5 Ameriks, John, Dean J. Hamilton, and Liqian Ren, 2011, *Investor Comprehension and Usage of Target-Date Funds: 2010 Survey.* Valley Forge, Pa.: The Vanguard Group.

Figure 6. Distribution of equity exposure by investor type, 2020

Vanguard defined contribution plan participants



Source: Vanguard, 2021.

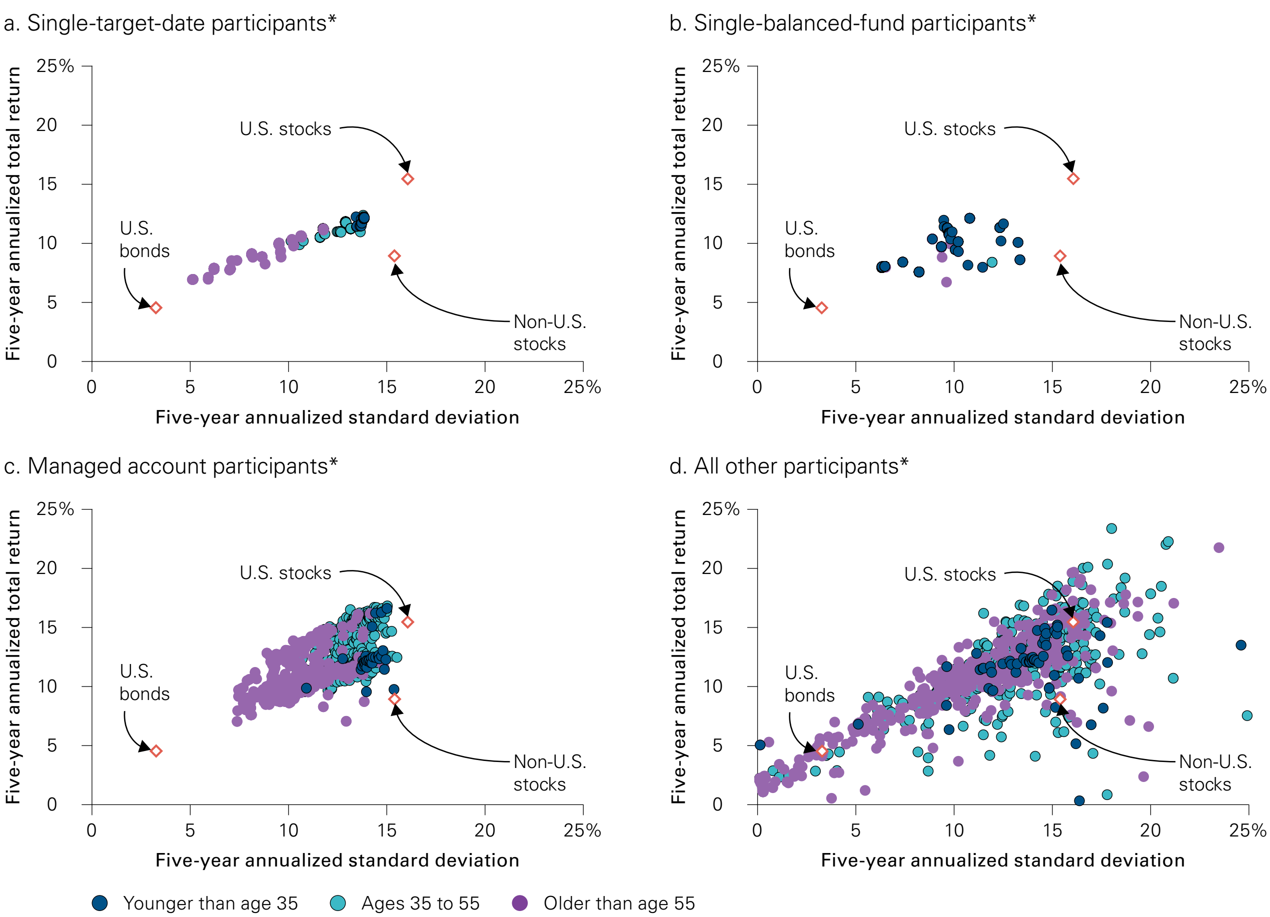
Among pure target-date investors, the vast majority have equity allocations ranging from 51% to 90% of their portfolios, many of those in the 81% to 90% range. This phenomenon reflects two facts: (1) automatic enrollment in TDFs typically applies to newly eligible plan participants, who are disproportionately younger than 45, and (2) in voluntary enrollment plans, a single TDF is a popular strategy among new hires.

Dispersion of outcomes

Figure 7 shows the dispersion of five-year annualized returns for our four investor types. During the period ended in 2020, outcomes for single-target-date investors were distributed among major market indexes (see Panel a). They were slightly upward-sloping, indicating a positive equity risk premium. These results are consistent with the fact that most of the target-date portfolios in our sample are a specific combination of indexed U.S. equities, international equities, U.S. bonds, and international bonds. In the target-date scatter plot, younger participants (represented by navy blue dots and in long-dated portfolios) are to the right of the chart; older participants (represented by purple dots and in near-dated portfolios) are to the left.

Figure 7. Risk and return characteristics, 2016–2020

Defined contribution plan participants for the five-year period ended December 31, 2020



Notes: This figure includes 1,000 random sample of participant accounts drawn from respective samples. It excludes 1/2% top and 1/2% bottom outliers for both risk and return, for a net sample of 980 observations.

Source: Vanguard, 2021.

* U.S. stocks are represented by the MSCI US Broad Market Index, non-U.S. stocks are represented by the MSCI AC World Index ex US, and U.S. bonds are represented by the Bloomberg Barclays US Aggregate Bond Index. **Past Performance is not a guarantee of future results.** Index returns do not reflect fees and expenses but do reflect reinvestment of dividends, capital gains, and interest. Indexes are unmanaged; therefore, direct investment is not possible.

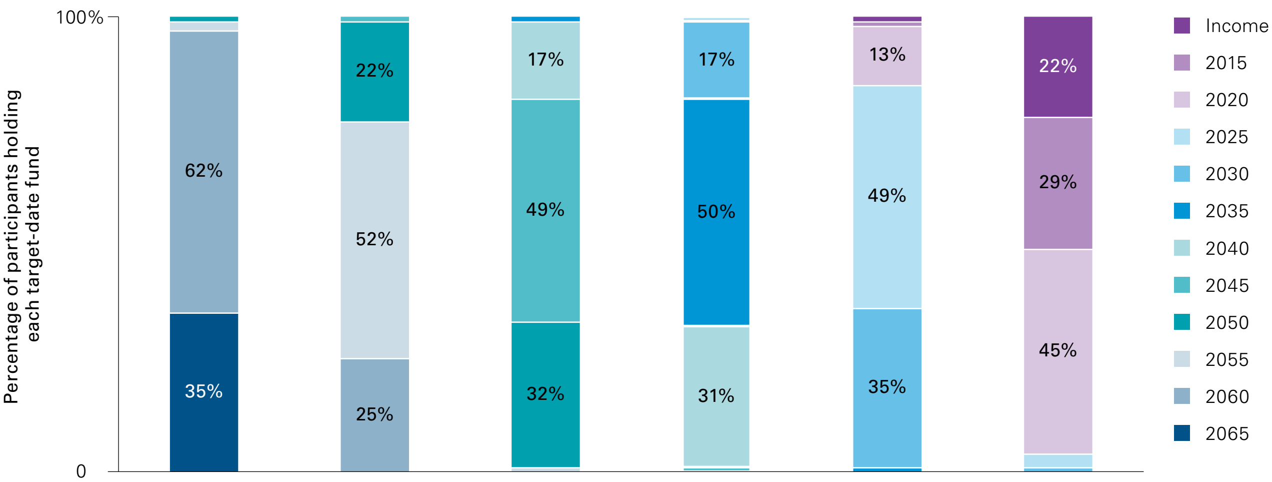
The results for single-balanced-fund investors reflect the fact that most balanced funds have similar ranges of equity allocations, typically around 35% to 65% of assets (Panel b). Managed account investors are more dispersed, revealing the customized nature of managed account advice (Panel c). The greatest dispersion of risk/return outcomes is among participants making their own investment choices (Panel d). Over time, because of the historical increase of professionally managed allocations in DC plans, this population has declined.

Target-date fund selection

Figure 8 shows TDF use by single-TDF investors according to age in 2020. Single-TDF investors appear to select, or are defaulted into, a TDF with an appropriate target date. Six in ten participants under age 25 are invested in a 2060 TDF, and most of the rest use a 2065 TDF. Similarly, about half of participants ages 55 to 64 are invested in a 2025 TDF, with most of those remaining using either the 2020 or 2030 TDF.

Figure 8. Target-date fund utilization by age, 2020

Vanguard defined contribution plan participants holding a single target-date fund (54% of all participants)



Participant age	<25	25–34	35–44	45–54	55–64	65+
Percentage of single-target-date fund holders	6%	30%	26%	20%	14%	4%

Source: Vanguard, 2021.

Account balances

Figure 9 shows average and median account balances in 2020 for each of our four investor types. Average and median account balances for single-TDF investors were about 40% of the assets accumulated by all participants. As noted above, our research shows that these investors are more likely to be younger, lower-wage, and shorter-tenured. Managed account investors have balances that are higher, indicating longer tenure and plan participation.

Conclusion

TDFs continue to reshape investment patterns in DC plans in fundamental ways. Three factors are driving their growing use by plan sponsors and participants: their simplified approach to investment decision-making and portfolio construction, the growing use of automatic enrollment, and their designation as a QDIA under the PPA.

By design, the funds lead to a disciplined approach to portfolio risk-taking, with risk levels falling as an investor ages. They also help remedy the problem of extreme allocations found among many DC plan participants. For these reasons, their adoption is likely to continue to rise in the coming years.

Figure 9. Account balance by investor type, 2020

Vanguard defined contribution plan participants

		Percentage of participants	Average	Median
Professionally managed allocations	Single-target-date investors	54%	$49,880	$13,714
	Single-balanced-fund investors	1	103,806	33,418
	Managed account investors	7	179,347	81,492
	All other investors	38	232,783	98,002
	Total	**100%**	**$129,157**	**$33,472**

Source: Vanguard, 2021.

Connect with Vanguard® > vanguard.com

Vanguard research authors

Jeffrey W. Clark
John A. Lamancusa
Jean A. Young

ISGTDFA 032021