

October 25, 2023 • No. 594



# Changes in 401(k) Plan Asset Allocation Among Consistent Participants, 2016–2020

By Sarah Holden, ICI; Steven Bass, ICI; and Craig Copeland, EBRI

### **Key Findings:**

This paper provides an update of a longitudinal analysis of 401(k) plan participants drawn from the EBRI/ICI 401(k) database.

Because the annual cross sections cover participants with a wide range of participation experience in 401(k) plans, meaningful analysis of how 401(k) participants' asset allocations evolve over their lifecycle must examine the asset allocation of 401(k) plan accounts of participants who maintained accounts over all of the years being studied (consistent participants). A few key insights emerge from looking at the 3.7 million consistent participants in the EBRI/ICI 401(k) database over the four-year period from year-end 2016 to year-end 2020.

- Consistent 401(k) participants' exposure to equities was relatively unchanged between year-end 2016 and year-end 2020. At year-end 2016, 92.9 percent of consistent 401(k) plan participants held some equities (equity funds, target date funds, non-target date balanced funds, or company stock). This was little changed at year-end 2020, with 94.3 percent of consistent 401(k) plan participants holding equities. Movement toward holding some equities was highest among participants in their twenties: 91.1 percent held equities at year-end 2016, and 96.5 percent held equities at year-end 2020.
- Older consistent 401(k) participants increased their exposure to target date funds between yearend 2016 and year-end 2020. At year-end 2016, 56.5 percent of consistent 401(k) participants held at least some target date fund investments in their 401(k) accounts, and that share increased to 58.9 percent at yearend 2020. The net movement toward target date fund use over the period occurred among consistent 401(k) participants in their forties, fifties, and sixties. Participants in their twenties had the highest use of target date funds in both periods but experienced negligible net change.
- Most consistent 401(k) participants who were fully invested in target date funds at year-end 2016 remained fully invested in target date funds at year-end 2020. Among consistent 401(k) plan participants who were fully invested in target date funds at year-end 2016, more than three-quarters remained fully invested in target date funds at year-end 2020. This high level of persistence in target date fund investing was observed across all participant age groups.

Sarah Holden is Senior Director of Retirement and Investor Research at the Investment Company Institute (ICI). Steven Bass is an economist at ICI. Craig Copeland is the Director of Wealth Benefits Research at the Employee Benefit Research Institute (EBRI). Thanks to Adam Bensimhon, EBRI data compliance and IT director, for data tabulations. This *Issue Brief* was written with assistance from the Institute's research and editorial staffs. Any views expressed in this report are those of the author and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

**Suggested Citation:** Holden, Sarah, Steven Bass, and Craig Copeland, "Changes in 401(k) Plan Asset Allocation Among Consistent Participants, 2016–2020," *EBRI Issue Brief*, no. 594, and *ICI Research Perspective*, vol. 29, no. 8 (October 2023).

**Copyright Information:** This report is copyrighted by the Employee Benefit Research Institute (EBRI). You may copy, print, or download this report solely for personal and noncommercial use, provided that all hard copies retain any and all copyright and other applicable notices contained therein, and you may cite or quote small portions of the report provided that you do so verbatim and with proper citation. Any use beyond the scope of the foregoing requires EBRI's prior express permission. For permissions, please contact EBRI at <a href="mailto:permissions@ebri.org">permissions@ebri.org</a>.

Report Availability: This report is available on the internet at www.ebri.org

For all of the figures in this report, components may not add to the totals presented because of rounding.

### **Table of Contents**

Introduction	3
Sample of Consistent 401(k) Participants, 2016–2020	3
Factors Determining Changes in Consistent 401(k) Participants' Asset Allocations	4
Changes in Consistent 401(k) Participants' Allocations to Equities Between 2016 and 2020	5
Evidence of Reallocation Activity to or from Equities Among Consistent 401(k) Participants	6
Changes in Consistent 401(k) Participants' Allocations to Target Date Funds Between 2016 and 2020	8
Evidence of Reallocation Activity to or from Target Date Funds Among Consistent 401(k) Participants	8
References	
Endnotes	11
Figures	
Figure 1, Average Asset Allocation of 401(k) Plan Accounts by Participant Age	4
Figure 2, Domestic Stock and Bond Market Indexes	5
Figure 3, Consistent 401(k) Participants' Investment in Equities and Target Date Funds	6
Figure 4, Changes in Allocation to Equities Among Consistent 401(k) Participants	7
Figure 5, Changes in Allocation to Target Date Funds Among Consistent 401(k) Participants	9

# Changes in 401(k) Plan Asset Allocation Among Consistent Participants, 2016–2020

By Sarah Holden, ICI; Steven Bass, ICI; and Craig Copeland, EBRI

### Introduction

The EBRI¹/ICI² 401(k) database, which is constructed from the administrative records of 401(k) plans, represents a large cross section, or snapshot, of 401(k) plans at the end of each year. It is a cross section of the entire population of 401(k) plan participants, and it represents a wide range of participants—including those who are young and individuals who are new to their jobs, as well as older participants and those who have been with their current employers for many years.³

Although annual updates of the EBRI/ICI 401(k) database provide valuable perspectives on 401(k) plan account balances, asset allocation, and loan activity across wide cross sections of participants, cross-sectional analyses are not well suited to examining the impact of consistent participation in 401(k) plans. Cross sections change in composition from year to year because the selection of data providers and sample of plans using a given provider vary, and because 401(k) participants join or leave plans.<sup>4</sup> In addition, examining changes in aggregate asset allocation among the entire database may neglect important variation in activity among individual participants. To explore the full scope of ongoing participation in 401(k) plans and to understand how 401(k) plan participants have behaved over recent years, it is important to analyze a consistent group of participants (a longitudinal sample) who have been part of the database for an extended period—in this case, year-end 2016 through year-end 2020.<sup>5</sup>

### Sample of Consistent 401(k) Participants, 2016-2020

Among the 401(k) participants with accounts at the end of 2016 in the EBRI/ICI 401(k) database, 3.7 million are in the consistent sample.<sup>6</sup> These consistent participants had accounts at the end of each year from 2016 through 2020; they make up a longitudinal sample, which removes the effect of participants and plans entering and leaving the database. Over this period, the consistent participants' aggregate allocation to equities was relatively unchanged, from 67.2 percent of 401(k) plan assets at year-end 2016 to 68.3 percent at year-end 2020 (Figure 1). Over the same time period, their allocation to target date funds increased modestly, from 27.4 percent of aggregate 401(k) plan assets to 30.8 percent.

#### Figure 1

### Average Asset Allocation of 401(k) Plan Accounts by Participant Age

Percentage of 401(k) plan account balances

#### Year-end 2016

		Balar	ced funds							
Age group	Equity funds	Target date funds <sup>1, 2</sup>	Non-target date balanced funds	Bond funds	Money funds	GICs <sup>2, 3</sup> and other stable value funds	Company stock <sup>2</sup>	Other	Unknown	Memo: equities⁴
20s	25.6%	58.2%	2.1%	3.4%	0.3%	1.6%	2.0%	1.8%	5.0%	80.6%
30s	35.0%	45.8%	2.8%	4.9%	0.7%	2.9%	3.7%	2.6%	1.6%	80.8%
40s	44.0%	31.5%	3.2%	6.5%	0.9%	4.5%	4.9%	3.1%	1.3%	77.0%
50s	44.6%	24.9%	3.7%	8.2%	1.0%	7.0%	5.7%	3.4%	1.3%	68.8%
60s	38.7%	24.7%	3.8%	10.8%	1.2%	10.6%	4.9%	4.0%	1.3%	57.3%
All consistent sample <sup>5</sup>	41.8%	27.4%	3.6%	8.6%	1.0%	7.6%	5.1%	3.6%	1.3%	67.2%

#### Year-end 2020

		Balar	nced funds							
Age group	Equity funds	Target date funds <sup>1, 2</sup>	Non-target date balanced funds	Bond funds	Money funds	GICs <sup>2, 3</sup> and other stable value funds	Company stock <sup>2</sup>	Other	Unknown	Memo: equities⁴
20s	33.1%	53.4%	4.4%	4.5%	0.3%	1.1%	1.2%	1.4%	0.7%	86.4%
30s	38.8%	44.6%	4.0%	5.0%	0.6%	2.2%	2.2%	1.9%	0.8%	84.0%
40s	46.7%	32.8%	2.3%	6.9%	0.9%	3.9%	3.4%	2.3%	0.9%	77.4%
50s	44.7%	28.6%	2.8%	8.8%	1.0%	6.6%	4.0%	2.7%	0.8%	67.1%
60s	38.8%	28.1%	3.4%	11.1%	1.4%	10.0%	3.7%	2.8%	0.9%	57.0%
All consistent sample <sup>5</sup>	42.9%	30.8%	3.0%	8.6%	1.0%	6.5%	3.6%	2.6%	0.9%	68.3%

<sup>&</sup>lt;sup>1</sup>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.

5Asset allocation by age group is among the consistent sample of 3.7 million 401(k) plan participants with account balances at the end of each year from 2016 through 2020.

Note: Funds include mutual funds, bank collective trusts, life insurance separate accounts, and any pooled investment product primarily invested in the security indicated. Age group is based on the participant's age at year-end 2020. Percentages are dollar-weighted averages.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### Factors Determining Changes in Consistent 401(k) Participants' Asset Allocations

Changes in 401(k) plan asset allocation are determined by three factors:

- gains or losses on the investments held in the 401(k) plan account,
- contributions to or withdrawals from the account in a different proportion than the existing mix of assets, and
- changes to the assets held inside of the account (including rebalancing and changes in the underlying asset allocation of funds, such as target date funds).

Between year-end 2016 and year-end 2020, stock markets generally appreciated more than bond markets (Figure 2). All else equal, this would have tended to increase the proportion of 401(k) plan assets invested in equities. However, allocation to equities was essentially constant over the period (67.2 percent at year-end 2016 and 68.3 percent at year-end 2020) (Figure 1). While it is not possible to directly observe the impact of each of these factors inside the EBRI/ICI 401(k) database, it is possible to observe whether participants entered or exited an asset class entirely over the period analyzed. To gain insight into participant behavior, changes in allocation to equities overall—and to target date funds, in particular—are examined. For the most part, there were relatively small changes in consistent 401(k) plan participants' exposure to equities between year-end 2016 and year-end 2020.

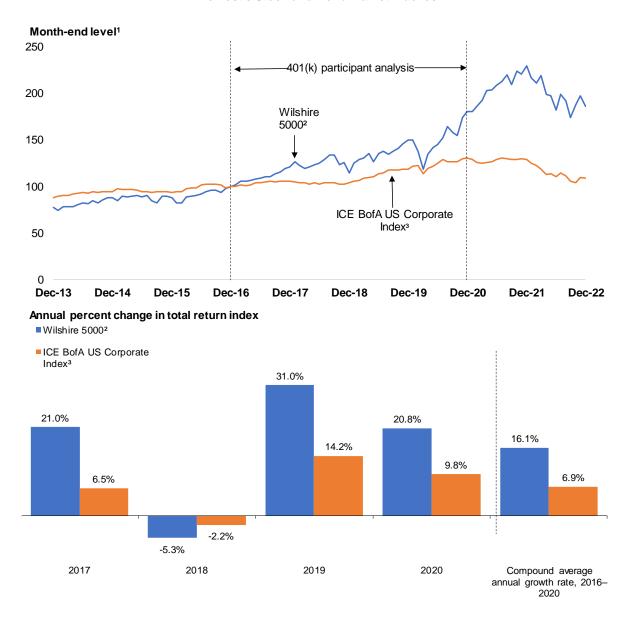
<sup>&</sup>lt;sup>2</sup>Not all participants are offered this investment option.

<sup>&</sup>lt;sup>3</sup>GICs are guaranteed investment contracts.

Equities include equity funds, company stock, the equity portion of target date funds, and the equity portion of non–target date balanced funds.

Figure 2

Domestic Stock and Bond Market Indexes



<sup>&</sup>lt;sup>1</sup> All indexes are set to 100 in December 2016.

Sources: Federal Reserve Bank of St. Louis, ICE Data Indices, and Wilshire Associates

# Changes in Consistent 401(k) Participants' Allocations to Equities Between 2016 and 2020

At both year-end 2016 and year-end 2020, more than 90 percent of consistent 401(k) plan participants had at least some exposure to equities, whether through equity funds, the equity portion of target date funds, the equity portion of non–target date balanced funds, or company stock. The share of consistent 401(k) participants who held at least some equities in their 401(k) accounts changed little from year-end 2016 (92.9 percent) to year-end 2020 (94.3 percent) (Figure 3). Increased equity exposure was found among participants of all ages, but those in their twenties showed the

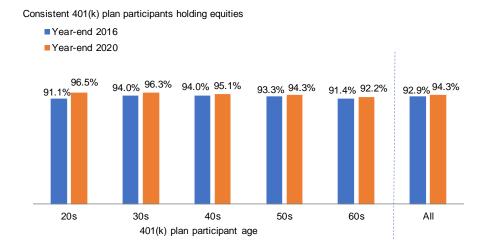
<sup>&</sup>lt;sup>2</sup>The Wilshire 5000 index is a comprehensive measure of the US stock market, designed to reflect the performance of all US equity securities that have readily available prices.

<sup>&</sup>lt;sup>3</sup>The ICE BofA US Corporate Index tracks the performance of investment grade corporate debt that is publicly issued in the US domestic market and denominated in US dollars.

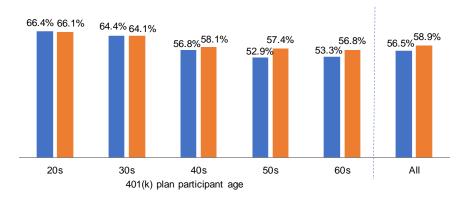
largest increases: 91.1 percent of them held equities at year-end 2016, and that share increased to 96.5 percent at year-end 2020. Smaller increases were observed across the remaining age groups.

### Consistent 401(k) Participants' Investment in Equities and Target Date Funds

Percentage of consistent 401(k) participants by age, year-end 2016 and year-end 2020



Consistent 401(k) plan participants holding target date funds



Note: Equities include equity funds, company stock, the equity portion of target date funds, and the equity portion of non–target date balanced funds. 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 any pooled investment product primarily invested in the security indicated. The consistent sample is 3.7 million 401(k) plan participants with account balances at the end of each year from 2016 through 2020. Age group is based on the participant's age at year-end 2020.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

## Evidence of Reallocation Activity to or from Equities Among Consistent 401(k) Participants

Movement in the concentration of equities in 401(k) participants' accounts results from changes in stock values and from reallocation activity by participants. Although information on specific trading activity of 401(k) participants is not available in the EBRI/ICI 401(k) database,<sup>7</sup> it is possible to observe activity away from or to 100 percent or zero equity holdings at year-end. Among consistent 401(k) participants between year-end 2016 and year-end 2020, few moved to, or away from, these extremes of equity holdings.

Few consistent 401(k) participants had their entire 401(k) balances invested in equities, and slight net movement to that full concentration occurred between year-end 2016 and year-end 2020. To be 100 percent invested in equities, the 401(k) investor would have allocated their full 401(k) balance to equity funds and/or company stock. Analyzing the group of consistent 401(k) participants at year-end 2020, the data show that 2.0 percent, on net, moved to a 100

percent equities allocation—5.5 percent of this group at year-end 2016 and 7.5 percent at year-end 2020 were 100 percent invested in equities (Figure 4). This net change reflects 2.2 percent moving away from the 100 percent allocation to something less, 4.2 percent moving to a 100 percent allocation, and 3.3 percent sticking with 100 percent allocation to equities in both 2016 and 2020. In other words, 60 percent of consistent 401(k) participants with their 401(k) accounts fully invested in equities at year-end 2016 were fully invested in equities at year-end 2020.

All age groups in the sample of consistent 401(k) participants had some movement to full allocations to equities between year-end 2016 and year-end 2020. For example, 3.3 percent of consistent 401(k) participants in their twenties had 100 percent of their account invested in equities at year-end 2016, compared with 6.9 percent at year-end 2020 (Figure 4). At the other end of the age spectrum, consistent 401(k) participants in their sixties also moved to 100 percent concentrations in equities: 5.3 percent of consistent 401(k) participants in their sixties had 100 percent of their account invested in equities at year-end 2016, compared with 6.3 percent at year-end 2020.

Few consistent 401(k) participants had none of their 401(k) balances invested in equities, and slight net movement away from that zero holding occurred between year-end 2016 and year-end 2020. To have zero investment in equities, the 401(k) investor would have allocated none of their 401(k) balance to equity funds, target date funds, non—target date balanced funds, or company stock. Analyzing the group of consistent 401(k) participants at year-end 2020, the data show that 1.4 percent, on net, moved away from a zero equities allocation—7.1 percent of this group had no equities at year-end 2016, and 5.7 percent had no equities at year-end 2020 (Figure 4). This net change reflects 3.4 percent moving from zero equities to at least some, 2.0 percent moving from some to zero, and 3.7 percent sticking with zero holdings in both 2016 and 2020. While the youngest 401(k) participants were more likely to move to holding some equities than older 401(k) participants, the oldest group of 401(k) participants also displayed slight reallocation activity away from a zero equities allocation.

# Figure 4 Changes in Allocation to Equities Among Consistent 401(k) Participants

Percentage of consistent 401(k) participants by age, year-end 2016 and year-end 2020

Changes in	100 percent	allocation to	equities
------------	-------------	---------------	----------

Age	100 percent in 2016	Moved away from 100 percent by 2020	Remained at 100 percent		Net change	100 percent in 2020
20s	3.3%	-1.2%	2.1%	4.8%	3.6%	6.9%
30s	4.2%	-1.6%	2.6%	3.6%	2.0%	6.2%
40s	5.7%	-2.2%	3.5%	5.8%	3.6%	9.3%
50s	6.4%	-2.6%	3.8%	3.7%	1.1%	7.5%
60s	5.3%	-2.1%	3.2%	3.1%	1.0%	6.3%
All	5.5%	-2.2%	3.3%	4.2%	2.0%	7.5%

		Moved away from	Remained at	Moved to zero	Net	
Age	Zero in 2016	zero by 2020	zero	by 2020	change	Zero in 2020
20s	8.9%	-7.6%	1.3%	2.2%	-5.4%	3.5%
30s	6.0%	-4.0%	2.0%	1.7%	-2.3%	3.7%
40s	6.0%	-3.1%	2.9%	2.0%	-1.1%	4.9%
50s	6.7%	-3.0%	3.7%	2.0%	-1.0%	5.7%
60s	8.6%	-3.1%	5.5%	2.3%	-0.8%	7.8%
All	7.1%	-3.4%	3.7%	2.0%	-1.4%	5.7%

Note: Equities include equity funds, company stock, the equity portion of target date funds, and the equity portion of non-target date 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 consistent sample is 3.7 million 401(k) plan participants with account balances at the end of each year from 2016 through 2020. Age group is based on the participant's age at year-end 2020.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

# Changes in Consistent 401(k) Participants' Allocations to Target Date Funds Between 2016 and 2020

Between year-end 2016 and year-end 2020, consistent 401(k) participants' use of target date funds increased, with more participants moving into than out of these funds, on net. At year-end 2016, 56.5 percent of consistent 401(k) participants held at least some target date fund investments in their 401(k) accounts, and that share increased to 58.9 percent at year-end 2020, with the net increase occurring across participants aged 40 or older (Figure 3). In both years, younger 401(k) participants were more likely to hold some target date fund investments, compared with older participants: 66.1 percent of consistent 401(k) participants in their twenties had target date funds in their 401(k) accounts at year-end 2020, compared with 56.8 percent of consistent 401(k) participants in their sixties. Nevertheless, the largest net movement toward target date fund use over the period occurred among consistent 401(k) participants in their forties, fifties, and sixties. Participants in their twenties and thirties saw similar exposure to target date funds in both years.<sup>8</sup>

# Evidence of Reallocation Activity to or from Target Date Funds Among Consistent 401(k) Participants

As with equities, movement in the concentration of target date funds in 401(k) participants' accounts results from changes in asset values, in addition to reallocation activity by participants. Although information on specific trading activity of 401(k) participants is not available in the EBRI/ICI 401(k) database, <sup>9</sup> it is possible to observe activity away from or to 100 percent or zero target date fund holdings at year-end. Among consistent 401(k) participants between year-end 2016 and year-end 2020, few moved to, or away from, these extremes of target date fund holdings.

A substantial share of consistent 401(k) participants had their entire 401(k) balances invested in target date funds, and some net movement away from that full concentration occurred between year-end 2016 and year-end 2020. Analyzing the group of consistent 401(k) participants at year-end 2020, the data show that 3.8 percent, on net, moved away from a 100 percent target date fund allocation—34.6 percent of this group at year-end 2016 and 30.8 percent at year-end 2020 only held target date funds (Figure 5). This net change reflects 7.5 percent moving away from the 100 percent allocation to something less, 3.7 percent moving to a 100 percent allocation, and 27.1 percent sticking with 100 percent allocation to target date funds in both 2016 and 2020. In other words, 78 percent of consistent 401(k) participants with their 401(k) accounts fully invested in target date funds at year-end 2020.

All age groups in the sample of consistent 401(k) participants had some net movement away from full allocations to target date funds between year-end 2016 and year-end 2020. However, the largest movements were for younger investors, who were much more likely to be fully invested in target date funds in both years. For example, 57.8 percent of consistent 401(k) participants in their twenties had 100 percent of their account invested in target date funds at year-end 2016, compared with 49.4 percent at year-end 2020 (Figure 5). At the other end of the age spectrum, consistent 401(k) participants in their sixties also moved away from 100 percent concentrations to target date funds: 29.5 percent of consistent 401(k) participants in their sixties had 100 percent of their account invested in target date funds at year-end 2016, compared with 28.0 percent at year-end 2020.

Fewer consistent 401(k) participants had none of their 401(k) balances invested in target date funds at year-end 2020 than at year-end 2016. Analyzing the group of consistent 401(k) participants at year-end 2020, the data show that 2.4 percent, on net, moved away from a zero target date fund allocation—43.5 percent of this group had no investments in target date funds at year-end 2016 and 41.1 percent had no investments in target date funds at year-end 2020 (Figure 5). This net change reflects 9.4 percent moving from zero target date fund ownership to at least some, 7.0 percent moving from some to zero, and 34.1 percent sticking with zero holdings in both 2016 and 2020.

Although consistent 401(k) participants moved, on net, toward target date fund ownership between year-end 2016 and year-end 2020, this was concentrated among participants in their forties, fifties, and sixties. Participants in their twenties and thirties remained similarly likely to own target date funds in both years. For example, 46.7 percent of consistent 401(k) participants in their sixties had held no target date funds at year-end 2016, compared with 43.2

percent at year-end 2020 (Figure 5). Among participants in their twenties, 33.6 percent held no target date funds at year-end 2016, compared with 33.9 percent at year-end 2020.

### Figure 5

### Changes in Allocation to Target Date Funds Among Consistent 401(k) Participants

Percentage of consistent 401(k) participants by age, year-end 2016 and year-end 2020

#### Changes in 100 percent allocation to target date funds

Age	100 percent in 2016	Moved away from 100 percent by 2020	Remained at 100 percent	Moved to 100 percent by 2020	Net change	100 percent in 2020
20s	57.8%	-15.2%	42.6%	6.8%	-8.4%	49.4%
30s	47.4%	-10.8%	36.6%	4.6%	-6.2%	41.2%
40s	33.4%	-8.6%	24.8%	3.5%	-5.1%	28.3%
50s	28.3%	-5.6%	22.7%	3.3%	-2.3%	26.0%
60s	29.5%	-4.7%	24.8%	3.2%	-1.5%	28.0%
All	34.6%	-7.5%	27.1%	3.7%	-3.8%	30.8%

### Changes in zero allocation to target date funds

	Zero in	Moved away from	Remained at	Moved to zero	Net	
Age	2016	zero by 2020	zero	by 2020	change	Zero in 2020
20s	33.6%	-10.3%	23.3%	10.6%	0.3%	33.9%
30s	35.6%	-8.5%	27.1%	8.8%	0.3%	35.9%
40s	43.2%	-9.5%	33.7%	8.2%	-1.3%	41.9%
50s	47.1%	-10.2%	36.9%	5.7%	-4.5%	42.6%
60s	46.7%	-9.1%	37.6%	5.6%	-3.5%	43.2%
All	43.5%	-9.4%	34.1%	7.0%	-2.4%	41.1%

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 any pooled investment product primarily invested in the security indicated. The consistent sample is 3.7 million 401(k) plan participants with account balances at the end of each year from 2016 through 2020. Age group is based on the participant's age at year-end 2020.

Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project

### About the EBRI/ICI 401(k) Database

The EBRI/ICI project is unique because of its inclusion of data provided by a wide variety of plan recordkeepers, permitting the analysis of the activity of participants in 401(k) plans of varying sizes—from very large corporations to small businesses—with a variety of investment options.

### Sources and Types of Data

Several EBRI and ICI members provided records on active participants in 401(k) plans for which they kept records for year-end 2016 through year-end 2020.<sup>10</sup> These plan recordkeepers include mutual fund companies, banks, insurance companies, and consulting firms. Although the EBRI/ICI 401(k) project has collected data from 1996 through 2020, the universe of data providers varies from year to year. In addition, the plans using a particular provider can change over time. Records were encrypted to conceal the identity of employers and employees but were coded so that both could be tracked over multiple years.<sup>11</sup> For each participant, data include date of birth, from which an age group is assigned; date of hire, from which a tenure range is assigned; outstanding loan balance; funds in the participant's investment portfolios; and asset values attributed to those funds. An account balance for each participant is the sum of the participant's assets in all funds.<sup>12</sup> Plan balances are constructed as the sum of all participant balances in the plan.

### **Investment Options**

In the EBRI/ICI 401(k) database, investment options are grouped into eight broad categories. 13

- Equity funds consist of pooled investments primarily invested in stocks, including equity mutual funds, bank collective trusts, life insurance separate accounts, and other pooled investments.
- Similarly, bond funds are any pooled account primarily invested in bonds.
- Balanced funds are pooled accounts invested in both stocks and bonds. They are classified into two subcategories: target date funds and non-target date balanced funds.
- 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.
- Non-target date balanced funds include asset allocation or hybrid funds, in addition to lifestyle funds.<sup>14</sup>
- Company stock is equity in the 401(k) plan's sponsor (the employer).
- Money funds consist of those funds designed to maintain a stable share price.
- Stable value products, such as guaranteed investment contracts (GICs)<sup>15</sup> and other stable value funds, <sup>16</sup> are reported as one category.
- The other category is the residual for other investments, such as real estate funds.
- The final category, unknown, consists of funds that could not be identified.<sup>17</sup>

### References

BrightScope and Investment Company Institute. 2023. *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans, 2020.* San Diego, CA: BrightScope, and Washington, DC: Investment Company Institute. Available at <a href="https://www.ici.org/system/files/2023-09/23-rpt-dcplan-profile-401k.pdf">www.ici.org/system/files/2023-09/23-rpt-dcplan-profile-401k.pdf</a>.

Federal Reserve Economic Data (FRED). St. Louis: Federal Reserve Bank of St. Louis.

- Holden, Sarah, Steven Bass, and Craig Copeland. 2022. "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2020." *ICI Research Perspective* 28, no. 11, and *EBRI Issue Brief*, no. 576 (November). Available at <a href="https://www.ici.org/files/2022/per28-11.pdf">www.ici.org/files/2022/per28-11.pdf</a> and <a href="https://www.ebri.org/docs/default-source/ebri-issue-brief/ebri ib 576 k-xsec-29nov22.pdf">www.ebri.org/docs/default-source/ebri-issue-brief/ebri ib 576 k-xsec-29nov22.pdf</a>.
- Holden, Sarah, Steven Bass, and Craig Copeland. 2023a. "What Does Consistent Participation in 401(k) Plans Generate? Changes in 401(k) Plan Account Balances, 2016–2020." *ICI Research Perspective* 29, no. 2, and *EBRI Issue Brief*, no. 582 (March). Available at <a href="https://www.ici.org/system/files/2023-03/per29-02.pdf">www.ici.org/system/files/2023-03/per29-02.pdf</a> and <a href="https://www.ebri.org/publications/research-publications/issue-briefs/content/what-does-consistent-participation-in-401(k)-plans-generate-changes-in-401(k)-plan-account-balances-2016-2020.
- Holden, Sarah, Steven Bass, and Craig Copeland. 2023b. "How 401(k) Plan Participants Use Loans over Time: An Analysis of Loan Activity of Consistent 401(k) Plan Participants, 2016–2020." *ICI Research Perspective* 29, no. 7, and *EBRI Issue Brief*, no. 590 (September). Available at <a href="https://www.ebri.org/publications/research-publications/issue-briefs/content/full/how-401(k)-plan-participants-use-loans-over-time-an-analysis-of-loan-activity-of-consistent-401(k)-plan-participants-2016-2020.</a>
- Holden, Sarah, Daniel Schrass, and Elena Barone Chism. 2021. "Defined Contribution Plan Participants' Activities, 2020." *ICI Research Report* (February). Available at <a href="https://www.ici.org/pdf/20">www.ici.org/pdf/20</a> rpt recsurveyq4.pdf.
- Holden, Sarah, Daniel Schrass, and Elena Barone Chism. 2023. "Defined Contribution Plan Participants' Activities, First Quarter 2023." *ICI Research Report* (July). Available at <a href="https://www.ici.org/system/files/2023-07/23-rpt-recsurveyq1.pdf">https://www.ici.org/system/files/2023-07/23-rpt-recsurveyq1.pdf</a>.

Holden, Sarah, Jack VanDerhei, and Steven Bass. 2021. "Target Date Funds: Evidence Points to Growing Popularity and Appropriate Use by 401(k) Plan Participants." *ICI Research Perspective* 27, no. 7 and *EBRI Issue Brief*, no. 537 (September). Available at <a href="https://www.ici.org/system/files/2021-09/per27-07.pdf">www.ici.org/system/files/2021-09/per27-07.pdf</a> and <a href="https://www.ebri.org/docs/default-source/ebri-issue-brief/ebri">www.ici.org/system/files/2021-09/per27-07.pdf</a> and <a href="https://www.ebri.org/docs/default-source/ebri-issue-brief/ebri">www.ebri.org/docs/default-source/ebri-issue-brief/ebri</a> ib 537 401ktdfs-9sep21.pdf.

ICE BofA US Corporate Index. Atlanta: ICE Data Indices, LLC.

Plan Sponsor Council of America. 2021. *64th Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 2020 Plan Experience*. Chicago: Plan Sponsor Council of America.

Wilshire 5000. Santa Monica: Wilshire Associates.

### **Endnotes**

<sup>1</sup> The Employee Benefit Research Institute (EBRI) is a nonprofit, nonpartisan, public policy research organization that does not lobby or take positions on legislative proposals.

<sup>&</sup>lt;sup>2</sup> The Investment Company Institute (ICI) is the leading association representing regulated investment funds. ICI's mission is to strengthen the foundation of the asset management industry for the ultimate benefit of the long-term individual investor. Its members include mutual funds, exchange-traded funds (ETFs), closed-end funds, and unit investment trusts (UITs) in the United States, and UCITS and similar funds offered to investors in other jurisdictions. ICI also represents its members in their capacity as investment advisers to certain collective investment trusts (CITs) and retail separately managed accounts (SMAs). ICI has offices in Washington DC, Brussels, and London, and carries out its international work through ICI Global.

<sup>&</sup>lt;sup>3</sup> For the results of the year-end 2020 update of the EBRI/ICI 401(k) database, see Holden, Bass, and Copeland 2022.

<sup>&</sup>lt;sup>4</sup> Because of these changes in the cross sections, comparing average account balances across different year-end cross-sectional snapshots can lead to false conclusions. For example, newly formed plans would tend to pull down the average account balance but would tell us nothing about consistently participating workers. Similarly, the aggregate average account balance would tend to be pulled down if a large number of participants retire and roll over their account balances. For analysis of changes in consistent 401(k) plan participants' account balances, see Holden, Bass, and Copeland 2023a.

<sup>&</sup>lt;sup>5</sup> For a more detailed description of the 2016–2020 longitudinal sample, see Holden, Bass, and Copeland 2023a and 2023b.

<sup>&</sup>lt;sup>6</sup> This number is lower than it would have been if it merely reflected employee turnover and retirement. For example, if 401(k) plan sponsors change their service providers, all participants in those plans would be excluded from the consistent sample.

<sup>&</sup>lt;sup>7</sup> The Investment Company Institute tracks reallocation of account balances and changes to the asset allocation of contributions for a sample of recordkeepers. The survey results indicate a minority of DC plan participants change their asset allocation in any given period. For example, 10.6 percent of DC plan participants changed the asset allocation of their account balances, and 6.3 percent changed the asset allocation of their contributions in 2020 (see Holden, Schrass, and Chism 2021). For the most recent update covering the first quarter of 2023, see Holden, Schrass, and Chism 2023.

<sup>&</sup>lt;sup>8</sup> For a detailed analysis of 401(k) plan participants' use of target date funds by participant age or job tenure in the year-end 2020 cross-sectional EBRI/ICI 401(k) database, see Holden, Bass, and Copeland 2022. Among 401(k) plan participants holding target date funds at year-end 2018, 88 percent held one age-appropriate target date fund (see Holden, VanDerhei, and Bass 2021).

<sup>&</sup>lt;sup>9</sup> See note 7.

<sup>&</sup>lt;sup>10</sup> For the complete update from the year-end 2020 EBRI/ICI 401(k) database, see Holden, Bass, and Copeland 2022.

<sup>&</sup>lt;sup>11</sup> The EBRI/ICI 401(k) database environment is certified to be fully compliant with the ISO-27002 Information Security Audit standard. Moreover, EBRI has obtained a legal opinion that the methodology used meets the privacy standards of the Gramm-Leach-Billey Act. At no time has any nonpublic personal information that is personally identifiable, such as a Social Security number, been transferred to or shared with EBRI.

- <sup>12</sup> Account balances are net of unpaid loan balances. Thus, unpaid loan balances are not included in any of the eight asset categories described.
- <sup>13</sup> This system of classification does not consider the number or types of distinct investment options presented to a given participant, but rather, the types of options chosen by participants. Plan Sponsor Council of America 2021 indicates that in 2020, the average number of investment fund options available for participant contributions was 21 among the 518 plans surveyed. BrightScope and Investment Company Institute 2023 reports an average of 28 investment options in 2020, and an average of 20 investment options when a target date fund suite is counted as a single investment option.
- <sup>14</sup> Lifestyle funds maintain a predetermined risk level and generally use words such as "conservative," "moderate," or "aggressive" in their name to indicate the fund's risk level. Lifestyle funds generally are included in the non–target date balanced fund category.
- <sup>15</sup> GICs are insurance company products that guarantee a specific rate of return on the invested capital over the life of the contract.
- <sup>16</sup> Other stable value funds include synthetic GICs, which consist of a portfolio of fixed-income securities "wrapped" with a guarantee (typically by an insurance company or a bank) to provide benefit payments according to the plan at book value.
- <sup>17</sup> Some recordkeepers supplying data were unable to provide complete asset allocation detail on certain pooled asset classes for one or more of their clients. The final EBRI/ICI 401(k) database includes only plans for which at least 90 percent of all plan assets could be identified.