

Winter 2023

Defined Contribution Guidebook

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FOR DEFINED CONTRIBUTION PLAN SPONSOR USE ONLY

We're living in defining times.

In the United States, more than 686,000 defined contribution (DC) plans are in place, helping over 109 million workers save for retirement.¹

With 83% of workers depending on their DC plan as a primary source of retirement income,² measuring plan success has evolved from maximizing participation rates to optimizing participant outcomes. This realignment of goals requires a broader, more holistic approach to helping employees prepare for a secure and comfortable retirement. And the decisions plan sponsors make today impact the retirement outcomes of current and future generations of retirees.

But there's still work to do.

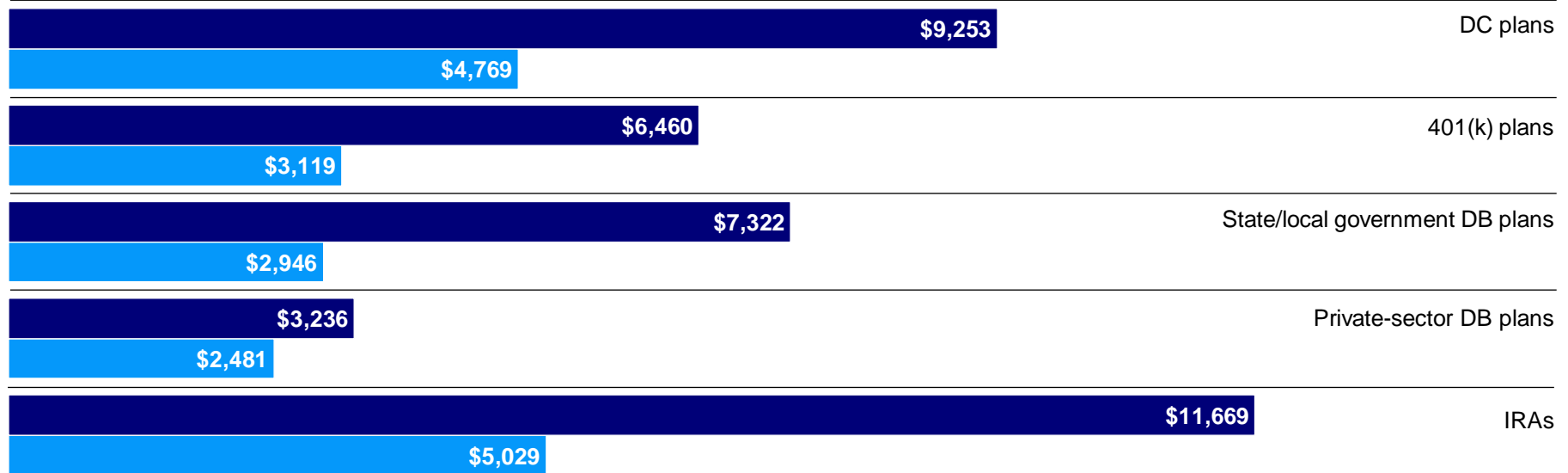
- **Only 65%** of private sector workers had access to a DC plan in 2021. For smaller employers, the rate dropped to 51%.³
- **62%** of workers without a retirement plan have less than \$1,000 in savings and investments.⁴

¹DOL Employee Benefits Security Administration, Private Pension Plan Bulletin, Abstract of 2019 Form 5500 Annual Reports, September 2021 (most recent data available). ²Invesco, Show me the income, 2022 retirement income research (survey of 1,049 large plan participants). ³Bureau of Labor Statistics, as of December 27, 2021. ⁴Employee Benefit Research Institute and Greenwald & Associates, 2022 Retirement Confidence Survey (survey of 2,677 American workers and retirees).

Growth of US retirement plan assets over the last decade

US retirement assets by plan type (\$ billion)

■ 2Q 2022 ■ 2010



Investment returns and rollovers from employer-sponsored retirement plans have fueled the growth of IRAs, whereas DC plan growth is primarily driven by investment returns and new contributions.

Source: Investment Company Institute, US Retirement Market Assets, 4th quarter 2010 and 2nd quarter 2022.

Four key tenets of DC plan management: Working together to help optimize participant outcomes

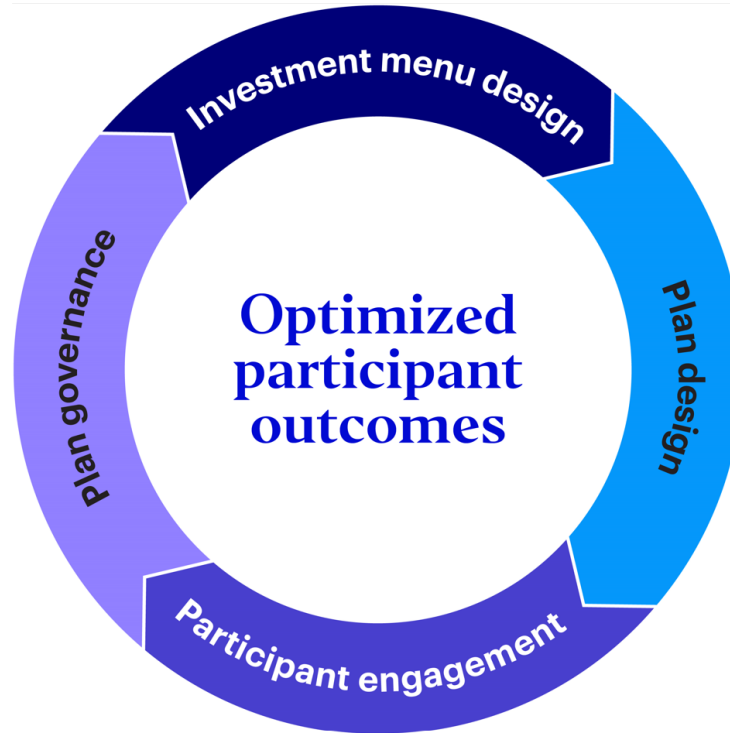


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The landscape

In today's DC world,
there's no standing still

01

The shift from DB to DC exposes participants to more risks

Inflation risk

Consideration: Diversify portfolio to include inflation hedging assets such as real estate, commodities or Treasury inflation-protected securities (TIPS).

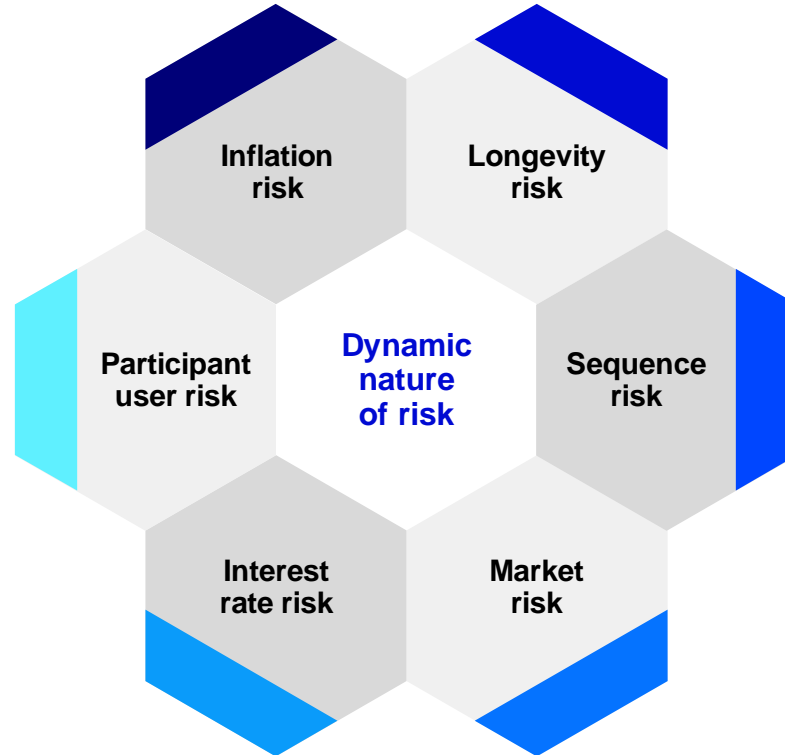
Participant user risk

Consideration: Offer guidance services and professional managed portfolios such as target date or risk-based funds.

Interest rate risk

Consideration: For fixed income, diversify investments to bonds of differing structures, maturities, duration, coupon and quality.

Diversification does not guarantee a profit or eliminate the risk of loss.



Longevity risk

Consideration: Offer guaranteed income options for retirees, such as a lifetime annuity product, either in-plan or out-of-plan solutions.

Sequence risk

Consideration: Adjust spending strategy, tap into emergency cash reserves or continue working part-time.

Market risk

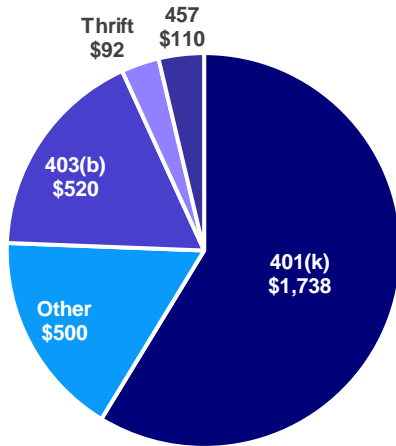
Consideration: Diversify across markets, countries, asset classes, derivatives, and alternative investments.

401(k) plans hold the lion's share of DC assets

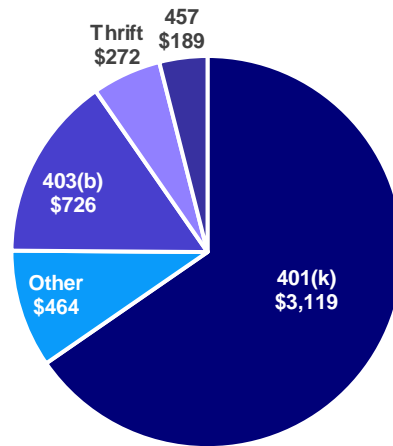
Defined contribution plan assets by plan type (\$ billion)

■ 401(k) plans ■ Other private-sector DC plans ■ 403(b) plans ■ Thrift Savings Plan ■ 457 plans

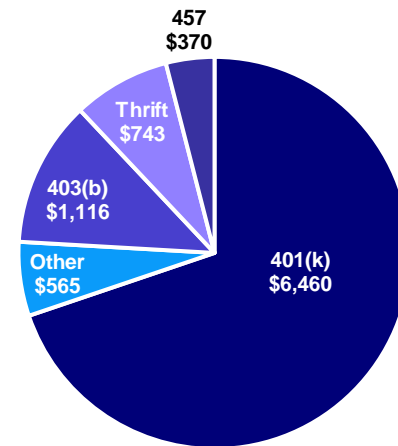
2000 total = \$2.96T



2010 total = \$4.77T



2Q 2022 total = \$9.3T

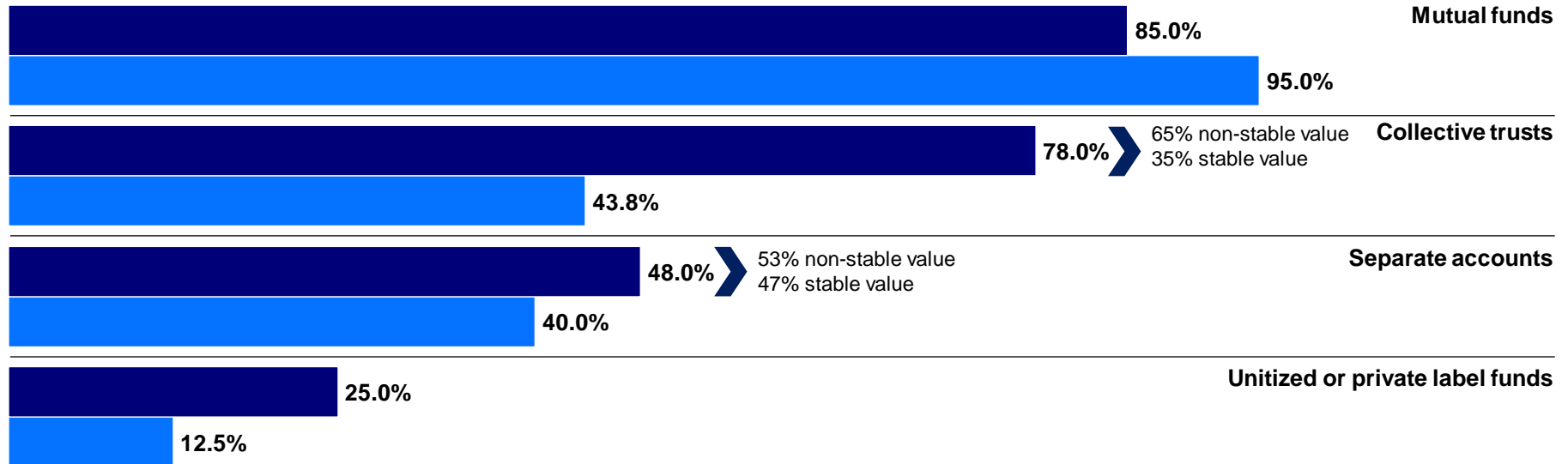


Source: Investment Company Institute..

Fee pressures and litigation have elevated adoption of CITs

Types of investment vehicles used in fund lineups

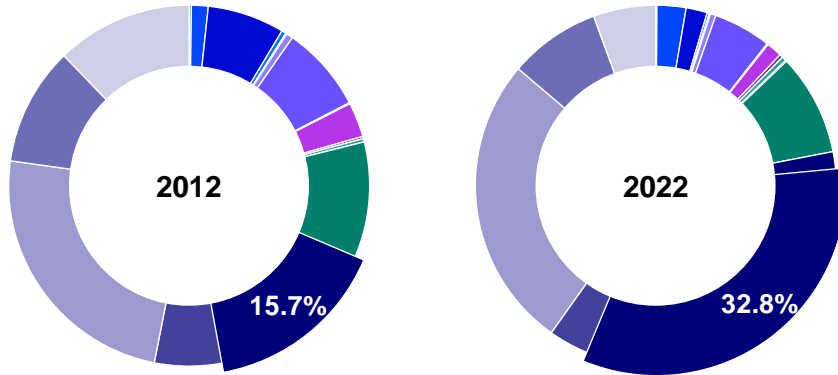
■ 2021 ■ 2011



Source: Callan 2022 Defined Contribution Trends Survey (101 large DC plan sponsors).

Growth of target date funds over the last decade

DC plan asset allocations (2012–2022)¹



In 2021, 6 in 10 plan contribution dollars were invested in target date funds.²

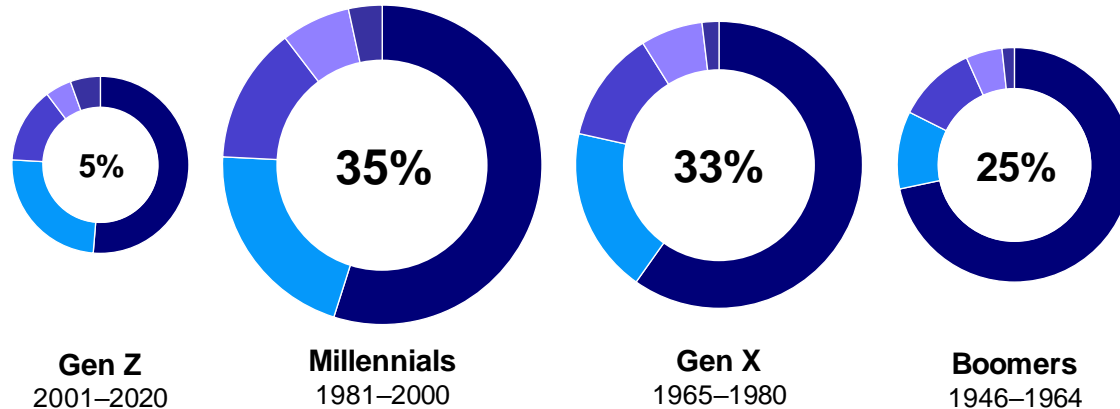
Asset allocations	2012	2022	% Change
Alternatives/other	0.1%	0.2%	0.1%
Brokerage window	1.5%	2.5%	1.0%
Company stock	5.0%	2.8%	-2.2%
Emerging markets equity	0.3%	0.2%	-0.1%
Global fixed income	0.2%	0.1%	-0.1%
Global equity	1.0%	0.5%	-0.5%
Global ex-US equity	6.8%	4.9%	-1.9%
High yield fixed	0.1%	0.1%	0.0%
Money market	3.2%	1.3%	-1.9%
Real estate	0.3%	0.4%	0.1%
Real return/TIPs	0.5%	0.5%	0.0%
Specialty equity/sector	0.0%	0.0%	0.0%
Stable value	12.4%	10.0%	-2.4%
□ Target date funds	15.7%	32.8%	17.1%
US fixed	9.9%	5.8%	-4.1%
US large cap	23.3%	25.1%	1.8%
US small/mid cap	10.7%	7.7%	-3.0%
US global/balanced	9.0%	5.1%	-3.9%

¹The Callan DC Index, data as of 4Q2012 and 2Q2022. ²Vanguard, How America Saves 2022 (examination of data from 5 million DC plan participants).

A diverse, younger and mobile workforce

Distribution of the current US workforce by race¹ and generation²

■ White ■ Latino/Hispanic ■ Black ■ Asian American ■ Other



75% of the global workforce will be made up of millennials by 2025.¹

¹The Brookings Institution, William H. Frey analysis of Annual Census Bureau estimates, July 2020. ²Pew Research Center, 10 Facts About American Workers, Aug. 2019 (most recent data available). ³Bureau of Labor Statistics, Employee Tenure in 2022.

Shifting demographics and job tenure

Soaring retirement rates among baby boomers²

- US labor force is declining by 5,900 boomers daily
- By 2030, all boomers will reach age 65

Decreasing median job tenures³

- Men = 4.3 years
- Women = 3.8 years
- Age 55 to 64 = 9.8 years
- Age 25 to 34 = 2.8 years
- Public-sector = 6.8 years
- Private-sector = 3.7 years

Engaging an evolving workforce

Potential actions



1 Segment targeted communications to millennials and pre-retirees.

2 Auto features and default investments are important to millennials.

3 Consider offering ESG investment options which are attractive to millennials and women.

4 Encourage retirees to stay in the plan and provide access to flexible distribution options and resources.

5 Offer additional programs that appeal to millennials such as emergency savings and student loan benefits.

6 Consider defaulting younger and/or lower salaried employee deferrals to a ROTH source vs. pre-tax.

Plan sponsor preferences for retaining assets of departing workers

Preferred distribution methods for separated and retired participants¹

■ Upon separation ■ Upon retirement



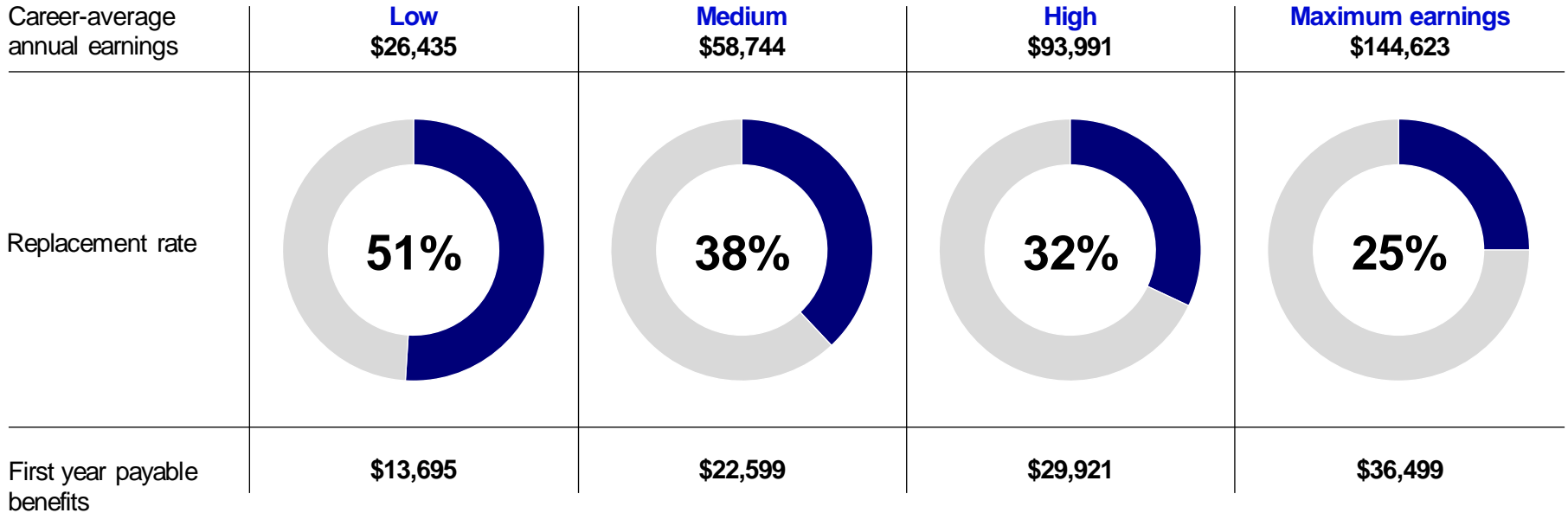
Participant preferences

- **9 in 10 participants** were more likely to keep their assets in the plan if there were available options to help create a stream of income in retirement.²
- **54% of retirees** left their retirement savings in their DC plans, primarily due to lower fees, liked the investments options and convenience.³

¹The Cerulli Report, U.S. Retirement Markets 2021 (over 700 plan sponsors surveyed). ²Invesco, Show me the income, 2022 Retirement Income Research (survey of 1,049 large DC plan participants). ³The Pew Charitable Trusts survey, June 2020 (survey of 536 US retirees).

How much will Social Security replace?

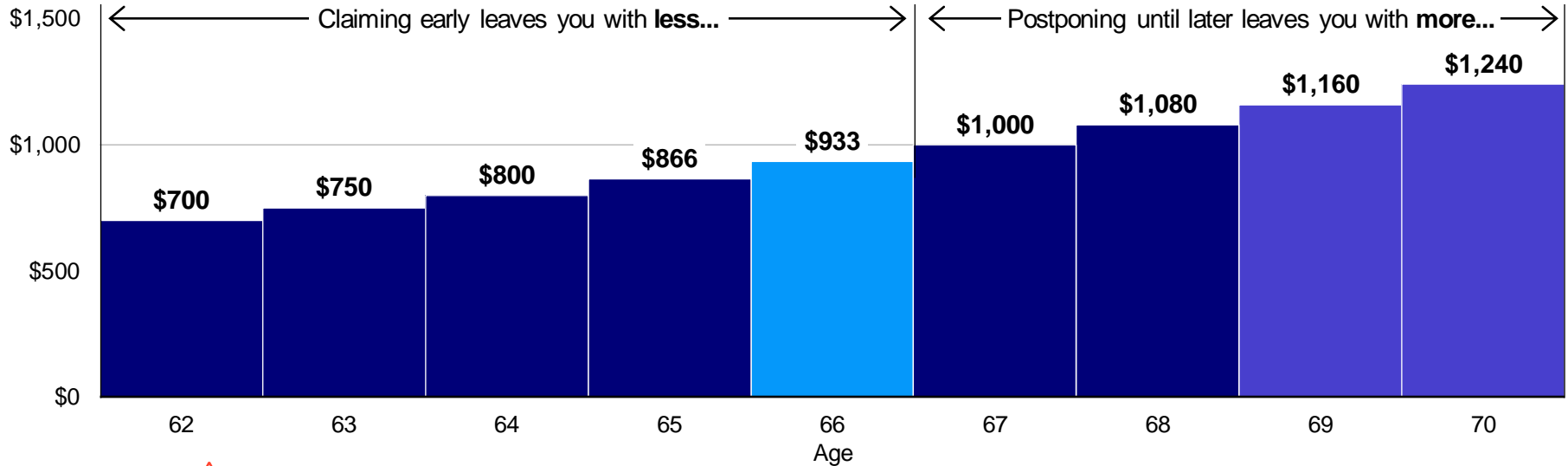
Annual benefits of a retired worker aged 65 in 2021



Source: Social Security Administration, Retirement Rates for Hypothetical Retired Workers, June 2022.

Impact of Social Security monthly benefits based on claiming age

Average monthly benefit¹



Claiming early can have an average lifetime loss of \$95,000 per household.²

¹SSA.gov, When to Start Receiving Retirement Benefits 2022. For illustrative purposes only. Assumes full retirement age is 67. Individual benefits will vary based on earnings history and other factors. Examples in the graphs do not reflect cost of living adjustments (COLA) or inflation. According to SSA.gov, \$1,669 was the average monthly Social Security benefit for a retired worker as of June 2022. ²Bipartisan Policy Center, How to Help Americans Claim Social Security at the Right Age, August 2020 (most recent data available).

Key provisions: SECURE 2.0 retirement savings legislation



Employers

- Provide small business incentives to offer retirement plans
- Mandatory auto-enrollment and auto-escalation for new plans
- Permit 403(b) plans to participate in Pooled Employer Plans (PEP)
- Quicker eligibility for part-time employees (from 3 to 2 years)
- Increase small-balance automatic cash-outs from \$5,000 to \$7,000
- Employer matching as Roth contributions (optional)
- Annual paper benefit statement requirement for DC plans
- Emergency savings accounts linked to retirement plans



Employees

- “Rothify” future catch-up contributions for employees with higher incomes
- Increase catch-up contribution limits apply to ages 60 to 63
- Mandatory increase in required minimum distribution (RMD) age to 73 starting in 2023 and then 75 starting in 2033
- Penalty reduction for failure to take RMDs
- “Saver’s match” deposited by Treasury into workers’ accounts
- Creation of a retirement savings “lost and found” database
- Domestic abuse penalty-free distributions
- Student loan payments eligible for matching contributions

Source: www.congress.gov

Plan design

The formative elements
of your retirement plan

02

Prevalence of automatic features among large plans

Auto-enrollment¹

- **70%** implement auto-enrollment (60% apply to new hires only).
- **10%** auto-enroll non-participating employees via one-time or annual sweeps.
- **Top reasons for not implementing auto enrollment** — satisfied with participation rates and cost concerns.
- Most **common default rates** are **3%** (29%) and **6%** (28%).
- **Top reasons driving default rates** — allows participants to maximize the company match and rate most palatable to employees (limit opt-outs).
- **92%** of plans used target date funds as the default investment option.

Auto-escalation¹

- **77%** of plans (87% with auto-enrollment) offer an auto-escalation feature.
- **85%** of all plans have an annual increase rate of 1%.
- **40%** of plans cap auto increases at 10% (26% cap at more than 10%).
- The **SECURE Act** increased the auto escalation cap for qualified automatic contribution arrangements (QACA) safe harbor plans from 10% to 15%.

Impact of auto enrollment

	Average participation rate ²	Average deferral rate ¹
Automatic enrollment	94.0%	7.8%
No automatic enrollment	89.6%	8.2%

¹Plan Sponsor Council of America's 64th Annual Survey Reflecting 2020 Plan Experience (103 plans with 5,000+ employees). ²Fidelity, Building Financial Futures, 1st quarter 2021 (survey of 23,500 corporate DC plans & 19.6 million participants).

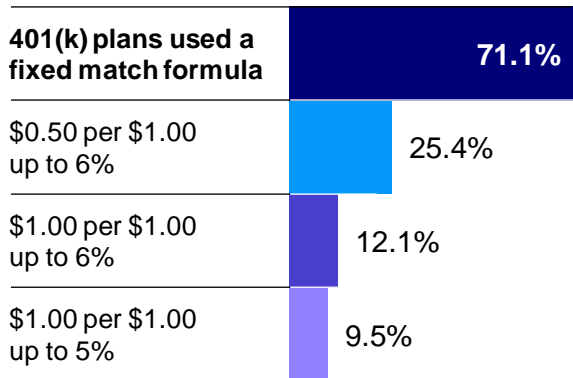


91% of employees who are auto enrolled don't opt out.²

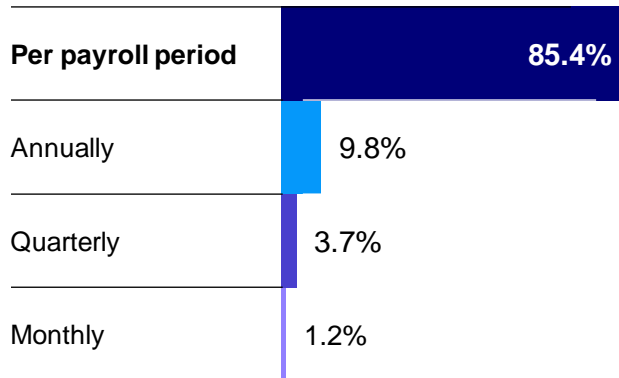
Employer match rates set the bar for participant deferrals

Employer match highlights (large plans)¹

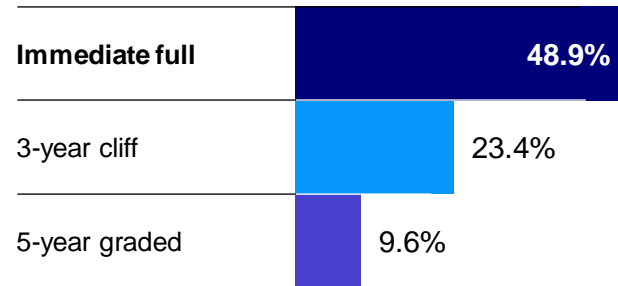
Most common fixed match formulas



Frequency



Most common vesting



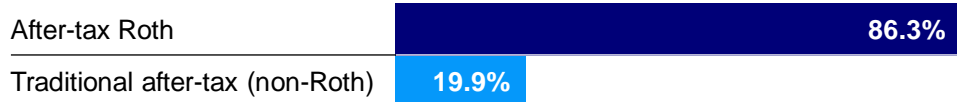
62% of plan sponsors make true-up matches to ensure all participants receive the full match.¹

29% of plans reinstated matching contributions in 2021.²

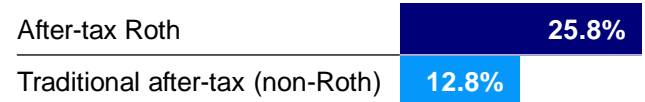
¹Plan Sponsor Council of America's 64th Annual Survey Reflecting 2020 Plan Experience (103 plans with 5,000+ employees). ²Callan 2022 Defined Contribution Trends Survey (101 large DC plan sponsors).

Prevalence of Roth and traditional after-tax contributions

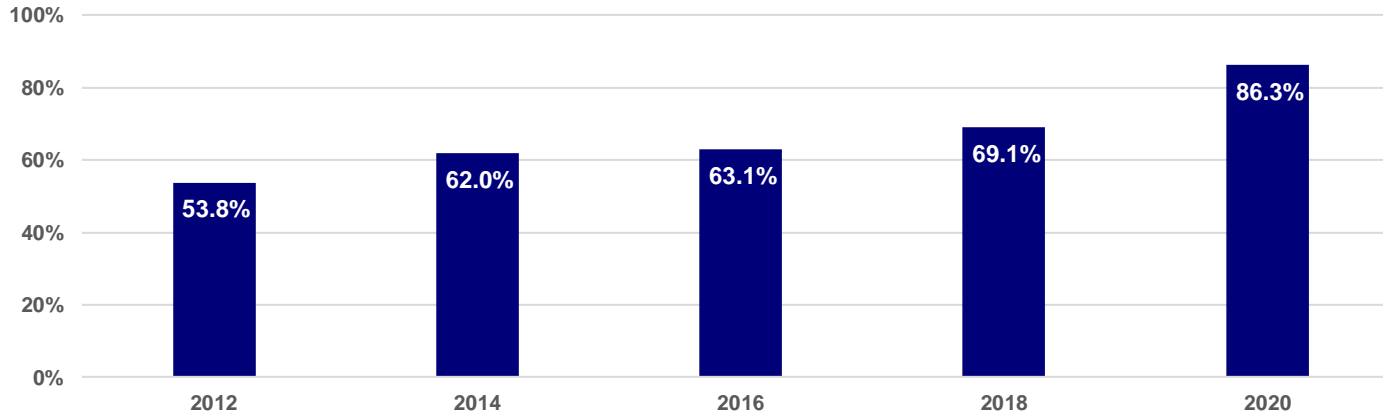
Plans allowing participant after-tax contributions



Eligible participants contributing to after-tax sources



Availability of Roth over time



Source: Plan Sponsor Council of America's 64th Annual Survey Reflecting 2020 Plan Experience (survey of 518 plan sponsors).

In-plan Roth conversions: An often-overlooked tax strategy

25% of plans allow Roth in-plan conversions.¹



What participants need to know:

Participants can convert their entire account balance or just a portion.

At the time of conversion, participants are required to pay income taxes on the converted amount.

Participants must wait five years after each conversion and reach the age of 59½ to have penalty-free access to the funds.

Once pre-tax contributions are converted, they cannot be converted back.

Roth 401(k) accounts require Required Minimum Distributions (RMDs) at the age of 72.

Tax-free withdrawals may benefit participants who expect their tax rate to be the same or higher in the future and interested in tax diversification strategies.



It may not make sense for participants who:

Expect their tax rate to be lower in retirement (then at the time of conversion).

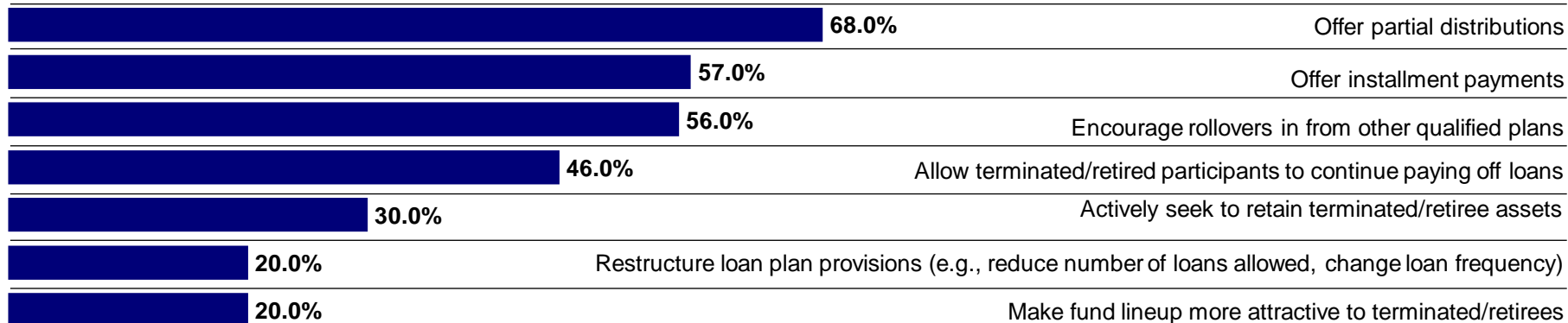
Will need to access your money within five years of the conversion.

Would find paying the tax owed on the amount of conversion a hardship.

¹Vanguard, How America Saves 2022 (data taken from 1,700 qualified plans).

Plugging the leak

Most plan sponsors (86%) have taken steps to prevent plan leakage¹

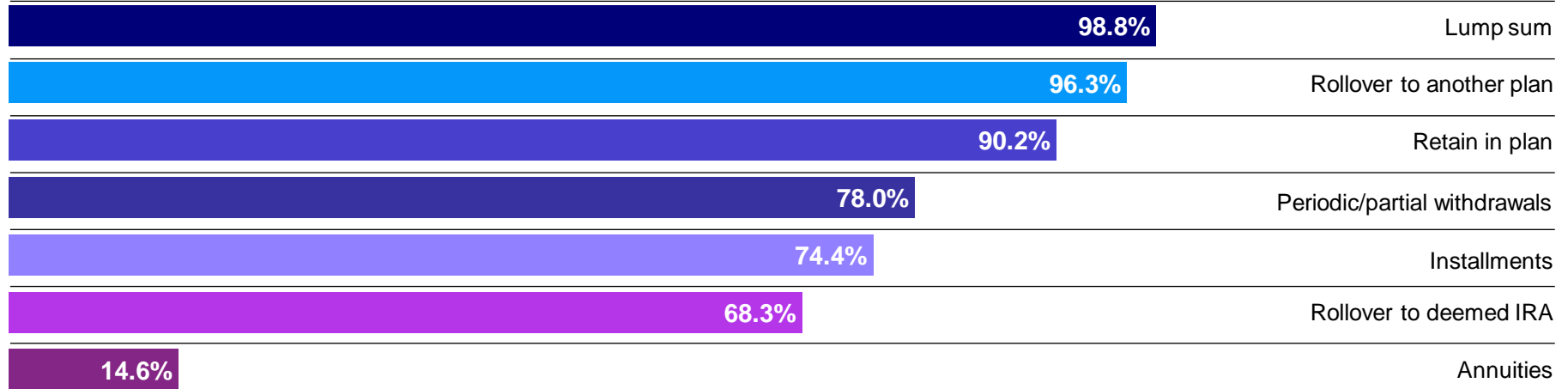


- 17.5% of participants have an outstanding loan, with an average initiated amount of \$12,250.²
- Primary reasons for taking a loan/withdrawal: 44% pay debt, 37% home purchase/repairs, 22% other (auto purchase, college)²
- Access to an emergency fund may help limit loans and premature withdrawals.

¹Callan 2022 Defined Contribution Trends Survey (101 large DC plan sponsors, multiple responses were allowed). ²Fidelity, Building Financial Futures, 1st quarter 2021 (survey of 23,500 corporate DC plans & 19.6 million participants).

Plan sponsors offer flexible distribution options

Retirement distribution options offered among large plans



Source: Plan Sponsor Council of America's 64th Annual Survey Reflecting 2020 Plan Experience (103 plans with 5,000+ employees).

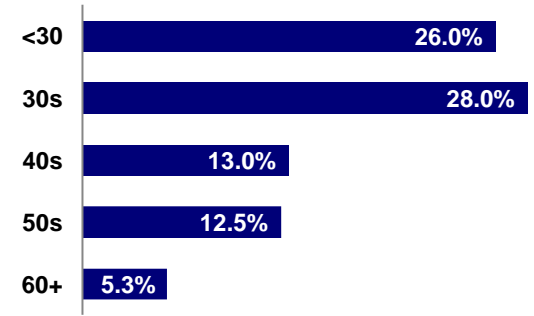
Student loan debt is placing a heavy burden on employees

Student loan debt is now the second highest consumer debt category behind mortgage debt and higher than both credit cards and auto loans.¹

48 million borrowers owe \$1.75 trillion in student loan debt with an average balance of \$39,351.¹

1 in 5 American adults have student loan debt with an average payment of \$393/month.¹

% of student loan debt holders by age group²



Average student loan debt by age group²

20s	\$21,700
30s	\$40,500
40s	\$40,400
50s	\$37,700
60s	\$33,800

¹Federal Reserve Bank of New York, as of 2Q 2022. ²Educationdata.org, as of 2Q 2022.

Programs to help employees repay and manage student loans

Tax-free reimbursements Direct payment programs

- The Consolidated Appropriations Act of 2021 allows employers to make tax-free contributions up to \$5,250 a year to employees' student debt (extended to 2025).

Converting unused paid-time-off (PTO)

- Allows workers to convert unused vacation days towards student loan payments.
- Can work on a reimbursement basis or a direct payments from an employer to a student loan servicer.

Innovations coming: 401(k) match programs

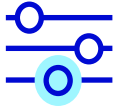
- Employers match an employee's student loan payment in the form of a contribution to their retirement plan, regardless if the employee makes an elective contribution.
- SECURE 2.0 regulations will allow employers to make tax-exempt 401(k) contributions that directly match a workers' student loan payments.

Current trends

- **25% of employers** currently offer student loan debt assistance and another 24% plan to do so.¹
 - **86% of workers** between the ages of 22 and 33 would commit to an employer for five years if the employer offered a student loan repayment program.²
 - **36% of Gen Z, 29% of millennials and 14% of Gen X** employees surveyed said student debt assistance is a “must have” employer benefit.³
-

¹EBRI 2022 Financial Wellbeing Employer Survey. ²Paycor, Employer Student Loan Repayment Program: 5 Tips for 2022, February 28, 2022. ³MetLife, 18th Annual US Employee Benefits Trends Study 2020 (survey of 2,367 full-time employees, most recent data available).

Cost cutting strategies for plan sponsors



Adjust the match

- Stretch the match
- Reduce match for HCEs
- Eliminate year-end true-ups
- Amend fixed match to discretionary
- Suspend match for a certain period



Change timing of contributions

- Add a “last day” or “1,000 hour” requirement
- Deposit employer contributions at year-end vs. each payroll



Lengthen vesting

- Amend from immediate to 3-year cliff or 5-year graded



Adjust non-elective contributions

- Eliminate nonelective contributions
- Pay contributions in company stock



Eliminate or delay auto features

- Eliminate auto-enrollment (or add service requirement)
- Eliminate or delay auto-escalation



Exclude certain pay components

- Exclude bonus or overtime compensation from “plan pay”
- Eliminate contributions above certain pay thresholds

Before implementing any changes to your DC plan, consult with your ERISA counsel. Plan amendments and participant notices might be required prior to making any changes.

Investment menu design

The engine that powers
your DC plan

03

A tier-based menu helps address the diverse needs of participants



32% participants preferred¹

Age-based funds (QDIA)

Commonly used options

- Target date funds (custom or bundled)
- Managed accounts



37% participants preferred¹

Risk-based funds

Commonly used investments

- Target risk funds (custom or bundled)



31% participants preferred¹

Core funds

Commonly used investments

- US equities (value/growth/core)
- International developed
- Emerging markets
- Real estate/real assets
- Diversified bond
- Stable value/money market



Present tiered investment menus ranging from simple to more complex decisions.

For illustrative purposes only. QDIA is the abbreviation for Qualified Default Investment Alternative. ¹Source: Invesco US participant survey, November 2020.

A “retirement tier” provides solutions for pre- and post-retirees

A “retirement tier” helps broaden the plan’s goal from one wholly focused on savings to one that also supports participants near or in retirement.

Retirement tier		
Investment options	Distribution options	Communications and resources
<ul style="list-style-type: none">• Target risk funds• In-retirement target date fund• Managed payout funds• Inflation protection funds• Stable value funds	<ul style="list-style-type: none">• On-demand withdrawals• Systemic withdraw option (monthly/quarterly)• In-plan guaranteed income product• Annuity placement services	<ul style="list-style-type: none">• Targeted communication and education programs• Social Security optimizer/claiming strategies• Access to retirement coach/advisor

The case for a retirement tier

Participants over age 50 hold **63%** of all 401(k) plan assets¹

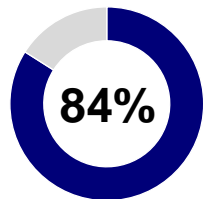
94% of employees feel a guaranteed lifetime income option offered by their employer is a good fit.²

2 in 3 employees worry about running out of money during retirement²

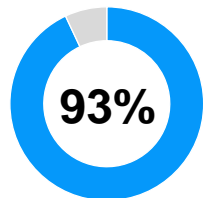
For illustrative purposes only. QDIA is the abbreviation for Qualified Default Investment Alternative. ¹EBRI/ICI 401(k) plan database as of December 31, 2020 (represents 11.5 million participants in 76,507). ²Invesco, Show me the income, 2022 DC retirement income study (survey of 1,049 large plan participants).

Target date fund landscape among large plans

Adoption rates¹

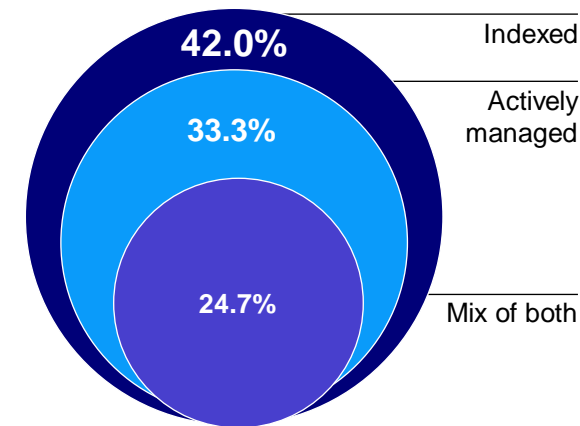



Large DC plans offering target date funds in their lineup.



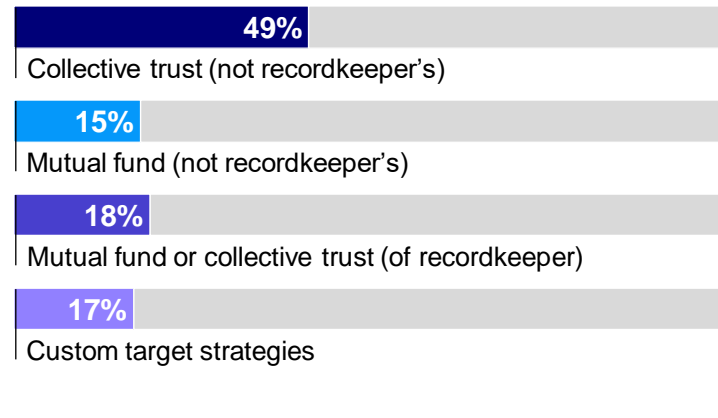
Plans with a QDIA using target date funds.

Investment approaches used¹



 **69% of millennials are 100% invested in TDFs, due to being auto-enrolled and defaulted.³**

Types of target date funds in DC plans²



Type of glidepath used¹



¹Plan Sponsor Council of America's 64th Annual Survey Reflecting 2020 Plan Experience (103 plans with 5,000+ employees). ²Callan 2022 Defined Contribution Trends Survey (101 large DC plan sponsors). ³Fidelity, Building Financial Futures, 1st quarter 2021 (survey of 23,500 corporate DC plans & 19.6 million participants).

Rethinking the core menu

Alternative approaches to the core menu using white label or risk-based funds

White label core options	Traditional fund menu	Risk-based options
US large company stock	US large-cap value US large-cap core US large-cap growth	Aggressive
US small/mid company stock	US small/mid-cap value US small/mid-cap core growth US small/mid-cap growth	Moderately aggressive
International stock	Non-US value Non-US core Non-US growth Emerging markets	Moderate
Diversified fixed income	Global bond	Moderately conservative
US bonds	High yield bond Core bond	Conservative
Real assets (commodities, real estate, TIPs)	Real estate (REITs)	
Stable value	Stable value	

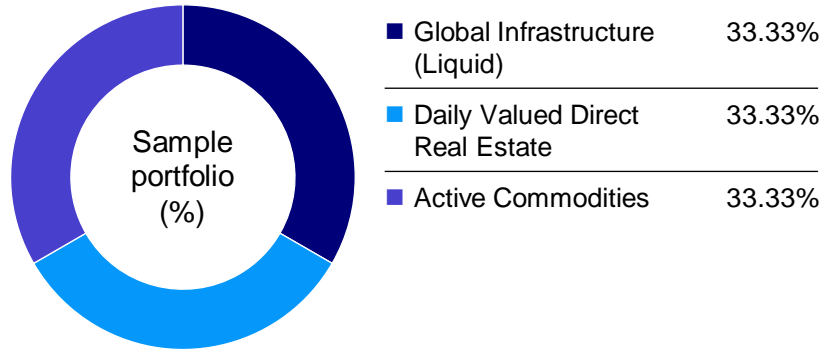
Current trends¹

- **56%** of plan assets are in the core menu.
- **69%** of large plans offer 10-14 core menu investments.
- **66%** offer Stable Value & **53%** offer money market. Consider consolidating if both are offered.

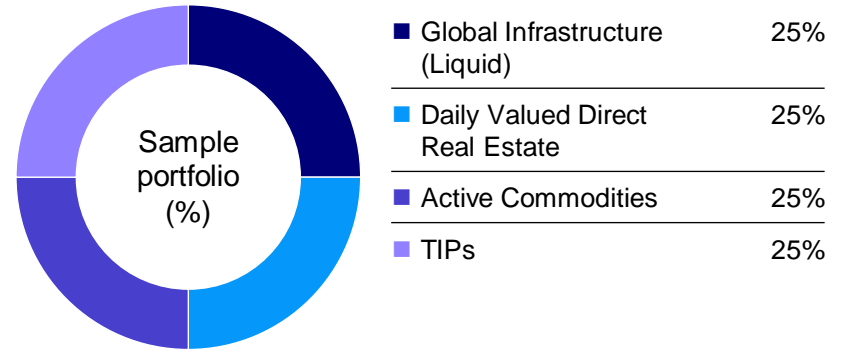
For illustrative purposes only. ¹NEPC, 2021 Defined Contribution Plan Trends and Fee Survey (survey of 137 plan sponsors averaging 1.7 billion in assets).

Two approaches to real assets white label portfolios

Real assets — inflation sensitive



Real assets — defensive



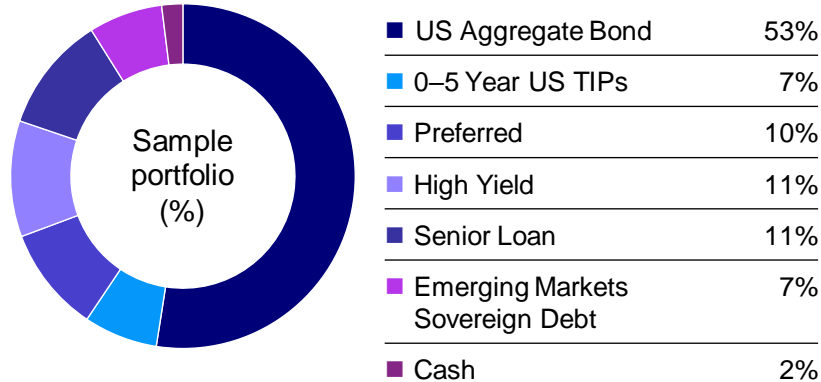
Observations

- Potential for improved resiliency to rising rates versus a benchmark comprised of the Bloomberg Barclays US TIPs Index, Dow Jones US Real Estate Index and Bloomberg Commodity Index
- May be less sensitive to equity markets than a 60/40 portfolio

For illustrative purposes only. This information is not intended as a recommendation to invest in a specific asset class or strategy. Indices are unmanaged and used for illustrative purposes only. It is not possible to invest directly in an index.

Sample diversified fixed income white label portfolio

Diversified fixed income



Observations

- Potential for higher risk-adjusted returns versus the Bloomberg US Aggregate index
 - Potential for improved resiliency to rising rates versus the Bloomberg US Aggregate index
 - May be less sensitive to equity markets than a 60/40 portfolio
-

For illustrative purposes only. This information is not intended as a recommendation to invest in a specific asset class or strategy. Indices are unmanaged and used for illustrative purposes only. It is not possible to invest directly in an index.

Prevalence of managed accounts

Plans offering managed accounts by asset size

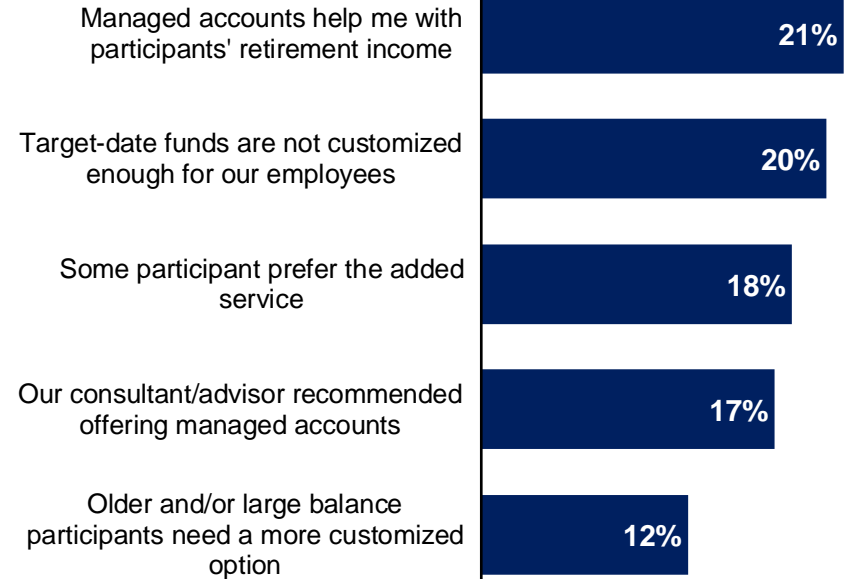
Offer managed accounts	<\$25 million	\$25-\$250 million	\$250+ million	All plans
Yes	41%	49%	54%	47%
No	45%	40%	37%	41%
No, but plan to in the next 12 months	10%	9%	6%	9%
Don't know	3%	2%	2%	2%



A “Dynamic QDIA” is when younger defaulting participants are invested in a target date fund. When they reach a specified age, they’re switched to a managed account.


Source: The Cerulli Report, U.S. Retirement Markets 2021 (over 700 plan sponsors surveyed).

Reason for offering a managed account



Key environment, social, governance (ESG) factors

Environment



Environmental policy

Environmental performance

Climate change

Nuclear energy

Biodiversity

Social



Human rights


Labor standards

Health and safety

Employee development

Supply chain standards

Governance



Corporate governance

Code of ethics

Bribery and corruption

Death penalty

Military expenses

For illustrative purposes only. Source: Invesco.

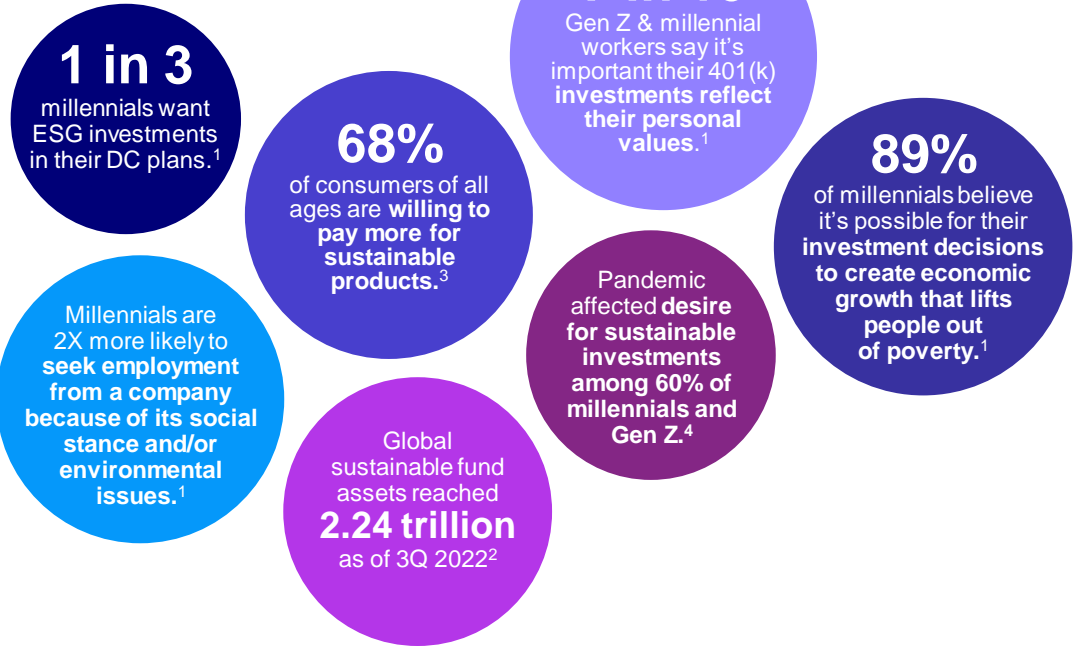
Demographics driving demand for ESG investments

Two primary ways plan sponsors can implement ESG investing in their DC plans:

01 Add **ESG-themed options** into the lineup or self-directed brokerage window.

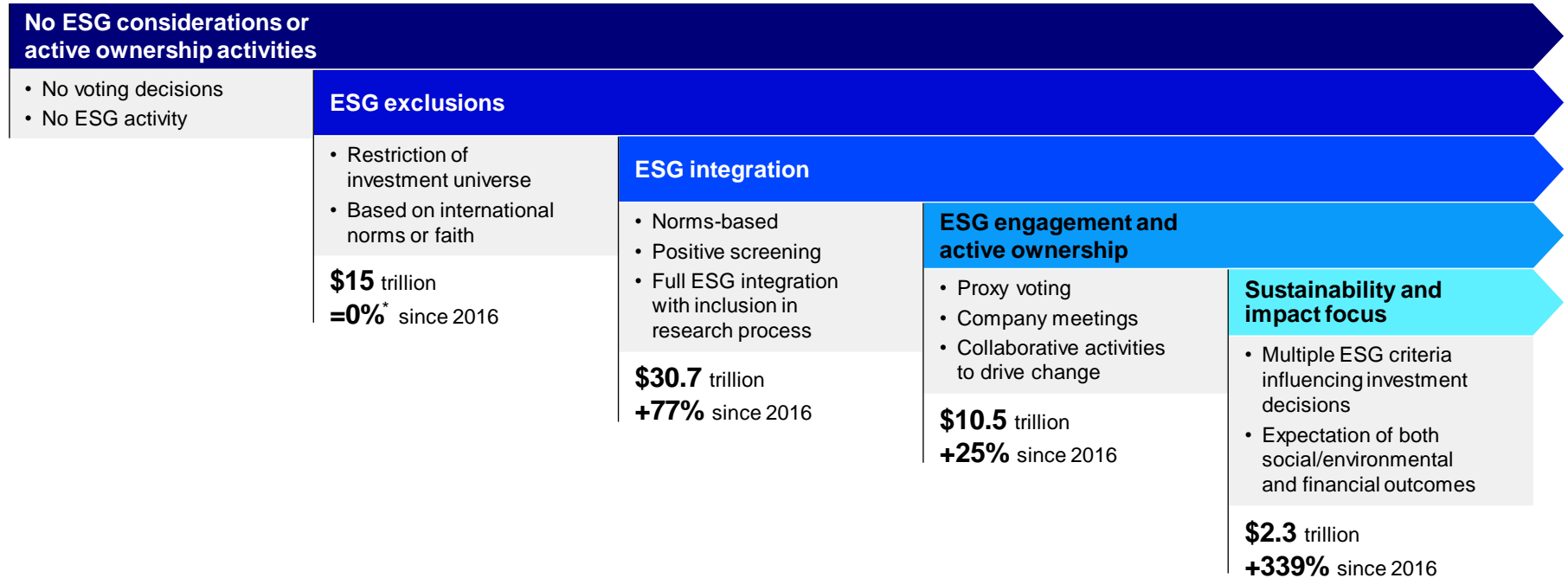
02 Consider **ESG factor integration** in investment processes during manager evaluation.

On Average, 8% of DC plans offer a dedicated/standalone ESG option.⁵



Source: ¹Schwab Retirement Plan Services, US 401(k) participant survey, April 2022 (survey of 1,000 participants). ²Morningstar, Global Sustainable Fund Flows, Q3 2022. ³First Insight and Wharton School Baker Retailing Center, The Sustainability Disconnect Between Consumers & Retail Executives, January 2022 (survey of 1,000 consumers). ⁴Prudential, Family Wealth Unlocked Part 2: The Growing Appetite for Responsible Investing Across the Generations in 2021. ⁵Callan, 2022 DC Trends Survey (101 large DC plan sponsors).

Varied approaches to ESG integration



For illustrative purposes only. Source: GSIA 2020 Global Sustainable Investment Review. Global SRI Assets \$35.3T as of 2018, a 55% increase over 2016. This total is a net value after adjustments to remove double-counting, since managers may apply more than one strategy to a given pool of assets. Most recent data available.

Participant engagement

A crucial component in
achieving desired outcomes

04

The numbers validate the urgency to engage participants



70%

of workers think they will work for pay in retirement - while only 27% of retirees report doing so¹ - and underestimate the number of years in retirement and how much they'll need.²

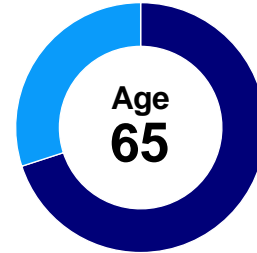


\$315,000



Estimated out-of-pocket health care expense for a 65-year-old couple retiring today (\$11,700 in the first year).³

What retiring couples assume they'll need for health care expenses in retirement.³

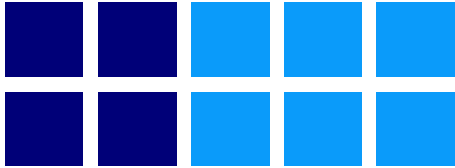


7 in 10 people over age 65 will need some form of long-term care at some point, ranging from \$54,000 to \$108,405 annually.⁴

¹EBRI, 2022 Retirement Confidence Survey (survey of 3,017 US workers & retirees). ²22nd Annual Transamerica Retirement Confidence Survey, June 2022 (survey of 5,846 working adults).

³Fidelity, 2022 Annual Health Care Cost Estimate. ⁴Genworth, 2021 Annual Cost of Care Survey.

The numbers validate the urgency to engage participants (continued)



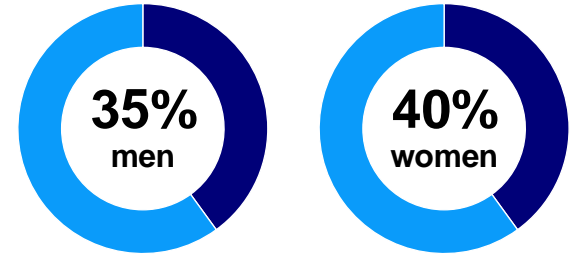
4 in 10

DC participants, who rated themselves with high investment knowledge, scored poorly (65% average) on a basic financial literacy quiz.¹



18%

of employees are not deferring enough to get the full company match, and 27% are deferring at the match threshold.²



start taking **Social Security** retirement benefits at age 62. Claiming early can have an average lifetime loss of \$95,000 per household.³

¹Invesco, The Forgotten Participant: Examining DC Participant Investing Behaviors and Decision-making, 2020. ²Alight, 2022 Universe Benchmarks Report (based on data from 3 million DC plan participants). ³Bipartisan Policy Center, How to Help Americans Claim Social Security at the Right Age, August 2020.

Financial well-being benefits offered by employers

Most common financial well-being benefits ¹	% currently offered
Financial planning education, seminars, or webinars	55%
Financial investing education, seminars, or webinars	51%
Tuition reimbursement	47%
Basic money management tools	48%
Personalized financial counseling, coaching, or planning	46%
Personalized credit/debt counseling, coaching, or planning	32%
Emergency fund/employee hardship assistance	35%
Short-term loans through payroll deduction	27%
Student loan debt assistance	25%
Payroll advance loans through the employer	27%
Debt management services	20%

4 in 10 workers

say saving for college or paying on debt is negatively impacting their ability to save for retirement.²

¹EBRI, 2022 Financial Well-Being Survey (survey of 250 employer benefit decision-makers). ²EBRI, 2022 Retirement Confidence Survey (survey of 2,677 US workers and retirees).

Retirement planning topics participants are most interested in

Top three important topics by age group

Topic	<30	30–39	40–49	50–59	60–69
Social Security (e.g., how much to expect, how to optimize benefits)	8%	16%	22%	31%	23%
Investment selection (e.g., understanding stocks and bonds, choosing between mutual funds and ETFs)	30%	33%	24%	18%	17%
How to manage healthcare costs or plan for long-term care	6%	8%	10%	14%	18%
Tax implications of my financial decisions (e.g., understanding capital gains tax or early 401(k) withdrawals)	25%	14%	15%	14%	18%
How to convert my retirement savings to income (e.g., how much to withdraw from different accounts)	16%	15%	20%	19%	23%
How much to save for retirement and which accounts to use (e.g., pre-tax or Roth)	22%	30%	22%	17%	9%
Prioritizing different financial obligations (e.g., whether to save in an emergency fund or pay off debt)	12%	17%	11%	8%	7%
Ways to guarantee portions of my income in retirement (e.g., how to compare annuities)	14%	11%	10%	12%	12%
How to financially prepare for specific events applicable to my situation (e.g., buying a house, getting married)	22%	15%	16%	4%	3%

Source: The Cerulli Report, U.S. Retirement End-Investor 2022 (survey of 1,497 401(k) plan participants).

Tailoring financial wellness programs to different employee segments

Financial wellness topics segmented by career stage

Early career

- Pay off education debt
- Develop a budget
- Build a good credit score
- Evaluate decisions about buying vs. renting/leasing
- Develop a savings and investing plan

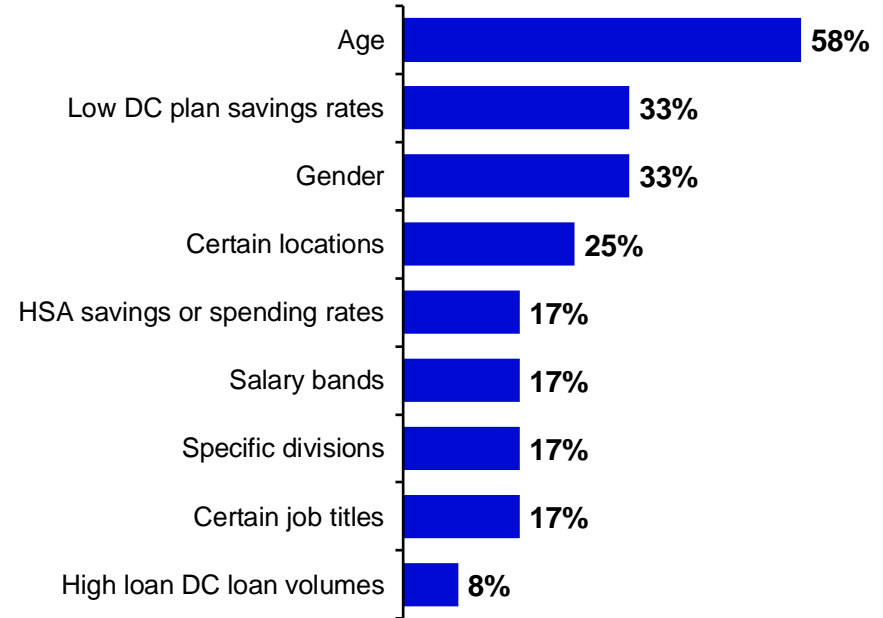
Mid-career

- Funding education expenses
- Develop strategies for saving and investing for retirement
- Maximizing cash flow
- Risk management/insurance planning
- Caring for elderly parents

Late-career

- Focus on retirement or life after retirement
- Retirement cash flow and distribution planning
- Investing during retirement
- Health care protection
- Social Security and Medicare
- Estate planning

Criteria plan sponsors use to tailor wellness programs



Source: Callan 2021 Defined Contribution Trends Survey (93 large DC plan sponsors, multiple responses allowed, most recent data available).

HSAs: Helping to enhance retirement savings

Key health savings account (HSA) benefits at-a-glance

Triple tax advantages

HSAs have triple tax-free benefits: pre-tax contributions, tax-deferred growth, and tax-free withdrawals for qualified medical expenses

Retirement savings strategy

- Can be used to pay for future healthcare costs in retirement
- Balances not subject to “use it or lose it” rule

2023 contribution limits

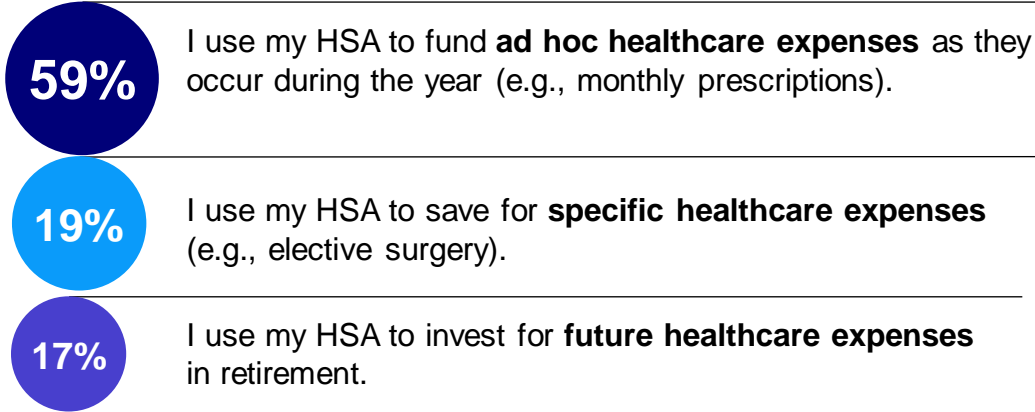
- Employee and/or employer funded
- Employer + employee: \$7,750 family, \$3,850 individuals
- Age 55 or older: additional \$1,000 catch-up

Full portability

Can be rolled over to another HSA custodian if changing jobs

HSAs: Reframing as a long-term investment strategy

How participants use their HSAs¹



Reframe HSAs

from a “current-year spending account” to a “**long-term investment account.**”

HSAs can be an attractive option to higher wage earners seeking to maximize pre-tax savings for retirement expenses.

Source: The Cerulli Report, U.S. Retirement End-Investor 2022 (survey of 1,497 401(k) plan participants, question asked of active and retired 401(k) participants with an HSA).

Helping participants prioritize savings

01



**Fund an
emergency savings
account**

02



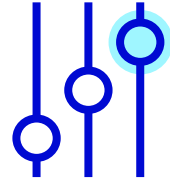
**Contribute
enough to get the
401(k) match**

03



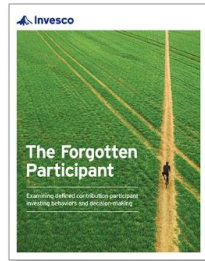
**Fully fund
(and invest in)
a health savings
account (HSA)**

04



**Top off the
401(k) up to deferral
limits (including
traditional after tax)**

Invesco's ReDefined Contribution Plans research series



2019 The Forgotten Participant: What's missing from the DC investment menu?

- Research spanned 110 large plan sponsors and 2,001 participants.
- Examined participant investment behaviors and decision making, including what beliefs and needs drive participants to construct retirement portfolios the way they do.
- Uncovered a significant population of participants often overlooked.



2021 Watch your Language: DC Language Research

- Research included plan sponsor interviews, participant focus groups, and a survey of 1,600 large plan participants in the US and Canada.
- Examined how language impacts participants' understanding of the investment menu, target date and target risk funds, the potential benefits of staying in the plan post-retirement, and retirement income concepts.



2022 Show me the Income: Retirement income study

- Explored plan sponsor and participant preferences for creating retirement income.
- To help plan sponsors build a “retirement readiness program,” the research will focus on retiree-friendly plan design, investment options and communication strategies.

Plan governance

Your framework for
decision-making

05

Five primary responsibilities of DC fiduciaries

01	Operate the plan solely in the interest of participants	<ul style="list-style-type: none"> • Use plan assets to benefit participants and designated beneficiaries only • Provide benefits and pay plan expenses 	<ul style="list-style-type: none"> • Invest plan contributions quickly and efficiently • Assess and monitor vendor cybersecurity policies
02	Oversee plan expenses paid by the plan and participants	<ul style="list-style-type: none"> • Ensure that service provider fees, investments and other plan expenses are reasonable for the level and quality of services provided (benchmark service and investment fees at least every three years) 	<ul style="list-style-type: none"> • Use the lowest cost share class of investments or collective investment trusts and separate accounts
03	Meet the <i>Prudent Man Rule</i>	<ul style="list-style-type: none"> • Act with the care, skill and due diligence of a prudent person in a similar role or circumstance • Seek the knowledge of an expert when making plan decisions if you don't have in-house expertise 	<ul style="list-style-type: none"> • Avoid conflicts of interest and prohibited transactions that could benefit parties related to the plan • Engage in annual fiduciary training
04	Minimize risks through diversification	<ul style="list-style-type: none"> • Offer a diverse range of investment choices • Carefully select and regularly review all investment options under the plan 	<ul style="list-style-type: none"> • Review 404(c) requirements with service providers to ensure no compliance gaps
05	Follow the terms of the plan	<ul style="list-style-type: none"> • Periodically review the plan document and Summary Plan Description to ensure they're consistent with ERISA • In case of a conflict, the plan document controls plan terms 	<ul style="list-style-type: none"> • Periodically monitor compliance of the recordkeeping and plan operations • Make timely required disclosures to participants • File required annual government reports

Source: U.S. Department of Labor.

Effective plan governance starts with properly structured committees

Best practices

- Create a governance charter outlining fiduciary delegation and monitoring, ensuring committees report annually back to the Board
- Document committee meetings with minutes including attendance, topics, discussions and decisions
- Retain meeting minutes for at least seven years¹
- Conduct comprehensive annual fiduciary training, including for new members
- Consider maintaining an odd number of committee members to prevent tie votes

Committee responsibilities

Investment committee	Plan administration committee
<ul style="list-style-type: none">• Evaluate and update the investment structure• Apply and periodically review the Investment Policy Statement (IPS)• Evaluate and monitor the target date fund glide path as part of QDIA oversight• Review and monitor investment manager performance• Monitor and benchmark plan fees• Formulate investment strategy/structure and prepare fund recommendations• Establish and monitor appropriate fund benchmarks	<ul style="list-style-type: none">• Review overall plan utilization and effectiveness compared to industry trends• Distribute required participant notices and disclosures• Monitor service providers for compliance to plan rules• Manage participant communication strategy, education and engagement efforts• Monitor service providers' cyber and fraud policies and activities

¹ERISA 29 U.S. Code § 1027, Retention of Records.

Sample agenda for plan committee meetings

Quarterly agenda items

- Review minutes of last committee meeting and report on actions items
- Quarterly investment review (including company stock if applicable)
- Report on legal changes
- Review of participant-related issues/claims for benefits

Q1	Q2	Q3	Q4
<ul style="list-style-type: none">• Annual review of service provider operations, issues and opportunities• Annual review of IPS• Annual report to board of directors of prior year's committee activity• Review Service Level Agreements• Conduct fiduciary training	<ul style="list-style-type: none">• Review participant communication and education resources with recordkeeper• Assess participant retirement readiness and develop engagement strategies• Review QDIA selection and glidepath	<ul style="list-style-type: none">• Review of participant disclosures and notices• Report on industry trends compared to plan design• Review of plan policies to any new features• Review vendors' cyber policies, including proper levels of insurance and bonding	<ul style="list-style-type: none">• Review funds for lowest share classes• Benchmark all plan fees, including revenue sharing from investments, managed accounts, and brokerage window• Review recordkeeper for possible cross-selling efforts

For illustrative purposes only.

Understanding outsourcing of fiduciary services

Limited plan committee time, resources and litigation concerns, are driving increased interest in outsourcing fiduciary services.

	ERISA 3(16) plan fiduciary	ERISA 3(21) co-fiduciary for investments	ERISA 3(38) delegated fiduciary for investments
Fiduciary duties	<ul style="list-style-type: none"> Named fiduciary as “Plan Administrator” Manages day-to-day plan administration and operations 	<ul style="list-style-type: none"> Co-fiduciary investment adviser partners with Plan Sponsor (co-fiduciary) to select and monitor plan investments 	<ul style="list-style-type: none"> Adviser is sole investment fiduciary making all investment decisions without plan sponsor approval Services can range from investment manager selection and replacement to developing multimanager portfolios and custom glide paths
Plan sponsor considerations for outsourcing	<ul style="list-style-type: none"> Outsource 3(16) fiduciary when Plan Sponsor doesn’t have capacity or expertise to ensure all regulatory and administrative functions for their retirement plan are carried out 	<ul style="list-style-type: none"> Committee seeks professional investment advice but prefers to maintain ultimate control over investment decision-making 	<ul style="list-style-type: none"> Committee prefers to outsource all investment decision-making Frees up committee resources to focus on other strategic initiatives (e.g., plan design, participant communications)
Plan sponsor responsibilities	<ul style="list-style-type: none"> Prudently selects a qualified 3(16) fiduciary Monitors and replaces fiduciaries as necessary 	<ul style="list-style-type: none"> Prudently selects a qualified 3(21) co-fiduciary Takes recommendations into consideration with the discretion to accept or reject the advice Makes final decision on any plan changes 	<ul style="list-style-type: none"> Prudently selects a qualified 3(38) delegated fiduciary Maintains responsibility to monitor the 3(38) delegated fiduciary

ERISA is a highly complex area of law. The information contained in this material is strictly educational in nature and is not intended as legal advice. Plan sponsors are strongly encouraged to obtain legal advice from a qualified expert.

Mitigating fiduciary risk

Litigation trends and simple action steps for fiduciaries

Theme	Actions for plan sponsors
<p>Cyber and fraud risk Participant accounts are being hacked and unauthorized distributions are occurring.</p>	<ul style="list-style-type: none"> • Issue RFI to service providers to understand cyber and fraud procedures • Create a Fraud Policy Statement for committee monitoring efforts and action steps in case of breach • Educate participants on how to monitor their accounts and steps to follow if fraud occurs • Review 2021 DOL guidance on Cybersecurity Best Practices
<p>Lowest cost share class Collective investment trusts and separate accounts are being overlooked when evaluating lowest cost share classes.</p>	<ul style="list-style-type: none"> • Consolidate similar overlapping funds to create scale in the asset class and potential lower expense • Monitor asset levels to reach the next lowest share class • Explore if lower cost non-mutual fund investments are available such as collective investment trust and separate accounts
<p>High recordkeeping fees Failure to consider all fees when benchmarking.</p>	<ul style="list-style-type: none"> • Benchmark and negotiate recordkeeping fees every two years including ALL sources of plan-generated revenue (float income, managed accounts, the recordkeeper's proprietary investments, etc.) • RFP the plan every five years for competitive bids • Reduce/rebate or eliminate revenue sharing and move to flat per participant recordkeeping fee to enhance transparency
<p>Cross-selling plan data Service providers use plan data to cross-sell non-plan related services.</p>	<ul style="list-style-type: none"> • Review service contract for cross-sell language and who owns the data • Restrict cross-selling to require participant consent • Request recordkeeper to report new IRAs and other service lines being opened by participants and the revenue received
<p>QDIA selection QDIA is often proprietary to the plan's recordkeeper or was selected without proper evaluation.</p>	<ul style="list-style-type: none"> • Follow DOL guidelines to select and monitor QDIAs • Use plan data to help determine if "to" or "through" glidepath is appropriate • Monitor/educate participants using multiple target date funds

Managing cybersecurity risk

Steps to address cybersecurity risk and vulnerabilities

STEP 1	Establish a formal, well-documented cybersecurity program	<ul style="list-style-type: none"> • Identify personally identifiable information (PII) data to be protected • Issue a Cyber/Fraud RFI with current and competing leading service providers <ul style="list-style-type: none"> ◦ Determine how data is accessed, shared, stored, controlled, transmitted, secured and maintained • Establish protocols and policies covering assessment of cybersecurity procedures <ul style="list-style-type: none"> ◦ Updating, reporting, training, data retention, controlling access and third-party risks • <i>DOL provides a list of 12 best practices for ERISA-covered plans</i>
STEP 2	Review service provider contracts and practices	<ul style="list-style-type: none"> • Define security obligations, indemnifications, reporting and monitoring responsibilities • <i>DOL provides a service provider review checklist for plan sponsors</i>
STEP 3	Review insurance coverages	<ul style="list-style-type: none"> • Understand overall insurance programs covering plans and service providers • Evaluate whether cyber insurance has a role in a cyber risk management strategy and consider the need for a separate policy covering the DC plan
STEP 4	Communicate to participants	<ul style="list-style-type: none"> • Educate participants on protecting their assets, what to do and who to contact if their accounts or identity has been compromised • <i>DOL provides a retirement account tip sheet for participants</i>

Source: 2016 ERISA Advisory Council Executive Summary to the Secretary of Labor, November 10, 2016.

DOL audits begin on cybersecurity practices

DC plan sponsors are receiving DOL audit letters requesting the following information:

- What are service provider processes and systems for dealing with cybersecurity threats and protection of personally identifiable information (PII)?
- Does the service provider have policies on storing PII including where it is stored, how long it is stored, and how it is eliminated?
- Is there a privacy and security policy, and does the policy apply to data held by benefit plans?
- Are all personnel, who come in contact with PII, trained on adequate protection of the information?
- Is the policy clear with respect to storing PII on laptops and portable storage devices? What is that policy?
- Does the service provider carry cybersecurity insurance?
- Is advanced authentication used? Can the service provider explain the process? Can the Company explain it?
- Has the service provider experienced any security breaches?
- Are technology systems regularly updated?
- Does the Company monitor the cybersecurity controls of service providers? How often? Is the monitoring documented?

Source: Department of Labor, June 2021.

About Invesco

Helping people get
more out of life

06

Invesco is a leading independent global investment management firm

We are privileged to manage **\$1.3 trillion** in assets on behalf of clients worldwide.

Invesco Ltd. is an independent investment management firm dedicated to delivering an investment experience that helps people get more out of life.

We have:

- Specialized investment teams managing investments across a comprehensive range of asset classes, investment styles and geographies
- More than 8,400 employees focused on client needs across the globe
- Proximity to our clients with an on-the-ground presence in more than 20 countries
- Solid financials, investment-grade debt rating, and strong balance sheet

UK & Ireland



Continental Europe



US & Canada



Middle East



Asia



Australia



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A legacy of serving DC clients for over 30 years

■ Equity	\$48 billion
■ Fixed income	\$75 billion
■ Alternatives	\$4 billion
■ Balanced	\$6 billion
■ Money market	\$2 billion

■ Mutual funds	\$54 billion
■ Separate accounts	\$53 billion
■ Collective trust funds	\$23 billion
■ Other	\$5 billion



Ranked 11th by
Pensions & Investments'
Managers of DC Plan Assets¹

A leading DC asset manager for
stable value, active international equity,
active domestic equity and real estate¹

¹Pensions & Investments. Largest defined contribution money managers ranked by US institutional, tax-exempt assets under management as of December 31, 2021. Invesco data as of June 30, 2022. Asset breakdowns may not equal total due to rounding. Some vehicles are offered by affiliated investment advisers, which provide investment advisory services and do not sell securities. These firms, like Invesco Distributors, Inc., are indirect, wholly owned subsidiaries of Invesco Ltd.

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