

# The success of defined contribution plans and the road ahead



In the Spotlight  
August 2024

## Key Insights

- Defined contribution (DC) plans have expanded retirement plan access for U.S. workers and offered them diversified investments at costs that have declined over time.
- As the main workplace retirement plan option, DC plans could adequately replace career earnings for all Americans when combined with Social Security benefits.
- Fixing Social Security, encouraging default participation, age-based default contributions, and promoting emergency savings could improve the retirement system.



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The Employee Retirement Income Security Act of 1974 (ERISA) was enacted to establish the guardrails for workplace retirement plans in the private sector. Since then, the world of workplace retirement plans has evolved significantly to expand access to retirement plan benefits to workers across all income groups, encourage higher participation and increase retirement savings through automated features, and improve age-appropriate asset allocation through the adoption of default investment arrangements. These plans have become

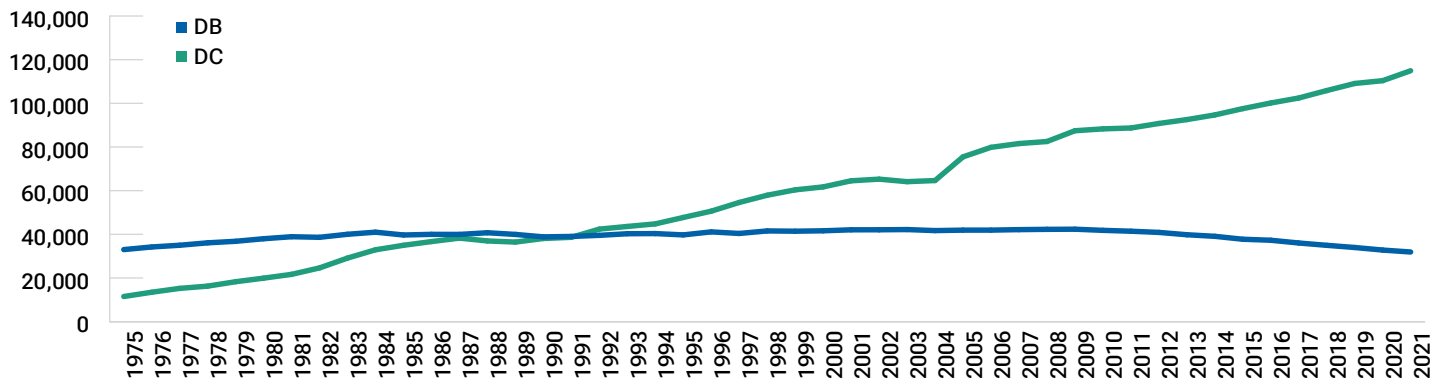
a vital force behind a more secure retirement for many Americans, allowing them to share in the prosperity of capital markets.

According to data from the Department of Labor (DOL), defined benefit (DB) plans covered roughly three times the employees covered by defined contribution (DC) plans in 1975. By 1991, DC plans covered more workers than DB plans for the first time, and the trend continues to grow (Figure 1). In 2021, DC plans covered nearly 115 million private sector workers

“...workplace retirement plans... have become a vital force behind a more secure retirement for many Americans...”

## The number of workers covered by DC plans continues to grow

(Fig. 1) Number of participants in pension plans by type of plan, 1975–2021 (thousands)



Source: Private Pension Plan Bulletin Historical Tables and Graphs 1975–2021 (Page 5). Department of Labor, Employee Benefits Security Administration, Department of Labor. September 2023.

compared with 32 million workers covered by DB plans.

Data from the Investment Company Institute (ICI) show that at the end of 2023, DC plans and individual retirement accounts (IRAs) held \$24.1 trillion in assets compared with \$3.2 trillion held in private sector DB plans.<sup>1</sup>

This dramatic shift from DB to DC plans has been welcomed by many, but there are some critics of the DC system as well. Their criticisms, for the most part, ignore the progress made by the DC system

and compare it with an illusory past, which seems rosier in the rearview mirror. Generally, the concerns raised fall into several buckets—limited DC plan coverage, ill-equipped participants left on their own to make complex decisions, inadequacy of savings generated by DC plans, lack of guaranteed income in retirement, and the fact that DC plans only help affluent (not middle-class and low-income) Americans.

This paper will outline how DC plans have improved retirement saving and investing; it will also address some of these criticisms and offer suggestions to help enhance

DC plans in ways that aim to improve retirement outcomes for all Americans.

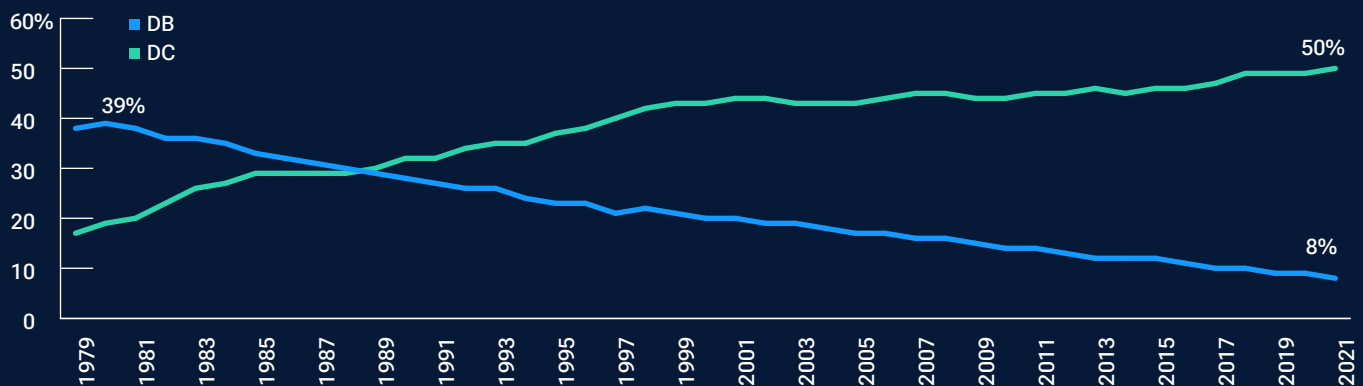
### Coverage and contributions have improved with DC plans

Coverage of workplace retirement plans in the U.S. (also known as access to a retirement plan) has been steadily improving in the last 40 years thanks to DC plans. A recent Congressional Research Service report from 2021 indicated that nearly two-thirds (65%) of private sector workers had access to DC plans and 47% of

<sup>1</sup> Quarterly Retirement Market Data, Investment Company Institute, Washington D.C., 2024.

## DC plans cover more private sector workers than DB plans ever did, even at their peak

(Fig. 2) Percentage of private sector wage and salary workers participating in an employer-based retirement plan by plan type, 1979–2021



Source: Employee Benefit Research Institute (EBRI), Fast Facts #485, November 2023.

workers were actively contributing to their plans. For full-time private sector workers, access was 74% and the participation rate<sup>2</sup> was 57%.<sup>3</sup>

According to data from the Employee Benefit Research Institute (EBRI), the high watermark for DB plan participation in the private sector was 39% in 1980 (Figure 2). In comparison, the participation rate for DC plans was 50% for private sector workers in 2021.<sup>4</sup>

Like many things of the past, nostalgia about DB plans tends to ignore their realities. The truth is that when DB plans were more dominant, not only was coverage lower, but coverage also didn't mean the same thing under these plans. Many DB plans were designed as workforce management tools, so the vesting schedules were very steep and the benefit formulas (such as final average pay) meant that those who changed jobs often ended up with meager pensions. This highlights a benefit of the transition from DB to DC plans that is rarely discussed—job mobility and increased earnings potential.

DB plans often compelled workers to forgo higher earnings by switching jobs in the hope of earning a decent pension someday. Schrager (2008) studied the relative risks of DB and DC plans accounting for job turnover and wage variability in the context of a life cycle model and found that as wages become more variable and the probability of job turnover increases, DC plans generate higher welfare for workers than DB plans.<sup>5</sup>

In 1983, the median tenure of a worker between ages 55 and 64 was 15.3 years, which went down to 10.2 years in 2018.<sup>6</sup> DC plans have indeed induced more job changes among late-career workers. However, according to the Bureau of Labor Statistics (BLS), median tenure for the entire workforce inched up slightly in the last four decades, from 3.5 years in 1983 to 4.1 years in 2020.<sup>7</sup> This data indicates that the average worker never worked long enough for a single employer to accrue any meaningful DB benefits.

There is also a limitation of looking at coverage from a cross-sectional or point-in-time view. Many workers who are currently not covered by a retirement plan might gain coverage in the future, and others might lose such coverage when they change jobs (for example, moving from a full-time to a part-time job). As a result, it becomes unclear what share of the workforce accumulates savings in a workplace retirement plan during the span of an entire career. Analyzing data from the Federal Reserve Board's Survey of Consumer Finances (SCF), ICI (2024) found that more than three-quarters (77%) of near-retiree households had DB plan accumulations, DC plan or IRA assets, or both.<sup>8</sup> This means that, during their entire careers, three in four households accumulate retirement savings in a workplace retirement plan or an IRA.

Brady and Bass (2023)<sup>9</sup> also addressed this issue by analyzing tax filing information to estimate the share of retirees who draw retirement income from

 Like many things of the past, nostalgia about DB plans tends to ignore their realities.

<sup>2</sup> Participation rate refers to the total share of the workforce (with or without access) who participate in a DC plan. For DB plans, participation was automatic. Contributions to both DB and DC plans refer to the amount of benefits that participants receive or accrue.

<sup>3</sup> "Worker Participation in Employer-Sponsored Pensions: Data in Brief", Congressional Research Service, R43439, November 2021. <https://crsreports.congress.gov/product/pdf/R/R43439>

<sup>4</sup> "The Retirement Landscape for Private-Sector Workers: How It Has Changed 1979–2021," EBRI Fast Fact # 485, November 9, 2023.

<sup>5</sup> Allison Schrager "The Decline of Defined Benefit Plans and Job Tenure." *Journal of Pension Economics and Finance*. 2009;8(3):259–290. doi:10.1017/S1474747208003570.

<sup>6</sup> Craig Copeland. "Trends in Employee Tenure, 1983–2018." EBRI Issue Brief, no. 474, February 28, 2019.

<sup>7</sup> U.S. Bureau of Labor Statistics <https://www.bls.gov/opub/ted/2020/median-tenure-with-current-employer-was-4-point-1-years-in-january-2020.htm>

<sup>8</sup> See Figure 8.4 in Investment Company Institute, *2024 Investment Company Fact Book: A Review of Trends and Activities in the Investment Company Industry* (Investment Company Institute, Washington D.C., May 2024); available at <https://www.icifactbook.org/pdf/2024-factbook.pdf>

<sup>9</sup> Peter J. Brady & Steven Bass, "When I'm 64 (or Thereabouts): Changes in Income from Middle Age to Old Age," Investment Company Institute, May 2023.

## Small DC plans have consistently reported higher contributions than small DB plans over the past 50 years

(Fig. 3) Pension plan contributions to plans with fewer than 100 participants by type of plan, 1975–2021 (millions)



Source: Private Pension Plan Bulletin Historical Tables and Graphs 1975–2021 (Table E14, Page 19). Department of Labor, Employee Benefits Security Administration, September 2023. Contributions are defined as employer and employee contributions.

DB plans, DC plans, IRAs, or annuities. They report that by age 72, 67% of individual tax filers and 75% of joint tax filers report drawing retirement income from these sources.

Moving on to contributions, they also follow a pattern that mirrors coverage. Going back to 1975, DB plans took in more total contribution dollars than DC plans.<sup>10</sup> The order flipped in 1985 when DC plans took in higher contributions than DB plans for the first time and never looked back.

A closer look at the coverage and contribution data provides an interesting observation. A common criticism of DC plans has been that they don't help enough people who work for small employers. However, according to DOL data, DC plans with fewer than 100 participants have always covered more participants and taken in more total contribution dollars than similar DB plans at any point in the past 50 years going back to 1975 (Figure 3). For example, these smaller DC plans covered 2.5 million participants in 1975 compared with 1.6 million participants

covered by similar DB plans. In 2021, the gap expanded to 13.1 million (DC plans) versus 0.5 million (DB plans).<sup>11</sup> So, contrary to common belief, DC plans have always been the plan of choice for small private sector employers who wanted to provide a retirement savings plan to their employees.

### DC plans have improved investing

The adoption of automatic features and default investment arrangements in DC plans has relieved workers of making complex decisions and positively influenced their savings and investments. Remember, DC or 401(k) plans were originally designed to supplement DB plan benefits; they were not the primary workplace retirement investing vehicle that they are today. At their inception, individuals shared the responsibility of their supplemental savings. But as DC plans became the primary retirement savings plan for millions of workers, it became evident that many employees were either ill-equipped to make investment decisions or had no interest in

doing so, and many plan sponsors were poorly prepared to assist them.

The retirement industry, regulators, and academics came together with solutions that have largely eased the decision-making burden from individual workers, at least for the working or saving phase. Now, the focus is shifting toward retirement or the decumulation phase, which we will discuss in a later section. The adoption of auto-features, such as auto-enrollment with default contributions and auto-escalation, has removed the need for participants to actively decide whether to save or how much to save. The only remaining hurdle for individual workers was investment decision inertia, which has been solved by the adoption of qualified default investment alternatives (QDIAs) such as target date solutions. According to the EBRI/ICI 401(k) database, at the end of 2022, 88% of participants in 401(k) plans were offered target date investments and 68% of participants were invested in target date strategies.<sup>12</sup>

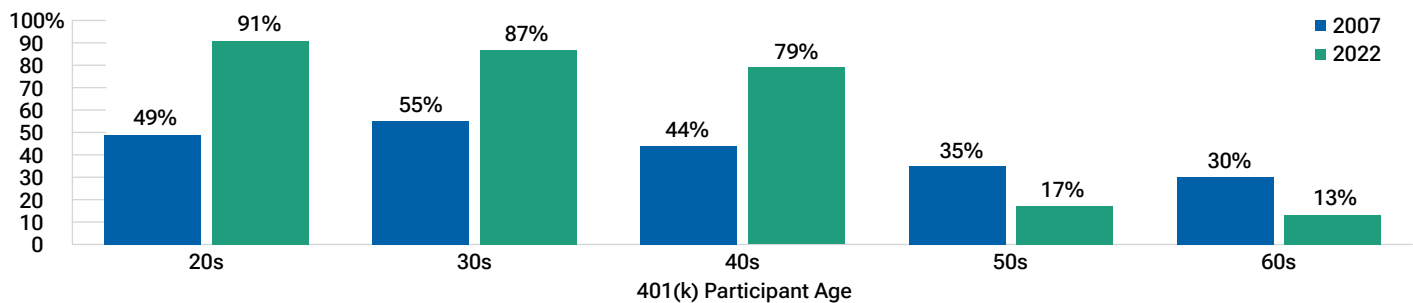
<sup>10</sup> Private Pension Plan Bulletin Historical Tables and Graphs 1975–2021 (Table E5, Page 7). Employee Benefits Security Administration, Department of Labor. September 2023.

<sup>11</sup> Private Pension Plan Bulletin Historical Tables and Graphs 1975–2021 (Table E14, Page 19). Employee Benefits Security Administration, Department of Labor. September 2023.

<sup>12</sup> Sarah Holden, Steven Bass, and Craig Copeland, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2022," EBRI Issue Brief, no. 606, and ICI Research Perspective, vol. 30, no. 3 (April 2024).

## More workers now have age-appropriate asset allocations

(Fig. 4) Percentage of 401(k) participants invested more than 80% in equities



Source: EBRI/ICI Participant-Directed Retirement Plan Data Collection Project, 2024.

The widespread adoption of target date investments has improved the asset allocations for participants. More workers are now invested in age-appropriate allocations than 15 years ago (Figure 4). According to the EBRI/ICI 401(k) database, at year-end 2022, 3% of 401(k) plan participants held no equities,<sup>13</sup> down from 13% at year-end 2007. More than 90% of 401(k) plan participants in their 20s had more than 80% of their account balances invested in equities at year-end 2022 compared with less than half at year-end 2007. Furthermore, 13% of 401(k) plan participants in their sixties had more than 80% of their account balances invested in equities at year-end 2022 compared with 30% of 401(k) plan participants in their sixties at year-end 2007. The importance of such improvement in asset allocation for the retirement nest egg of workers cannot be overstated.

Another benefit of defaulting participants into a diversified investment, such as a target date portfolio, has been that they are less likely to change these investments by trying to time the market. Data from T. Rowe Price's recordkeeping platform<sup>14</sup> show that, in 2023, only 0.8% of participants who were fully invested in target date strategies made an exchange compared with 20.7% of participants who were not

invested in target date strategies at all. Therefore, not only are accounts more diversified,<sup>15</sup> but participants are also less likely to try to time the market or engage in risky investing behavior that might erode the returns they have amassed.

### The holistic outlook on retirement adequacy is positive

Do Americans have enough retirement savings? A deeper look reveals some surprises.

When it comes to the adequacy of retirement savings, workplace retirement savings plans are not supposed to be viewed in isolation. But DC plans are often viewed in isolation and criticized for not helping workers save enough for retirement. Faulty data such as cross-sectional average account balances are often cited as the marker of a "retirement crisis." But cross-sectional data only show the balance from the current job for workers who also have different ages and tenure. For example, T. Rowe Price's recordkeeping data show that, at year-end 2023, the average 401(k) account balance was \$115,000. But on a closer look, participants younger than 30 with a tenure of two to five years had an average balance

of \$15,900, and participants between ages 60 and 64 who were close to retirement and had a tenure over 20 years had an average balance of \$463,200. Looking at a single average for the entire participant population produces a distorted image of retirement savings, and we should refrain from using it. In addition, these balances typically don't include account balances from prior jobs or rollover IRAs.

Still, the larger issue is that this criticism undermines the structure of the U.S. retirement saving system, which consists of multiple layers, including Social Security; homeownership; and tax-advantaged savings such as 401(k)s, IRAs, and other private savings. The foundation of our retirement savings system is Social Security, a government-mandated social insurance program. Like other social insurance programs, it prevents people from running out of income in their old age by guaranteeing a stream of inflation-protected income for life based on earnings during their working years. According to the Social Security Administration (SSA), the average monthly retired worker benefit for Social Security recipients was \$1,907 in January 2024.<sup>16</sup>

Social Security also has a progressive benefit structure, which means it replaces

<sup>13</sup> This includes any direct investment in equities as well as the equity portion in target date strategies or other balanced portfolios.

<sup>14</sup> All data from the T. Rowe Price recordkeeping platform are based on the large-market, full-service universe—T. Rowe Price total—of T. Rowe Price Retirement Plan Services, Inc., retirement plans (401(k) and 457 plans) consisting of 660 plans and over 2 million participants.

<sup>15</sup> Diversification cannot assure a profit or protect against loss in a declining market.

<sup>16</sup> <https://faq.ssa.gov/en-us/Topic/article/KA-01903>

a higher share of preretirement earnings for low earners. These individuals would only need to replace a smaller share of their earnings from other sources.


Bee and Mitchell (2017) showed that people above age 65 in the second income decile (from the bottom) received 83% of their income from Social Security (the bottom income decile received less from Social Security as they receive a large part of their income from Supplemental Security Income, or SSI), whereas people in the ninth income decile (or second decile from top) received only 24% of their income from Social Security.<sup>17</sup> This shows that higher-income people need to replace a larger share of their income from private savings such as employer-sponsored retirement plans. To complicate things further, marginal tax rates change differently for people across the income distribution as they move into retirement. We can only judge the effectiveness of the U.S. retirement savings system once we consider how all these different sources of retirement income and associated tax rates change for people across the income distribution.

Unlike coverage, it is tricky to judge the issue of adequacy because there is no single objective way to measure adequacy of savings. The verdict on a “retirement crisis” appears split. However, the differences in findings can be traced to the difference in the methodologies used in some of these studies. For example, Munnell, Chen, and Yin (2024) use historical data on wealth-to-income ratios to estimate predicted income replacement rates and compare them with a target income replacement rate needed to maintain the preretirement standard of living.<sup>18</sup> They

predict that 39% of U.S. households could be at risk in retirement. On the other hand, Brady and Bass (2023) use tax return data from the Internal Revenue Service (IRS) to estimate actual post-tax income replacement rates, i.e., how much of late-career spendable income is replaced early in retirement. They find that a typical individual replaced 90% of their age 55–59 post-tax income through age 72. And people in the bottom 25% of the age 55–59 income distribution typically replaced more than 100% of their post-tax income.

It should also be noted that the assumption of maintaining a preretirement standard of living or a preretirement level of consumption throughout retirement as the marker of a successful retirement ignores actual spending patterns of retirees. It also vastly overestimates the amount of savings required in retirement. Our research has shown that, on average, real spending declines at an annual rate of 2% throughout retirement.<sup>19</sup> Hurd and Rohwedder (2023) report similar findings.<sup>20</sup> The common question that arises when looking at this spending decline is whether this decline is voluntary or forced by lack of savings. To answer this, Hurd and Rohwedder (2023) share two interesting observations: (1) spending declined across the entire wealth distribution (i.e., wealthy households who face no risk of running out of money also decreased their spending), and (2) the budget share of gifts and donations increased as households aged. If people were lowering their spending due to lack of savings, we don't expect them to spend a higher share on gifts and donations.

These findings also underscore the need for using empirical consumption-based measures rather than income replacement

 ...there is no single objective way to measure adequacy of savings.

<sup>17</sup>Charles Adam Bee and Joshua Mitchell, “Do Older Americans Have More Income Than We Think?” (July 25, 2017). SESHD Working Paper #2017-39, Available at SSRN: <https://ssrn.com/abstract=3015870> or <http://dx.doi.org/10.2139/ssrn.3015870>

<sup>18</sup>Yimeng Yin, Anqi Chen, and Alicia H. Munnell. 2024. “The National Retirement Risk Index: An Update from the 2022 SCF” Issue in Brief 24-5. Chestnut Hill, MA: Center for Retirement Research at Boston College.

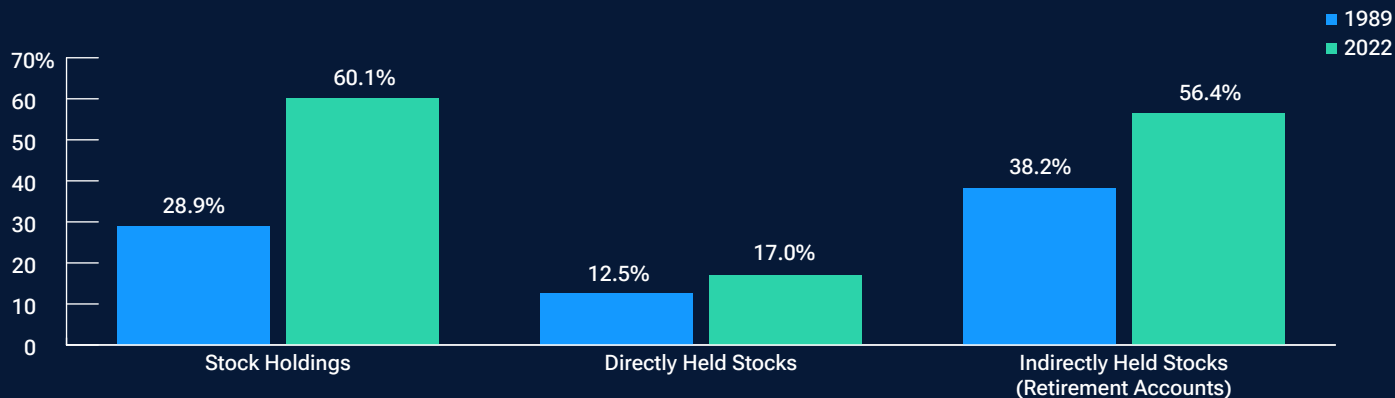
<sup>19</sup>Sudipto Banerjee, “Decoding Retirement Spending” T. Rowe Price Insights, March 2021.

<sup>20</sup>Michael D. Hurd, Susann Rohwedder, “Spending trajectories after age 65 variation by initial wealth,” *The Journal of the Economics of Ageing*, Volume 26, 2023, 100468, ISSN 2212-828X, <https://doi.org/10.1016/j.jeoa.2023.100468>. (<https://www.sciencedirect.com/science/article/pii/S2212828X23000282>)



## Stock ownership for middle-income families has more than doubled over the past three decades

(Fig. 5) Percentage of middle-income families<sup>1</sup> with stock holdings between 1989 and 2022



Source: Survey of Consumer Finances, Board of Governors of the Federal Reserve System, 1989–2022.

<sup>1</sup> Middle income includes families between the 40th percentile and 60th percentile of the family income distribution.

rates to study adequacy of lifetime savings. In a comparison of these two types of measures, Hurd and Rohwedder (2015) found that the vast majority of households were adequately prepared for retirement when consumption-based measures were used, but the majority fall short when typical income replacement rates were used.<sup>21</sup>

### Who benefits from DC plans?

The notion that only high earners benefit from DC plans is flawed. This argument primarily claims that higher earners with higher marginal tax rates get a higher tax relief for their contributions. But traditional DC plan contributions are tax-deferred, not tax-free. And future tax rates are highly uncertain.<sup>22</sup>

This narrow argument around tax benefits misses the larger benefits of DC plans that are enjoyed by workers across the income spectrum. It is often forgotten that DC plans have increased stock market participation and provided easy and cost-effective access to professional

money management for middle-class workers. Historically, stocks have provided the highest returns relative to most asset classes over the long term, which means they are essential for long-term investing goals such as saving for retirement (higher returns, however, come with higher risk).<sup>23</sup> But stock ownership was low for middle-class workers because of significant barriers of owning stocks.

According to data from SCF, stock ownership for middle-income families has more than doubled between 1989 and 2022, from 28.9% to 60.1% (Figure 5). This includes families holding individual shares directly or indirectly (e.g., through mutual funds in retirement accounts). During the same period, direct ownership of stocks only increased from 12.5% to 17.0%, but indirect ownership through retirement accounts increased from 38.2% to 56.4%. It is safe to say that retirement accounts have been a key driver of stock ownership for middle-income families—an upshot that has allowed them to share in the prosperity of capital markets.

As a result, a large share of Americans' financial portfolios are invested in equities. According to data from the Organization for Economic Cooperation and Development (OECD), 39.2% of financial assets of Americans were invested in equities, far ahead of many other western industrialized nations. For example, the comparable number for the United Kingdom and Germany was 11.9%.<sup>24</sup>

As DC plans have grown, the share of retirement balances in total financial assets has grown as well, albeit at a much faster rate for middle-income families than high-income families (Figure 6). SCF data show that between 1989 and 2022, this share increased from 26% to 32% for the top 10% of earners. But for the middle 20% (40th to 60th percentiles) of earners, this share has increased from 46% to 76%.

Therefore, less than one-third of total financial assets of the top 10% of earners are invested in retirement accounts. But more than three-quarters of total financial assets of middle-income families are invested in retirement accounts. So, when

<sup>21</sup> Michael D. Hurd and Susann Rohwedder. 2015. "Measuring Economic Preparation for Retirement: Income Versus Consumption." Michigan Retirement Research Center Research Paper no. WP 2015–332. Available at <https://mrrc.isr.umich.edu/publications/papers/pdf/wp332.pdf>.

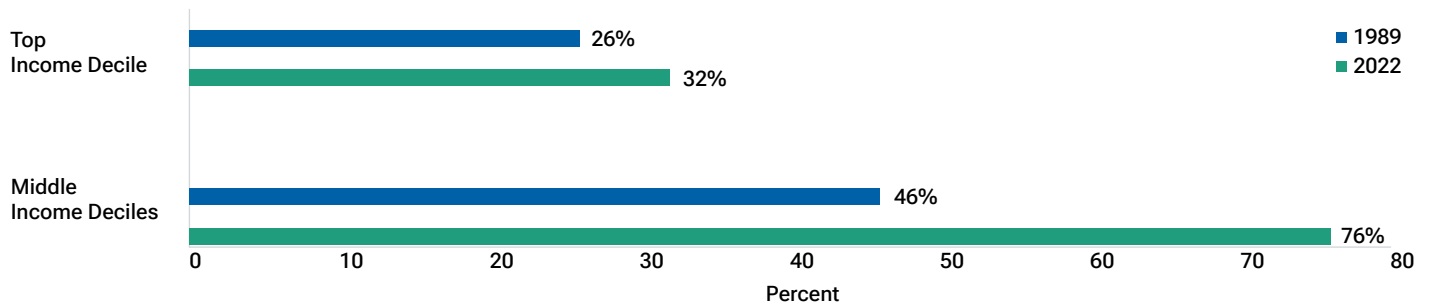
<sup>22</sup> David C. Brown, Scott Cederburg, Michael S. O'Doherty, Tax uncertainty and retirement savings diversification, *Journal of Financial Economics*, Volume 126, Issue 3, 2017, Pages 689-712, ISSN 0304-405X, <https://doi.org/10.1016/j.jfineco.2017.10.001>.

<sup>23</sup> Jim Reid, Nick Burns, Luke Templeman, Henry Allen, Karthik Nagalingam, "The Age of Disorder," Deutsche Bank, September 8, 2020.

<sup>24</sup> OECD Data, 2019–2022. <https://data.oecd.org/hha/household-financial-assets.htm>

## Retirement balances make up a significant share of total financial assets for middle-income families

(Fig. 6) Share of retirement balance in total financial assets for middle-income<sup>1</sup> and high-income families between 1989 and 2022



Source: Survey of Consumer Finances, Board of Governors of the Federal Reserve System, 1989–2022.

<sup>1</sup> Middle income includes families between the 40th percentile and 60th percentile of the family income distribution.

measured by the share of their financial portfolio, middle-income families have benefited greatly from the advances in DC plans.

These advances include easy access to professional money management, lower fees, access to financial planning tools, and so on. For instance, an analysis of 401(k) mutual fund fees reveals that they have fallen dramatically in recent years. According to ICI, equity mutual fund expense ratios in 401(k)s are down 57% and bond mutual fund expense ratios are down 63% since 2000.<sup>25</sup> These advances help middle-class workers to save more and invest better.

### The road ahead for DC Plans: First step, retirement income

Could DC plans deliver retirement income? Yes.

DC plans have been an innovation lab. They have revolutionized voluntary participation through auto-enrollment and investing through QDIAs such as target date solutions, which offer both diversification and portfolio rebalancing. Retirement income is the next wave of DC innovation.

While traditional DB plans generally leaned toward providing participants an annuity income for life, DC plans are increasingly providing a greater set of income options, including annuities.

Currently, the retirement income discussion revolves around a discussion of lifetime income, i.e., income guaranteed for life or annuities. But the universe of retirement income products is larger and expanding. A key reason behind the interest in annuities is the decline of DB plans in the private sector. Proponents of annuities point out that they provide a monthly paycheck in retirement, which certainly seems like a good thing. But we have limited understanding of whether people have the same preference for a regular paycheck if it comes at the expense of their savings rather than from their labor. This problem gets compounded when we add Social Security—which provides a guaranteed inflation-indexed paycheck for life—into the mix. The question then becomes, how much additional annuity income might people need? In other words, are retirees under-annuitized, and should they consider additional annuities?

According to a 2020 report from ICI,<sup>26</sup> the majority of U.S. households nearing

retirement are highly annuitized through annuities or annuity equivalents, including Social Security, DB wealth, and homeownership.<sup>27</sup> For example, when future income streams are included in a comprehensive measure of wealth in present discounted form, households in the bottom quintile (20%) of the wealth distribution hold 94% of their wealth in annuitized form. The middle quintile holds about three-quarters (76%) of their wealth in annuitized form. Households in the top quintile of the wealth distribution hold half of their wealth in annuitized form. So, there could be a demand for additional annuity income, particularly, among the wealthier households. But it is not clear if everyone, particularly less wealthy households, could benefit from a nudge toward additional annuities.

Apart from a steady income stream, the other key benefit of an annuity is that it provides longevity protection, usually at the expense of some liquidity and an additional cost. Whether a person chooses the annuity payment or not also depends on where they fall on the liquidity/longevity hedge trade-off. Risk and potential benefits vary depending on the type of annuity, and they can be subject to higher costs and are typically more complex. It is, therefore,

<sup>25</sup> ICI Research Perspective, “The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2022.” Investment Company Institute, July 2023, Vol. 29, No. 6. <https://www.ici.org/system/files/2023-07/per29-06.pdf>

<sup>26</sup> “The Myth of Under-Annuitization: Managing Income and Assets in Retirement,” Whitepaper, Investment Company Institute, April 2020, [https://www.ici.org/doc-server/pdf%3A20\\_ppr\\_annuitization.pdf](https://www.ici.org/doc-server/pdf%3A20_ppr_annuitization.pdf)

<sup>27</sup> In the absence of an owned home, households need to pay rent. Owner-occupied housing provides imputed rental income, which reduces the need for regular income from other sources.



not obvious that annuities would meet everyone's needs (besides needing to take into account an individual's own situation), and a closer look at DB plan outcomes confirms that. Banerjee (2013) has shown that when DB plans offered participants a choice between a lump sum and an annuity, only a small share of participants (27.3%) chose to annuitize.<sup>28</sup> Mottola and Utkus (2007) also reported similar annuitization rates in DB plans.<sup>29</sup> The current evidence from DC plans also points toward this trend. Brown, Poterba, and Richardson (2022) analyzed retirement income choices made by participants in a large DC plan with multiple withdrawal options, between 2000 and 2018. They found that the share of life annuitants fell from 52% in 2008 to 31% in 2018.<sup>30</sup> Interestingly, they also found that about one-fifth of participants used more than one withdrawal option, often combining a life annuity with another withdrawal option. This speaks to the need of providing participants a range of retirement income options that meets their personal needs.

The larger DC market is in a nascent stage when it comes to retirement income. But more and more retirement income products—such as managed payouts, systematic withdrawals, target date strategies with embedded annuities, managed accounts, and annuity marketplaces—are coming to DC plans. Different employers have different workforce demographics and having access to a suite of retirement income solutions will help them choose what makes the most sense for their employees.

“...more needs to be done to boost saving rates and limit leakage.”

Still, the retirement income problem cannot be solved by products alone. Most workers are unlikely to figure out the workings of each of these retirement income products on their own, let alone understand how or which of these products are best suited to help with their personal situation. They will need help to do that, and DC plans should offer that help. Help can come in many forms, including education on retirement income planning, tools that let participants compare different in-plan income options, and help with Social Security claiming or tax-aware withdrawals. Most importantly, for any of these offerings to be successful, participants need to be confident in their decisions or choices. This is where the services of financial professionals, a trusted human professional such as an advisor, or a managed account solution could prove beneficial.

### DC plans should address savings challenges of all workers

One of the well-documented facts that has garnered more attention in recent years

is the racial wealth disparity in the U.S. Aladangady et al. (2023) reported that the typical white family had six times as much wealth as the typical Black family and five times as much wealth as the typical Hispanic family.<sup>31</sup> To be clear, these inequities were not created by DC plans. They are a cumulative result of various socioeconomic issues that have existed for centuries. If anything, these gaps are narrower among those who participate in DC plans; however, there are still large gaps. Banerjee (2024) shows that among DC participants, a typical Black family had 36% of the net worth of a typical white family and a typical Hispanic family had 58% of the net worth of a typical white family.<sup>32</sup> Retirement accounts are the largest component of financial assets for American families,<sup>33</sup> and data suggest that DC plans have the potential to narrow some of these savings' inequities by providing access to tax-advantaged savings vehicles with professionally managed investment options.

Once someone starts participating in a plan, there are three factors that determine their final savings—saving rate, investment allocation, and leakage or early withdrawals. QDIAs such as target date solutions have gone a long way to address the issue of investment allocation. But more needs to be done to boost saving rates and limit leakage. Some leakages such as loans are not necessarily bad, so we need to be careful on how we limit them.

Choukhmane et al. (2023) show that the average contribution of Black and Hispanic workers is 40% lower than that

<sup>28</sup> Sudipto Banerjee, “Annuity and Lump-Sum Decisions in Defined Benefit Plans: The Role of Plan Rules,” EBRI Issue Brief, no. 381 (January 2013).

<sup>29</sup> Gary R. Mottola, and Stephen P. Utkus. 2007. “Lump Sum or Annuity? An Analysis of Choice in DB Pension Payouts.” Vanguard Center for Retirement Research, Vol. 30.

<sup>30</sup> J.R. Brown, J.M. Poterba, and D.P. Richardson. “Trends in retirement and retirement income choices by TIAA participants: 2000–2018.” Journal of Pension Economics and Finance. Published online 2023:1–22. doi:10.1017/S1474747223000070

<sup>31</sup> Aditya Aladangady, Andrew C. Chang, and Jacob Krimmel (2023). “Greater Wealth, Greater Uncertainty: Changes in Racial Inequality in the Survey of Consumer Finances,” FEDS Notes. Washington: Board of Governors of the Federal Reserve System, October 18, 2023, <https://doi.org/10.17016/2380-7172.3405>

<sup>32</sup> Sudipto Banerjee, “Race, Retirement, and the Savings Gap,” T. Rowe Price Insights on Retirement, 2024. [https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/race-retirement-and-savings-gap/Race-Retirement-Savings\\_Gap\\_Insights.pdf](https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/race-retirement-and-savings-gap/Race-Retirement-Savings_Gap_Insights.pdf)

<sup>33</sup> Survey of Consumer Finances, Historical Tables, Excel based on Public Data, Table 5, October 202

of white workers.<sup>34</sup> They attribute this mostly to the differences in earnings—their own earnings and earnings of their parents—and show that the tax and employer matching subsidies further amplify the gap in saving rates by subsidizing higher savers at a higher rate. To break this cycle, they suggest that both employer contributions and tax subsidies are proportional to earnings and disconnected from employee contributions. Such a move that redistributes the existing pool of matching dollars has the potential to narrow the racial savings gap significantly. But employers often have different reasons—such as offering competitive benefits or retention of top talent—for designing their plans in a particular way and might have limited room to change their plan design. In that case, they might take a closer look at their overall compensation policies to make sure that those are in line with the company's values and objectives.

SECURE 2.0 has created a new Saver's Match program that will go into effect in 2027. The program will offer a 50% match on the first \$2,000 of retirement savings contributions for a participant, subject to certain income eligibility conditions. VanDerhei (2024) shows that the program has the potential to improve the retirement savings outcomes significantly for most race-gender subgroups.<sup>35</sup> He shows that if participants increase their contributions to receive the full Saver's Match, then every race-gender group

will have a significantly higher account balance to salary ratio at age 65 with Black females and Hispanic females reporting the highest potential gains, compared with what they are currently projected to have. However, Ramnath (2013) has shown that the past iteration of Saver's Credit had little effect on retirement contributions.<sup>36</sup> The challenge for DC plans will be to ensure that those who become eligible to be part of the program take full advantage of it.

Early withdrawals from retirement plans are the other key reason why many minority workers fall behind on their retirement savings. VanDerhei (2024) shows that Black and Hispanic workers are much more likely to take early withdrawals, and Black workers are more likely to have outstanding loans from their retirement plans compared with their white counterparts.<sup>37</sup> He shows that eliminating these early withdrawals would mitigate the racial gaps in retirement savings. However, the counterargument for eliminating early withdrawals is that some of these workers might lower their contributions or stop participating in their retirement accounts if they have no ability to access these funds before retirement. Beshears et al. (2010) show that the net effect of loans on savings is small and could be either positive or negative.<sup>38</sup> But this points toward a larger issue. Lack of emergency savings is contributing to lower retirement savings and needs to be addressed.

## How to address the lack of emergency savings?

In our latest Retirement Savings and Spending (RSS) Study,<sup>39</sup> we asked retirement plan participants if they thought they were saving enough, and if not, what prevented them from doing so. Among the respondents, 38% said that they were not saving enough (another 22% were not sure), and among those not saving enough, 25% said they were prioritizing an emergency savings fund and 18% didn't want to tie up their money in their 401(k). This indicates that many participants don't have the financial cushion needed to put money toward long-term goals such as retirement. As a result, many end up taking loans or hardship withdrawals from their retirement accounts.

Data from T. Rowe Price's recordkeeping platform show that nearly one in five (19.4%) participants had an outstanding loan balance and another 1.6% of eligible participants had taken a hardship withdrawal in 2023.<sup>40</sup> Furthermore, our analysis revealed that the deferral rate for participants who took multiple small loans per year was lower, on average, by 2.3 percentage points. Frequent and/or unpaid loans and hardship withdrawals increase leakage from retirement accounts and often end up eroding some of the long-term compounding and potential tax benefits due to the tax-penalty imposed on early withdrawals.

<sup>34</sup> Taha Choukhmane, Jorge Colmenares, Cormac O'Dea, Jonathan Rothbaum, and Lawrence D.W. Schimdt, "Who Benefits from Retirement Savings Incentives in the U.S.? Evidence from Racial Gaps in Retirement Wealth Accumulation," Working Paper, November 2023, <https://mitsloan.mit.edu/shared/ods/documents?PublicationDocumentID=10074>

<sup>35</sup> Jack VanDerhei, "How Effective Might the Saver's Match Be in Mitigating Race/Gender Disparities in 401(k) Plans: Evidence from the Collaborative for Equitable Retirement Savings Project," The Collaborative for Equitable Retirement Savings Report, May 2024.

<sup>36</sup> Taxpayers' responses to tax-based incentives for retirement savings: Evidence from the Saver's Credit notch, Journal of Public Economics, Volume 101, 2013, Pages 77–93, ISSN 0047–2727, <https://doi.org/10.1016/j.jpubeco.2013.02.010>. (<https://www.sciencedirect.com/science/article/pii/S0047272713000479>)

<sup>37</sup> Jack VanDerhei, "How Large are Racial and Gender Disparities in 401(k) Account Balances and What is Causing Them: Initial Findings from the Collaborative for Equitable Retirement Savings," The Collaborative for Equitable Retirement Savings Report, March 2024.

<sup>38</sup> John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian. "The Impact of 401(k) Loans on Saving." Retirement Research Consortium and NBER, September 2010.

<sup>39</sup> The 2023 RSS was conducted between July 24, 2023, and August 13, 2023. It included 3,041 401(k) participants, full-time or part-time workers who never retired, currently age 18 or older, and either contributing to a 401(k) plan or eligible to contribute and have a balance of \$1,000+. The survey also included 1,176 retirees who have retired with a Rollover IRA or a left-in-plan 401(k) balance.

<sup>40</sup> Reference Point Annual Report, T. Rowe Price, Baltimore MD, April 2024. [https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/savings-insights/ReferencePoint\\_2024.pdf](https://www.troweprice.com/content/dam/retirement-plan-services/pdfs/insights/savings-insights/ReferencePoint_2024.pdf)

Participants need adequate emergency savings to prevent leakage and the tax penalty. SECURE 2.0 has created two in-plan emergency savings options—an emergency withdrawal of up to \$1,000 a year and a pension-linked emergency savings account (PLESA). While the emergency withdrawal option is gaining traction among plan sponsors due to its relative simplicity regarding implementation, PLESAs are not generating as much interest due to their perceived complexity. However, out-of-plan emergency savings accounts, which are relatively simple to implement and offer much more flexibility, could be an attractive option for employers who want to provide an emergency savings option to their participants. They could provide incentives to their employees to set up a payroll deduction into these emergency savings accounts. A small contribution of 1% to 2% of salary into these accounts could create the financial cushion that prevents participants from taking early withdrawals to address unexpected expenses, and it may encourage them to invest for long-term goals such as retirement.

## Legislative opportunities

**Fix the long-term outlook for Social Security:** Social Security is the foundation of the U.S. retirement savings system. As previously stated, the combination of Social Security and private savings replaces a large share of earnings for most workers, with lower earners replacing a higher share of their earnings with Social Security and higher earners replacing more of their earnings with private savings such as retirement accounts. But according to the latest Social Security Trustees Report,<sup>41</sup> the Old-Age and Survivors Insurance (OASI) Trust Fund, commonly known as the Social Security Trust Fund, is projected to exhaust its reserves by 2033, after which Social Security will be able to pay

“...the combination of Social Security and private savings replaces a large share of earnings for most workers...”

only 79% of scheduled benefits. In other words, if Congress doesn't take any action, there will be a roughly 20% cut in Social Security benefits.

Congress should address this as soon as possible. Any delay narrows the set of options to fix the program. Certainty over the future of Social Security could restore confidence in the U.S. retirement system including the DC system. But whatever fix Congress comes up with, it should try to protect the self-funded status of Social Security, i.e., it should not be funded through general revenue. Tying Social Security to the often contentious budgetary process would only add tremendous uncertainty to the program.

**Encourage auto-enrollment for all plans:** Auto-enrollment (AE) increases participation rates dramatically. In 2023, AE plans recordkept by T. Rowe Price had a participation rate of 83% as opposed to a participation rate of only 36% for plans without AE. SECURE 2.0 has mandated AE for all plans established after the passing of the law with some exceptions for small and new businesses. Extending the mandate to all plans irrespective of their date of

establishment, but keeping the exceptions, will give many more American workers the opportunity to save in a workplace retirement plan.

**Encourage auto-reenrollment:** Even when AE is mandated, participants have the opportunity to opt out. People have various needs at any given point in time, and that might require them to focus on other financial priorities. But priorities can change with time. Therefore, plans should be encouraged to auto-reenroll workers who opt out at a regular frequency of their choosing. If some workers still prefer to opt out, they should have the chance to do so.

**Introduce age-based default contribution rates:** Most, if not all, retirement plans have a single default contribution rate. The addition of auto-escalation slowly builds up the contribution rates of participants over time. But as participants change jobs, they are more likely to start contributions again at a default rate, which could be lower than what they were saving earlier. If they take a career break, which is more common with women, they need to save at a higher rate to make up the ground. People should not save less by default if they switch jobs or return to the labor force. In doing so, they can lose valuable time and the benefits of compounding. Having some legislative clarification to allow age-based default contribution rates might address some of these issues.

**Reform health savings:** Declining health and the associated costs are a constant worry for retirees. If future retirees live longer, they will likely need to save more for health care. The Health Savings Account (HSA) with its “triple tax” advantage<sup>42</sup> is an excellent vehicle for that, but only if people invest the money in these accounts. But utilization of investments in HSAs has been lagging. There are several factors behind this, including the fact that people generally don't use what is called a “savings account”

<sup>41</sup> “The 2024 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds,” Social Security Administration, May 6, 2024. <https://www.ssa.gov/oact/TR/2024/tr2024.pdf>

<sup>42</sup> Contributions to HSA's are tax-deductible, any earnings are tax-free, and withdrawals are tax-free when used for qualified medical expenses (may, in whole or part, still be subject to state taxes). Withdrawals prior to age 65 for nonqualified expenses is subject to taxes and penalties. An individual must be covered by a high-deductible health plan to be eligible for an HSA.

for investing. Flexible Spending Accounts (FSAs) complicate matters further. The difference between a “savings account” and a “spending account” might not be clear to most workers, which hurts proper usage of these accounts.<sup>43</sup> Renaming HSAs to Health Investment Account (HIA) might be helpful.

Also, HSAs have proliferated rapidly as more and more employers have switched to high-deductible health plans. As a result, workers are starting to accumulate several HSAs. This trend could grow over time. It might be beneficial to create a framework that helps workers to easily roll over their HSA balances and consolidate. Otherwise, many of them will likely lose track of some of these accounts, particularly those with small balances.

## Opportunities for plan sponsors

**Rethink retirement:** Our current understanding of retirement is outdated. The vast majority don’t retire on their 65th birthday and go out of the labor force permanently. Yet, somehow, we are still making decisions assuming that this is the case. Retirement will be a transitional phase for American workers, if it isn’t already, and we need to prepare for that.

Employers need to think about how and when they can move their full-time workers into a “transitioning to retirement” workforce. Compensation and benefits need to adjust to that. Some people might want to reduce their hours but keep their health coverage. Others might be willing to give up benefits altogether but continue with reduced hours. People might want to switch roles and work on a limited capacity. Employers need to decide if and how they are going to create this transitional workforce, and how they are going to design the benefits for this group. Easier said than done.

**Nudge participants to save for emergencies:** Leakages can be a drag on

retirement savings. But in the absence of any dedicated emergency savings, some participants might have no other choice but to withdraw money from their retirement accounts if a sudden need for cash arises. SECURE 2.0 tried to address this by creating two in-plan solutions—emergency withdrawals and the PLESA. But the PLESA appears too complicated for many plan sponsors, and the emergency withdrawal option could potentially add to leakages.

Another alternative is to offer out-of-plan emergency savings options to participants. Plan sponsors have a lot of flexibility in setting up these accounts, and participants can easily access the money. But most importantly, this money is earmarked for emergencies and could potentially stop some leakages from retirement accounts. Plan sponsors can also nudge participants into contributing a small portion of their salaries into these accounts.

**Think beyond products to address retirement income:** As discussed above, the next wave of DC innovations will happen in the retirement income product space. In fact, it’s already happening. But while products are necessary, they are not sufficient to solve the retirement income needs of participants. The decision to use a retirement income product is linked to a series of other decisions such as when to retire, when to claim Social Security, or whether to relocate. Unless participants see how each product can help them execute their plans, they are not likely to use them. Therefore, if the retirement income problem has to be solved in plan, then participants will need help on how to choose the right retirement income product.

## Final thoughts

The U.S. retirement savings system is a mix of social insurance (Social Security) and private savings (workplace plans, personal savings, and investments). By design, social insurance provides more

support for workers with lower lifetime earnings, while higher earners depend more on private savings. But when the two are combined, most workers can replace their preretirement income adequately.

On the private savings front, DC plans have been the driving force for the last few decades. However, there is room for improvement, particularly, when it comes to coverage. Although, coverage of workplace retirement plans has never been higher, there might be limits to the voluntary system.

In recent times, some experts have suggested that the U.S. should move to a mandatory private savings structure where employers are mandated to offer or contribute to retirement plans. By definition, a mandate will improve coverage; however, there could be other perils apart from the political feasibility of a mandate. While researchers or policymakers might look at income and retirement benefits separately, for most employers, they are just different components of compensation. If they can’t increase overall compensation and are forced to increase one component—retirement benefits—the result could be a decrease in the other components of compensation, such as salary or income. After all, there is no free lunch.

DC plans are not perfect, but they have helped American workers to build secure retirements for themselves. They have also addressed the unfunded liability challenges faced by DB plans, made it easier for middle-class Americans to invest in well-diversified and professionally managed investments, and they are constantly innovating and improving. Expense ratios on equity and fixed income funds in 401(k)s have also declined meaningfully over the past two-plus decades. The DC system is a success story but with far more potential. We should all work together to build on its success.

<sup>43</sup> Employees cannot invest their money in FSAs. Investments are not FDIC insured and are subject to possible loss of principal.

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