

401(K)/IRA HOLDINGS IN 2019: AN UPDATE FROM THE SCF

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Introduction

Though the economy has been overtaken by COVID-19 and the ensuing recession, the Federal Reserve's 2019 *Survey of Consumer Finances* (SCF) still provides a useful update on how retirement balances fared between 2016 and 2019 – three years of solid economic growth, strong stock market returns, and continued maturation of the 401(k) system. And given that the market is modestly higher in 2020 and most job losses have been borne by lower-paid workers without retirement plans, 2019 balances may not be dramatically different from today. The big advantage of the SCF is that it provides information not only on 401(k) balances, much of which is available from financial services firms, but also on household holdings in IRAs, which are largely rollovers from 401(k)s. This *brief* reports on household holdings in these two sources combined.

The discussion proceeds as follows. The first section describes the importance of 401(k) plans and IRAs in the retirement income system. The second section documents the trend in individual decisions regarding the accumulation of assets in 401(k)s. The good news is a slight increase in participation rates and greater use of target date funds; the bad news is the lack of universal coverage, flat total contribution rates, high fees, and significant leakages. The third

section reports on 401(k)/IRA balances. The SCF shows – for households approaching retirement – an increase in these balances from \$135,000 in 2016 to \$144,000 in 2019. These balances will provide a couple with only \$570 per month in retirement. Moreover, only about half of households have 401(k)/IRA balances; and, as defined benefit plans phase out in the private sector, the rest will have no source of retirement income other than Social Security. The final section concludes that today's 401(k) system provides meaningful benefits only for the top two quintiles of the income distribution and that, for the employer-sponsored system to work effectively, coverage must be universal.

The Role of 401(k)s/IRAs in the Retirement System

Retirement savings accounts – 401(k)s and IRAs – play an increasingly important role in the nation's retirement system for two reasons.¹ First, Social Security, the backbone of the system, will provide less relative to pre-retirement earnings in the future, so

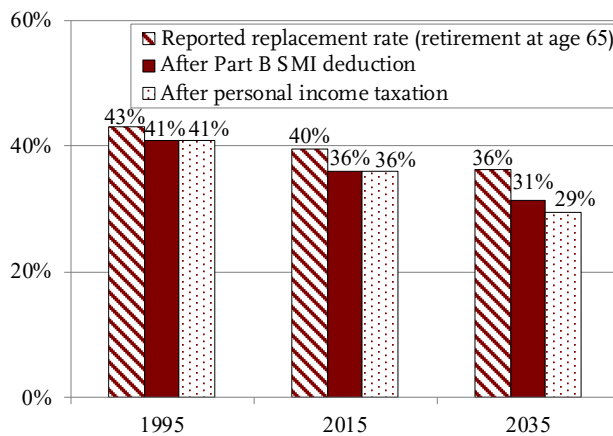
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people will need more from their employer-sponsored plans. Second, employer-sponsored plans have shifted from traditional defined benefit plans, which pay lifetime benefits, to 401(k)s and IRAs, where balances determine retirement resources.

Social Security

Social Security will replace less of workers' earnings for three reasons. First, the Full Retirement Age – the age at which a worker is entitled to full benefits – is moving from 65 to 67. As a result, those who continue to retire at, say, 65 will see a larger cut in their monthly benefit relative to pre-retirement earnings (see Figure 1). Second, rising Medicare premiums, which are deducted before the check goes in the mail, will reduce the *net* Social Security benefit. Finally, more Social Security benefits will be subject to the personal income tax since the thresholds above which benefits are taxable are not adjusted for inflation or

FIGURE 1. SOCIAL SECURITY REPLACEMENT RATES FOR AVERAGE EARNER RETIRING AT AGE 65, 1995, 2015, AND 2035



Note: Replacement rates for 2035 are based on scheduled benefits, not payable benefits.

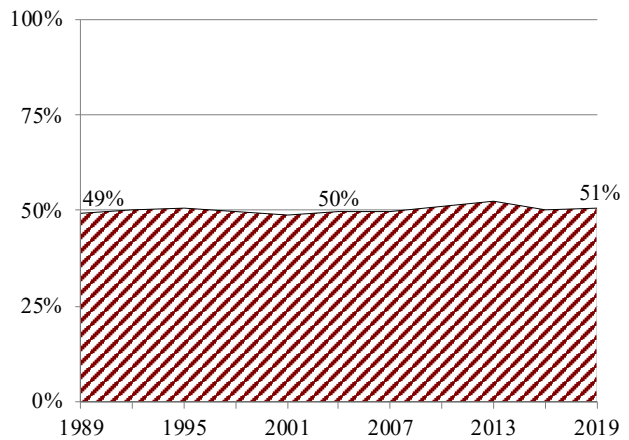
Sources: Centers for Medicare & Medicaid Services (2019); unpublished data from *Medicare Trustees Report*; and U.S. Social Security Administration (2020).

wage growth. In addition to the changes that will occur under current law, Congress might cut benefits further to help eliminate the program's 75-year deficit.

Employer-sponsored Plans

With Social Security replacing a smaller percentage of pre-retirement earnings, employer-sponsored retirement plans are increasingly important. Unfortunately, only about half of workers – at any moment in time – participate in either a defined benefit plan or a 401(k) plan. That percentage has remained constant for decades (see Figure 2).²

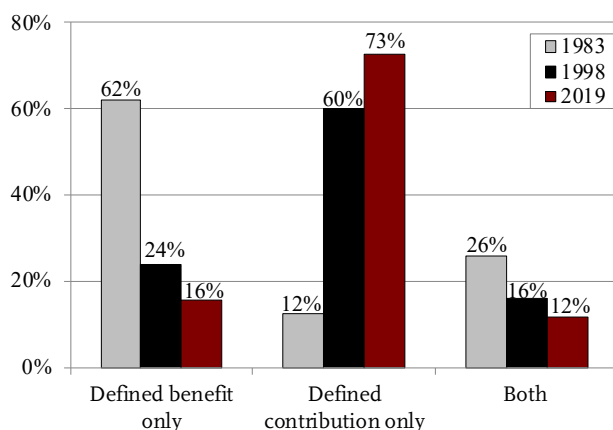
FIGURE 2. PERCENTAGE OF WORKERS AGES 25-64 PARTICIPATING IN AN EMPLOYER-SPONSORED RETIREMENT PLAN, 1989-2019



Source: Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (SCF) (1989-2019).

For those lucky enough to work for an employer providing a retirement plan, the nature of these plans has changed from defined benefit to 401(k) (see Figure 3 on the next page).³

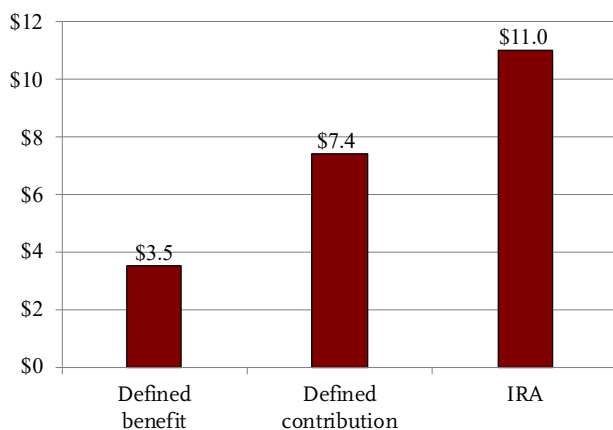
FIGURE 3. WORKERS WITH COVERAGE BY TYPE OF RETIREMENT PLAN, 1983, 1998, AND 2019



Source: Authors' calculations based on the 1983-2019 SCF.

While 401(k)s plans have spread dramatically, they have essentially turned into a collection mechanism for retirement savings; participants eventually roll over the bulk of the money into IRAs. Today, IRA assets exceed those in 401(k)s by almost 50 percent – \$11.0 trillion compared to \$7.4 trillion (see Figure 4). Thus, any assessment of the current employer-sponsored retirement system requires an evaluation of how well 401(k)s collect money and how much people have in their combined 401(k)/IRA holdings.

FIGURE 4. TOTAL U.S. PRIVATE RETIREMENT ASSETS BY TYPE OF PLAN, TRILLIONS OF DOLLARS, 2019 Q4



Source: U.S. Board of Governors of the Federal Reserve System, *Financial Accounts of the United States* (2020).

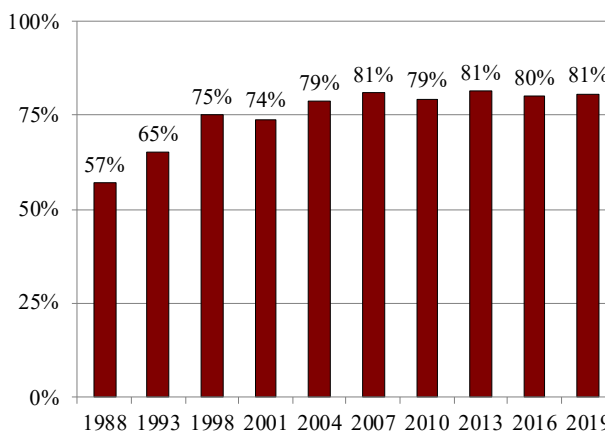
How Well Do 401(k)s Collect Retirement Money?

When 401(k) plans began to spread rapidly in the 1980s, they were viewed mainly as supplements to employer-funded pension and profit-sharing plans. Since 401(k) participants were presumed to have their basic retirement income needs covered, they were given substantial discretion over their 401(k) choices, including whether to participate, how much to contribute, how to invest, and when and in what form to withdraw the funds.

Participation

For those individuals offered a plan, success first requires that they participate. An extensive literature has demonstrated that automatically enrolling employees sharply increases participation rates.⁴ The share of plans with auto-enrollment increased substantially in the wake of the Pension Protection Act of 2006 (PPA), and now hovers around 50 percent.⁵ Given the spread of plans with auto-enrollment, the upward trend in participation rates as reported in the SCF may seem modest (see Figure 5). One factor is that participation rates in plans *without* auto-enrollment have been declining.⁶

FIGURE 5. PERCENTAGE OF ELIGIBLE WORKERS PARTICIPATING IN 401(K) PLANS, 1988-2019

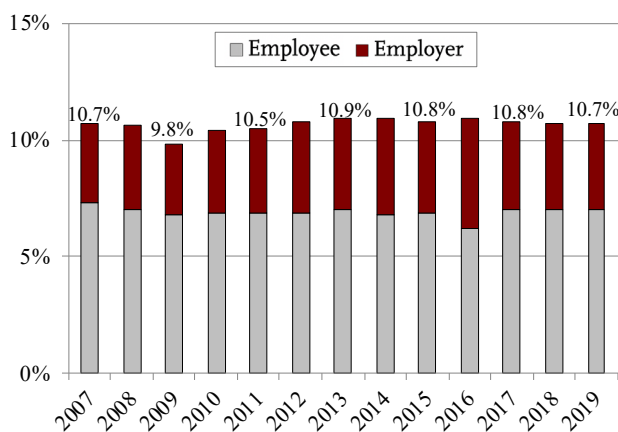


Sources: U.S. Bureau of Labor Statistics (2003); and authors' calculations based on the 1998-2019 SCF.

Contributions

Once in the plan, participants have to decide how much to contribute. Average employee contribution rates continue to hover around 7 percent (see the gray bars in Figure 6). Employer contributions bring the total average deferral rate to 10.7 percent.⁷ While in prior years, lower contribution rates for those automatically enrolled appeared to reduce the average, that effect no longer exists.⁸

FIGURE 6. AVERAGE EMPLOYEE AND EMPLOYER CONTRIBUTION RATES, 2007-2019



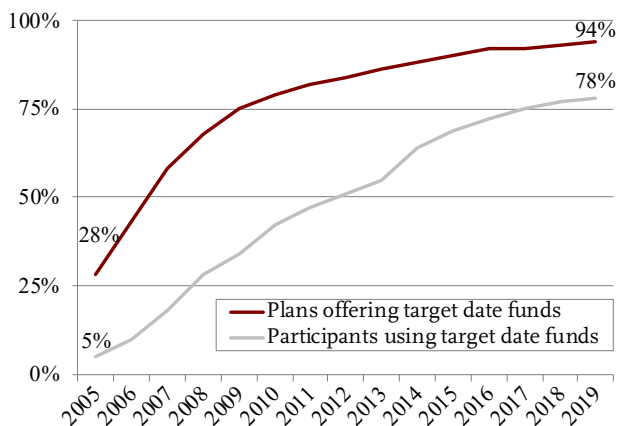
Source: Vanguard (2020).

Moving from the average contribution rate to the maximum, employees in 2019 were entitled to contribute \$19,500 on a tax-deductible basis to their 401(k) plan. In addition, workers approaching retirement could contribute another \$6,500 under “catch-up” provisions introduced in 2002. In 2019, 12 percent of Vanguard participants – mostly high earners – reached their limit. Since Vanguard tends to have a disproportionate number of large plans and, therefore, higher earners, the percentage maxing out is probably slightly lower for the 401(k) population as a whole.

Investment Decisions

In addition to participation and contribution decisions, employees must decide how to invest their money. This process has been simplified significantly with the advent of target date funds, which ensure that investments are diversified and rebalanced over time (see Figure 7).⁹ The other benefit of these funds is that they reduce the likelihood of investing in employer stock, which helps to further diversify the participant’s portfolio both across stocks and away from the employer. According to Vanguard, only 8 percent of firms offer their own company’s stock in their 401(k) plans.

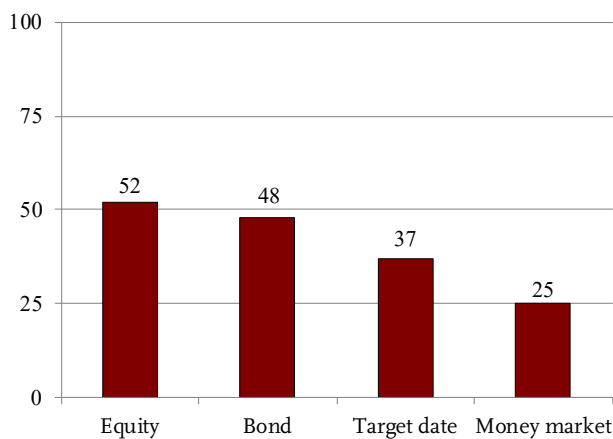
FIGURE 7. TARGET DATE FUND ADOPTION, 2005-2019



Source: Vanguard (2020).

Even with the spread of target date funds, fees remain an important issue. An expense ratio of 1 percent – 100 basis points – over a 40-year worklife will reduce assets at retirement by almost 20 percent.¹⁰ And despite a decline over time, expense ratios on mutual funds – the primary investment vehicle in 401(k) plans – remain high. Based on how people actually invest, the expense ratio in 2019 was 52 basis points for equity funds, 48 basis points for bond funds, 37 basis points for target date funds, and 25 basis points for money market funds (see Figure 8 on the next page).

FIGURE 8. ASSET-WEIGHTED EXPENSE RATIOS BY TYPE OF FUND, BASIS POINTS, 2019

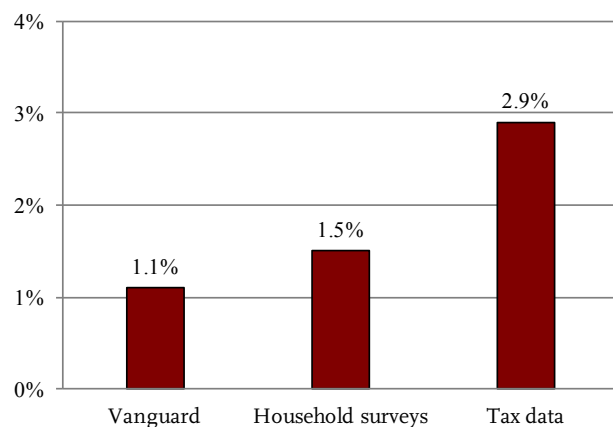


Source: Investment Company Institute (2020).

Keeping Money in the Plan

Over the last decade, researchers have undertaken a number of studies to estimate the magnitude of leakages out of 401(k)s and IRAs.¹¹ In addition, each year Vanguard provides data on flows into and out of the defined contribution accounts that it administers. Based on these data, the leakage rate is 1.1 percent (see Figure 9). The Vanguard numbers, however,

FIGURE 9. LEAKAGE ESTIMATES FROM VARIOUS SOURCES



Sources: Vanguard (2020) and Munnell and Webb (2015).

must be viewed as a lower bound, since the company administers only about 14 percent of the market and large plans are overrepresented in its data. Large plans – with higher-paid employees – most likely have lower leakage rates. Indeed, studies from household survey data looking at leakages out of 401(k)s and IRAs put the figure at 1.5 percent.¹² And studies using tax data suggest an even higher leakage rate.¹³ Leakages from cashouts at the time of a job change remain the most serious problem.

Reported 401(k) Balances: 2016 and 2019

As a prelude to looking at the new SCF data, it is useful to examine median 401(k) balances as reported by Vanguard.¹⁴ As Table 1 shows, these balances predictably rise with age and increased slightly between 2016 and 2019.

TABLE 1. MEDIAN 401(k) BALANCES REPORTED BY VANGUARD, BY AGE, 2016 AND 2019

Ages	2016	2019
All	\$24,713	\$25,775
35-44	23,491	26,188
45-54	43,467	46,363
55-64	66,643	69,097

Source: Vanguard (2017, 2020).

Although these individual 401(k) balances provide a hint of what to expect in the 2019 SCF, three factors make it impossible to determine from these numbers how much money households have accumulated for retirement. First, when participants change jobs, their 401(k) accounts may remain with their old employer, so individuals may have more than one 401(k) account. Second, 401(k) balances may be rolled over to an IRA, and financial services companies cannot track combined 401(k)/IRA holdings. Third, by necessity, balances are provided on an individual, rather than a household, basis. For all these reasons, the new SCF data are crucial.

401(k)/IRA Balances in the 2019 SCF

To calibrate the Federal Reserve's 2019 SCF to the numbers from financial services firms, the best place to start is with single individuals. Table 2 shows SCF median 401(k) and combined 401(k)/IRA balances for working individuals with a 401(k) in 2016 and 2019. The SCF 401(k) balances are higher than the Vanguard numbers, most likely because they represent all the accounts held by an individual. But basically, the patterns by age and magnitude look consistent. Adding IRA balances shows that focusing only on 401(k)s significantly understates retirement saving by workers. In 2019, the typical worker approaching retirement (ages 55-64) with a 401(k) had a balance of \$120,000 in combined 401(k)/IRA accounts, up from \$105,000 in 2016. Note that the gain is a little less in real terms since these figures are not adjusted for inflation.

TABLE 2. MEDIAN 401(k) AND 401(k)/IRA BALANCES FOR WORKING INDIVIDUALS, 2016 AND 2019 SCF

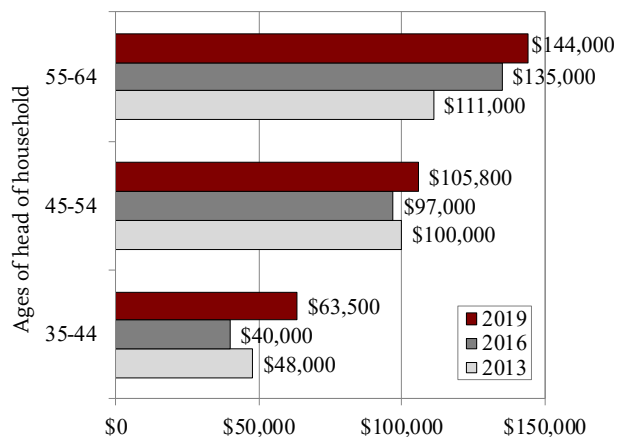
Ages	Median 401(k)		Median 401(k)/IRA	
	2016	2019	2016	2019
35-44	\$29,000	\$41,000	\$37,000	\$51,000
45-54	60,000	65,000	80,000	90,000
55-64	76,000	84,000	105,000	120,000

Source: Authors' calculations from the 2016 and 2019 SCF.

Individuals live in households, and the great virtue of the SCF is that it provides data on retirement assets at the household level. In 2016, the typical working household approaching retirement with a 401(k) had \$144,000 in 401(k)/IRA balances (see Figure 10).¹⁵ This amount compares to \$135,000 in 2016.

The 401(k)/IRA balances for the households approaching retirement will produce only a modest supplement to Social Security. If the couple uses their \$144,000 to buy a joint-and-survivor annuity, they will receive \$570 per month.¹⁶ Since this amount is not indexed for inflation, its purchasing power will decline over time. Moreover, this \$570 is likely to be the only source of additional income, because the typical household holds virtually no financial assets outside of its 401(k).¹⁷

FIGURE 10. MEDIAN 401(k)/IRA BALANCES OF WORKING HOUSEHOLDS WITH 401(k) PLANS BY AGE GROUP, 2013, 2016, AND 2019



Note: Sample excludes households that are not working and those that have only an IRA.

Source: Authors' calculations from the 2013-2019 SCF.

While the overall median for households approaching retirement was \$144,000, up from \$135,000 in 2016, the amount and pattern of increase varied significantly by household income. Balances for the highest quintile were \$805,500 in 2019 compared to \$780,000 in 2016 and the share of high-income households with 401(k) balances rose from 70 percent to 75 percent (see Table 3). In contrast, for the lowest quintile, even with rapid growth, balances

TABLE 3. MEDIAN 401(k)/IRA BALANCES FOR WORKING HOUSEHOLDS WITH A 401(k), AGES 55-64, BY INCOME QUINTILE, 2016 AND 2019

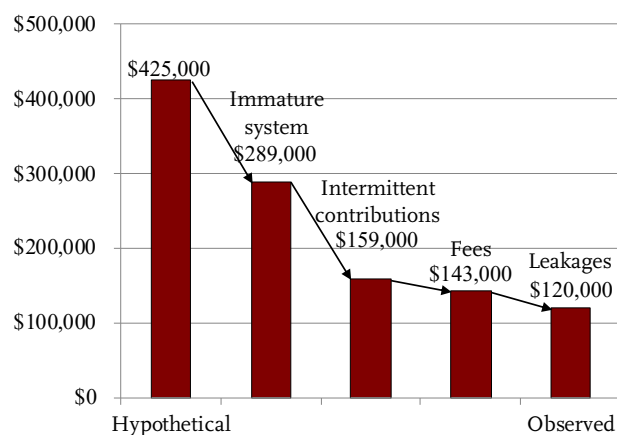
Income quintile	Median balances		Percentage with 401(k)	
	2016	2019	2016	2019
Lowest	\$26,700	\$32,200	25%	21%
2nd	72,000	75,000	45	48
3rd	104,000	97,000	58	53
4th	335,400	289,000	62	66
Highest	780,000	805,500	70	75
Total	\$135,000	\$144,000	52%	52%

Source: Authors' calculations from the 2016 and 2019 SCF.

amounted to only \$32,200 and the share of households with a 401(k) declined from 25 percent to 21 percent. For households in the middle quintile, both balances and the percentage with a 401(k) declined. Retirement accounts appear to serve as a meaningful source of saving only for the upper two quintiles. Even there, however, a significant minority of households have no 401(k) balances.

One interesting question is how much should we *expect* to see in these 401(k)/IRA accounts. In an attempt to answer that question, take a representative individual age 25 with median earnings in 1984 who reaches age 60 in 2019, assume that he contributed 6 percent of salary and received a 50-percent match from his employer, had a 50:50 stock/bond allocation, and received actual investment returns over the period. This individual would have accumulated \$425,000 (see Figure 11).¹⁸

FIGURE 11. IMPACT OF CONTRIBUTIONS, FEES, AND LEAKAGES ON 401(k)/IRA BALANCES, 2019



Source: Authors' estimates based on Biggs, Munnell, and Chen (2019).

But this calculation assumes continuous contributions, no fees, and no leakages. In fact, most people have not contributed continuously over their worklives. About half of the shortfall between potential and actual balances is attributed to the fact that 401(k)s only came into existence in the 1980s, so many workers would not have been able to contribute early in their careers. The other half reflects the fact that many employers do not offer a plan so that workers move in and out of coverage. The lack of continuous contributions from these two factors reduces the

expected 401(k) balance for the typical 60-year-old from \$425,000 to \$159,000. Fees further reduce balances to \$143,000, and leakages bring the balance to \$120,000. Overall, then, the lack of universal coverage is the major deficiency in the employer-sponsored retirement system.

Conclusion

The 401(k) system is the collection mechanism for retirement saving; the bulk of the money now resides in IRAs. The 2019 *Survey of Consumer Finances* offers a glimpse of how three years of solid economic growth, steady stock market returns, and the continued maturation of the 401(k) system affected households' retirement savings. The typical household approaching retirement had \$144,000 in combined 401(k)/IRA assets, up from \$135,000 in 2016. These assets will provide only \$570 per month in retirement, an amount whose purchasing power will decline over time with inflation. Overall, the system provides meaningful balances for only the top two income quintiles of households with 401(k)s. Moreover, only half of *all* households have any 401(k)-related holdings. This somewhat bleak assessment of the nation's employer-sponsored retirement system can only have been worsened by COVID-19 and the ensuing recession.

A number of factors contribute to low balances. The most important is the lack of continuous contributions. Part of that failure is due to the immaturity of the 401(k) system. This problem will resolve itself over time as new workers can be covered for their whole career. The other half of the problem, however, requires policymakers to mandate universal coverage. Employers must either provide a plan themselves or be required to auto-enroll their employees in a retirement savings program initiated by government. Burgeoning auto-IRA programs at the state level – in California, Illinois, and Oregon – are a first step down this path.

This whole discussion has focused on the accumulation stage of retirement saving, and has not even considered what participants will do with their money when they reach retirement. Unlike defined benefit plans, which provide participants with steady benefits for as long as they live, 401(k) plans generally pay out lump sums. Lump-sum payments mean that retirees have to decide how much to withdraw each year. They face the risk of either spending too quickly and outliving their resources or spending too conservatively and depriving themselves of necessities.

Participants need an easy and cheap way to transform their accumulated balances into lifetime income. Using 401(k) balances to defer claiming Social Security, which results in larger monthly benefits, should be a big part of the solution.¹⁹

Endnotes

- 1 This *brief* generally covers assets in all defined contribution plans but refers to them as 401(k)s for simplicity.
- 2 For a comparison of different measures of pension coverage, see Munnell and Bleckman (2014).
- 3 See Appendix for trends in retirement plan coverage for all workers between 1989 and 2019.
- 4 For examples, see Nessmith, Utkus, and Young (2007), Beshears et al. (2009, 2010), Butrica and Karamcheva (2012), and Clark, Utkus, and Young (2015). In 2019, among Vanguard’s recordkeeping plans, the voluntary enrollment participation rate was 61 percent and the auto-enrollment participation rate was 92 percent.
- 5 Vanguard (2020).
- 6 Vanguard reports that while participation rates at plans with auto-enrollment rose from 86 percent to 92 percent from 2010 to 2019, participation rates at plans without auto-enrollment fell from 70 percent to 61 percent.
- 7 Median employee and employer contribution rates show the same pattern as the average rates in Figure 6.
- 8 In 2019, Vanguard participants joining a plan under auto-enrollment had an average deferral rate of 7 percent, which was identical to the average deferral rate for participants enrolling on a voluntary basis (Vanguard 2020).
- 9 Historically, employers that offered auto-enrollment defaulted participants into stable value or money market funds – safe, but low-return, investments. Given inertia, most participants stayed in these investments. In response, the PPA defined a list of “qualified default investment alternatives,” which included target date funds, balanced funds, and managed accounts. Plans that use these investments as the default avoid fiduciary liability.

10 The calculations assume real stock and bond returns of 6.6 percent and 2.3 percent respectively, a stock asset allocation of 50 percent, 40 years of saving, and real wage growth of 1.1 percent per year. If individuals respond to the decline in projected balances by saving more, the ultimate impact on wealth at retirement will be smaller.

11 For an overview, see Munnell and Webb (2015). For a detailed study of leakages through loan defaults, see Lu et al. (2014).

12 Biggs, Munnell, and Chen (2019), Butrica, Zedlewski, and Issa (2010) and Munnell and Webb (2015).

13 Argento, Bryant, and Sabelhaus (2013) and Bryant, Holden, and Sabelhaus (2011).

14 Historically, these balances have closely matched median individual balances reported in the SCF.

15 This figure differs from the value of “retirement accounts” reported in Bhutta et al. (2017) because it pertains to only those households that are working and have a 401(k) plan; those that are not working or only have an IRA are excluded.

16 This number comes from ImmediateAnnuity.com and assumes that the husband is 65 and the wife is 62, the average retirement ages for men and women, respectively.

17 Financial assets outside of 401(k) plans made up only 2-3 percent of total assets for the typical household ages 55-64 in 2016.

18 The hypothetical assets assume real stock and bond returns of 6.6 percent and 2.3 percent respectively, 35 years of saving beginning at age 25, a contribution rate of 9.0 percent a year, and real wage growth of 1.1 percent per year. If individuals respond to the decline in projected balances by saving more, the ultimate impact on wealth at retirement will be smaller.

19 Munnell, Hou, and Wettstein (2019).

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APPENDIX

TABLE A1. PLAN PARTICIPATION OF ALL WORKERS, BY TYPE OF PLAN, BY SELECTED AGES, 1989-2019

All workers

Type of plan	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Defined contribution only	15%	19%	26%	29%	29%	29%	30%	31%	32%	34%	33%
Defined benefit only	22	21	13	11	11	9	8	8	7	8	7
Both	10	8	7	8	8	8	9	6	6	5	5
None	53	53	54	53	52	54	53	55	55	54	54

Ages 30-39

Type of plan	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Defined contribution only	17%	21%	30%	32%	33%	31%	32%	34%	32%	36%	36%
Defined benefit only	21	21	12	9	10	9	7	8	6	8	7
Both	11	7	6	8	8	6	7	4	5	4	5
None	51	52	52	50	49	54	54	53	57	53	52

Ages 40-49

Type of plan	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Defined contribution only	15%	19%	29%	30%	34%	33%	32%	35%	36%	38%	38%
Defined benefit only	28	23	17	14	13	10	10	8	8	7	8
Both	13	11	10	10	10	10	11	7	6	5	6
None	44	47	44	47	44	47	47	50	49	50	48

Ages 50-59

Type of plan	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Defined contribution only	16%	19%	23%	30%	27%	32%	33%	34%	36%	38%	37%
Defined benefit only	28	29	20	15	18	13	11	12	8	9	8
Both	15	12	9	11	11	11	15	9	8	7	7
None	41	41	48	45	45	44	41	46	49	46	47

Source: Author's estimates based on the 1989-2019 SCF.

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About the Center

The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center conducts a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

Affiliated Institutions

The Brookings Institution
Mathematica – Center for Studying Disability Policy
Syracuse University
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