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WHY ARE 401(K)/IRA BALANCES SUBSTANTIALLY BELOW POTENTIAL?

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Introduction

For most workers, 401(k)/IRA assets represent the main source of retirement savings outside of Social Security. These accounts can generate significant wealth if workers contribute consistently from a young age, keep their money in their accounts, and minimize their investment fees. However, most workers have 401(k)/IRA balances at retirement that are substantially below their potential. For example, a 25-year-old median earner in 1981 who contributed regularly would have accumulated about $364,000 by age 60, but the typical 60-year-old with a 401(k) in 2016 had less than $100,000. This *brief,* which is based on a recent paper, explores the reasons for this gap between potential and actual balances.[1]

The discussion proceeds as follows. The first section identifies four factors – immaturity of the 401(k) system, lack of universal coverage, leakages, and fees – that might explain why 401(k)/IRA balances fall below their potential. The second section describes the data and the methodology used to estimate the role of each factor. The third section discusses the results, which show that the immaturity of the system and the lack of universal coverage are the main culprits, followed by leakages, and finally fees. The final section concludes that, without a significant effort to cover the uncovered, a large gap between potential and actual accumulations will persist even after the system matures.

Possible Sources of the Gap

For workers to accumulate substantial retirement savings, they must contribute regularly, keep their money in the account, and maximize after-fee returns. Four aspects of the U.S. retirement system make it difficult to achieve these goals.

Immaturity of the System

The emergence of 401(k) plans is a relatively recent event. The Revenue Act of 1978 went into effect in January 1980, and in 1981 the Internal Revenue Service issued proposed regulations that sanctioned the use of employee salary reduction plans for retirement contributions. Initially 401(k) plan growth resulted

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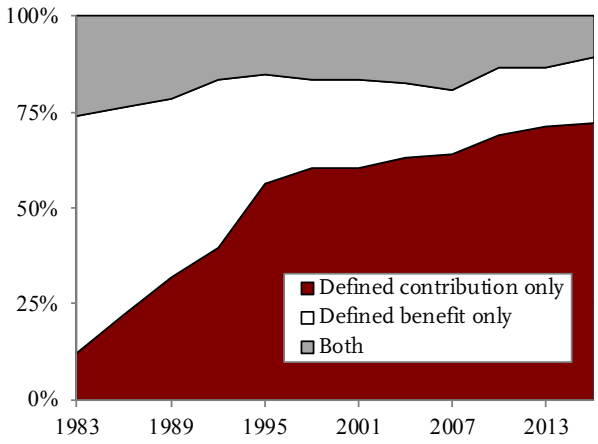
from the addition or substitution of 401(k) provisions to traditional thrift and profit-sharing plans. But, new plan formations also surged in the 1980s as 401(k)s were greeted enthusiastically by both employers and employees.

This relatively recent shift from traditional pensions to the newer 401(k) plans means that many of today's 60-year-olds did not participate in a 401(k) plan when they were young workers (see Figure 1). To the extent that the immaturity of the system explains the gap between potential and actual balances, future cohorts of workers who have experienced a more mature 401(k) system should accumulate larger retirement balances over the course of their careers.

Figure 1. Workers with Pension Coverage by Type of Plan, 1983-2016



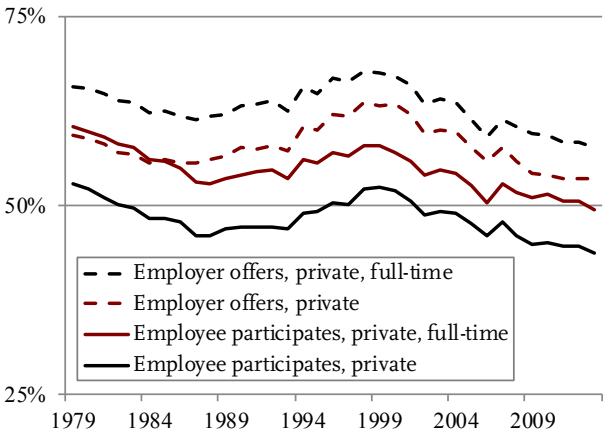
Sources: Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (1983-2016).

Lack of Universal Coverage

While 401(k) plans have expanded dramatically since the early 1980s, many workers today still do not participate in a 401(k). This outcome can occur for a number of reasons.[2] The most important is that their employer does not offer a plan. But employees can also work for an employer that *offers* a plan for some of its employees but not be eligible to participate.[3] Or their employer can offer a plan and they can be eligible to participate but choose not to do so – though this group only accounts for a small minority of all the workers who do not participate.

Coverage rates are a somewhat controversial topic these days! The *Current Population Survey* (CPS) has produced inexplicably low coverage rates since 2013, which is often attributed to a revision of the survey's questions that took place that year. However, the CPS is the only survey with significant historical information, and coverage rates before 2013 do not differ significantly from those provided by other surveys.[4] The CPS shows that regardless of how the uncovered are defined, the group without an employer-provided plan is large (see Figure 2). This lack of universal coverage means that many workers will move in and out of 401(k) plans over their careers and that their 401(k) accumulations will be much lower than projections based on the prospect of a steady lifetime of contributions.[5]

Figure 2. Pension Sponsorship and Participation in the Private Sector, Ages 25-64, 1979-2013



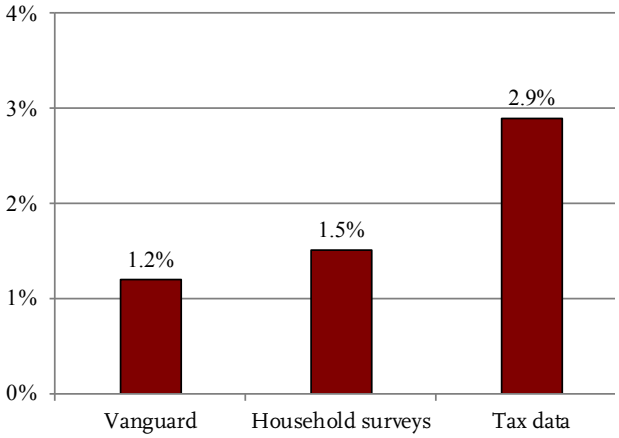
Sources: Authors' calculations from U.S. Bureau of the Census, *Current Population Survey* (1980-2014).

Leakages

401(k) participants have a number of ways of accessing their account balances before retirement. These pathways include the ability to cash out when they change jobs, in-service withdrawals (hardship and tax-free withdrawals beginning at age 59 ½), and loans. Congress has tried to limit withdrawals by imposing a 10-percent penalty (in addition to federal and state income taxes), but a substantial portion of 401(k)/IRA balances do leak out. (IRAs are included because most of the money held in IRAs is rolled over from 401(k) plans.)[6]

Estimates of leakage rates come from three sources. Vanguard data for 2013 show an annual leakage rate of 1.2 percent per year, with cash-outs at job change accounting for 0.5 percent of assets followed by hardship withdrawals (0.3 percent), post-age 59½ withdrawals (0.2 percent), and loans (0.2 percent).[7] While the Vanguard data provide a useful way to identify the various sources of leakage, they likely understate leakage rates because Vanguard's clients tend to be large plans with higher-paid workers who have less of a need to tap their 401(k)s. In fact, the annual leakage rates estimated from household surveys amount to 1.5 percent of aggregate balances,[8] and estimates using tax data are much higher, amounting to 2.9 percent of assets (see Figure 3).[9]

Figure 3. Leakage Estimates from Various Sources

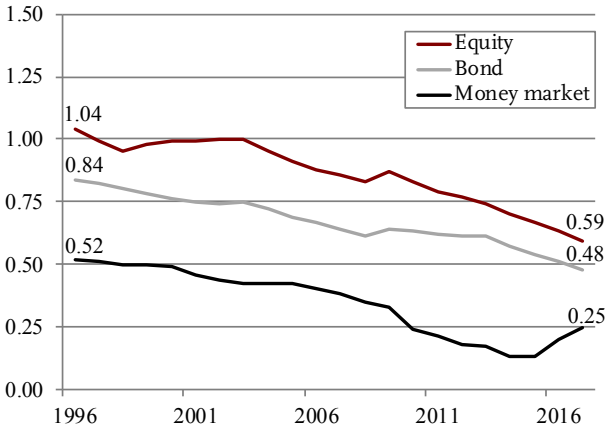


Source: Munnell and Webb (2015).

Fees

Fees can also erode 401(k) accumulations. Average fees are currently 0.48 percent of assets for bond mutual funds and 0.59 percent for equity mutual funds. These fees have declined noticeably from 0.84 percent and 1.04 percent respectively in 1996 (see Figure 4). This decline most likely reflects the rise in passive mutual funds, the Department of Labor's 2012 requirement that service providers disclose fees, and litigation over 401(k) fees.[10] Nevertheless, the retirement plan balances of households nearing retirement today reflect the higher fee rates that were charged in past years as these households were building their savings.

Figure 4. Average Expense Ratios for Long-Term Mutual Funds by Asset Type, 1996-2017



Source: Investment Company Institute (2018).

The four factors described above – the immaturity of the 401(k) plan, the coverage gap, leakages, and fees – are all possible explanations for the discrepancy between potential and actual 401(k)/IRA account balances. Finally, one could question whether it is realistic or necessary for everyone to save in a 401(k). Specifically, many young workers do not start saving until their 30s; and workers with a defined benefit pension plan may have no need for additional saving. Therefore, the analysis includes a sensitivity test that excludes these groups to determine the effect on the baseline results.

Data and Methodology

This analysis uses the *Survey of Income and Program Participation* (SIPP) linked with administrative tax records to sort out the relative importance of each component.[11] Tax records include earnings from all jobs in a given year from 1957-2014 and all deferred contributions to a retirement plan from 1990-2014. (Contributions before 1990 are estimated by the authors.) Aside from the tax data, the survey includes information on self-reported 401(k)/IRA wealth. The focus is on workers from the 2008 SIPP panel who were ages 55-64 in 2014 and had a 401(k) account. This group consists of about 13,500 individuals. Of those, only individuals who worked at some point between ages 55-64 and ever contributed over their working careers were included. This narrower defini-

tion leaves a sample of 9,900 workers. All workers in this sample were successfully linked to a valid Social Security number.

The analysis proceeds in five steps:

- Step 1: Estimate potential balances assuming universal coverage, consistent contributions of 9 percent of earnings (6 percent employee plus 3 percent employer), and no leakages or fees.
- Step 2: Document actual balances in 2014, as reported in the SIPP.
- Step 3: Calculate actual lifetime contributions and accumulated balances for each individual in the SIPP sample, assuming no leakages or fees.
- Step 4: Use the contributions of a younger cohort to separate the lack of contributions from the immaturity of the system.
- Step 5: Divide the remaining difference between leakages and fees using fees data from the Investment Company Institute.

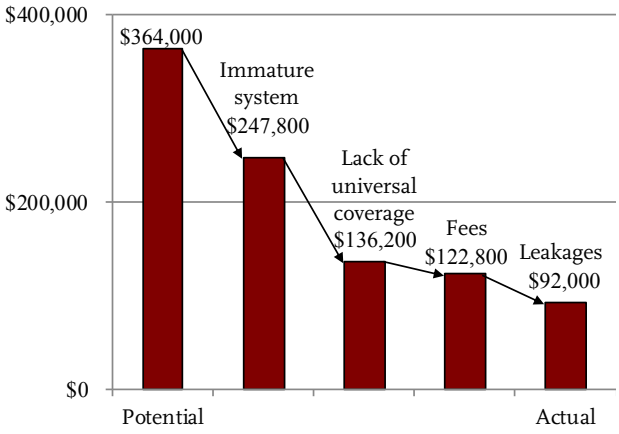
Results

The results of the multi-step process described above are summarized in Figure 5. The figure shows that the immaturity of the system and the lack of universal coverage account for the majority of the gap between potential and actual 401(k)/IRA balances, followed by leakages and fees.

The fact that the immaturity of the system accounts for such a substantial portion of the difference between potential and actual 401(k) balances means that once the system matures, worker balances should be higher than they are today. Nevertheless, actual balances may still end up being less than half of the potential.

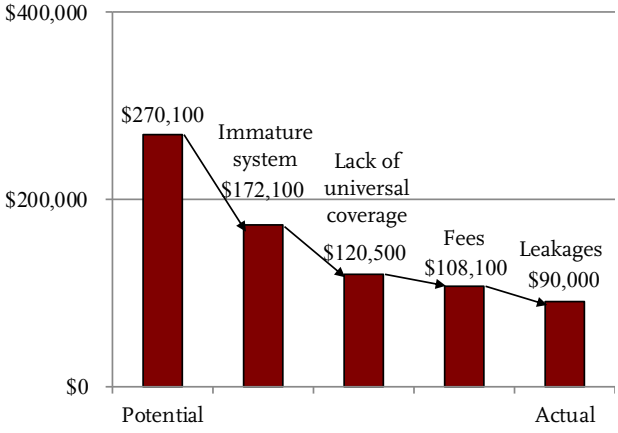
Finally, the analysis assumes that, in a perfect system, coverage would be universal and workers would save consistently from ages 25-64. However, these assumptions may not be realistic since many workers do not start saving until their 30s and some workers are covered by defined benefit plans. To test the sensitivity of the baseline results to these factors, the analysis re-estimates the sources of the gap assuming that coverage and contributions begin at age 30 and excludes the approximately 15 percent of workers between ages 55-64 who have a defined benefit plan with their current employer. The results show that final holdings equal a third of the potential accumulations, compared to a quarter when all workers are included (see Figure 6). However, the culprits remain the same, with the immaturity of the system and the lack of universal coverage accounting for the bulk of the gap.

Figure 5. Impact of Immature System, Lack of Universal Coverage, Fees, and Leakages on 401(k)/IRA Balances for a Typical Worker Ages 55-64 in 2014



Sources: Authors' calculations using U.S. Census Bureau, *Survey of Income and Program Participation* (SIPP) 1984-1986; and SIPP-linked Administrative Tax Data (1990-2014).

Figure 6. Impact of Immature System, Lack of Universal Coverage, Fees, and Leakages on 401(k)/IRA Balances for a Typical Worker Ages 55-64 in 2014, under Alternative Assumptions



Note: Assumes contributions start at age 30 and excludes workers with defined benefit plans between ages 55-64.
Source: Authors' calculations using SIPP (1984-1986) and SIPP-linked Administrative Tax Data (1990-2014).

Conclusion

401(k)/IRA plans have become the primary mechanism for retirement saving in the private sector. These accounts give households the potential to accumulate substantial retirement assets if they contribute regularly, keep the money in the account, and maximize after-fee returns. But, in reality, the typical older worker has less than $100,000 in 401(k)/IRA assets, instead of the $364,000 he would have had under a system in which workers participated throughout their careers, paid zero fees on account balances, and did not withdraw money prematurely from their accounts. The discrepancy is somewhat less if individuals under 30 and those with defined benefit plans are excluded from the analysis, but it is still significant.

This analysis shows that the immaturity of the system and lack of universal coverage are the main culprits, followed by leakages and fees. Today's near-retirees typically spent only about one-third of their working careers participating in a 401(k) plan, which partially reflects an immature system. But even among today's younger workers, who *are* in a mature system, a majority do not participate. Furthermore, the portion of workers without coverage has stagnated and remains large. The lack of universal coverage means that – even once the system matures – 401(k)/IRA plans will continue to fall below their potential.

Endnotes

1 Biggs, Munnell, and Chen (2019 forthcoming).

2 Biggs (2016) assesses 401(k) participation rates; and Biggs (2017) considers options for expanding coverage and participation.

3 See Munnell, Belbase, and Sanzenbacher (2018).

4 See Munnell, Belbase, and Sanzenbacher (2018).

5 For this study, the focus is on workers who do not make contributions regardless of the reason. Thus, participation rather than coverage is the relevant measure. However, given that a lack of coverage is the main reason for not participating, the word "coverage" is used synonymously with participation.

6 Chen and Munnell (2017).

7 Vanguard (2014).

8 Butrica, Zedlewski, and Issa (2010).

9 See Bryant, Holden, and Sabelhaus (2011); and Argento, Bryant, and Sabelhaus (2013).

10 Aven Gladych (2015); and Mellman and Sanzenbacher (2018).

11 The SIPP linked with administrative tax records is accessed through the Cornell Virtual Data Center, and results are validated by the U.S. Census Bureau. Since the SIPP is designed to evaluate the eligibility of households for federal, state, and local government programs, the survey tends to oversample lower-income households. To ensure it is comparable to national aggregates, the SIPP sample is re-weighted.

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