

# THE IMPACT OF LEAKAGES ON 401(K)/IRA ASSETS

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## Introduction

401(k) plans are now the main way that private sector workers save for retirement. The balances in these accounts, together with 401(k) monies rolled over to Individual Retirement Accounts (IRAs), will soon be the primary source of retirement income other than Social Security. Yet, in 2013, the typical working household with a 401(k) approaching retirement had only \$111,000 in 401(k)/IRA assets.<sup>1</sup> One reason for such modest balances is that individuals can tap their nest eggs during their worklives, resulting in “leakages” that erode assets at retirement. This *brief*, which summarizes a recent study, focuses on the size of leakages, their impact on retirement wealth, and options for reducing them.<sup>2</sup>

The *brief* is organized as follows. The first section describes the growing role of 401(k)s and IRAs. The second section introduces the channels through which leakages can occur. The third section quantifies the annual amount of leakages and estimates how much they reduce wealth at age 60. The fourth section discusses policy options for reducing leakages. The final section concludes that, since leakages reduce 401(k)/IRA wealth at retirement by about 25 percent, it may be time to take steps to curtail them.

## Why the Potential for Leakages Is Growing

Leakages are any type of pre-retirement withdrawal that permanently removes money from retirement saving accounts. Over the past few decades, the potential for leakages has greatly increased due to two developments: 1) the shift from defined benefit plans to 401(k) plans; and 2) the movement of retirement assets from 401(k)s to IRAs.

### *The Growth of 401(k)s*

When 401(k) plans began to spread rapidly in the early 1980s, they were viewed mainly as supplements to traditional pensions. Since 401(k) participants were presumed to have their basic retirement income needs covered by an employer-funded plan and Social Security, they were given substantial discretion over 401(k) choices, which included several ways to access their funds before retirement. Today, 401(k)s are the dominant employer-sponsored plan in the private sector, but the freedom and corresponding risks for participants are unchanged.

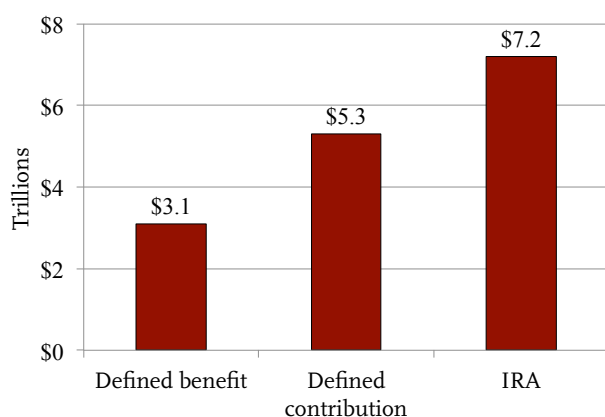
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## The Shift from 401(k)s to IRAs

Another significant change in the retirement saving environment is the movement of money from 401(k)s to IRAs. The increase in IRAs has occurred, in large part, because many individuals roll over their 401(k) balances when they shift jobs and when they retire. As shown in Figure 1, total IRA assets significantly exceed the money in 401(k)s, and their combined balances dwarf assets in defined benefit plans.

FIGURE 1. TOTAL U.S. PRIVATE RETIREMENT ASSETS, BY TYPE OF PLAN, 2014 (Q2)



Source: U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts* (2014).

The shift to IRAs moves savings to a different environment, one with a lower standard of regulatory oversight that is potentially more susceptible to leakages. For example, as discussed below, 401(k) withdrawals before age 59½ can be made only due to hardship or job change. IRA withdrawals can be made any time and without justification. Moreover, compared to IRAs, 401(k) hardship withdrawals pose more of an administrative burden for participants. And 401(k) withdrawals are subject to 20-percent withholding for income taxes, while IRAs are not. Finally, certain types of hardship withdrawals are exempt from penalty; and IRAs have more such exemptions than 401(k)s.<sup>3</sup>

## Leakage Channels

Leakages can occur through three channels: in-service withdrawals, cashouts at job change, and loans.

## In-service Withdrawals

In-service withdrawals come in two forms: hardship withdrawals and withdrawals after age 59½. Hardship withdrawals allow plan participants to withdraw funds for an “immediate and heavy financial need,” which includes medical care; postsecondary education; and buying, repairing, or avoiding foreclosure on a house. Hardship withdrawals generally are subject to income tax, a 10-percent penalty tax, and 20-percent withholding for income taxes.

Withdrawals after age 59½ – which are penalty free – are increasingly popular. The elimination of the penalty tax may signal to people that 59½ is an appropriate age to withdraw funds. But since many will need to work past their mid-60s to ensure a secure retirement, allowing such early access undercuts the notion of preserving savings until retirement.<sup>4</sup> Fortunately, recent data show that participants taking post-59½ withdrawals roll over most of the money into IRAs. Nevertheless, roughly 30 percent of post-59½ withdrawals may represent leakages.<sup>5</sup>

## Cashouts

Upon job separation, an employee can take a lump-sum distribution, or preserve the balance by leaving it in the prior employer’s plan (if the employer permits), rolling over the plan balance into an IRA, or transferring it to the new employer’s 401(k) (if the new plan accepts rollovers). Plan sponsors can only compel closure of accounts with less than \$5,000 but must deposit distributions between \$1,000 and \$5,000 in an IRA or another employer plan, unless the participant elects otherwise. Distributions are subject to the 10-percent penalty tax (if under age 59½) and the 20-percent withholding requirement.

## Loans

About 90 percent of 401(k) participants have access to a loan feature.<sup>6</sup> The Internal Revenue Code limits the borrowing to 50 percent of the account balance, up to \$50,000. Loans do not require approval but generally must be paid back within one to five years. A loan option appears to encourage individuals who value liquidity to participate in their employer’s 401(k) plan and to contribute more than otherwise.<sup>7</sup> But loans do come with risks. If a loan is not repaid due to default or job loss, the remaining balance is treated as a lump-sum distribution and is subject to income taxes and the 10-percent penalty tax.

## How Big Are Leakages?

The key policy questions are how much money leaves the retirement saving system each year and how much these leakages reduce wealth at retirement.

### *How Much Leaks Out Each Year?*

Researchers have tried to estimate annual leakage rates using household surveys and, more recently, tax data.<sup>8</sup> Unfortunately, the surveys are not designed to answer these precise questions, which often results in incomplete leakage estimates. In contrast, annual data from Vanguard present a comprehensive picture. The one drawback is that Vanguard data represent only about 10 percent of plans, and these plans tend to be larger with higher-paid employees and probably have lower leakage rates. But these estimates provide a useful anchor.

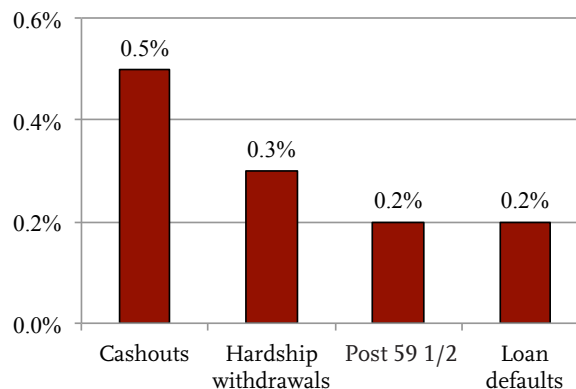
*In-Service Withdrawals.* Vanguard reports that in 2013 about 4 percent of participants in plans offering in-service withdrawals used this feature and 1 percent of total assets were withdrawn. Of this 1 percent, about 0.3 percent was for hardship purposes and the remaining 0.7 percent for non-hardship (i.e. post-59½) reasons. Since only about 30 percent of the post-59½ withdrawals are cashed out rather than rolled over into IRAs, the annual leakage from this source is about 0.2 percent (0.7 percent of assets x 0.3 percent of these withdrawals cashed out).

*Cashouts.* Vanguard reports that 9 percent of 401(k) participants left their job in 2013 and were eligible for a distribution. Their assets equaled 6 percent of Vanguard's recordkeeping assets. The majority of those leaving their job preserved their assets by leaving them in their prior employer's 401(k) plan or by rolling them over to an IRA or a new employer's plan. But about 0.5 percent of total assets were cashed out.

*Loans.* Vanguard reports that 18 percent of participants in plans offering loans had a loan outstanding in 2013; about 11 percent took out a new loan in that year. Loans accounted for about 2 percent of aggregate plan assets, but most of this money is repaid and therefore involves little in plan leakages. An estimate that accounts for loan defaults by employees who leave their companies as well as defaults by those who stay with the firm finds that loan leakage is a modest 0.2 percent of assets.<sup>9</sup>

Figure 2 shows the estimates for all leakage channels, based on the Vanguard data. Overall, these data show a total leakage rate of 1.2 percent of assets for 2013 (see the Appendix Table for a more detailed picture).

FIGURE 2. ANNUAL LEAKAGES OUT OF VANGUARD ACCOUNTS AS A PERCENTAGE OF ASSETS, 2013



Source: Authors' estimates based on Vanguard (2014).

Given that the Vanguard data probably understate leakages somewhat, these estimates represent a lower bound. Leakage estimates based on household surveys are modestly higher than those implied by Vanguard, while estimates using tax data are much higher.<sup>10</sup>

### *Impact of Leakages on Assets at Retirement*

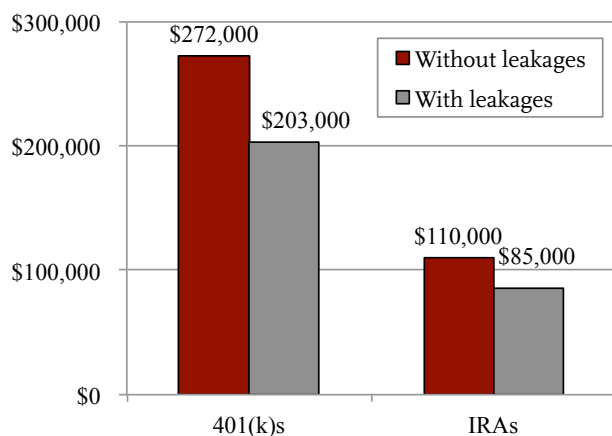
The impact of leakages depends on how much less people will have at the end of their work life than if they had left all contributions in the plan. The following estimates consider the impact of leakages on hypothetical participants in 401(k)s and IRAs.

The estimates for 401(k)s focus on the age-60 wealth of a participant who begins contributing at age 30. The assumed contribution rate is 6 percent of pay, the employer match rate is 50 percent, the participant's initial salary of \$40,000 increases at 1.1 percent a year in real terms, and investments earn a real 4.5-percent annual return. The calculations assume

1.5 percent of assets leaks out each year. They further assume a 75-percent linear decline in the leakage rate, expressed as a percent of assets, from age 30 to 60.

Under these assumptions, the leakages result in accumulated 401(k) wealth of \$203,000 at age 60 compared to \$272,000 with no leakages; so leakages reduce 401(k) wealth by 25 percent (see Figure 3).<sup>11</sup> This estimate represents the overall impact for the whole population, averaged across both those who tap their savings before retirement *and those who do not*.

FIGURE 3. ESTIMATED IMPACT OF LEAKAGES ON HYPOTHETICAL 401(K) AND IRA ASSETS AT AGE 60



Source: Munnell and Webb (2015).

A similar exercise estimates the impact of leakages from IRAs on wealth at age 60. It assumes that an individual rolls over money from his 401(k) three times during his career and earns a real 4.5-percent return on his investments. The initial rollover into the IRA occurs at age 30 and withdrawal rates are taken from the experience of households in the 2010 *Survey of Consumer Finances* (SCF). Under this approach, leakages result in accumulated IRA wealth of \$85,000 at age 60 compared to \$110,000 with no leakages; so leakages reduce IRA wealth by 23 percent.

Interestingly, the effects of leakages from 401(k)s and IRAs on age-60 wealth are relatively similar, which is consistent with an earlier study that estimated annual leakages at 1.5 percent from 401(k)s and 1.4 percent from IRAs.<sup>12</sup> The explanation may be that while IRAs are easier to access and have more penalty-free

withdrawals, those who roll over to IRAs may be more savings oriented. In total, the estimates suggest that, in a mature system, leakages reduce aggregate 401(k)/IRA wealth at retirement by about 25 percent.

## Policy Options for Reducing Leakages

In deciding how much early access to allow to retirement savings, policymakers are balancing two conflicting goals: 1) keeping monies in the plan; and 2) allowing access to those who need their funds, which can encourage participation and contributions.

A recent paper explored the optimal degree of illiquidity in the retirement saving system and concluded that, on balance, household financial well-being would be improved if penalties for accessing funds before retirement were much higher than under current policy.<sup>13</sup> In other words, the primary goal should be to keep monies in the plan for retirement. Thus, while many experts have proposed piecemeal ways to reduce leakages, it may be time to address leakages more comprehensively.<sup>14</sup>

### *In-Service Withdrawals*

For hardship withdrawals, it may make sense to keep a safety valve for families in financial trouble. However, these withdrawals could be limited to serious unpredictable hardships such as disability, high health care costs, and job loss. Predictable needs like housing and higher education could be excluded. With such limitations, the disincentive of a 10-percent tax penalty could be eliminated to avoid punishing those with severe financial problems. For post-59½ withdrawals, one obvious idea is to raise the threshold age to at least Social Security's Earliest Eligibility Age of 62.

### *Cashouts*

The option to cash out when changing jobs could be eliminated entirely by prohibiting lump-sum distributions at termination.<sup>15</sup> The allowable options could be limited to leaving the money in the prior employer's plan, transferring the money to the new employer's 401(k), or – for those leaving the labor force – rolling over the plan balance into an IRA.

## *Loans*

Of the various ways to access funds, loans appear to offer the biggest bang for the buck in terms of leakage. Most borrowers continue to contribute to the plan while they have a loan; and most of the money is repaid. The likely point of default arises when a terminating employee cannot repay the loan within 60 days, causing the money to be treated as a taxable distribution and subject to penalties. But estimated leakages from loan defaults are very small. So, given that the availability of loans encourages employees to participate and contribute, loans are probably a low-leakage way to allow participants to access funds.

## Conclusion

Leakages from 401(k)s/IRAs are a serious concern, given that these assets are the only significant retirement saving outside of Social Security for most workers. In-service withdrawals and cashouts appear to represent the biggest sources of leakage. Overall, leakages appear to reduce aggregate 401(k)/IRA retirement wealth by about 25 percent. If the primary policy goal is to protect *all* retirement saving from leakages, the cashout option could be closed down entirely. Hardship withdrawals could be limited to unpredictable events. And the age for penalty-free withdrawals could be raised to better align with when people will be retiring. Applying these principles to restructuring access to retirement saving could boost retirement assets for workers at a time when more money is needed for a secure retirement.

## Endnotes

- 1 “Nearing retirement” refers to those age 55-64. The 401(k)/IRA asset figure is from the Federal Reserve’s *Survey of Consumer Finances*; see Munnell (2014).
- 2 Munnell and Webb (2015).
- 3 See Munnell and Webb (2015) for more details.
- 4 Ellis, Munnell, and Eschtruth (2014).
- 5 This estimate is derived using data from Vanguard (2014).
- 6 Vanderhei et al. (2012).
- 7 For example, see Munnell, Sundén, and Taylor (2002).
- 8 For a full review of the literature, see Munnell and Webb (2015).
- 9 This estimate of the default leakage rate starts with a U.S. Government Accountability Office (2009) study, which reported that Department of Labor Form 5500 data showed a default rate of 0.02 percent for active 401(k) participants. A more recent study (Lu et al. 2014) pointed out that defaults by active participants account for only about 10 percent of total loan defaults. Thus, adding defaults by terminated employees raises loan leakage to 0.20 percent.
- 10 See Munnell and Webb (2015).
- 11 This figure is considerably higher than earlier estimates from Engelhardt (2002) and Poterba, Venti, and Wise (2001). Poterba, Venti, and Wise (2001) assume much lower rates of job separation. This assumption, together with the exclusion from their analysis of hardship withdrawals, loan defaults, and IRA withdrawals, leads them to conclude that leakages will reduce retirement wealth by only about 5 percent.
- 12 Butrica, Zedlewski, and Issa (2010).
- 13 Beshears et al. (2014).
- 14 For examples of ideas to reduce leakages, see Purcell (2009); AonHewitt (2011); U.S. Government Accountability Office (2009); Butrica, Zedlewski, and Issa (2010); and Fellowes and Willemin (2013). Burman et al. (2008) examine the interaction of public policies and behavioral influences.
- 15 Purcell (2009) suggests requiring at least part of the distribution to be rolled over.

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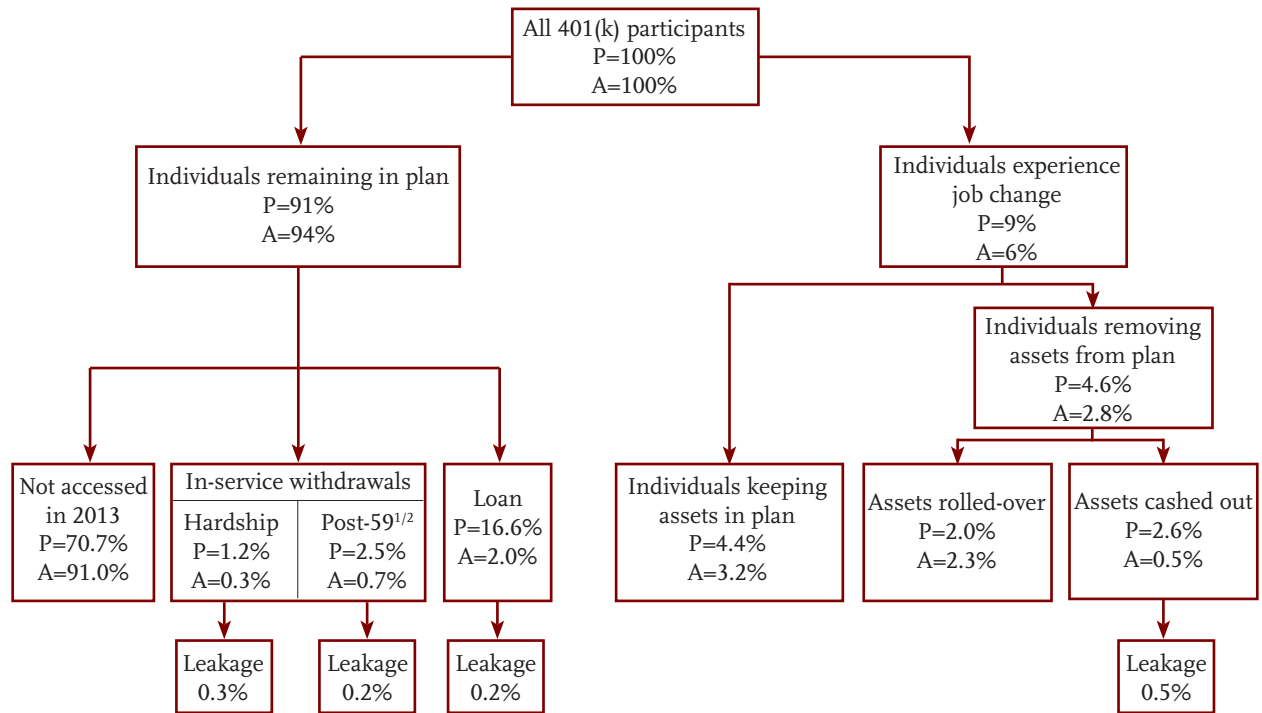
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# APPENDIX

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FIGURE A1. VANGUARD 401(k) LEAKAGE ACTIVITY, 2013



Note: P = participants and A = assets.

Source: Authors' depiction based on Vanguard (2014).

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