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401(K)/IRA HOLDINGS IN 2013: AN UPDATE FROM THE SCF

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Introduction

The release of the Federal Reserve's 2013 *Survey of Consumer Finances* (SCF) is a great opportunity to see how the positive developments of the last few years – a recovering economy, strong stock performance, and the continuing maturation of the 401(k) system – have affected workers' retirement wealth. The key sources of retirement wealth are 401(k) plans and Individual Retirement Accounts (IRAs), where balances come in large part from 401(k) rollovers. The SCF is a triennial survey of a nationally representative sample of U.S. households, which collects detailed data on their assets, liabilities, and demographic characteristics. The great advantage of the survey 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. While 401(k) plans serve as the gateway for retirement saving, more than half of the money collected now resides in IRAs. The relevant question is how much do households hold in these two sources combined. This *brief* reports on the progress made since the devastating effects of the financial collapse and Great Recession.

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 increased use of target date funds; the bad news is no improvement in participation rates, significant leakages, and high fees. The third section reports on 401(k)/IRA balances. The SCF shows for households approaching retirement a surprising decline in 401(k)/IRA balances from $120,000 in 2010 to $111,000 in 2013. The bright spot is a large gain for those in mid career. But, only about half of households have 401(k)/IRA balances; the rest have no source of retirement income other than Social Security. The final section concludes that the collection mechanism for our retirement system – that is, 401(k) plans – could work much better and balances would be higher if all plans were fully automatic – auto-enrollment for both existing and new employees and auto-escalation in the default contribution rate – and contribution rates were set at realistic levels.

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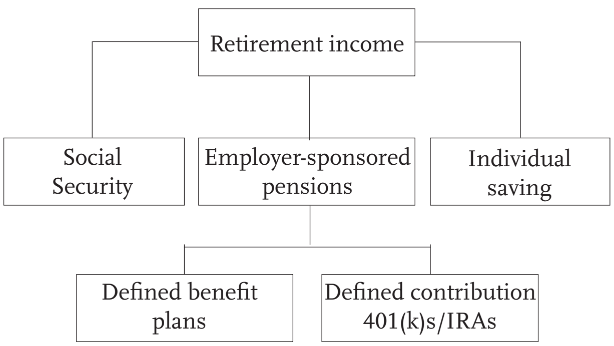
The Role of 401(k)s/IRAs in the Retirement System

Before discussing the holdings in 401(k)s and IRAs, it is useful to highlight the role that retirement accounts play in the U.S. retirement system. Figure 1 presents the so-called "three-legged stool."

Figure 1. Overview of the U.S. Retirement Income System



Source: Author's illustration.

Social Security, the mainstay, provides the bulk of retirement income for the typical household. The program is more important for those with lower earnings, who rely almost entirely on Social Security benefits in retirement, and it is relatively less important for high earners, who get more of their retirement income from pensions and earnings on assets.

But Social Security will provide less in the future than it does today for three reasons. First, the Full Retirement Age – the age at which the worker is entitled to full benefits – is moving from 65 to 67. As a result, those who continue to retire at say, 62 or 65, will see a cut in their monthly benefit relative to pre-retirement earnings. Second, Medicare Part B and D premiums are scheduled to increase from 11 percent of the average Social Security benefit today to 22 percent in 2088.[1] These premiums are deducted before the check goes in the mail, so the net Social Security benefit will decline. Finally, more Social Security benefits will be taxed under the personal income tax since the thresholds above which benefits are taxable are not indexed to inflation or wage growth. In short, the first leg of the retirement income stool is getting relatively smaller.

The third leg of the stool is individual saving – saving over and above that done through the workplace. But, in fact, virtually all the saving undertaken by the working-age population occurs in pension plans. Data from the 2013 SCF show that the typical household approaching retirement has only $12,500 of financial assets outside of retirement saving (see Table 1).[2] This amount is down from $18,300 in 2010.

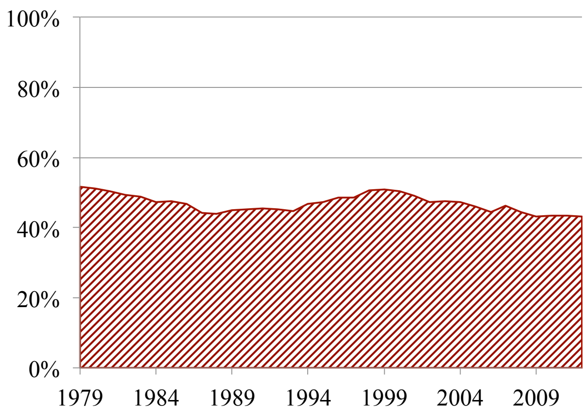
Table 1. Wealth of Typical Household with Head Age 55-64, 2013

Source of wealth	Amount in dollars[a]	Percent of total
Financial assets	$12,500	2 %
401(k)s/IRAs[b]	40,100	7
Defined benefit	153,700	26
Social Security	301,300	50
Primary house	69,100	12
Business assets	7,900	1
Other non-financial assets	14,100	2
Total	598,700	100

[a] The amounts are for the mean of the middle 10 percent based on net worth.
[b] Includes thrift savings/other defined contribution plans.
Source: Author's calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (SCF), 2013.

With a declining role for Social Security and virtually no individual saving outside of pensions, employer-sponsored retirement plans are very important. Unfortunately, only half of private sector workers – at any moment in time – are participating in any form of employer-sponsored plan, and this share has remained relatively constant over the last 30 years (see Figure 2 on the next page).[3] The lack of universal coverage means that many move in and out of participating in a plan and a significant fraction will end up with nothing beyond Social Security.

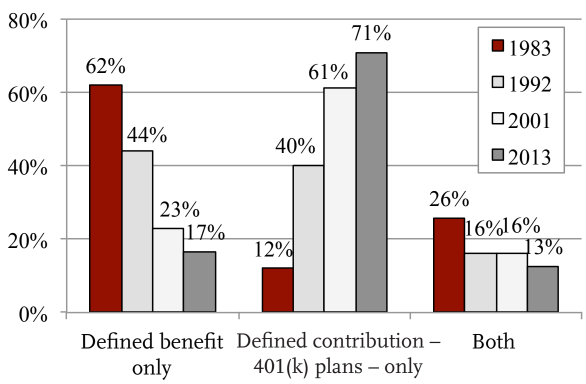
Figure 2. Percent of Private Sector Workers Age 25-64 Participating in an Employer-Sponsored Pension, 1979-2012



Source: Author's calculations based on U.S. Census Bureau, *Current Population Survey* (CPS), 1980-2013.

For those lucky enough to work for an employer providing a pension, the nature of employer-sponsored plans has changed dramatically over the last 30 years. Whereas, in the early 1980s, most workers were covered by a defined benefit plan, today most workers have a 401(k) as their primary or only plan (see Figure 3). (See Appendix Table A1 for trends in pension coverage between 1983 and 2013.)

Figure 3. Workers with Pension Coverage by Type of Plan, 1983, 1992, 2001, and 2013



Sources: Author's calculations based on the 1983, 1992, 2001, and 2013 SCF.

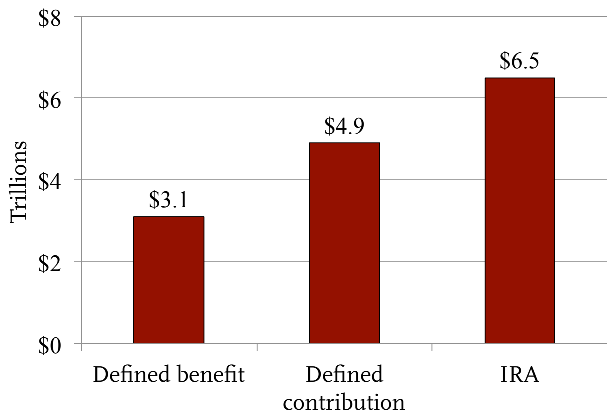
When 401(k) plans began to spread rapidly in the 1980s, they were viewed mainly as supplements to employer-funded pension and profit-sharing plans. Since 401(k) participants were presumed to have their basic retirement income needs covered by an employer-funded plan and Social Security, they were given substantial discretion over 401(k) choices, including whether to participate, how much to contribute, how to invest, and when and in what form to withdraw the funds. Even though 401(k)s are now the primary plan for most workers, they still have almost complete discretion over 401(k) choices.

In theory, workers should be able to accumulate substantial balances in 401(k)s, but it soon became evident that many failed to sign up for their 401(k) and many of those who did participate contributed much less than they could, failed to diversify, and cashed out balances when they changed jobs. Policymakers and business leaders came to recognize the challenges inherent in 401(k) plans and began to take steps to make these plans easier and more automatic. These steps culminated in the Pension Protection Act of 2006 (PPA).

The PPA was designed to encourage automatic enrollment, foster automatic increases in deferral rates, and broaden default investment options. While the PPA was certainly a step forward – particularly in terms of encouraging target date funds – auto-enrollment and particularly auto-escalation in the default contribution rate have not become as widespread as many hoped. As a result, success at this gateway to retirement saving still depends largely on the decisions made by individuals.

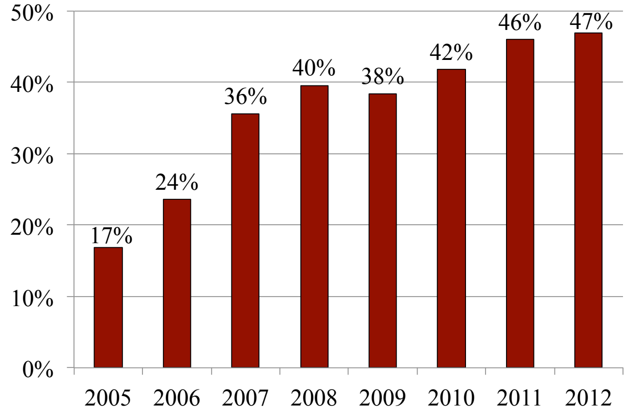
One final development needs to be noted in the evolution of the retirement system: 401(k)s plans have essentially become the collection mechanism for retirement accounts; the bulk of the money ends up residing in IRAs (see Figure 4 on the next page), mostly as a result of rollovers from 401(k)s. The risk in the shift from 401(k)s to IRAs is that people are moving from a protected world – one with fee disclosure and fiduciary protections – to an unprotected one. But it also means that it is no longer meaningful to look at 401(k) balances alone. On the other hand, it is still important to know how the collection mechanism – the 401(k) system – is functioning.

Figure 4. Total U.S. Private Retirement Assets, by Type of Plan, 2013



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

Figure 5. Percent of Plans with Automatic Enrollment, 2005-2012



Source: Plan Sponsor Council of America (2006-2013).

Progress Since the Financial Crisis

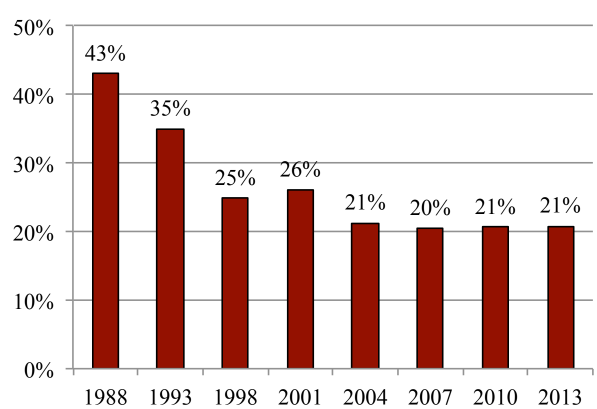
For 401(k) plans to work well, individuals need to join them, contribute as much as possible, invest intelligently, and not remove money through cashing out, hardship withdrawals, or loans. Until 2007, 401(k) participants had been improving along each of these dimensions. The financial crisis and prolonged recession caused some backsliding, and the 2013 SCF suggests, with the exception of widespread adoption of target date funds, the picture remains pretty much unchanged. Challenges remain in terms of participation, contributions, fees, and leakages.

Participation

If 401(k) plans are to be an effective way to gather funds for retirement saving, individuals with access to a plan need to participate. To improve participation, the PPA removed obstacles and established a safe harbor to encourage employers to adopt auto-enrollment. As shown in Figure 5, the share of plans with auto-enrollment increased substantially in the wake of the PPA, but now appears to have stabilized around 50 percent. Since large plans are more likely than small ones to have such provisions, the share of employees covered by plans with automatic provisions is much larger. But employers typically auto-enroll only new employees, so the effect on participation is very gradual.

Given the slow impact of auto-enrollment, it should not be surprising that the 2013 SCF shows that the non-participation rate remains 21 percent, little changed since the turn of the century (see Figure 6). These percentages are consistently lower than those provided by financial services companies.[4] As one would expect, low-income and younger workers are much less likely to participate than their older and higher-paid counterparts. Unfortunately, delay reduces the likelihood that these workers will be adequately prepared for retirement.[5]

Figure 6. Percent of Eligible Workers Not Participating in 401(k) Plans, 1988-2013

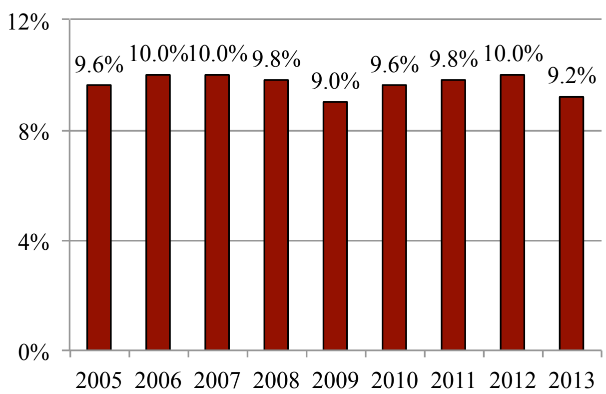


Sources: U.S. Bureau of Labor Statistics (2003); and author's calculations based on the 1998-2013 SCF.

Contributions

The median contribution rate in 2013 was 9.2 percent – roughly 6 percent by the employee with a 50-percent employer match (see Figure 7). Interestingly, the contribution rate declined slightly after the passage of the PPA, when employers began to auto-enroll workers into the plan, typically with a 3-percent default deferral rate. Since only 40 percent of plans with auto-enrollment have auto-escalation in the default contribution, many of those who are enrolled at low contribution rates remain at those rates.[6]

Figure 7. Median Employer and Employee Contribution Rate, 2005-2013

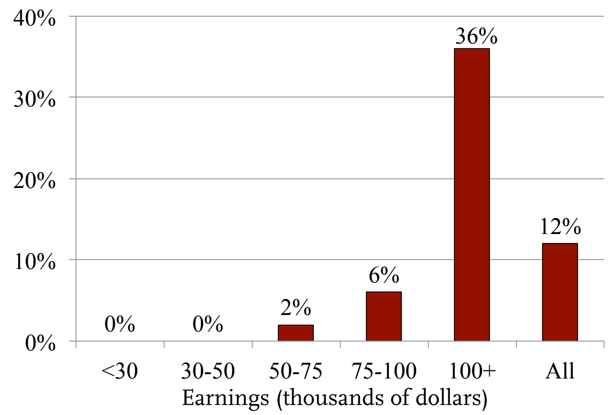


Source: Vanguard (2014).

Moving from the median to the maximum, most employees were entitled to contribute $17,500 on a tax-deductible basis to their 401(k) plan in 2014. Workers approaching retirement could contribute another $5,500 under "catch-up" provisions introduced in 2002. In 2013, roughly 12 percent of Vanguard participants reached their limit (see Figure 8). Since Vanguard tends to have a disproportionate number of large plans with higher earners, the percent maxing out is probably slightly lower for the 401(k) population as a whole.

It would also be nice to know the percent of participants who contribute enough to qualify for the full employer match. Those who do not are essentially leaving money on the table. The SCF asks whether the employer contributes and the nature of the contribution, but the responses to the sequence of questions make it difficult to determine whether the participant maximizes the match. A study by Hewitt

Figure 8. Percent of Participants Making Maximum Contributions, by Earnings, 2013



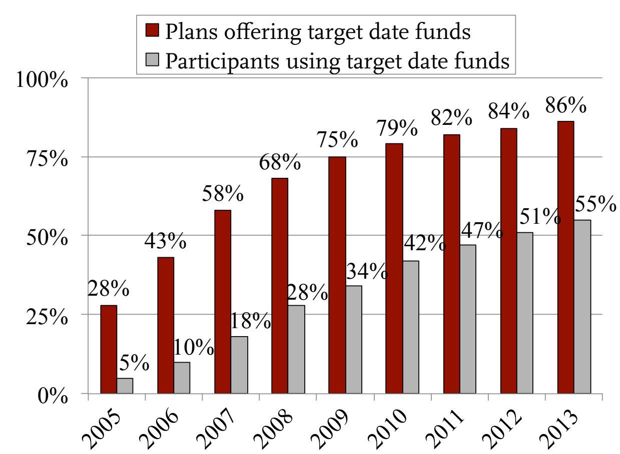
Source: Vanguard (2014).

Associates finds that the vast majority (72 percent) of 401(k) participants in 2009 contributed enough to maximize their employer match.[7]

Investment Decisions

In addition to participation and contribution decisions, employees have to decide how to invest their money. This process has been simplified significantly with the advent of target date funds, which ensure diversification and rebalancing over time (see Figure 9).[8] The other benefit of these funds is that they reduce the likelihood of investing in company stock,

Figure 9. Target Date Fund Adoption, 2005-2013

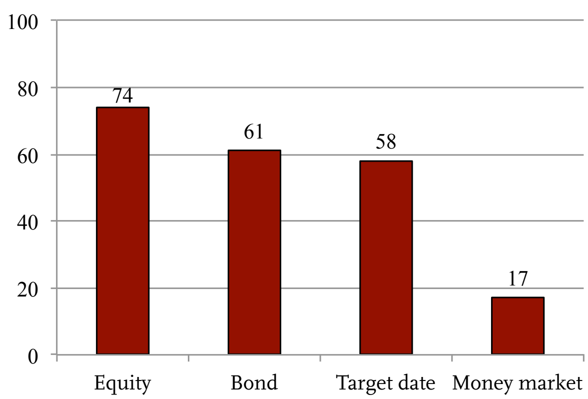


Source: Vanguard (2014).

which helps to further diversify the participant's portfolio both across stocks and away from the employer. According to Vanguard, company stock now accounts for only 9 percent of total assets.

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 work life will reduce assets at retirement by 20 percent.[9] 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 2013 was 74 basis points for equity funds, 61 basis points for bond funds, 58 basis points for target date funds, and 17 basis points for money market funds (see Figure 10).

Figure 10. Asset Weighted Expense Ratios by Type of Fund, Basis Points, 2013

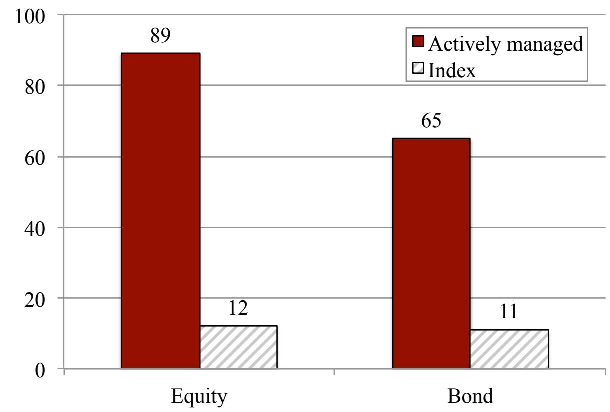


Source: Investment Company Institute (2014).

Investors could avoid much of the loss associated with fees by investing in index funds rather than actively managed funds. Many studies have also shown that actively managed funds typically underperform index funds, even before accounting for the higher fees charged by the former.[10] And the expense ratios for actively managed equity and bond funds are six times those of index funds (see Figure 11).

The Department of Labor has been concerned about fees and in 2012 launched an initiative to improve fee transparency. Today, companies administering 401(k) plans must disclose to the employer all the costs associated with administering the plans. Employers are then responsible for providing participants with expense ratios – charges per $1,000 – for investments offered by the plan. The hope is that when sponsors and participants see the fees, they will respond by moving toward low-cost options.

Figure 11. Expense Ratios for Actively Managed and Index Funds, 2013



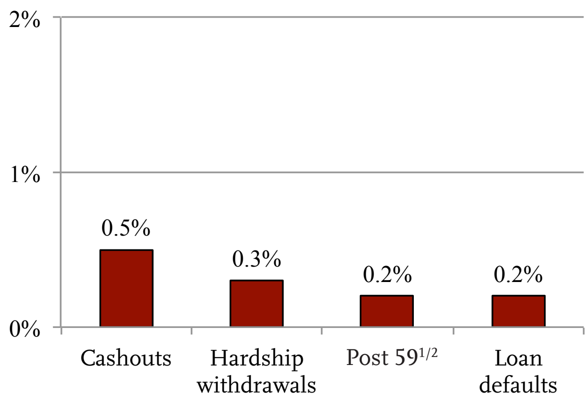
Source: Investment Company Institute (2014).

Keeping Money in the Plan

The only way to end up at retirement with significant accumulations is to put the money into the 401(k) account and leave it there until retirement. But the 401(k)/IRA system clearly plays a dual role – it provides for retirement saving, but it also supports current consumption. In terms of policy, the favorable tax treatment of retirement saving and the imposition of a 10-percent penalty (in addition to regular income taxes) on any withdrawal before age 59½ are designed to encourage retirement saving. On the other hand, people are allowed to cash out when they change jobs, access money for hardships, withdraw money penalty free after 59½, and take out loans, which involves the risk of default especially when they terminate employment. These leakages may be spent in worthwhile ways and the ability to gain access to funds appears to encourage participation and contributions, but money spent while working is not available at retirement.

In the last few years, researchers have made a lot of progress in estimating the magnitude of leakages out of 401(k) plans and IRAs.[11] In addition, each year Vanguard provides flows into and out of the defined contribution accounts that it administers (see flow chart in Appendix Figure A1). The data show that 1.2 percent of assets leave Vanguard each year and are not rolled over into an IRA (see Figure 12). The Vanguard number, however, must be viewed as a lower bound, since the company administers only about 10 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, a study 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] Thus, leakages remain a serious problem.

Figure 12. A Lower Bound: Annual Leakages Out of Vanguard Accounts as a Percent of Assets, 2012

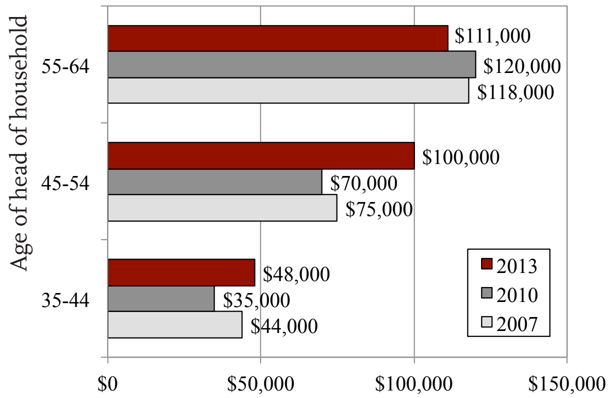


Source: Author's estimates based on Vanguard (2014).

Accumulations in 401(k) Plans and IRAs

According to the SCF, in 2013 the typical working household approaching retirement had only $111,000 in 401(k)/IRA balances (see Figure 13).[14] As discussed, IRAs are included because these balances consist mostly of rollovers from 401(k) plans. As shown in Figure 13, this amount compares to $120,000 in 2010. In contrast, households 45-54 had dramatically higher balances in 2013 than in 2010 – $100,000 versus $70,000, and younger households held $48,000 in 2013 compared to $35,000 in 2010. These numbers are not adjusted for inflation. With prices rising more than 7 percent between the 2010 and 2013 SCF, balances have fared less well in real terms.

Figure 13. Median 401(k)/IRA Accumulations of Working Households with 401(k) Plans by Age Group, 2007, 2010, and 2013



Note: Sample excludes households that are not working and those that have only an IRA.
Sources: Author's calculations from the 2007-2013 SCF.

The decline in balances for those approaching retirement was totally unexpected. One way to try to figure out what is going on is to compare aggegate retirement assets reported in the SCF with 401(k)/IRA balances reported by the Investment Company Institute (ICI). This check shows that the 2010 SCF number exceeded the ICI total by 13 percent, while the two totals virtually matched in 2013.[15] One hypothesis is that 2010 SCF respondents were in denial about the impact of the financial crisis on their balances. Thus, it appears that 2013 values may well be accurate.

While the overall median for households approaching retirement was $111,000, this figure varied significantly by income. Essentially few in the bottom two quintiles had any 401(k)/IRA balances, and the amounts in these accounts were quite low (see Table 2 on the next page). Retirement accounts appear as a meaningful source of saving only for the upper three quintiles. Even there, however, a significant percentage of households have no balances.

Table 2. 401(k)/IRA Balances for Median Working Household with a 401(k), Age 55-64, by Income Quintile, 2013

Income range (quintiles)	Median 401(k)/ IRA balance	Percent with 401(k)
Less than $39,000	$13,000	22 %
39,000-60,999	53,000	48
61,000-90,999	100,000	60
91,000-137,999	132,000	65
138,000 or more	452,000	68
Total	111,000	52

Source: Author's calculations from the 2013 SCF.

The 401(k)/IRA balances for those households approaching retirement will produce only a modest supplement to Social Security. If a couple uses their $111,000 to purchase a joint-and-survivor annuity, they will receive $500 per month.[16] Since this amount is not indexed for inflation, its purchasing power will decline over time. Moreover, this $500 is likely to be the only source of additional income, because, as discussed earlier, the typical household holds virtually no financial assets outside of its 401(k).

Table 3. Individual Median 401(k) Balances from SCF and Vanguard, 2013

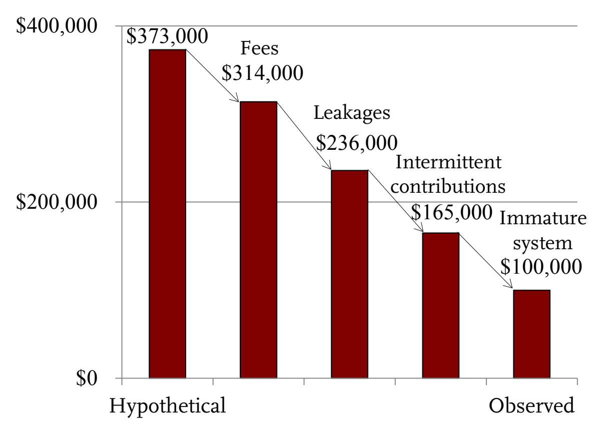
Age	SCF (individual)		Vanguard (individual)
	401(k)/IRA	401(k)	401(k)
35-44	$40,000	$32,000	$28,000
45-54	77,000	52,000	52,000
55-64	100,000	65,000	75,000

Sources: Author's calculations from the 2013 SCF; and Vanguard (2014).

To provide an idea of how the SCF household 401(k)/IRA data relate to 401(k) balances alone, it is useful to look at data for individuals from the SCF and Vanguard. The numbers from the two sources look remarkably consistent (see Table 3). Note that 401(k) balances alone are considerably smaller than the combined 401(k)/IRA balances. The difference is minimal for younger households, who have not had occasion to roll over money to an IRA, and then increases sharply by age group to the point where 401(k) balances are only about two-thirds of the combined 401(k)/IRA holdings for those approaching retirement ($65,000 versus $100,000).

The 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 29 with median income in 1982 who reaches 60 in 2013, assume that he contributes 6 percent of salary and receives a 50-percent match from his employer, that he has a 50:50 stock/bond allocation, and that he receives actual investment returns over the period. This individual would have accumulated $373,000 (see Figure 14). But this calculation ignores expenses; using expense data for equity and bonds from the Investment Company Institute (2014) reduces the expected balance to $314,000. Assuming 1.5 percent of assets leak out each year reduces the pile still further to $236,000. The remaining gap between the $236,000 and the observed individual 401(k)/IRA balances of $100,000 (as compared to $111,000 reported above for households) is due to a failure to contribute. Slightly less than half this failure is attributed to intermittent contribution patterns, which reduce assets to $165,000, and the rest to low contribution rates in early years as the program was beginning to spread.[17] In other words, individual holdings in retirement accounts for those approaching retirement might be $165,000 if the system were fully mature, but even that figure is less than half of contributions and earnings. Surely, this system could function more efficiently.

Figure 14. Impact of Fees, Leakages, and Contributions on 401(k)/IRA Balances, 2013



Source: Author's calculations.

Conclusion

The 401(k) system has evolved over time into a collection mechanism for retirement saving; the bulk of the money now resides in IRAs. The 2013 *Survey of Consumer Finances* offers the first glimpse of the current level of household combined 401(k)/IRA holdings. The typical household approaching retirement had $111,000 in combined 401(k)/IRA assets. These assets will provide at most $500 per month, an amount whose purchasing power will decline over time with inflation. Moreover, only half of households have any 401(k)-related holdings.

A number of factors contribute to low balances – less than full participation, low contributions, high fees, and leakages. Lower fees, a clamp-down on leakages, a fully automated 401(k) system – auto-enrollment for both existing and new employees and auto-escalation in the default contribution rate – and contribution rates set at realistic levels could greatly improve outcomes.

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. These risks could be eliminated through the purchase of annuities, but the individual annuity market in the United States is tiny. Therefore, individuals are on their own, and no one really knows what they will do.

Endnotes

1 Centers for Medicare & Medicaid Services (2011).

2 Note the difference between the $111,000 in 401(k)/IRA balances mentioned in the introduction and the $40,100 reported in Table 1. This difference arises because the former looks only at working households with a 401(k) plan, while the latter calculates average wealth for all households in the middle 10 percent of the sample, including those who are not working and those without a 401(k).

3 Munnell and Bleckman (2014).

4 Vanguard (2014) reports a 26-percent non-participation rate for 2011 and 2012 and much higher for earlier years. Fidelity (2014) suggests non-participation rates are higher than Vanguard – in 2012, 47 percent for plans without auto-enrollment and 16 percent for plans with auto-enrollment.

5 See Munnell, Webb, and Golub-Sass (2011) for the impact of early saving.

6 Plan Sponsor Council of America (2013).

7 Hewitt Associates (2010).

8 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 place a participant's defaulted contributions in these investments avoid fiduciary liability; the liability shifts to the participant.

9 The calculations assume real stock and bond returns of 7 percent and 3 percent respectively, a stock asset allocation of two thirds, 40 years of savings, 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.

10 For example, Malkiel (1995, 2005); Gruber (1996); Wermers (2000); and Fama and French (2010).

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

12 Butrica, Zedlewski, and Issa (2010).

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

14 This figure differs from the value of "retirement accounts" reported in Bricker et al. (2014) 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.

15 Investment Company Institute (2014) reports totals of $9.5 trillion in 2010 and $12.4 trillion in 2013. The comparable SCF numbers are $10.8 trillion in 2010 and $12.1 trillion in 2013.

16 This number comes from ImmediateAnnuity.com and assumes the husband is 64 and the wife is 62, the average retirement ages for men and women, respectively.

17 This calculation is based on a 30-percent non-participation rate – the average reported by Vanguard (2014) since the turn of the century.

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APPENDIX

Table A1. Pension Participation of All Workers, by Type of Plan, 1989-2013

Table 1. All Workers

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

Table 2. Age 30-39

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

Table 3. Age 40-49

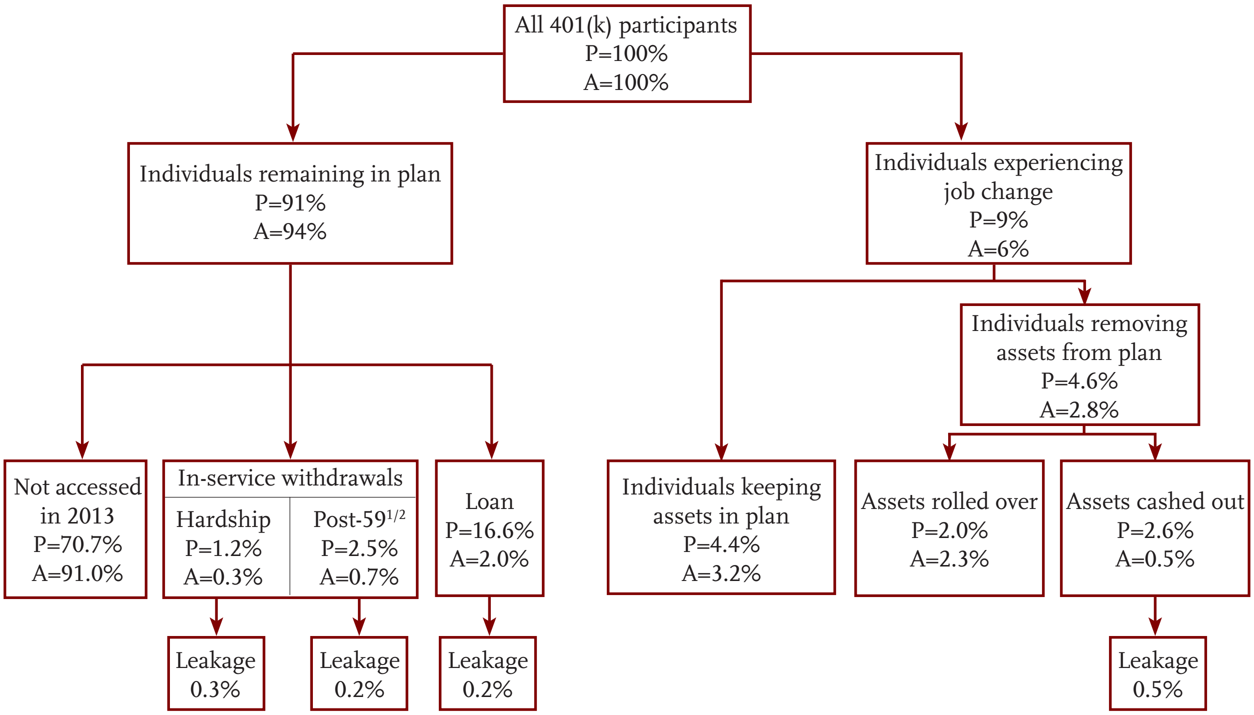
Type of pension	1989	1992	1995	1998	2001	2004	2007	2010	2013
Defined contribution only	15%	19%	29 %	30 %	34 %	33 %	32 %	35 %	36 %
Defined benefit only	28	23	17	14	13	10	10	8	8
Both	13	11	10	10	10	10	11	7	6
None	44	47	44	47	44	47	47	50	49

Table 4. Age 50-59

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

Source: Author's estimates based on the 1989-2013 SCF.

Figure A1. Vanguard 401(k) Leakage Activity, 2013



Note: P = participants and A = assets.
Source: Munnell and Webb (2014 forthcoming).

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