

401(k) Rollovers and Financial Literacy

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FOREWORD

Students enrolled in the Workshop in Public Affairs at the Robert M. La Follette School of Public Affairs, University of Wisconsin–Madison, prepared this report in collaboration with the Chicago field office of the U.S. Government Accountability Office. The workshop provides students in their last semester of the Master of Public Affairs degree program the opportunity to expand their policy analysis skills while working with a government agency and contributing to that agency’s understanding of a major public policy issue. Other projects involve three reports for the City of Milwaukee, under the supervision of Professor Andrew Reschovsky, and two under my supervision, for the Wisconsin Department of Children and Families and the Wisconsin Department of Natural Resources.

GAO asked the authors to examine whether individuals who roll 401(k) assets into Individual Retirement Accounts (IRAs) when they leave their jobs understand how differences in fees may affect final retirement accumulations. IRAs were originally intended to provide tax-deferred retirement savings options to individuals not covered by employer pensions. The majority of funds in IRAs now are due to rollovers from defined contribution plans. Although IRAs may be an economically efficient and equitable means of preserving the tax-advantages of prior retirement savings, rollovers reduce the economic efficiency if individuals are unaware of the costs of rollovers or withdrawals versus retaining those funds in employer-provided pensions. The intent of this report is not to come to a conclusion about an appropriate policy response, but to explore whether enough evidence and data exist to warrant further GAO study.

Sharon Hermes in the Chicago GAO Field office suggested this topic. She and others on the GAO Education, Workforce, and Income Security team were available to the students throughout the semester. This report would not have been possible without their enthusiasm and support. In the acknowledgments, the authors thank other individuals who aided their work through meetings, by phone, and by reading report drafts. I add my gratitude to the appreciation expressed there.

Although the conclusions are addressed to the GAO, other readers are likely to find this report useful for its information on an often ignored component of retirement savings—the rollover of funds between retirement accounts—

and the knowledge individuals have about the financial consequences of that decision.

The report also benefited greatly from the support of La Follette School faculty and staff, especially that of Publications Director Karen Faster, who edited and managed production of the report. The conclusions are those of the authors and do not represent the views of the La Follette School or of the GAO.

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GLOSSARY

Defined Benefit (DB) Plan: A retirement plan that pays to eligible beneficiaries an annuitized (monthly) benefit that is defined by a formula.

Defined Contribution (DC) Plan: A retirement plan that pays a benefit determined by the accumulated contributions of the plan sponsor and plan participant and the growth of the investments in the plan.

ERISA: Employee Retirement Income Security Act of 1974.

Financial Advisor: Used broadly in this report to refer to any professional that advises clients on matters of personal finance, particularly retirement planning. This term may include certified financial advisors, certified public accountants, financial planners, and other financial professionals.

Financial Literacy: Refers to an individual's ability to effectively and knowledgeably make financial decisions, including those related to budgeting, debt management, retirement planning, and other issues related to long-term financial health.

401(k) Plan: A DC plan set up by an employer in a way to conform to the Internal Revenue Service codes that allow plan participants to contribute pre-tax earnings to a retirement savings plan. The plan sponsor (employer) may match plan participant contributions to the plan up to a certain amount.

Health and Retirement Study (HRS): A nationally representative, longitudinal survey managed by the University of Michigan and supported by the National Institute on Aging and the U.S. Social Security Administration. The survey captures information from biennial interviews of more than 22,000 U.S. adults ages 50 and older.

Individual Retirement Account (IRA): An account originally defined under ERISA to allow individuals who do not qualify for an employer-sponsored plan to save for retirement on a tax-deferred basis. Internal Revenue Service regulations governing IRAs have been amended to now encompass several types of individual accounts with a range of eligibility criteria, contribution rules, and tax treatment.

Plan Participant: An individual who is covered by or because of past contributions is potentially eligible for a distribution from an employer-sponsored retirement plan.

Plan Provider: A company, often a financial services firm, that provides services to the retirement plan, including asset management, recordkeeping, and administration.

Plan Sponsor: An employer who has established a retirement plan for employees. The plan may be administered or managed by a third party.

Rollover: An event that transfers assets from one DC plan to another in a way that avoids the penalties or tax consequences that would have otherwise accompanied a withdrawal.

Separation: An event that ends the employer-employee relationship, including termination, resignation, or retirement from a job.

Withdrawal: A term used to indicate the event that distributes cash from a pension plan to a plan participant. Such a distribution may result in tax penalties or have income tax consequences depending on the timing of the distribution, the type of plan or account out of which the distribution is made, and whether the distributed assets are moved to another type of account.

RESULTS IN BRIEF

Since the late 1970s, defined contribution (DC) plans—specifically 401(k)s—have become a major vehicle for employment-based retirement savings in the United States. As 401(k)s become a more prevalent form of retirement savings, more individuals must decide what to do with accumulated 401(k) assets upon separation from employment. Typically, upon separation a plan participant may leave the assets in the account until reaching benefit eligibility age, withdraw the assets, transfer the assets into another qualified DC plan, or roll the assets into an Individual Retirement Account (IRA).

At the end of 2009, approximately 40 percent of U.S. households held assets in an IRA, accounting for more than one third of retirement financial assets. The majority of IRA assets are now a result of rollovers rather than direct contributions, suggesting that growing numbers of 401(k) plan participants are choosing to roll over assets upon separation from their employers. This arrangement is surprising given that plan participants generally have the option of leaving assets in a DC plan upon separation and that research suggests that IRA fees are higher than 401(k) fees.

The U.S. Government Accountability Office (GAO) would like to determine whether this issue warrants further study. In response to the agency's request, this report addresses the following questions:

- Are individuals aware of the option to leave assets in 401(k)s upon separation from an employer?
- Are individuals aware of the fees associated with 401(k)s and IRAs when they decide to roll over their assets? Are the fees transparent?
- What additional factors do individuals consider when they decide whether to roll over their assets?
- What is the relationship between financial literacy and the rollover decision compared to other actions taken on DC accounts?

To examine these issues we reviewed the literature, interviewed financial industry representatives, and analyzed data from the Health and Retirement Study.

We find that fees are probably not a primary concern for individuals choosing whether to roll their 401(k) assets into IRAs. However, it is likely that only a small proportion of individuals are fully aware of investment fees and fee structures. We conclude there is a general lack of fee awareness due in part to a lack of fee transparency and incomparability between fee structures of 401(k)s

and IRAs. It is also likely that some 401(k) plan participants are unaware of the range of options they have upon separation other than rolling 401(k) accumulations into IRAs. An examination of other decision factors reveals that even when fully knowledgeable about fees, some individuals may choose to roll assets into IRAs after weighing fees against other factors. Interviews with financial advisors indicate that many individuals are advised to roll over to IRAs for greater investment options and for the possibility of higher returns.

Evidence from the Health and Retirement Study suggests that financial literacy levels are not significantly different between those who roll assets into IRAs and those who leave assets in their DC account upon separation. This finding is consistent with the financial literacy literature and our interviews with financial advisors. However, we also find that financial literacy levels are significantly lower among respondents who withdrew their DC assets upon separation compared to respondents who rolled assets into IRAs. Because early withdrawals may have significant implications for individuals' retirement security, this issue may warrant further research.

Although fees associated with IRAs may be higher, it is not clear that leaving assets in 401(k)s upon separation is always in the best interest of plan participants. To determine whether rollover decisions are suboptimal, we recommend further research by GAO into the outcomes of rollover decisions on long-term total wealth. Fund performance and the different investment options and may compensate for fee differentials between IRAs and 401(k)s. Data from surveys and more detailed interviews may reveal more about the nature of the rollover decision. It would also be beneficial to assess financial advisors' knowledge of fees and the relevant importance of fees in how they advise clients facing the rollover decision.

Even if fees do not or should not drive the rollover decision, the lack of fee transparency and comparability is concerning due to the sizable impact fees can have on long-term investment gains. New financial disclosure requirements that will be implemented in 2011 should make 401(k) fees significantly more transparent. We recommend that these requirements be evaluated a few years after implementation to determine whether they are accomplishing their purpose. To facilitate comparisons among plan types by affected individuals, similar requirements may be needed for IRAs. Additionally, disclosures may be needed upfront for both plan types before participants make enrollment decisions.

BACKGROUND

Over the past 35 years, the method by which U.S. workers save for retirement has been transformed, with the responsibility increasingly placed on individuals to prepare for retirement through personal savings and investments. Defined benefit (DB) plans, which pay benefits determined by a formula, are being replaced by defined contribution (DC) plans, the most prevalent of which is the 401(k). Although most workers who meet a minimum account threshold may leave their savings in a DC plan when changing jobs or retiring, many roll their savings into Individual Retirement Accounts (IRAs). In this paper we examine the decision to roll over DC assets into IRAs upon job separation in the context of other options available. We focus on the cost consequences of rollovers that result from the differential fees associated with IRAs and 401(k)s. The impact of fees on the collective retirement savings of U.S. workers warrants examination, as these savings determine a retiree's standard of living.

The Growth of DC Plans and IRAs

A DC plan is a retirement plan where contributions are made by the plan participant and the plan sponsor (the participant's employer). Typically, the employer matches contributions up to a certain amount. The benefits paid to retirees are based on the contributions to the accounts and the investment earnings they generate. Although an account holder may choose to annuitize accumulations, individuals more often make periodic withdrawals during retirement. When a non-annuitized account is exhausted, benefit payments or withdrawals end regardless of the plan participant's age or circumstances. As 401(k) plans are the most prevalent of DC plans, this paper focuses on 401(k)s.

The growing prevalence of DC plans is often traced to the passage of the Employee Retirement Income Security Act (ERISA) of 1974. ERISA placed greater regulations on DB plans to ensure they were adequately funded and able to meet benefit obligations. Four years later the Revenue Act of 1978 created 401(k) plans—a DC retirement savings option attractive to employers and employees due to its deferred tax structure. For the reasons described above, ERISA and the 1978 Revenue Act, as well as subsequent amendments to each, have increased the attractiveness of DC plans relative to DB plans. Another key feature of ERISA was its creation of IRAs, which at the time were intended to

provide the tax-deferred benefits of certain retirement savings plans to individuals not qualified for these plans through their employers.¹

As a consequence of ERISA and subsequent amendments that have allowed for greater flexibility in IRA contributions and withdrawals, IRAs have played an increasingly significant role in retirement savings in the United States. IRAs represent a growing share of retirement assets. Between 1985 and 2009, the percentage of U.S.-based financial retirement savings held in IRAs increased from 10 percent to 36 percent (Table 1).²

Table 1: Percentage of U.S.-based financial retirement assets in IRAs, 1985-2009

Year	1985	1990	1999	2005	2006	2007	2008	2009
Percentage in IRA	10%	18	29	33	34	34	35	36
Actual amount (trillions of dollars)	\$0.2	0.6	2.7	3.7	4.2	4.8	3.6	4.3

Notes: Financial retirement assets include IRAs, annuities, and employee-sponsored DC and DB plans. Dollars are nominal. Source: Investment Company Institute, 2010.

Demographic Characteristics of IRA Holders

A demographic summary of IRA holders demonstrates that IRA-related policies affect a broad cross-section of the U.S. population. Forty-one percent of U.S. households possess an IRA, and these accounts held approximately \$4.3 trillion as of 2009 (Table 1).³ IRAs are held across demographic groups, including age, race, education, income, and net worth. For almost every demographic group, there was a slight increase in IRA ownership from 2004 to 2007 (Table 2).

Data reveal a positive correlation between IRA ownership and household income, education level of the head of the household, and household net worth (Table 2).⁴ Individuals across all ages hold IRAs. However, individuals ages 50-69 hold slightly more than 70 percent of traditional IRA assets (Figure 1). This finding is logical given that workers in this age range have worked long enough to have contributed more to their IRAs and to have realized more investment earnings.

¹ Zelinsky, 2004.

² Investment Company Institute, 2010.

³ Investment Company Institute, 2010.

⁴ In a 2009 report on the 2007 Survey of Consumer Finances and in Table 2, IRA and Keogh plans are lumped together. Keogh plans are either DB or DC plans for self-employed individuals and are similar in nature to IRAs. SEP IRAs have largely replaced Keogh plans and given the number of SEP-IRAs, Keogh plans are a minor player in this area. The table can be loosely interpreted as referring primarily to IRAs. Copeland, 2009; Federal Reserve Board of Governors, 2007.

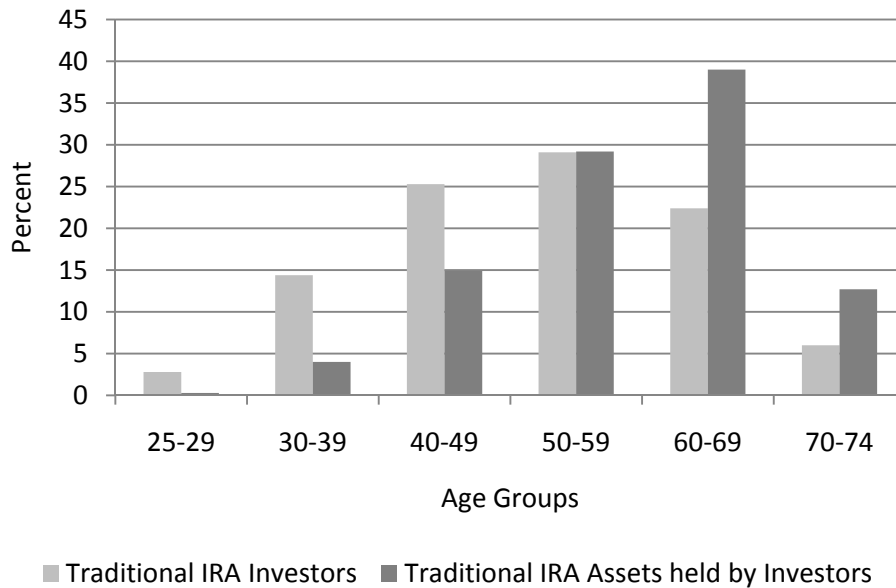
Many are not yet 59½, so they have not yet taken distributions, which would reduce account size.

Table 2: Percentage of families with a traditional IRA broken down by demographic characteristics, 2004 and 2007

	2004	2007
Family Income		
< \$10,000	5.7	6.8
\$10,000-\$24,999	8.4	12.6
\$25,000-\$49,000	21.0	22.5
\$50,000-\$99,999	36.1	36.4
>\$100,000	56.8	60.4
Age of Head of Household		
<35	16.0	16.2
35-44	25.2	28.8
34-54	33.6	35.3
55-64	43.9	39.5
65-74	36.4	43.0
>75	26.5	27.3
Education of Head of Household		
Below high school diploma	6.4	9.4
High school diploma	22.0	20.2
Some college	22.9	27.5
College degree	47.0	49.9
Race		
White, non-Hispanic	35.7	37.0
Non-white	11.9	15.1
Net Worth Percentile		
<25%	3.0	4.6
25-49.9%	14.5	17.3
50-74.9%	36.2	36.0
75-89.9%	56.2	57.6
Top 10%	72.1	74.3
Total	29.1	30.6

Source: Copeland, 2009.

Figure 1: Distribution by age of traditional IRA holders and assets



Source: Investment Company Institute, 2010.

Rollover Activity Among U.S. Workers

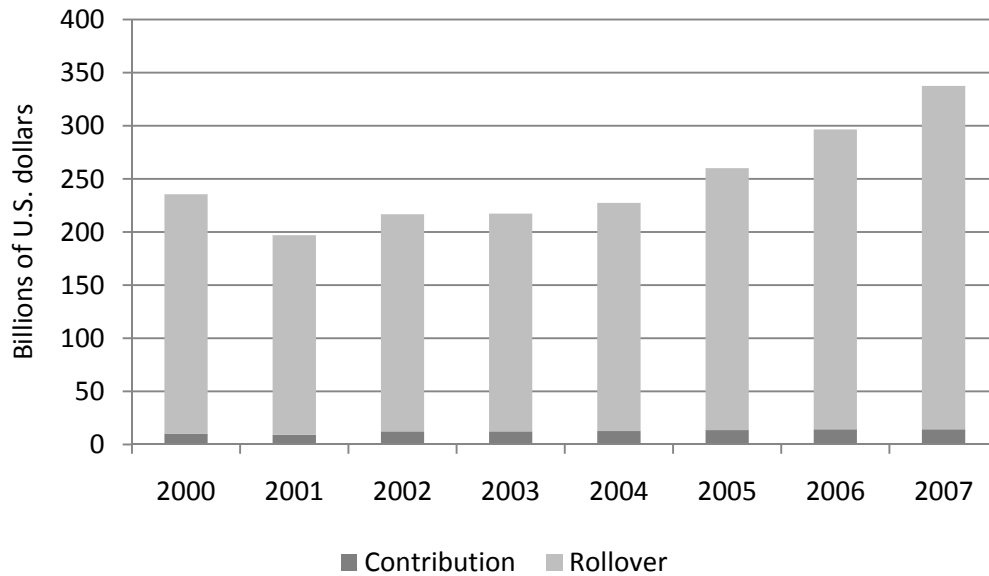
The growth of IRAs is likely associated with the frequency with which U.S. workers change jobs and the opportunity each job change presents for a rollover of retirement assets to an IRA. According to a Bureau of Labor Statistics study, Baby Boomers (born between 1957 and 1964) held on average 11 jobs from age 18 to 44.⁵

The frequency of job changes may illustrate why the majority of contributions made to traditional IRAs are rollovers from other accounts rather than direct contributions (Figure 2). More than 80 percent of assets in IRAs are derived from rollovers.⁶ Because IRAs represent a growing source of retirement wealth, and most IRA assets come from rollovers, issues related to rollovers are increasingly significant to retirement security in the United States.

⁵ U.S. Bureau of Labor Statistics, n.d.

⁶ U.S. Government Accountability Office, 2008.

Figure 2: Rollovers and contributions to traditional IRAs, 2000-2007



Note: Dollars are nominal. Source: Investment Company Institute, 2010.

Like the demographic trends among IRA holders in general, rollover activity is spread across demographic groups; rollovers occur at all ages, across income categories, and across genders. Approximately 48 percent of all IRA owners have never made a rollover while 52 percent have made a rollover at some point. For individuals 30 to 64 years old, the rollover share is almost identically flat at around 12 percent for every five-year age group in that range during 2007. Although these data only cover 2007, one might expect subsequent years to be similar in terms of age composition of rollovers. In contrast to the number of individuals holding IRAs, the distribution of rollovers across income groups does not exhibit a strong correlation between rollover activity and income. Nevertheless, rollover activity does trend somewhat downward with increasing income.⁷

Having explored the increasing number of IRAs and their growing importance as a means of retirement savings, we will now present our findings in two parts. First, we will highlight factors that influence the rollover decision. We assembled these findings through a survey of available literature on this topic and interviews with financial industry professionals. Second, we evaluate data from the Health and Retirement Study to determine the role of financial literacy in the rollover decision.

⁷ Investment Company Institute, 2010.

FACTORS AFFECTING THE ROLLOVER DECISION

We have established the significance of rollovers to U.S. retirement investments; however, it is also important to understand the factors relevant to the rollover decision. In this section we examine the options available to 401(k) plan participants upon separating from an employer, as well as their knowledge of these options. We discuss the fees associated with 401(k)s and IRAs, the transparency of these fees, and whether individuals are aware of them. Finally, we consider which factors in addition to fees plan participants may be considering when they decide to roll over.

Rollover Options Available to 401(k) Plan Participants

Plan participants have a number of options for their DC pension plan accumulations when changing jobs or retiring prior to when they begin periodic withdrawals. Plan sponsors must furnish the participants with a summary of plan benefits that includes their rights under the plan.⁸ Upon separation, a participant's rights to the account include:

- Keeping the account assets in the employer plan
- Rolling account assets over to an IRA
- Investing the account assets in a new employer's 401(k) plan
- Withdrawing the account assets
- Annuitizing the account assets

Among these options, rollovers are a common choice. According to a Charles Schwab study, 80 percent of the distributions from 401(k) assets under the investment company's management in 2009 were rolled over into IRAs, while 10 percent were taken as cash, 8 percent were moved into a new employer's 401(k) plan, and 2 percent were taken "in other forms of distribution."⁹

Our analysis of data from the Health and Retirement Study (HRS) shows that rollovers, assets left in a DC account, and withdrawals are the actions most commonly taken on DC accounts upon job separation. Among respondents in the 2006 wave of the HRS who reported leaving an employer in the prior two years, about 20 percent withdrew the DC assets, 29 percent rolled assets into IRAs, and 34 percent left assets in the DC account. About 2 percent each converted the

⁸ 29 U.S.C. § 1022 (2010).

⁹ Charles Schwab, 2010.

assets to an annuity, transferred the assets to a new employer, or lost the assets. About 6 percent of respondents were receiving installments from the plan.¹⁰

Participant Knowledge, the Rollover Process, and Conflicts of Interest

Although it is permissible for plan sponsors to force distribution from accounts with small values,¹¹ the high percentage of separated employees electing to roll over to IRAs raises the question of whether account holders realize they may leave their retirement savings in the 401(k) even after separation. Plan sponsors provide plan participants with documentation indicating distribution and rollover possibilities upon leaving a plan sponsor's employment.¹² Perhaps more important than whether plan sponsors notify participants of the option of leaving accrued assets in the 401(k) is whether participants actually absorb the information the plan sponsor provides. Anecdotal evidence from our interviews with financial service providers indicates that most prospective rollover clients are not fully aware of their options for their 401(k)s upon job separation. These interviews suggest that plan participants either do not read or do not pay close attention to plan sponsor-provided information.

According to an industry representative, the rollover process of managed accounts varies with a plan participant's plan sponsor. Larger plan sponsors often have little paperwork and the rollover is performed over the phone. The plan sponsor oftentimes patches the plan participant through to the plan provider's own IRA division. The participant, unaware of other alternatives, may open an IRA with the same provider as the 401(k) because the sponsor is steering her or him toward this decision. This tactic can result in a bias toward individuals staying with their current 401(k) provider when it may not be in their best interest.

In fact, GAO found that conflicts of interest may exist among financial service providers advising people to roll over their 401(k) assets into IRAs. They found that financial service providers earn a significant portion of their income by cross-selling. Cross-selling occurs when service providers associated with a plan sell a product outside the plan to a participant—for example, a service provider selling

¹⁰ Computed by authors from Health and Retirement Study, 2011. The remaining respondents reported "other" or "don't know" or refused to answer. Responses were considered only for respondents who reported taking a single action on their DC accounts (i.e., respondents who both withdrew and rolled over assets were excluded). If the respondent reported having multiple DC accounts with their employer upon separation, responses were considered for the account identified as the most important.

¹¹ Moore and Muller, 2002.

¹² 29 U.S.C. § 1022 (2010).

an IRA to a 401(k) participant. In such instances, service providers are not bound by fiduciary duty and may not act in the best interest of the consumer.¹³ Additionally, because plan sponsors face administrative costs for each account managed, they may have an incentive to encourage separating plan participants to roll over or take distributions rather than leave assets in existing 401(k)s.¹⁴

One industry representative argues that for smaller plan sponsors, the rollover process is completed on paper and plan participants are less likely to be directly encouraged to stay with the same provider. However, he stressed that although participants must be informed of their options when leaving a job, the fact that many do not read the paperwork carefully means they may not make optimal decisions.

The same representative also pointed out that when an individual leaves a job, he or she can talk to the 401(k) provider and permit a financial advisor to handle the rollover. When a financial advisor speaks with the plan provider, he or she is more apt to understand the variety of options and to make a better-informed decision on behalf of the plan participant.

IRA and 401(k) Fees

Fees associated with 401(k)s and IRAs are one factor that will affect the relative merits of what 401(k) plan participants do with their plans upon separation. Fees refer to the expenses an investor is charged by a collective investment scheme such as a mutual fund, or the percentage of total assets that investors pay to offset the expense incurred by fund managers of running a given fund. Although most retirement plans charge the same types of fees, there can be some significant differences. Table 3 provides an overview of the broad fee categories for IRA and 401(k) plans and highlights the areas where there are differences.

¹³ U.S. Government Accountability Office, 2011.

¹⁴ Dunne, 2010.

Table 3: Fee structures for 401(k) and IRA plans

401(k)	IRA
<p><i>Plan Administration (Custodial) Fees:</i> These pay for the ongoing costs for operation of a plan and pay for a custodian to record all contributions and distributions with the IRS. Examples include: recordkeeping, accounting, legal services, customer service, planning software, electronic access to plan information, and online transactions. The costs are covered by investment fees deducted directly from investment returns or administrative costs that are separately charged directly against the assets of the plan on an annual basis.</p>	<p><i>Plan Administration (Custodial) Fees:</i> These pay for the ongoing costs for operation of a plan. They also pay for a custodian to record all contributions and distributions with the IRS. The fees are taken directly from the IRA on an annual basis. Some custodians will waive this fee for high worth accounts. (These are similar to 401(k) fees— see examples to the left)</p>
<p><i>Investment (Transaction) Fees:</i> These pay for the management of plan investments and are assessed as a percentage of assets invested. They are deducted directly from investment returns. There are three types:</p> <ul style="list-style-type: none">• Sales fees (loads/commissions), which are transaction costs for the buying and selling of shares;• Management fees (investment advisory or account maintenance), which are ongoing fees for managing assets of the fund; and• Other fees, which cover any other services offered.	<p><i>Investment (Transaction) Fees:</i> These pay for work managing plan investments and are assessed as a percentage of assets invested. They are deducted directly from investment returns. (These are similar to 401(k) fees—see examples to the left)</p>
<p><i>Individual Service Fees:</i> These pay for any optional features. They are charged separately to the accounts of individuals who choose to take advantage of a particular plan feature.</p>	<p><i>Management Fees:</i> Many brokerage houses and self-directed IRA firms charge these fees for “managed accounts.” In essence, the managed account removes investment transaction fees in most cases, but then places an annual fee for service on the account. It is usually a percentage based on the balance in the account.</p>

Source: U.S. Department of Labor, n.d.

Fees can significantly affect retirement investment wealth. After assessing a comprehensive survey of mutual fund fees, Will McClatchy and Jim Wiandt conclude that almost 1 percent of yearly assets are wasted in unnecessary fees.¹⁵ Stephen Butler, president of Pension Dynamics Corporation, testified before the U.S. House of Representatives' Committee on Education and Labor in March 2007 that excessive 401(k) fees over the past 20 years had reduced worker account balances by an average of 15 percent.¹⁶

GAO research suggests that on average, IRAs charge higher fees than do 401(k)s. GAO finds that although participants typically pay the same types of fees across all tax-deferred savings plans, participants in IRAs are more likely to pay higher fees. There are several reasons 401(k) plans typically have lower fees, most of which relate to the size of the group of investors. First, because DC plans cover employer groups, these funds are eligible to invest in products that offer lower fees to larger groups. Individual IRA balances are generally too small to be eligible for investment in these funds. Second, the participant group that makes up a 401(k) plan possesses greater bargaining power when seeking lower fees—power an individual IRA investor lacks. Third, individuals who participate in 401(k) and similar plans more commonly invest in lower cost institutional mutual funds or group annuities than do IRA holders, as these funds are the ones most commonly offered in 401(k) plans. Fourth, a sponsor of several 401(k) and similar plans can more easily pool funds across multiple employer groups to receive lower group rates.¹⁷

IRAs, on the other hand, typically provide access to a broader range of investment options, some of which may be more costly than those typically included in a 401(k) plan. Although a 401(k) plan must appeal to the broad investment interests of a group (this usually means a selection of funds that are less risky) and as an employee benefit is subject to the fiduciary requirements of ERISA, an IRA plan can be tailored to the specific interests of the individual. This flexibility means an IRA holder has access to a broader range of investment products, including some relatively high-cost funds.

Even a small increase in initial or ongoing fees can substantially reduce the amount of accumulated income available for payout at retirement.¹⁸ If on average IRA fees are greater than 401(k) fees, U.S. workers who roll their retirement

¹⁵ McClatchy and Wiandt, 2000.

¹⁶ *Are Hidden 401(K) Fees Undermining Retirement Security?*, 2007.

¹⁷ U.S. Government Accountability Office, 2009.

¹⁸ Haas, 2004; Moody, n.d.; Poterba, Venti, and Wise, 2000.

assets to an IRA from a 401(k) plan would be subject to reduced retirement accumulations.

Knowledge of Fees and Their Relative Importance in Rollover Decisions

Research suggests a substantial number of people are not knowledgeable about their retirement savings, let alone the associated fees. Gustman and Steinmeier report that about half of employed persons in the 2004 HRS could not identify the type of pension or retirement plan by which they were covered and that an even higher proportion was completely ignorant of any costs or fees associated with these plans.¹⁹ Other studies have demonstrated similar findings.²⁰ That people may not be aware of the fees associated with their pensions, 401(k)s, or IRAs is significant because, as mentioned, higher fees relate directly to lower returns on investment.²¹

Even if some account holders are unaware or misinformed about fees in retirement plans, other individuals may have full knowledge of fees but place greater weight on other factors in making investment choices. Table 4 draws from Caudill and our interviews with financial advisors in displaying factors that might affect the comparative advantage of separated employees leaving accrued retirement assets in a 401(k) or rolling them into an IRA.

¹⁹ Gustman and Steinmeier, 2004.

²⁰ Lusardi and Mitchell, 2007b; Lusardi and Mitchell, 2009.

²¹ Haas, 2004; Moody, n.d.; Poterba, Venti, and Wise, 2000.

Table 4: Non-fee factors affecting the rollover decision

Factor	401(k)	IRA
Investment Options within Plans	Participant's investment options are limited, usually to about half a dozen funds.	An IRA allows the investor to select from a much larger universe of funds and other investment options.
10 percent Premature Distribution Penalty	Minimum distributions required at age 59½. An individual is exempt from a 10 percent premature distribution penalty when the distribution is made to an employee after termination at age 55 or older, when the distribution is made to an alternate payee under a domestic relations order, and on certain dividends from employee stock ownership plan stock. IRAs are not exempt under these circumstances.	Minimum distributions are required at age 59 ½, but an IRA is exempt from a 10 percent premature distribution penalty when the distribution is used for health insurance premiums during unemployment; for college costs of owner, spouse, child, or grandchild; or for first-time purchase of a home up to \$10,000. 401(k) plans are not exempt under these circumstances.
Tax Treatment: Company Stock	If a 401(k) plan has employer company stock, the unrealized net gain on the stock is treated as capital gains. When the stock is sold at retirement, the stock proceeds are taxed at the lower capital gains rate instead of the higher regular income tax rate.	Company stock that is rolled over loses its treatment as capital gains and is taxed as regular income when it is distributed.
Required Distributions at Death	Consequences of an account holder's death are plan-specific. Many plans require a lump-sum payout following a participant's death, precluding the possibility of spreading taxes over multiple lives. Others may allow continued periodic distributions.	An IRA owner can use the "stretch IRA" technique whereby the owner takes only the required minimum distribution amounts, naming his or her spouse as beneficiary. Then the spouse treats the account as his or her own and names a child as beneficiary. If all parties take only the required distributions, taxation can be spread over all three life expectancies, deferring taxes for decades.

Source: authors' synthesis of Caudill, 2005, and authors' interviews with industry representatives.

Table 4 demonstrates that although fees are an important investment criterion, an individual must consider many other issues when making decisions about rolling over assets or leaving a plan with a former employer. The individual may know that the IRA will charge higher fees but prefer the number and types of investment options available in an IRA, with that advantage outweighing the higher fees. Indeed, our interviews with financial planners and financial advisors indicate that individuals are unconcerned about fees or find that other investment aspects are more important. Interviewees cited the desire of account holders for more investment choices and customization that are available with IRAs as the primary driver of the rollover decision. However, it is unclear whether individuals who are unconcerned about fees are aware of the full impact of fees on overall wealth over time.

Hidden vs. Transparent Fees

Higher fees associated with IRAs are a concern because fees have a long-term effect on financial assets available for retirement, and more assets are now in IRAs. These fees may not be understood by people who roll their 401(k) assets into an IRA. One reason for suboptimal investment decisions is that retirement plan participants may be unable to discern accurately investment fees due to a lack of fee transparency.

For example, an individual with a retirement plan that is made up predominantly of mutual funds will find it difficult to define the exact amount that he or she is charged annually because the mutual fund industry is only required to provide cost estimates in semiannual reports based on expense ratios²² and hypothetical levels of return.²³ Fees in these reports are presented in set dollar amounts that are not correlated to the actual amount of invested assets. Investors are required to do a fair amount of math to convert the presented values to the actual fees that they would pay.

Further, the semiannual cost estimates for mutual funds do not address all fees that may be associated with the investment. The cost estimates are only intended to help investors understand administration fees that include ongoing costs for operation of the plan. They need not reflect transactional costs, such as front-end or contingent deferred sales charges (loads), or annual fees imposed on accounts

²² An expense ratio is the percentage of a fund's assets that are used to pay annual fund expenses.

²³ Quinn, 2009; U.S. Securities and Exchange Commission, 2000.

valued below certain levels.²⁴ For example, most funds charge investors distribution and/or service (12b-1) fees, which are paid out of fund assets to cover shareholder service expenses such as distribution and sales, compensation for brokers, and payments for advertising.²⁵ These transactional fees, which like other expenses come out of the fund's performance, are even more difficult to define and are not included in semiannual reports.²⁶ Therefore, although the cost tables distributed by fund companies are useful in comparing ongoing costs, they do not provide the relative total costs of owning different types of funds. Without an accurate accounting of fees for the funds that make up 401(k)s or IRAs, investors may not be able to accurately determine their plans' total expenses and may choose to invest in plans that contain higher fees.

GAO has also found that it is difficult to catalog all of the typical schedules of fees that providers of financial services charge 401(k) plan sponsors and participants. The fees associated with 401(k) plans are so complex, confusing, or obscure that many sponsors and participants in these plans do not know of their magnitude or do not understand their consequences.²⁷ Additionally, the structure of fees does not necessarily correspond closely to that of trading costs because the funds of 401(k) plans are often pooled with the funds of other investors. This situation means that the 401(k) plan's participants "might be paying a share of the trading costs incurred by investors who do not belong to the plan."²⁸ These differences make it all but impossible to directly compare 401(k) fees with IRA fees.

Fee transparency is important for comparing the costs of IRA and 401(k)s upon job separation, but also for protecting the interests of plan participants before separation. 401(k) plan participants need to be aware of fees that stem from the way that companies purchase plans. According to industry representatives, most 401(k) plans are bundled and lump together administrative fees and expenses charged by the funds contained in the plan. A 401(k) plan provider will propose plans with different lineups of mutual funds or index funds to a potential plan sponsor. Some plans will contain mostly mutual funds that charge investors a higher percentage of total assets. These plans usually do not require the company purchasing the plan to pay for record keeping and other overhead costs. Index

²⁴ Karceski, Livingston, and O'Neal, 2004; Kopcke, Vitagliano, and Muldoon, 2009; U.S. Securities and Exchange Commission, 2000.

²⁵ Karceski, Livingston, and O'Neal, 2004; U.S. Securities and Exchange Commission, 2000.

²⁶ U.S. Securities and Exchange Commission, 2000; Weinberg and Lambert, 2003.

²⁷ Kopcke, Vitagliano, and Muldoon, 2009; U.S. Government Accountability Office, 2009.

²⁸ Kopcke, Vitagliano, and Muldoon, 2009, 1.

funds, on the other hand, charge investors a lower percentage of total assets than do mutual funds, but require a company to cover more of the overhead costs associated with the plan. Faced with this choice, many companies will gravitate to plans that will cost them less, but are loaded with expensive mutual funds.

In addition, industry representatives indicated that because plan participants are not provided an accounting of these fees, many assume that their 401(k) plans are free or that the plan sponsor is paying fees on their behalf. Spencer Williams, CEO of Persumma Financial—a full-service 401(k) provider and member of the MassMutual Financial Group—stated in 2001 that “most participants continue to operate under the false notion that their 401(k) is free. That’s a myth.”²⁹ Williams goes on to say that “for every new dollar a participant adds to their account, a portion of that dollar goes to pay for service—often without the participant’s understanding. And because the price is asset-based, as the participant’s account balance goes up, his or her fees go up—even though the level of service remains the same.”³⁰

Fee Disclosure Requirements

A clear and complete disclosure of 401(k) and IRA fees is needed before any comprehensive comparison of costs plans can be made. Currently, the regulating entity specifying disclosure rules varies depending on the type of retirement plan and/or the type of investment.

DC plans covered by Title I of ERISA must provide certain documentation to plan participants, and this documentation need not provide information about fees. The U.S. Department of Labor is responsible for enforcing these disclosure requirements. With the exception of employer-sponsored IRAs, Title I does not cover IRAs. There are also other plans outside the purview of Title I of ERISA. For example, state and local government plans are subject to disclosure requirements set forth by the respective states, and only some states impose requirements. As a result, participants in DC and IRA plans could “invest in similar investment products but receive different information on fees.”³¹

Different investment products are also subject to different regulatory regimes. Some products, mutual funds, for example, are subject to Security and Exchange Commission rules. Other products must meet requirements imposed by states’

²⁹ McHenry Consulting Group, 2001, 17.

³⁰ McHenry Consulting Group, 2001, 17.

³¹ U.S. Government Accountability Office, 2009.

insurance regulators. One entity that does possess broad reach across retirement savings plans is the Internal Revenue Service (IRS). The IRS does not regulate fees or disclosures, but it is responsible for ensuring that DC plans follow the tax code requirements that qualify plans for tax deferred status. To ensure that fees are disclosed and that these disclosures are consistent regardless of plan type or investment product, there must be greater coordination and collaboration among the different regulatory entities.

On December 20, 2010, the Department of Labor issued new disclosure requirements pertaining to 401(k)s, which will begin affecting plans November 1, 2011.³² The new rule will require plan sponsors to annually provide the following:

- An explanation of record-keeping, legal, accounting, and other administrative fees that can be charged to an account
- An explanation of individually charged fees such as commissions, redemption fees, transfer fees, and investment advice fees
- The amount and a description of investment fees
- Total annual operating expenses of each investment, including management fees, administrative fees, and record-keeping fees if they are not listed separately
- Performance data for each investment option after fees have been subtracted
- A statement about the cumulative effect of fees and expenses on account growth³³

The new rule also requires a quarterly statement be provided to plan participants that includes the total actual amounts charged for record-keeping, legal, accounting, and other administrative fees.³⁴ These requirements should substantially ameliorate problems associated with 401(k) fee transparency. However, these rules do not apply to IRAs even in the case of rollovers from 401(k) plans. Thus, improved disclosure requirements may be needed for IRAs as well to allow plan participants to compare their options upon separation.

³² 29 C.F.R. § 2550 (1985).

³³ Pension Rights Center, 2011.

³⁴ Pension Rights Center, 2011.

FINANCIAL LITERACY AND THE ROLLOVER DECISION

Low knowledge about the options available for 401(k) assets upon job separation and the associated fees may result from low financial literacy. Researchers have been increasingly interested in the effects of financial literacy on individuals' economic outcomes, especially in light of low financial literacy levels documented in the United States.³⁵ Financial literacy is defined and measured in multiple ways, but typically represents the knowledge and capacity an individual requires to effectively manage his or her long-term financial health.³⁶

Previous studies suggest that financial literacy correlates with retirement planning and wealth.³⁷ For example, Hogarth, Anguelov, and Lee report that consumers with low financial literacy scores are more often “unbanked,” meaning that they do not have any type of retirement account.³⁸ However, results are mixed regarding these factors' effects on specific investment behaviors.³⁹ Kimball and Shumway find a large positive correlation between financial sophistication and portfolio choice,⁴⁰ and Calvet, Campbell, and Sodini report that more sophisticated households are more likely to make optimal investment decisions.⁴¹ Hung et al. found that although measures of financial literacy are associated with retirement planning, they are not strongly associated with specific investment behaviors and common investment mistakes.⁴²

Evidence from the Health and Retirement Study

To explore the relationship between financial literacy and rollover behavior, we examined data from the HRS. HRS is a nationally representative, longitudinal dataset managed by the University of Michigan and supported by the National Institute on Aging and the U.S. Social Security Administration. The survey captures information from biennial interviews of more than 22,000 U.S. adults ages 50 and older.⁴³ Because the dataset is designed to follow participants'

³⁵ Calvet, Campbell, and Sodini, 2005; Gustman and Steinmeier, 2004; Hogarth, Anguelov, and Lee, 2005.

³⁶ Hung, Parker, and Yoong, 2009.

³⁷ Banks and Oldfield, 2007; Clark, D'Ambrosio, McDermed, and Sawant, 2003; Hershey and Mowen, 2000; Jacobs-Lawson and Hershey, 2005; McArdle, Smith, and Willis, 2009.

³⁸ Hogarth, Anguelov, and Lee, 2005.

³⁹ Hung, Meijer, Mihaly, and Yoong, 2009; Lusardi and Mitchell, 2007a.

⁴⁰ Kimball and Shumway, 2007.

⁴¹ Calvet, Campbell, and Sodini, 2005.

⁴² Hung, Meijer, Mihaly, and Yoong, 2009.

⁴³ Health and Retirement Study, 2011.

transition from the workforce into retirement, it provides detailed information about actions taken on DC accounts when plan participants leave an employer.

We use HRS data to examine the financial literacy levels and educational attainment of respondents who rolled assets from a DC pension into an IRA. We compare the results to respondents who left assets in their DC pension after leaving an employer. We also look at respondents who withdrew their assets as an additional comparison group.

From our review of the literature and interviews with financial advisors, we could not draw a conclusion about the expected direction of the relationship between financial literacy levels and the decision to roll assets into an IRA rather than leave them in a DC plan. Because IRA holders may pay greater investment fees, leaving assets in a DC account may produce better financial outcomes than rolling them into an IRA. In this case, we would expect to find that respondents with higher financial literacy levels are more likely to keep assets in their DC accounts. However, our interviews with financial advisors suggest that many advisors promote IRAs as a better investment choice for separating employees because IRAs are more flexible. In this case the relationship would be ambiguous if not the reverse.

Alternatively, we might expect a distinction in financial literacy levels between respondents who roll over their DC assets and respondents who withdraw them. In this case knowledge of the early withdrawal tax penalty and the income tax consequences is required. Although there may be many legitimate reasons to withdraw DC assets early from an account (e.g. to address a financial emergency, or simply to make ends meet), the income tax penalty associated with early withdrawals suggests that from a long-term perspective, rolling over produces better financial outcomes.

Because we do not have a distinct hypothesis about the relationship between financial literacy and the decision to roll assets into IRAs rather than leave them in existing DC accounts, we use the withdrawal group as a comparison group. We expect financial literacy levels of respondents who roll assets into IRAs to be higher than the levels of respondents who withdraw assets. Financial literacy is a relatively new field of study, and researchers are still debating which measures of financial literacy are accurate and informative. Results showing no relationship between financial literacy and the withdrawal decision would suggest that our measures may not be appropriate for our analysis.

Methods

We use respondent-level core data from the 2006 wave of HRS in our analysis. Specifically, we look at respondents who reported leaving an employer since their 2004 interviews. When respondents had more than one DC pension plan sponsored by their employer, we use data from the respondents' primary pension.⁴⁴ We compare those who chose to leave their assets in the DC account to those who rolled their assets into an IRA. We also compare those who chose to withdraw their assets from the pension account to those who rolled them over. Nine respondents reported taking multiple actions on their account (e.g., both withdrawing assets and rolling assets into an IRA). We excluded these respondents from the analysis.

Table 5 describes the demographic characteristics of respondents in each of the three groups: respondents who left assets in their DC accounts, respondents who rolled their assets into IRAs, and respondents who withdrew their assets. The mean age is consistent across the groups (60 or 61 years), and reflects the pre- and post-retirement-age focus of HRS. Overall, the respondents who withdrew assets upon leaving a job during the prior two years tend to have lower incomes, and are more likely to be female, single, and minorities than the respondents in the other two groups. The difference between respondents who left assets in their accounts and respondents who rolled their assets into IRAs is less distinct, though those in the rollover group have higher incomes, are more likely to be married and white/Caucasian, and less likely to be black/African American.

⁴⁴ Each respondent was asked to report information for up to four pension accounts associated with the employer he or she left. We only used data from the account listed as the "most important" of these accounts. Few respondents had multiple accounts. Additionally, respondents were asked whether their pensions were DB or DC plans. We excluded respondents from our analysis who reported having DB plans. We included 329 respondents who reported having DC accounts, as well as 46 respondents who reported having both types of accounts, or reported not knowing which type of account they had. We repeated the analysis using respondents who reported having only DC accounts. The results were not substantially different and are therefore not reported here.

Table 5: Demographic characteristics of individuals who upon job separation in the last two years left assets in their DC accounts, rolled assets into IRAs, or withdrew assets

	Left in account (n=154)	Rolled over (n=132)	Withdrew (n=89)
Mean age	60	61	60
Female (percent)	53	52	58
Married (percent)	66	74	60
Household income below the poverty line (percent)	6	3	9
Race			
White/Caucasian (percent)	81	87	67
Black/African American (percent)	12	7	15
Hispanic (percent)	6	5	12

Source: HRS, computed by authors from 2006 wave.

The 2006 HRS survey includes three questions designed to measure financial literacy levels. In previous research, correct responses to these questions have been associated with planning for retirement, which in turn predicts greater retirement wealth.⁴⁵

HRS Financial Literacy Questions

1. If the chance of getting a disease is 10%, how many people out of 1,000 would be expected to get the disease?
2. If 5 people all have the winning number in the lottery and the prize is 2 million dollars, how much will each of them get?
3. Let's say you have 200 dollars in a savings account. The account earns 10% interest per year. How much would you have in the account at the end of two years?

The first two questions were asked of every respondent. The third question was only asked of respondents who answered the first or second question correctly. For each question, a single variable was coded to indicate whether the respondent answered the question correctly (“don’t know” was coded as an incorrect response, while “refused to answer” was coded as missing).

⁴⁵ Lusardi and Mitchell, 2007a.

We also used years of education as a proxy for financial literacy. Zero years indicates no formal education. Twelve years represents graduation from high school. Respondents with 13 to 15 years have had some college education while 16 years indicates a college degree. Respondents with 17 years or more have had post-college education. Responses of “other” were coded as missing.

The correct response rates for the financial literacy questions, as well as average years of education, were computed for each group. Statistical tests (t-tests) were used to determine whether these values were significantly different between the groups.

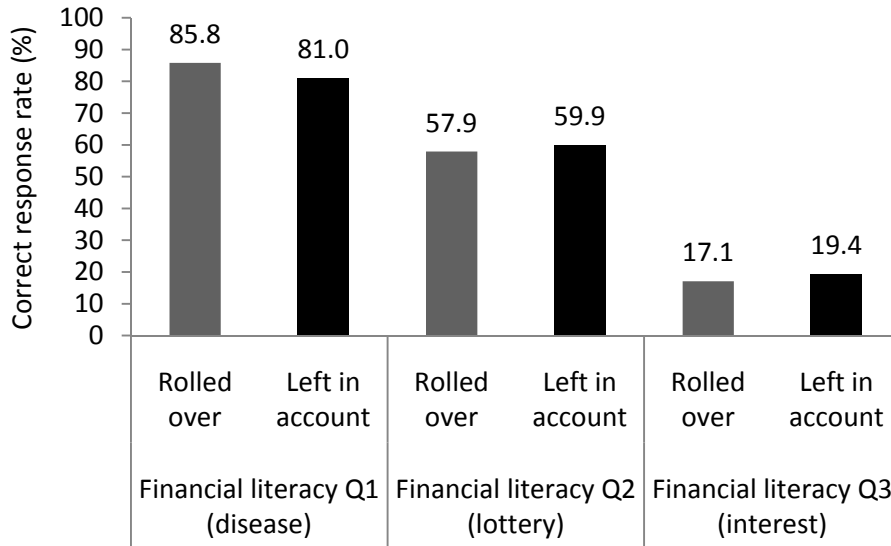
Because respondents who left their jobs to retire may have been facing different circumstances than those who had not yet retired (e.g., withdrawing assets from a DC plan would not have incurred tax penalties if the respondent was at least 59½ years old), these analyses were repeated for a sample that excludes respondents who reported retirement as a reason for leaving their employer. The analyses were also repeated for a sample excluding respondents age 59 and older. The results were similar to those of the unrestricted sample and are therefore not reported.

Results

We find no significant difference in financial literacy levels among respondents who rolled assets into IRAs and respondents who left assets in their DC accounts.

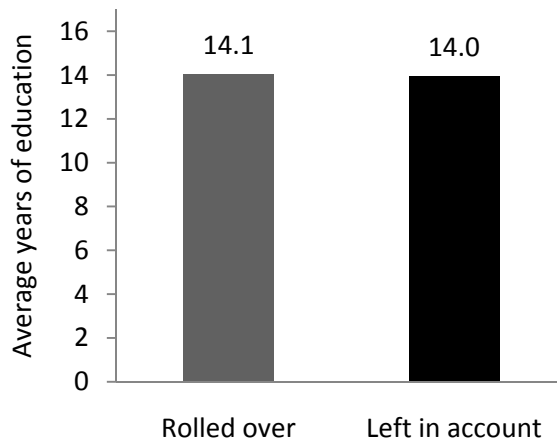
Figure 3 shows the percentage of correct responses for each of the financial literacy questions among respondents in these groups. Statistical tests reveal that the rate differences between the two groups are not significant, which means the differences may be a result of chance alone (see Appendix A for a more detailed summary of the t-test results). Average years of education are not significantly different between the two groups either (see Figure 4). Across both groups, about 81 to 86 percent answered the first question correctly, about 58 to 60 percent answered the second question correctly, and about 17 to 19 percent answered the third question correctly. Both groups had about 14 years of education on average (some college).

Figure 3: Financial literacy measures. Respondents who rolled assets into IRAs and respondents who left assets in their DC accounts upon job separation in the last two years



Note: Correct response rates are not significantly different between respondents who rolled over and respondents who left assets in their DC accounts at a 10 percent significance level. Source: HRS, computed by authors from 2006 wave.

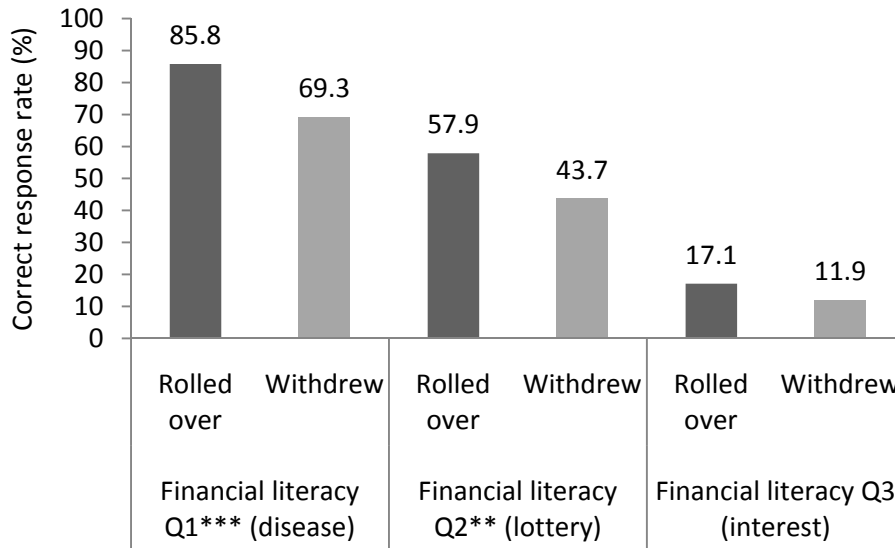
Figure 4: Education level. Respondents who rolled assets into IRAs and respondents who left assets in their DC accounts upon job separation in the last two years



Note: Average years of education are not significantly different between respondents who rolled over and respondents who left assets in their DC accounts at a 10 percent significance level. Source: HRS, computed by authors from 2006 wave.

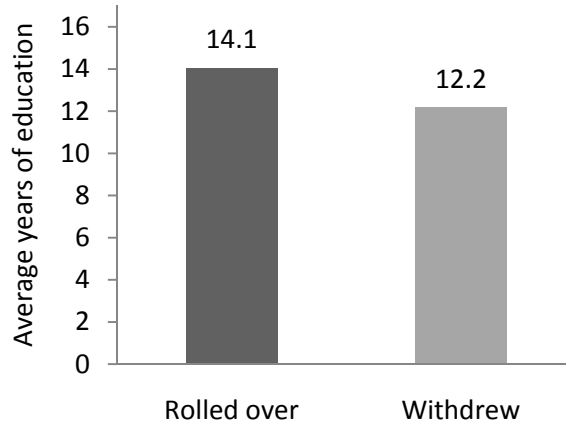
However, we do find that the financial literacy levels of respondents who rolled assets into IRAs are significantly higher than the levels of respondents who withdrew assets (Figures 5 and 6). For the first financial literacy question, 86 percent of those in the rollover group answered correctly, while 69 percent answered correctly in the withdrawal group. For the second question, 58 percent of those in the rollover group answered correctly, while 44 percent answered correctly in the withdrawal group. The differences in response rates are statistically significant, which means there is a very low probability the differences are due to chance alone. Responses to the third question ranged from 12 to 17 percent, but were not significantly different between the groups. Respondents in the rollover group had significantly more years of education: an average of about 14 years (some college) compared to an average of about 12 years (high school degree) in the withdrawal group.

Figure 5: Financial literacy questions. Respondents who rolled assets into IRAs and respondents who withdrew their assets upon job separation in the last two years



Note: For the first and second financial literacy questions, correct response rates are significantly different between respondents who rolled over their assets and respondents who withdrew them. Correct response rates are not significantly different for the third question. Statistical significance levels are indicated as follows: *** = 1 percent; ** = 5 percent; * = 10 percent. Source: HRS, computed by authors from 2006 wave.

Figure 6: Education level. Respondents who rolled assets into IRAs and respondents who withdrew their assets upon job separation in the last two years



Note: Average years of education are significantly different between respondents who rolled over their assets and respondents who withdrew them at a 1 percent significance level. Source: HRS, computed by authors from 2006 wave.

Discussion

Comparison of the rollover and withdrawal groups shows that the financial literacy questions do capture information that supports our hypothesis for these groups. Respondents who withdrew their assets were less educated and less likely to answer the financial literacy questions correctly than respondents who rolled their assets into IRAs. This result lends support to the validity of our main finding: financial literacy levels of respondents who roll over assets into IRAs are not significantly different than the levels of those who leave assets in their DC account.

These results are consistent with the literature and our interviews with financial advisors. We have established that many individuals may not be aware of the option to leave assets in 401(k)s upon separation, nor aware of the investment fees associated with their accounts. However, it is not clear that leaving assets in a 401(k) rather than rolling them into an IRA is necessarily a better investment decision. The financial planning literature suggests that the rollover decision should be made based on a number of personal considerations. If this suggestion is true, we would not expect to see an explicit relationship between financial literacy and rollovers into IRAs. Our HRS analysis confirms this hypothesis.

Our results should be interpreted with some caution. First, our cross-tabulations do not control for other factors that may affect rollover and withdrawal decisions, and we cannot assume financial literacy levels are causal to the distribution decision.

Studies have shown that financial literacy correlates with other factors, including income, race/ethnicity, and education level (which we use here as a proxy for financial literacy, but is also associated with factors such as socioeconomic status).⁴⁶ Additionally, spouses with different levels of financial literacy may be helping to make decisions about how to handle 401(k) assets upon job separation. The statistics presented in Table 5 show that respondents who withdrew their IRA assets are demographically different than the respondents who rolled their assets into IRAs or left them in their DC accounts. While these demographic characteristics might influence financial literacy and the rollover or withdrawal decision, our analysis shows that respondents in the withdrawal group are at greater risk than the other two groups of not fully understanding the ramifications of their decision. A more sophisticated analysis that controls for additional variables would suggest whether financial literacy can explain withdrawal and rollover behavior.

Additionally, we suggest caution in generalizing these results to future cohorts of retirees. Because the proportion of retirement savings held in IRAs in the United States has been increasing, the demographic characteristics of people who roll over their assets may be changing as well. These changes may affect patterns in financial literacy among individuals facing the rollover decision in future years.

Finally, the financial literacy questions may be better suited to differentiate between withdrawal and rollover behavior. The decision to withdraw assets rather than roll them into an IRA has more transparent financial consequences than the decision to roll over assets versus keeping them in the DC account. The latter decision may require more sophisticated knowledge not captured in these questions, which assess basic arithmetic skills.

Hung et al. found that measures of financial literacy are not strongly associated with specific investment behaviors and common investment mistakes, even though they are associated with retirement planning generally.⁴⁷ The measures of financial literacy they used included questions that specifically tested respondents' knowledge of retirement investment products in addition to basic financial knowledge. More research is needed to determine whether factors other than financial literacy have a more significant impact on retirement investment decisions, or whether the literacy measures themselves require refinement.

⁴⁶ Hung, Meijer, Mihaly, and Yoong, 2009; Lusardi and Mitchell, 2007b; Lusardi and Mitchell, 2006; van Rooij, Lusardi, and Alessie, 2007.

⁴⁷ Hung, Meijer, Mihaly, and Yoong, 2009.

CONCLUSION AND RECOMMENDATIONS

IRAs are an important and growing source of retirement wealth. Because most IRA assets come from rollovers, the rollover decision's effect on savings is significant for the retirement security of households in the United States. Yet many people are likely not aware of the option to leave assets in a 401(k) when they leave a job, nor aware of the investment fees associated with their accounts.

We find that basic measures of financial literacy (education levels and arithmetic skills) are not able to differentiate people who roll assets into IRAs rather than leave them in their DC accounts. More sophisticated measures of financial literacy may be better suited to distinguish these groups. However, our research suggests that financial literacy may not be the only significant factor affecting the rollover decision.

Our interviews with financial advisors suggest that many promote rolling assets into IRAs as a better financial decision due to the greater investment flexibility and potentially better performance. Because financial advisors may be subject to conflicts of interest, their advice may not be entirely in the interest of their clients. However, if individuals are following professional advice when they make their rollover decisions, differentials in financial literacy levels may be less likely to influence those decisions. At the same time, the lack of transparency in investment fees may make it difficult for even individuals with very high levels of financial literacy—including financial advisors—to make financially optimal decisions. For these reasons, further research should examine the outcomes of rollovers from a total wealth perspective. If IRAs yield greater returns than 401(k)s, these returns may outweigh the cost of higher fees. Alternatively, even financial advisors may not understand the difference in fees, or they may have incentives to promote products that are not in the best interest of their clients. To understand the true impact of IRA fees, it is important to examine their effects on retirement wealth in combination with the returns on investment associated with 401(k)s and IRAs.

More detailed interviews and surveys may reveal how and why individuals decide to roll over their assets or leave them in their accounts. Since many individuals rely on professional financial advice, and many financial advisors seem to favor IRAs over 401(k)s, future work should focus on advisors as well. Specifically, studies should address financial advisors' knowledge of fees, and how they consider fees in combination with other factors relevant to the decision to roll assets into IRAs.

Whether or not fees should drive the rollover decision, they can have a significant effect on retirement savings, and steps should be taken to improve 401(k) plan participants' ability to make informed decisions about their plan upon job separation. For example, regulation should address potential conflicts of interest among financial service providers offering rollovers into IRAs. In previous studies, GAO has recommended policies to address these issues.⁴⁸ These recommendations would likely improve the financial outcomes of individuals facing the rollover decision.

Additionally, the new 401(k) disclosure requirements should be evaluated a few years after implementation to ensure they are achieving policymakers' objectives. The requirements should make 401(k) fees significantly more transparent, but their effect on investors' decisions needs to be studied. As discussed, industry representatives argue that 401(k) plan participants do not necessarily read the information they are provided about their accounts. Fee disclosures may be likewise overlooked, in which case additional educational measures may be warranted. Similar disclosure requirements for IRAs may also be needed to inform the rollover decision, and disclosures for both plan types may be needed upfront before enrollment.

However, it is important to establish whether higher fees associated with IRAs are a significant problem and the appropriate focus for policy measures. Other factors that affect the rollover decision may be equally, if not more important. Any policy recommendations should be made after the effects of the rollover decision on total wealth are better understood.

Finally, although 401(k) withdrawals were not the focus of our report, we find a correlation between withdrawals and lower levels of financial literacy. Due to the associated tax penalties, early withdrawals are probably not in individuals' long-term financial interest. We find that 20 percent of the HRS respondents who took some action on a DC account in our analysis withdrew funds, which is a substantial proportion. If 401(k) plan participants are making early withdrawals because they lack knowledge of the consequences or alternative options, policy measures may be needed to help participants make informed decisions about withdrawals. This issue may have important implications for retirement security in the United States, and warrants further study.

⁴⁸ U.S. Government Accountability Office, 2011; U.S. Government Accountability Office, 2009.

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APPENDIX A: HRS T-TEST RESULTS

T-tests were used to determine whether rates of correct responses to financial literacy questions and education levels were significantly different between groups of HRS respondents who reported taking different actions on their employer-sponsored DC accounts after leaving a job.

HRS Financial Literacy Questions

- 1) If the chance of getting a disease is 10%, how many people out of 1,000 would be expected to get the disease?
- 2) If 5 people all have the winning number in the lottery and the prize is 2 million dollars, how much will each of them get?
- 3) Let's say you have 200 dollars in a savings account. The account earns 10% interest per year. How much would you have in the account at the end of two years?

Table 6 shows that financial literacy scores and years of education are not significantly different between respondents who rolled their assets into IRAs and respondents who left assets in their DC account ($p > 0.1$).

Table 6: Financial literacy measures. Respondents who rolled assets into IRAs and respondents who left assets in their DC accounts upon job separation in the last two years

Variables	Rollover to IRA		Assets left in account		p-value
	% Correct	Obs.	% Correct	Obs.	
Financial literacy Q1 (disease)	85.8 (3.1)	127	81.0 (3.2)	147	0.142
Financial literacy Q2 (lottery)	57.9 (4.4)	126	59.9 (4.1)	147	0.374
Financial literacy Q3 (interest)	17.1 (3.6)	111	19.4 (3.5)	129	0.327
	Mean	Obs.	Mean	Obs.	
Years of education	14.1 (0.2)	131	14.0 (0.2)	154	0.347

Note: Standard deviations in parentheses. P-values provided for one-tailed tests.
Source: HRS, computed by authors from 2006 wave.

Table 7 shows that financial literacy scores and education levels are significantly different between respondents who rolled assets into IRAs and respondents who withdrew their assets. Correct response rates to the first two financial literacy questions were significantly higher among respondents who rolled assets into IRAs ($p < 0.01$ and $p < 0.05$, respectively). Correct response rates to the most

advanced financial literacy question, however, were not significantly different between the two groups ($p > 0.1$). Respondents who rolled assets into IRAs had significantly more years of education on average ($p < 0.01$).

Table 7: Financial literacy measures. Respondents who rolled assets into IRAs and respondents who withdrew their assets upon job separation in the last two years

Variables	Rollover to IRA		Assets withdrawn		p-value
	% Correct	Obs.	% Correct	Obs.	
Financial literacy Q1 (disease)	85.8 (3.1)	127	69.3 (4.9)	88	0.002
Financial literacy Q2 (lottery)	57.9 (4.4)	126	43.7 (5.3)	87	0.020
Financial literacy Q3 (interest)	17.1 (3.6)	111	11.9 (4.0)	67	0.177
	Mean	Obs.	Mean	Obs.	
Years of education	14.1 (0.2)	131	12.2 (0.4)	89	0.000

Note: Standard deviations in parentheses. P-values provided for one-tailed tests.
Source: HRS, computed by authors from 2006 wave.