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The Impact of Adding an Automatically Enrolled Loan Protection Program to 401(k) Plans

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AT A GLANCE

A key contributor to the existing U.S. retirement deficit is leakage from 401(k) plans upon job change. While overall, U.S. Department of Labor data indicate that loan amounts tend to be a negligible portion of total plan assets, EBRI research has shown that defaulting on retirement plan loans can produce significant reductions in retirement balances. One approach to reducing such leakage is to add some type of automatically enrolled 401(k) loan insurance that prevents defaults.

In this study we used the accumulation module of the Retirement Security Projection Model® (RSPM) to simulate the increase in the present value of the 401(k) account balances with and without the automatically enrolled loan protection program. We used these results to simulate the aggregated present value of the improvement in plan balance for all current 401(k) participants assumed to have at least one loan default in the baseline scenario. Basing our analysis on assumptions from Lu et al., the resulting increase in the present value of balances is $1.96 trillion, representing up to 40 years of loan default experience.

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The Impact of Adding an Automatically Enrolled Loan Protection Program to 401(k) Plans

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Introduction

Measuring retirement security — or retirement income adequacy — is an extremely important topic. The Employee Benefit Research Institute's (EBRI's) Retirement Security Projection Model® (RSPM) has determined that the aggregate retirement deficit for all U.S. households ages 35–64 as of January 1, 2020, was $3.68 trillion.[1]

Eligibility for participation in a defined contribution (DC) plan can have a significant impact on reducing these savings shortfalls. Previous EBRI research[2] provides information on the average individual retirement income deficits by the number of future years eligible for coverage in a defined contribution retirement plan. To further quantify the impact of participation on retirement income adequacy, the deficit value for those in the youngest cohort (ages 35–39) assumed to have no future years of eligibility (as if they were never simulated to be employed in the future by an organization that provides access to those plans) is $78,046 per individual. That shortfall decreases substantially to $44,546 for those with one to nine years of future eligibility and even further to $27,830 for those with 10–19 years of future eligibility. Households in this age cohort fortunate enough to have at least 20 years of future eligibility in those programs have their average shortfall at retirement reduced to only $14,638. In other words, workers ages 35–39 with no future eligibility in a DC plan have a deficit more than five times higher than those with at least 20 years of future eligibility.

About the Retirement Security Projection Model®

EBRI launched a major project to provide this type of measurement in the late 1990s for several states concerned whether their residents would have sufficient income when they reached retirement age. A national model — the EBRI Retirement Security Projection Model® (RSPM) — was developed in 2003 (VanDerhei and Copeland 2003). New versions of the model have been generated periodically to include updates for financial and real estate market performance, employee demographics, and real-world behavior of 401(k) participants (based on a database of 27 million 401(k) participants) and individual retirement account (IRA) accountholders (based on a database of 20 million unique individuals).

However, many American workers do not have access to employer-sponsored defined contribution plans — especially those who are employed by small businesses that cannot afford the cost of offering such plans, are ill-equipped to manage the administration of a plan, etc. Several legislative alternatives have been enacted to deal with this so-called coverage gap.[3] Previous EBRI research[4] used RSPM® to simulate the likely impact on retirement income adequacy of three of the Setting Every Community Up for Retirement Enhancement Act of 2019's (SECURE Act's) most important provisions:

- Widening access to multiple employer plans (MEPs) through open MEPs.
- Increasing the cap under which plan sponsors can automatically enroll workers in "safe harbor" retirement plans, from 10 percent of wages to 15 percent.
- Covering long-term part-time employees.

Taking all three of these provisions into account, the reduction in retirement savings deficits was simulated to be $114.9 billion.

A more recent EBRI report[5] simulates the potential impact on retirement income adequacy of five different proposals. It finds that the combination of Automatic Contribution Plan/Arrangement (ACPA) provisions and an enhanced Saver's

Credit are projected to have a material impact on reducing retirement savings shortfalls when analyzed for households simulated to have a retirement deficit. For those currently ages 35–39, the reductions in retirement deficits vary from 17 to 26 percent, depending on race. This combination has an even larger impact when considering households who are not simulated to have a retirement deficit. Moreover, the addition of employer matches on student loans or using the "skinny" 401(k) for ACPA can add up to another 4 percent reduction in retirement deficits. Auto portability can add 11 to 14 percent, depending on race. We also find that the results are relatively robust to changes in assumptions for opt-out rates.

Background

Attempts to reduce the existing retirement deficit have also taken place through industry innovations to mitigate the impact of 401(k) leakages on job change. For example, previous EBRI research[6] has simulated the extent to which both partial and total auto portability would improve retirement income adequacy.

Another approach to reducing the simulated retirement deficits is to add some type of automatically enrolled 401(k) loan insurance that prevents defaults. While overall, U.S. Department of Labor data indicate that loan amounts tend to be a negligible portion of total plan assets,[7] EBRI research has shown that defaulting on retirement plan loans can produce significant reductions in retirement balances. Using EBRI's RSPM,® we simulated the impact on retirement balances as a multiple of pay at age 65 for scenarios where employees take full advantage of the Coronavirus Aid, Relief, and Economic Security (CARES) Act flexibility to access their defined contribution plan. We found potentially significant reductions in retirement balances as a multiple of pay at age 65 when employees take full CARES Act distributions and fail to pay them back. The most catastrophic scenario modeled was one in which workers are provided CARES-Act-like access to withdrawals time and again as various crises occur. In other words, this is a scenario in which policymakers essentially turn defined contribution plans into de facto emergency savings vehicles. In this scenario, the overall median reduction in retirement balances as a multiple of pay at age 65 is 54 percent.[8]

In the EBRI/ICI 401(k) database, 88 percent of participants were in plans offering loans.[9] However, only 19 percent of those eligible for loans had 401(k) plan loans outstanding.[10] Loan activity varies with age, tenure, and account balance. Of those participants in plans offering loans, the highest percentages of participants with outstanding loan balances were among participants in their thirties, forties, or fifties. Factoring in all 401(k) participants with and without loan access in the database, 17 percent had loans outstanding at year-end 2018. Among participants with outstanding 401(k) loans at the end of 2018, the average unpaid balance was $8,162, compared with $7,935 in the year-end 2017 database. The median loan balance outstanding was $4,486 at year-end 2018, compared with $4,293 in the year-end 2017 database. On average, over the past 23 years, among participants with loans outstanding, about 13 percent of the remaining account balance remained unpaid.

This report simulates the potential impact of adding an automatically enrolled loan protection program to 401(k) plans and shows that it measurably improves retirement outcomes for those individuals simulated to have at least one loan default in the baseline scenario.

EBRI's Retirement Security Projection Model®

EBRI's RSPM® simulates retirement income adequacy for all U.S. households between the ages of 35 and 64. The model reflects the real-world behavior of 27 million 401(k) participants as well as 20 million individuals with individual retirement accounts (IRAs).

EBRI Retirement Security Projection Model® (RSPM) Methodology

One of the basic objectives of RSPM® is to simulate the percentage of the population at risk of NOT having retirement income to adequately cover average expenses and uninsured health care costs (including long-term-care costs) at ages 65 or older throughout retirement in specific income and age groupings. RSPM® also provides information on the distribution of the likely number of years before those at risk run short of money as well as the percentage of preretirement compensation they will need in terms of additional savings in order to have a 50, 70, or 90 percent probability of retirement income adequacy.

VanDerhei and Copeland (2010) describe how households are tracked through retirement age and how their retirement income/wealth is simulated for the following components:

- Social Security.
- Defined contribution (DC) balances.
- Individual retirement account (IRA) balances.
- Defined benefit (DB) annuities and/or lump-sum distributions.
- Net housing equity.

A household is considered to run short of money in this model if aggregate resources in retirement are not sufficient to meet average retirement expenditures, defined as a combination of deterministic expenses from the Consumer Expenditure Survey (as a function of income) and some health insurance and out-of-pocket, health-related expenses, plus stochastic expenses from nursing-home and home-health care (at least until the point such expenses are covered by Medicaid). This version of the model is constructed to simulate retirement income adequacy, as noted above. Alternative versions of the model allow similar analysis for replacement rates, standard-of-living calculations, and other ad hoc thresholds.

The baseline version of the model used for this analysis assumes all workers retire at age 65; that they immediately begin drawing benefits from Social Security and defined benefit plans (if any); and, to the extent that the sum of their expenses and uninsured medical expenses exceed the projected, after-tax annual income from those sources, immediately begin to withdraw money from their individual accounts (defined contribution and cash balance plans as well as IRAs). If there is sufficient money to pay expenses without tapping into the tax-qualified individual accounts, those balances are assumed to be invested in a non-tax-advantaged account where the investment income is taxed as ordinary income. Individual accounts are tracked until the point at which they are depleted. At that point, any net housing equity is assumed to be added to retirement savings in the form of a lump-sum distribution (not a reverse annuity mortgage (RAM)). If all the retirement savings are exhausted and the Social Security and defined benefit payments are not sufficient to pay expenses, the individual is designated as having run short of money at that point.

In this study we used the accumulation module of RSPM® to simulate the increase in the present value of the 401(k) account balances with and without the automatically enrolled loan protection program. We first ran a baseline scenario assuming there was no such program in effect and flagged each year — if any — that a 401(k) participant was assumed to have a loan default. The assumptions were similar to those used in previous RSPM® publications; however, the percentages of eligible 401(k) participants with 401(k) loans by participant age, tenure, and account size were updated to reflect the tabulations from EBRI/ICI Participant-Directed Retirement year-end 2018 Plan Data Collection Project.[11] In addition, the percentage of those with a loan terminating was assumed to be equivalent to the full period numbers of 11.2 percent in Table 4 of Lu et al. (2015).

Results

The present value of the combined 401(k) and IRA rollover account balances at age 65 were output, and the same simulation was run assuming the automatically enrolled loan protection program was in place. Although the cost of the automatically enrolled loan protection program — which is assumed to be paid by the employee in this simulation at a cost of 0.178 percent of the original balance of the loan per month — will decrease the account balances for those with a loan, the simulated combined 401(k) and IRA rollover account balances at age 65 for 401(k) participants simulated to have a loan default in the baseline scenario will be increased by:

- Retention of the account balance that would otherwise be defaulted in a retirement account.
- Retention of the remaining amount of the account balance for 66 percent of the participants who were simulated to have defaulted on their loan.[12]

The present value of the combined 401(k) and IRA rollover account balances at age 65, assuming that the automatically enrolled loan protection program was used, were then compared with the baseline scenario for any 401(k) participants simulated to have had at least *one* loan default in the baseline scenario.

The average present-value increase in plan balance derived from the automatically enrolled loan protection program as a function of the current age of the 401(k) participant is shown below.

Figure 1
Impact of Automatic Enrollment Into Loan Protection Program for 401(k) Participants Simulated to Have at Least One Loan Default in the Baseline Scenario

Current Age	Average Present-Value Improvement for Those With at Least One Loan Default in the Baseline Scenario
25–34	$ 150,623
35–44	$ 184,681
45–54	$ 194,529
55–64	$ 195,692

Source: Employee Benefit Research Institute Retirement Security Projection Model® version 3737.

The average present value increases with age in this analysis due to the fact that all the loan default events for those currently in the oldest cohorts will by definition involve account balances for those in the older cohorts. In contrast, for those currently in the younger cohorts, the account balances impacted by a loan event can be anywhere from the current age to age 64. Since the average account balances increase monotonically with age, this would lead one to expect that the present value would be higher for the older cohort.

Offsetting this to some extent is the fact that those in the younger cohorts would have a higher probability of multiple loan default events than those currently in the older cohorts, since they have more years of exposure to a potential loan default.

We used these results to simulate the aggregated present value of the improvement in plan balance for all current 401(k) participants assumed to have at least one loan default in the baseline scenario. Using those assumptions, the resulting increase is $1.96 trillion, representing up to forty years of loan default experience.

Conclusion

The impact of loan defaults on retirement savings is significant when compared with other EBRI research and the overall retirement deficit for all U.S. households. According to our analysis, preventing leakage from the system through the use of loan insurance over a 40-year period results in an increase in the present value of 401(k) and rollover IRA balances of $1.96 trillion for those simulated to have a loan default. This can go a long way to helping reduce the present value of retirement deficits for U.S. households. Research from Deloitte based on anecdotal data from recordkeepers conservatively estimated that 66 percent of participants who defaulted on their loan took their entire account balance. Further, studies have also shown that Black and Hispanic workers have higher rates of loans and loan defaults than White workers (Fellows and Willemin 2013).

One approach to reducing the retirement deficits that result from plan loan leakage is to automatically enroll participants into a 401(k) loan insurance program to prevent defaults. The analysis in this *Issue Brief* shows that such an approach can measurably improve retirement outcomes for those individuals simulated to have at least one loan default in the baseline scenario.

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Endnotes

[1] VanDerhei (April 2020). While that number may seem extraordinarily large, it must be remembered that this applies to all U.S. households in that age range, whether they work for employers that sponsor retirement plans or not. The baseline scenario for this number also assumes Social Security retirement benefits are paid as currently calculated. For sensitivity analysis assuming that a proportional reduction in these benefits takes place when the Social Security trust fund is exhausted, see VanDerhei (March 2019).

[2] VanDerhei (March 2019).

[3] Currently, there are several legislative proposals that would provide additional assistance. For EBRI simulations of the Automatic Contribution Plan/Arrangement (ACPA), enhanced Saver's Credit, and allowing individuals to receive an employer match in their retirement plans for paying down a student loan, see VanDerhei (January 2022).

[4] VanDerhei (February 2020).

[5] VanDerhei (2022).

[6] VanDerhei (August 2019).

[7] In plan year 2019 (latest data available), only 1.2 percent of the $6.2 trillion in 401(k) plan assets were participant loans. See Table D6 in U.S. Department of Labor, Employee Benefits Security Administration 2021.

[8] VanDerhei (July 2020).

[9] Plan-specific information on loan provisions is available for the majority of the plans in the sample (including virtually all of the small plans). Some plans without this information are classified as having a loan provision if any participant in the plan has an outstanding loan balance. This may understate the number of plans offering loans (or participants eligible for loans) because some plans may have offered a plan loan, but no participant had taken out a loan. It is likely that this omission is small, as U.S. Government Accountability Office 1997 found that more than 95 percent of 401(k) plans that offer loans had at least one plan participant with an outstanding loan.

[10] Holden, VanDerhei, and Bass (2021).

[11] Holden, VanDerhei, and Bass (2021).

[12] Deloitte (2018). Withdrawals are assumed to revert to usual patterns assumed by EBRI in subsequent job changes.

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