Impact of Five Legislative Proposals and Industry Innovations on Retirement Income Adequacy
By Jack VanDerhei, Ph.D., Employee Benefit Research Institute

ATA The combination of Automatic Contribution Plan/Arrangement (ACPA) provisions and an enhanced Saver’s Credit program are projected to have a material impact on reducing retirement deficits 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 on households who are not simulated to have a retirement deficit.

- The combination of ACPA provisions and an enhanced Saver’s Credit program have the greatest positive impact on the retirement savings shortfalls of families headed by White and Hispanic workers ages 35–39.

- The retirement savings surpluses of families headed by Black workers these ages are most positively impacted by these same modifications.

- The net outcomes from these modifications are most favorable to families headed by Black workers, followed by those headed by Hispanic workers.

- The addition of employer matches on student loans to the ACPA and enhanced Saver’s Credit program has the greatest favorable impact on families headed by Black and White workers ages 35–39.

- However, the use of a “skinny” 401(k) in ACPA most favorably impacts families headed by Hispanic and White workers this age.

- The addition of auto portability significantly improves retirement savings shortfalls for all races studied, with families headed by workers falling in the “other” category impacted the least.

- The results are relatively robust to changes in assumptions for opt-out rates.
Jack VanDerhei is Director of Research at the Employee Benefit Research Institute (EBRI). This Issue Brief was written with assistance from the Institute’s research and editorial staffs. Any views expressed in this report are those of the author and should not be ascribed to the officers, trustees, or other sponsors of EBRI, Employee Benefit Research Institute-Education and Research Fund (EBRI-ERF), or their staffs. Neither EBRI nor EBRI-ERF lobbies or takes positions on specific policy proposals. EBRI invites comment on this research.

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Impact of Various Legislative Proposals on Retirement Income Adequacy

By Jack VanDerhei, Ph.D., Employee Benefit Research Institute

Introduction

Measuring retirement security — or retirement income adequacy — is extremely important in understanding the efficacy of the current retirement system. The Employee Benefit Research Institute’s (EBRI’s) Retirement Security Projection Model® (RSPM) has determined that the aggregate retirement savings shortfall for all U.S. households ages 35–64 as of January 1, 2020, was $3.68 trillion.2

Eligibility for participation in a defined contribution (DC) plan can have a significant impact on reducing these savings shortfalls. EBRI research3 shows that the retirement deficit of workers ages 35–39 who are employed throughout their careers by organizations providing no access to DC plans is $78,046 per individual. In contrast, if those same individuals worked for organizations that provided DC plan access for between one to nine years, the deficit is nearly halved — to $44,546. For those with future DC plan access of between 10 and 19 years, it declines to $27,830. The retirement savings shortfalls of households ages 35–39 with at least 20 years of future eligibility in DC plans drop to $14,638. In other words, workers ages 35–39 with no access to a DC plan have a deficit more than five times higher than those with at least 20 years of access.

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).

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 address this so-called coverage gap. EBRI research4 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 deficit was simulated to be $114.9 billion.

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, EBRI research5 has simulated the extent to which both partial and total auto portability would improve retirement income adequacy.

This report 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 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.

**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).

RSPM® produces several important metrics for evaluating retirement income adequacy:

- Retirement Savings Shortfalls (RSS) give the present value of the simulated retirement deficits at retirement age (in today's dollars) for those households simulated to experience a shortfall in retirement.
- Retirement Savings Surpluses (RSS+) give the present value of the simulated surpluses in retirement at retirement age (in today's dollars) for those households simulated to experience a surplus in retirement.
- Retirement Savings Net Outcomes (RSNO) give the net outcome for all households combined. Mathematically it is simply the RSS+ minus RSS.

**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.

**Description of Proposal and Assumptions**

This report analyzes the potential retirement income adequacy impact of five different scenarios:

- **Automatic Contribution Plan/Arrangement (ACPA).** This proposal would generally require employers with more than five employees to maintain an automatic contribution plan/arrangement; however, sponsors with certain previous plans would be grandfathered. The baseline version of the model used in this report assumes that auto-IRAs are used for all new sponsors. Each new plan is assumed to have a 6 percent default with automatic contribution escalation up to 10 percent of pay. A 30 percent opt-out rate is assumed for new eligibles (although this assumption is relaxed later in the report).

- **Enhanced Saver’s Credit.** This proposal would replace the current Saver’s Credit with a simple, 50 percent government match on contributions of up to $1,000 per year made to 401(k)-type plans and IRAs by individuals with incomes up to $25,000, couples with incomes up to $50,000, and heads of household with incomes up to $37,500. The amount of the match would phase out over the next $10,000 of income for individuals and $20,000 for couples/heads of household. The baseline assumption used in this analysis is that everyone eligible will take the full amount given its refundable nature.

- **Student Loan Debt Match.** This proposal allows individuals to receive an employer match in their retirement plans for paying down a student loan debt.

- **“Skinny 401(k)” plan.** Instead of assuming that all "new" plans resulting from ACPA are auto-IRAs, an assumption is made that a simplified form of 401(k) plan is used that will be limited to employee deferrals.

- **Full Auto Portability.** This is a plan design feature whereby a participant’s account from a former employer’s retirement plan would be automatically combined with their active account in a new employer’s plan. This would help keep the defined contribution assets in the retirement system and — in theory — eliminate leakage from cashouts upon employment termination. 7

**Baseline Retirement Savings Shortfalls by Age and Race**

Figure 1 provides the retirement savings shortfalls by age and race assuming none of the scenarios described above are implemented. These values will serve as the baseline to determine the impact of the various scenarios on the retirement savings shortfalls.

Focusing on the youngest age cohort simulated, which would be those currently ages 35–39, it appears there are dramatic differences in projected shortfalls by race. Families with white, non-Hispanic heads would require an average of an additional $31,084 (in today’s dollars) after taxes in their retirement accounts at age 65 in order to avoid running short of money in retirement. Families with Black heads would require an average of $47,781, while families with
Hispanic heads would require an average of $42,860. Families with “other” heads would require an average of $42,704.

These shortfalls appear to be persistent across all age groups simulated for families with Black heads and families with Hispanic heads. However, the shortfalls for families with “other” heads decreases dramatically after the youngest age cohort and are at near parity with families with White, non-Hispanic heads for ages 45 through 54.

Impact of ACPA and Saver's Credit Enhancements

Figure 2 shows the combined impact on retirement savings shortfalls of ACPA and the Saver's Credit enhancements described above. The simulation finds that families with White, non-Hispanic heads ages 35–39 would have an average reduction in savings shortfalls of 25.6 percent if these two legislative proposals were enacted. In contrast, families with Black heads of the same ages would have an average reduction of 19.1 percent. Families with Hispanic heads ages 35–39 would have an average reduction that falls between these two groups, at 22.1 percent. Families with “other” heads start with the smallest average reduction in savings shortfalls as a result of these two legislative proposals — 16.7 percent.

The impact of these legislative proposals declines by age cohort. This is to be expected since the younger workers would have much more time to benefit from these modifications than those on the verge of retirement. The one exception is the “other” category, where the reduction in savings shortfalls improves markedly for ages 40–49 before falling off.
Turning to retirement surpluses, Figure 3 shows how much the ACPA and the Saver's Credit enhancements together might increase savings surpluses for those households simulated to experience them in retirement. It appears that those likely to benefit the most are families with Black heads ages 35–39. They are positioned to see their savings surpluses increase by 57.9 percent under this legislation. Families with Hispanic heads ages 35–39 are the second greatest beneficiaries, with an average percentage increase in retirement savings surpluses of 49.3 percent. Families with White, non-Hispanic heads these ages are projected to experience a savings surpluses increase of 43.9 percent in retirement. Meanwhile, families with “other” heads start with a smaller percentage increase in retirement savings surpluses (39.9 percent); however, the increases are more in line with the rest of the racial/ethnic groups for age groups 40 and older.
Finally, we examine the sum of the increase in retirement savings shortfalls and the decrease in retirement savings shortfalls of the combined ACPA and the Saver’s Credit enhancements. Figure 4 shows that for those currently ages 35–39, the net impact is most beneficial for families with Black heads. These families are set to have a net improvement in their retirement savings outcomes of 74.6 percent. Families with Hispanic heads in this age category are the second greatest beneficiaries, with an average net increase of 61.2 percent. Families with White, non-Hispanic heads are shown with a net increase of 48.7 percent. Again, families with “other” heads start with a smaller percentage increase, at 45.5 percent. The increase aligns at older ages across racial/ethnic cohorts.

Figure 4
Increase in Retirement Savings Net Outcomes by Age and Race With Modifications for Saver’s Credit and Automatic Contribution Plan/Arrangement

Source: Author’s simulations.

Impact of Additional Scenarios on Retirement Savings Shortfalls

We now consider the impact of three additional potential changes to the retirement savings system and the extent to which they could further reduce retirement savings shortfalls across various races/ethnicities:

- Allowing individuals to receive an employer match in their retirement plans for paying down student loan debt.
- Assuming new plans are “skinny” 401(k) plans instead of auto-IRAs.
- Implementing a system of full auto portability.

As a reference point, the first column in the left panel of Figure 5 again shows the simulated reduction in retirement savings shortfalls for those ages 35–39 given the aforementioned ACPA and Saver’s Credit enhancements. Essentially, this column repeats the simulated results from Figure 2.

Each subsequent column in the left panel of Figure 5 adds further reductions in retirement savings shortfalls that would result from the three scenarios outlined above.

Student loan match. The first scenario considers the impact on retirement savings shortfalls if, in addition to benefiting from ACPA and the Saver’s Credit, all individuals ages 35–39 who were eligible to participate in a 401(k) plan were to also receive an employer matching contribution to their plans in exchange for paying down a student loan. In this scenario, retirement savings shortfalls are projected to be reduced by 22 percent for families with Black heads ages 35–39. As shown in the right panel of Figure 5, this is a 2.9 percent incremental improvement vs. the projection that
considered just the ACPA and Saver’s Credit scenario. Savings shortfalls were reduced by a further 2.8 percent for families headed by White heads in that age group when student loan matching was added. The impact is estimated to be lower for families headed by Hispanic heads age 35–39, at 0.7 percent. The additional reduction for families with “other” heads falls in between, at 1.4 percent.

The model assumes that anyone eligible who is not currently contributing and has a required monthly student loan debt payment would start making the minimum of the monthly student loan debt payment or the projected contribution rate for their demographic. The simulated values include the “new” accounts that are assumed to be created by ACPA.

“Skinny” 401(k). The third column in the left panel of Figure 5 shows how the reduction in retirement savings shortfalls arising from ACPA and the Saver’s Credit would be further impacted if it were assumed that all “new” plans arising from ACPA were “skinny” 401(k) plans instead of auto-IRAs. Under this scenario, a further 3.9 percent reduction in the retirement savings shortfalls is expected for families with Hispanic heads ages 35–39, with the reduction going from 22.1 percent to 26 percent under this scenario. For families headed by White, non-Hispanic heads in that age group, the further reduction is 3.8 percent — with the retirement savings shortfalls reduction going from 25.6 to 29.4 percent. Families with Black heads would see a further 3.1 percent decrease, and families with “other” heads would have a further 2.6 percent decrease.

Auto portability. Finally, the fourth column in the left panel of Figure 5 shows how the reduction in retirement savings shortfalls arising from ACPA and the Saver’s Credit would be further impacted under the assumption that a full auto portability system were in place for all 401(k) plans. In this case, a further 14.3 percent reduction in the savings shortfalls is expected for families with White, non-Hispanic heads ages 35–39; retirement savings shortfalls are projected to be reduced in this scenario by 39.9 percent vs. the 25.6 percent reduction with just the ACPA and Saver’s Credit. For families with Hispanic heads this age, the further reduction would be 13.9 percent — or 36 percent vs. 22.1 percent under just the ACPA and Saver’s Credit scenario. Families with Black heads would have a further 13.5 percent decrease. Families with “other” heads would have a smaller but still double-digit (10.8 percent) further decrease.

Figure 5
Reduction in Retirement Savings Shortfalls for Those 35–39 by Race Under Various Scenarios

<table>
<thead>
<tr>
<th>Percentage Reduction</th>
<th>Marginal Impact in Addition to Automatic Contribution Plan/Arrangement (ACPA) and Saver’s Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACPA and Saver’s Credit</td>
</tr>
<tr>
<td>White</td>
<td>25.6%</td>
</tr>
<tr>
<td>Black</td>
<td>19.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>22.1%</td>
</tr>
<tr>
<td>Other</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

Note: This includes the “new” accounts created by ACPA. Source: Author’s simulations.
Sensitivity Analysis

One of the most difficult problems in building simulation models to predict the impact of new legislative proposals is that there is often no empirical evidence to use for critical behavioral assumptions. This section conducts sensitivity analysis to see how robust the previous findings are likely to be for opt-out rates.

As mentioned previously, the baseline opt-out assumption used for the "new" plans created as a result of ACPA was 30 percent. While there is no industry-wide database of opt-out assumptions for plans with automatic enrollment and no employer match, we were able to conduct sensitivity analysis based on industry-specific formal opt-out rates from OregonSaves data. When limited to industries with data on at least 500 employees, the opt-out rates ranged from 32.2 to 57.4 percent.

Focusing again on workers ages 35–39, Figure 6 shows sensitivity analysis by race of increasing the opt-out rate from the 30 percent assumption in the baseline to 40, 50, and 60 percent. As expected, each increase in the opt-out assumption decreases the simulated reduction in retirement savings shortfalls. Doubling the opt-out rate assumption from 30 to 60 percent reduces the expected reduction in retirement savings shortfalls from:

- 25.6 percent to 17.3 percent for families with White, non-Hispanic heads.
- 22.9 percent to 12.9 percent for families with Black heads.
- 20.3 percent to 15.9 percent for families with Hispanic heads.
- 17.3 percent to 11.5 percent for families with “other” heads.

![Figure 6](image-url)

Reduction in Retirement Savings Shortfalls for Those 35–39 With Modifications for Saver’s Credit and Automatic Contribution Plan/Arrangement, Assuming Various Opt-Out Rates

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>25.6%</td>
<td>22.9%</td>
<td>20.3%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Black</td>
<td>19.1%</td>
<td>17.3%</td>
<td>15.4%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>22.1%</td>
<td>20.1%</td>
<td>17.7%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Other</td>
<td>16.7%</td>
<td>15.3%</td>
<td>13.3%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Source: Author’s simulations.
Conclusion
American workers ages 35–64 are on track to fall $3.68 trillion short of the money they will need to pay their expenses in retirement. There have been various legislative attempts to reduce this deficit in recent years. This report simulates the potential impact on retirement income adequacy of five different proposals. Focusing on those ages 35–39, it finds that the combination of Automatic Contribution Plan/Arrangement provisions and an enhanced Saver’s Credit program have the greatest positive impact on the retirement savings shortfalls of families headed by White and Hispanic workers. However, the retirement savings surpluses of families headed by Black workers these ages are most positively impact by these same modifications. The net outcomes from these modifications are most favorable to families headed by Black workers, followed by families headed by Hispanic workers.

The addition of employer matches on student loans to the ACPA and enhanced Saver’s Credit program has the greatest favorable impact on families headed by Black and White workers ages 35–39. However, the use of a “skinny” 401(k) in ACPA most favorably impacts families headed by Hispanic and White workers these ages.

The addition of auto portability significantly improves retirement savings shortfalls for all races studied, with families headed by workers falling in the “other” category impacted the least.

We also find that the results are relatively robust to changes in assumptions for opt-out rates.

References


VanDerhei, Jack, "The Impact of Auto Portability on Preserving Retirement Savings Currently Lost to 401(k) Cashout Leakage," EBRI Issue Brief, no. 489 (Employee Benefit Research Institute, August 15, 2019)


Endnotes

1 Note: Not all families are headed by workers in this dataset.

2 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).

3 VanDerhei (March 2019).

4 VanDerhei (February 2020).

5 VanDerhei (August 2019).

6 Another metric that is not used in this study is the Retirement Readiness Rating (RRR) that provides the probability that a household will NOT run short of money in retirement.

7 See VanDerhei (August 2019) for additional detail on auto portability.

8 Chalmers et al. (2021).