What Moves the Retirement Readiness Needle: Quantification of Risk and Evaluation of New Proposals

By Stephen Blakely, Employee Benefit Research Institute

A T A G L A N C E

• With the United States facing an estimated national retirement savings shortfall of $4.13 trillion, how can more Americans be brought into a retirement savings plan, and how can they be persuaded to save enough to cover simulated costs in retirement?

• Those questions were explored by a panel of retirement experts at EBRI’s 77th policy forum held Dec. 10, 2015, focusing on policy proposals aimed at increasing private-sector retirement plan coverage and possible improvements to retirement plan designs by sponsors of retirement plans. The session also included a short presentation of the demographic forces in the United States that underpin the issue, in particular the fact that more Americans than ever are living longer, will spend more time in retirement, and face the potential crisis of outliving their savings.

• Expert presentations summarized in this article were provided by:

  o Jack VanDerhei, EBRI research director, who focused on ways to increase the number of employees offered some type of retirement savings option, leakages from the defined contribution system, modifying the employer incentives to increase employee contributions to higher levels, and what happens when the equity market turns down and investment returns suffer.

  o Lori Lucas, executive vice president and defined contribution practice leader at Callan Associates, who focused on the policy implications of the data and possible unintended consequences of new retirement income policies.

  o Jeff Eng, product director for Russell’s Adaptive Retirement Accounts, who focused on how investment menus for their 401(k) participants have evolved.

  o Charles Clark, a principal and actuary at Milliman, and director of the firm’s Employee Benefits Research Group, who provided an actuarial perspective on retirement policy issues and focused in particular on “longevity risk.”
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With the United States facing an estimated national retirement savings shortfall of $4.13 trillion, how can more Americans be brought into a retirement savings plan, and how can they be persuaded to save enough to cover simulated costs in retirement?

Those questions were explored by a panel of retirement experts at EBRI’s 77th policy forum, focusing on policy proposals aimed at increasing private-sector retirement plan coverage and possible improvements to retirement plan designs by sponsors of retirement plans. The session also included a short presentation of the demographic forces in the United States that underpin the issue, in particular the fact that more Americans than ever are living longer, will spend more time in retirement, and face the potential crisis of outliving their savings.


Jack VanDerhei, EBRI research director, noted that EBRI research has already extensively analyzed post-retirement risks, such as longevity, long-term care, and investment risk. He then reviewed research dealing with pre-retirement risks and the likely impact of new proposals to mitigate their impact, including (1) ways to increase the number of employees offered some type of retirement savings option, (2) leakages from the defined contribution system, (3) modifying the employer incentives to increase employee contributions to higher levels, and (4) what happens when the equity market turns down and investment returns suffer.

VanDerhei summarized the EBRI Retirement Security Projection Model and provided baseline estimates of retirement income adequacy for Boomer and Gen Xer households.

He noted that quantifying retirement income adequacy depends on several key factors, including how “adequacy” is defined, and whether or not long-term care costs are included in the calculations:

- If “adequacy” is defined as being able to cover 100 percent of the average expenses in retirement, including long-term care costs, then about 57.6 percent of all Baby Boomers and Gen Xer households would be adequately prepared for retirement.
- If “adequacy” is pegged at 90 percent of average costs in retirement, about 68 percent would be adequately prepared.
- If “adequacy” is 80 percent of the average costs, about 82 percent would be adequately prepared.

He noted that if long-term care costs are ignored, the chances of achieving retirement income adequacy are significantly higher. Specifically, 75.5 percent of all Baby Boomers and Gen Xer households would be adequately prepared for retirement if “adequacy” is defined as being able to cover 100 percent of the average expenses in retirement, but long-term care costs are excluded. If adequacy is based on 90 percent of average costs in retirement without long-term care costs, the value increases to 82.6 percent. With an 80 percent average cost threshold without long-term care costs, 90.9 percent of the households would be adequately prepared.
Concerning efforts to expand private-sector retirement plan coverage, VanDerhei noted that the impact of proposed “automatic IRAs” for all workers currently ages 35-64 depends heavily on the required level of contributions and “opt-out” rates—how many workers refuse to participate. Under one scenario (total participation/no opt-outs and a 3 percent of pay contribution rate), he said that auto-IRAs would reduce projected retirement savings deficits by 6.5 percent.

By comparison, if employers that do not currently offer any kind of retirement plan instead offered a 401(k) plan similar to what other employers of the same size offer, there would a significantly higher reduction in retirement savings deficits—19.4 percent, VanDerhei said. Those projections are based on empirical opt-out rates in the private sector as well as actual employee contribution rates, asset allocation, account balances and employer contribution formulae (both matching and nonelective).3

The advantages of a universal DC-type plan are also sharply evident when examined by age. Modeling the youngest workers (ages 35–39) under the same scenario used above (no opt-outs, 3 percent contribution rate), an auto-IRA would reduce retirement savings shortfalls by 10.6 percent—compared with 28.2 percent for a universal DC plan with workers of the same age. These reductions will decrease for older workers. For example, an auto-IRA would decrease Retirement Savings Shortfalls (RSS) by 9.9 percent for those 40-44, while the universal defined contribution plan would reduce RSS by 25.9 percent in that age cohort. For those 45-49 the reductions would be 7.9 percent for the auto-IRA and 22.1 percent for the universal defined contribution plan. For those already 50-54 the auto-IRA would reduce RSS by 5.1 percent while the universal defined contribution plan is simulated to have a 15.5 percent reduction. (Figure 1).

Figure 1
Reduction in Retirement Savings Shortfalls, by Age, for Coverage Modifications

VanDerhei also addressed the “leakage” risk—workers who take money out of their retirement savings plans, either by taking a loan from their 401(k) account and not repaying it, taking a hardship withdrawal, and/or spending the money in their accounts at job change rather than rolling it over into another savings plan (Figure 2).

VanDerhei’s analysis finds that the effect of retirement plan leakages varies by income and type of leakage, but that clearly the lowest-income quartile is most adversely affected (the population simulated consists of workers currently ages 25–29 who will have more than 30 years of simulated eligibility for participation in a 401(k) plan). Among the lowest-income quartile, 4.2 percent would have achieved an 80 percent inflation-adjusted replacement rate by combining 401(k) accounts (and any IRA rollovers originating with 401(k) plans) and Social Security benefits but miss doing so because of defaulting on a 401(k) loan; 8 percent miss it because of hardship withdrawals with a required six-month suspension of contributions; and 20 percent miss it because of cashing out their accounts at job change and not rolling them over. Overall, more than a quarter (27.3 percent) of those in the lowest income quartile would miss hitting the 80 percent threshold of pre-retirement income replacement because of the combined sources of leakage, VanDerhei said.

VanDerhei also noted the dilemma facing retirement plan sponsors: Closing off all leakage by prohibiting cash-outs, hardship withdrawals or 401(k) loans would result in some low-income workers reducing their contributions or not participating in the plan at all—which would make their lack of savings even worse. “If you take away cash out, if you
take away loans, and if you take away hardship withdrawals, you're likely to decrease participation and certainly
decrease contributions on the part of many of the participants, especially the low income,” he said.

Concerning the so-called “stretch match” designed to get workers to contribute more to their 401(k) by expanding the
percentage of compensation that is eligible for an employer matching contribution, VanDerhei said any advantages
depend heavily on how a stretch match is structured. Generally, higher-income workers would do better than lower-
income workers under a stretch match, he noted, but in the scenario in which employers as much under the stretch
match proposal as they would have under the PPA safe harbor, a move to the stretch match proposal simulated in the
model could increase 401(k) contributions by 6.7 percent for low-income workers to 7.9 percent by high-income
workers.

Finally, VanDerhei also ran analysis of how much of an impact a decrease in market rates of return are likely to have,
using for comparison the sharp drop in equities in August 2015, when equity returns dropped 4.3 percent and fixed-
income returns dropped 1.3 percent.

Lori Lucas, executive vice president and defined contribution practice leader at Callan
Associates, focused on the policy implications of the data and possible unintended
consequences of new retirement income policies.

She cited recent Government Accountability Office (GAO) studies noting the wide disparity
of estimates in retirement income adequacy in the United States, ranging from as few as
16 percent of households likely to have a shortfall in retirement to as much as 52 percent.
The reason for those differences had to do with basic assumptions (what an “adequate”
level of savings is), what factors need to be included (such as long-term health care, as
VanDerhei pointed out), and how certain assets (such as housing equity) are calculated.

“These are all things that sound very mundane but have huge implications in terms of the way we perceive Americans
being able to retire sufficiently when it comes time,” Lucas said. How such data is used has the potential to create
serious unintended consequences, she warned. “Assumptions matter, and it’s important that empirical, measurable
data be used to avoid unintended consequences of certain programs.”

Concerning unintended policy consequences, she discussed the trend toward new state-run retirement savings
programs for small businesses, which typically do not offer retirement plans to their workers because of cost. For
instance, a new program enacted in Illinois, currently in the process of being implemented, would have a default
contribution rate of 3 percent by workers who enroll in the program, and would offer no company or state-financed
match.

“The powers that be in Illinois know that 3 percent is not going to be a sufficient amount of pay to save for an
adequate retirement, but it’s a good start—it’s not intended to be an end-all and be-all for workers, it’s intended to
get people started in the retirement system,” she said. But one unintended consequence of setting the initial default
rate so low (rather than, say, 6 percent) is that it tends to be very “sticky”—relatively few workers will increase their
savings rate. “Wherever you put that default is likely to be where people stay for a very, very long time.”

Another unintended consequence, she warned, was that state-run retirement programs may wind up “cannibalizing”
existing private-sector defined contribution plans: “Will employers, especially small employers that are making
available or considering making available 401(k) plans and other plans to their workers, just decide, ‘The state will
take care of it, we don't have to worry about it?’” she said.

For instance, she cited a 2012 survey by AllianceBernstein that found about 12 percent of private-sector employers
would terminate their retirement savings plans if Congress revoked their current ability to deduct their retirement
contributions from taxable income. Studies are currently underway to gauge how private employers will react to state-run retirement programs such as the one in Illinois.

Yet another unintended consequence she warned about is that opt-out rates in state-run plans could prove to be sharply higher than in private-sector 401(k) plans, since the state-run plans will not offer an employer match—long known to be a big incentive in getting workers to participate in the plan in the first place. She added that “the role of the employer cannot be underestimated in terms of trust when it comes to financial services—the employer often ranks very high.” Taking employers out of the equation could leave workers without a lynchpin of support for retirement savings, she said.

“We know opt-out rates are low—5 to 10 percent—when an employer produces a plan with automatic enrollment,” she said. “But it’s likely, and some studies have indicated this, that opt-out rates will be much higher with state-run plans, possibly 25 percent or more.”

Lucas expressed frustration with public policy proposals designed to reduce retirement savings “leakage” by prohibiting 401(k) loans and hardship withdrawals, since research has shown those are a big incentive to get low-income workers to participate in an employment-based retirement savings plan and account for very little leakage (Figure 3).

“What’s doing the most harm? EBRI’s analysis has demonstrated quite clearly that it’s not loans or withdrawals, it's cash-outs. So many people have so many jobs when they're young. So you see people with low balances cashing out over and over and over again.” She said a key reason why employers don't focus on that problem is because there is little incentive to do so, and plan sponsors may be concerned that current or future regulations may subject them to potentially expensive fiduciary liability if they do.”

She referred to the “stretch matches” as “a mythical unicorn out there; everyone talks about it, very few have seen it. In our DC trend survey, only 2 per-cent of plan sponsors said that they had stretched the match in 2015.”

Although the concept is designed to “get people to save at higher rates by causing them to not get the full company contribution until they save at that higher rate,” she said, it too has unintended consequences. “Lower-wage workers may not be able to get all the way up to the higher level of savings in order to get the full match, so it may unduly penalize lower-wage workers and reduce overall company contributions,”

Lucas said. “The match is a political hot potato—very few plan sponsors want to mess with the match because it is a bad PR move, in their perception, to tinker with the match, and it’s hard to explain to participants. But more work
needs to be done in the area of understanding how to employ the company contribution better in order to positively
influence participant behavior,” she said.

Lucas also cited data from the Callan DC Index showing that investment returns in target-date funds (TDFs) have
underperformed the overall Index, which is a concern since nearly a third of total defined contribution plan assets are
in TDFs (Figure 4). “From a policy perspective, what does that mean? It is important that plan sponsors take another
look at their target-date funds to ensure they meet their plan’s goals. Target-date funds are only going to become
more crucial going forward when it comes to retirement savings, as DC assets continue to flow into them.”

**Impact of Rates of Return**

Investment Performance of DC Plan Participants vs Target Date Funds

Investment Performance
2nd Quarter 2015 and Annualized Since Inception (1/1/06)

- Total DC Index
- Average 2035 Fund

5.74% 5.48%

Source: Callan DC Index, as of June 30, 2015.

**Target date funds now hold 25 cents of every dollar in DC plan assets.**
Jeff Eng, product director for Russell’s Adaptive Retirement Accounts, said that back in the 1980s, retirement plan sponsors provided basic investment menus for their participants to select from: an equity fund, a balanced fund, and fixed-income fund. That was expanded to “a whole slew of choices” in the 1990s, but having too many choices led to indecision.

“Unfortunately, a lot of participants just don’t have the financial acumen or even the time to sort through and figure out the appropriate investments, what should they be doing, and how can they appropriately invest for retirement,” he said.

Research has shown many investors tend to react to current (rather than longer-term) conditions in the investment markets, and buy in when prices are high and sell when prices are low—“not exactly a great recipe for appropriate investment returns,” Eng noted. Compounding the problem is that retirees’ financial literacy has been found to decline with age, even though their confidence in managing their own finances remains high. He noted research has also shown that workers who get some sort of investment help—such as through managed accounts, the use of target-date funds or professional investment advice—tend to have better annualized returns on their investments than do the “do-it-yourselfers.”

As the automatic-enrollment provisions of Pension Protection Act of 2006 encouraged, retirement plan sponsors look for ways to use behavioral economics and automate investment decisions to “take it out of the hands of the participants” with automatic rebalancing, Eng noted.

Figure 5

Participants receiving investment help had higher annual returns

> On average, Help* participants had 3.32% higher annual returns than for Non-Help participants, net of fees.


*Help participants are defined as those invested in target-date funds or managed accounts or receive online investment advice.

Past performance is no guarantee of future results.
“Let’s take advantage of that inertia and put them into do-it-for-me solutions but give them the ability to opt out if they want,” Eng said. “At least we can put them into an appropriate solution for those who don’t want to or maybe don’t have the ability to do it for themselves.” (Figure 5)

Since 401(k) participants generally have been found to stay at whatever the plan’s default savings rate is (all too often an inadequate rate of 3 percent of pay), he suggested plan sponsors consider providing investment and savings advice to improve their retirement preparations. One effective way to do that would be show them projections of what their current retirement savings are likely to actually produce in retirement, and what their needs are likely to be.

“The important thing here would be to refocus and reframe the mindset of plan participants: Based on how they’re currently saving and investing, are you on track?” Eng said. “We can do a lot to help them on the investment component, but from the savings component, unless we automatically put them in at a higher rate, we are going to need some engagement or at least consent from the participant.”

He also said “there are other [investment] options out there” besides just target-date funds—notably managed accounts that can provide a more customized investment strategy to help participants specific to their situation. Eng also advocated providing appropriate preretirement savings advice to help workers get to retirement, but then, in retirement, also providing them with appropriate withdrawal advice.

Charles Clark, a principal and actuary at Milliman, and director of the firm’s Employee Benefits Research Group, provided an actuarial perspective on the retirement policy issues.

Clark focused on “longevity risk,” a term he thinks is widely misused, and the expected number of years of life remaining at a given age—a number that varies by date of birth, gender, income, and place of residence. As his graphs of U.S. life expectancy demonstrated, “this has changed a lot” as Americans’ life spans have increased (Figure 6). A large part of the reason is improved medical care, especially the sharp decline in deaths from heart-related diseases.

Clark defined longevity risk as the risk that life expectancies exceed assumptions, resulting in greater-than-anticipated retirement cash flow—by individuals, by pension plans and by insurance companies that write life-annuity policies. That breaks down into two different types:

- For individuals, that means “the risk of outliving our own assets, resulting in a lower standard of living, reduced care, or a return to employment.”
- For pension plan sponsors, insurance companies and financial firms, that means “the risk of underestimating survival rates, resulting in increased liabilities to sufficiently cover promised payments.” He added: “We see this in defined benefit pension plans and, when annuities are underwritten.”

The impact of a large and rapidly aging population brings with it a shift in “who bears responsibility”—individuals, retirement plan sponsors and financial institutions, or the government, primarily through the Social Security program (Figure 7). Clark noted that EBRI’s 2015 Retirement Confidence survey found that almost two-thirds (63 percent) of American workers are not confident in the future viability of Social Security. Since it’s not news that lifespans in the United States are lengthening, Clark said, the question is “how do we deal with that?”
For a 60-year-old female, current actuarial tables indicate she will live two additional years, which in pension calculations could result in a 5.5 percent reduction in the value of an annuity Clark said. “Just think about having a 5-1/2 percent pay cut at any time,” he noted.

He also noted that employers face higher costs from older workers who stay on the job longer: More employer costs incurred with the 401(k) match, higher payroll taxes and health care insurance. “So there’s much going on for the employer to analyze” because of increased life expectancy, Clark said.
US Population by Age & Gender: 1900

Demography 101
1. Fertility
2. Mortality
3. Immigration

1900 US Population
Classic pyramid shape due to high fertility and mortality

US Population by Age & Gender: 2030

Tomorrow
1. Baby boom provides lots of retirees
2. Social impact?
   1. Medical needs
   2. Long-term care
   3. Caregivers
Endnotes


2 For additional information on the EBRI Retirement Security Projection Model® including a list of recent studies, see https://www.ebri.org/research/?fa=model


4 The proposed stretch match alternative to the PPA safe harbor modeled for this analysis contains a default contribution rate of 6 percent; an auto increase of 2 percent per year until 10 percent; and an employer match of 50 percent on the first 2 percent and 30 percent on the next 8 percent.

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