Article from:

The Actuary

February/March 2011 – Volume 8 Issue 1

IMPROVING RETIREMENT SECURITY

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SESSION 79 at the 2010 SOA ANNUAL MEETING focused on the risks of retirement and how those risks impact attaining a secure retirement in a defined contribution world. This article is based on the content of that session.

TODAY, MANY AMERICANS who participate in employer-sponsored retirement plans will have the largest portion of their employer-provided retirement income delivered through defined contribution (DC) plans. The relative number of DC plans delivering the primary source of employer-sponsored retirement income is increasing each year.

The goal of any retirement system is to provide adequate resources to replace income before retirement for the period of retirement. The reasons why the funds may not be adequate include:

- Not saving enough money;
- Inadequate investment returns and poor investment strategy;
- Leakage—using funds too early, possibly as a result of cashing out savings as participants change employers, taking loans and not repaying them, or requesting hardship distributions;
- Premature death of the employee, leaving the family without adequate funds for retirement;
- Disability before retirement;
- Early retirement;
- Outliving retirement resources because they are used too quickly;
- Job changes, which disrupt the program of retirement savings; and
- Period of unemployment.

Some of these risks can be dealt with through DC plans, whereas others may require interventions or actions outside of the plan. It is important to recognize that in a DC environment, the plan is a part of the path to retirement security, but it may need to be supplemented by other risk protection and actions outside of the plan.

WHERE DO WE STAND TODAY?

At the majority of larger companies, we have seen a major shift from defined benefit (DB) plans as the primary employer-provided retirement vehicle to DC plans playing this role. Hewitt Associates' Real Deal 2010 Study[1] analyzed the retirement savings of 2.1 million active employees who were eligible for 401(k) plans. This study estimated that retirement resources from the DC plan (if no DB plan) and other savings would need to equal 11 times pay at age 65 to be on track for an adequate retirement. Based on actual savings behavior and the provisions of these plans, only one in five employees was projected to be on track at age 65. The average shortfall for those who are not on track was 2.4 times pay at age 65. To eliminate or reduce the shortfall, employees will need higher levels of savings and/or later retirement. (Of course this group is better off than nearly half of American workers who have no employer-sponsored support for retirement. In addition, the Hewitt data may overstate savings further as it captures only large employer plans which tend to offer higher benefits than smaller employers.)

For workers who are likely to come up short in retirement savings, they may say that they intend simply to work longer, yet they do not seem to have a good financial grasp of the implications of doing so. The Society of Actuaries Retirement Risk Surveys ask about the implications of working three years longer and several different kinds of impacts. Other than the need for health care benefits, the understanding of the issues seems very limited. Although there is an increased perspective on working longer, about four in 10 employees end up retiring earlier than planned, often due to job loss, poor health or family members needing care.[2]

The retirement savings gap is even larger for women because they are expected to live longer. The average 2.4 times pay gap at age 65 breaks down as 3.1 times pay for women and 1.8 times pay for men in the study. Other contributing factors to the greater gap for women are women tend to receive lower pay, spend fewer years in the labor force, save a lower percentage of pay, and invest more conservatively.

Social Security benefits provide the floor retirement benefit for nearly all Americans. Hewitt estimated that these benefits are worth 4.7 times pay at age 65 for the average participant in the Real Deal study.

Social Security is the only form of retirement income received by about four in 10 older women, and, for many, makes up more than half of their total retirement resources. Fortunately, Social Security provides an inflation-indexed lifetime income for retirement, and also provides survivor and disability benefits. Notably, the relative projected income replacement of Social Security benefits in the United States is lower than for Europe, with the United States at 38.7 percent replacement of median income, Europe at 48.5 percent.[3] This reality places even more emphasis on the importance of American workers saving effectively in their DC plans.

Among older Americans (ages 55–64) non-financial assets, primarily housing, account for about 70 percent of their wealth (excluding the value of Social Security and DB benefits).[4] Many people have not carefully evaluated the retirement implications of having such a heavy concentration of their wealth locked up in housing. What's more, other research shows that most workers don't plan for retirement until they are within 10 years of the date they wish to retire.

CHANGES IN RETIREMENT FUNDING

Large employers who have ongoing DB plans have long-term annual DB costs of about 3 percent to 6 percent of covered pay, an average maximum available match of 3.5 percent of pay and another 0.5 percent of pay going into other DC plans, so they spend a total 7 percent to 10 percent of pay for retirement benefits.[5] In contrast, employers with only DC benefits have an average maximum available match of 3.7 percent plus 3.0 percent of pay in other DC costs for a total of 6.7 percent of pay for retirement benefits.[6]

One in four workers employed in a company offering only DC retirement benefits is not saving and not accumulating resources for retirement.[7] In spite of the downturn, the participation rate in DC plans remained relatively constant from 2007 through 2009.[8]

Of those employees who have access to a plan with a match, 38 percent are saving above the match threshold, 33 percent are at the maximum match percentage, and 28 percent are below the match threshold.[9]

Minorities have less saved in 401(k) plans, and have bigger gaps as they prepare for retirement. One study showed an average 401(k) account balance for employees earning $30,000 to $59,999 of $35,551 for Caucasians, $22,017 for Hispanics and $21,224 for African Americans.[10] Disparities in retirement security were studied by the 2010 ERISA Advisory Council. The overall disparity on a population basis is larger than this since rates of coverage are lower for minorities since they are more likely to be in jobs without benefits.

The economic environment since the inception of 401(k) plans has likely influenced the plan investment design. 401(k) plans were introduced in 1981 at the beginning of one of the greatest bull markets in capital market history. Given this market environment, it's not surprising that plan sponsors offered many equity investments to their participants. Today, more than 70 percent of the investment options offered in DC plans are equity offerings.[11] Offering such an undiversified line-up of higher volatility investments may subject participants to inappropriate risk for retirement savings.

The combination of pure DC plans and volatile investment markets has put many participants in a difficult situation and placed their retirement income security on a roller coaster ride. For one group of participants at ages 60+, 2008 average returns were -22.6 percent and 2009 returns were 18.1 percent. They recovered part of their losses, but balances were still down.[12]

Most DC benefits are paid out as lump sums, with larger balances typically rolled over to Individual retirement accounts (IRAs). For people with larger account balances, these funds tend to stay invested as long as possible, and then they are later withdrawn in accordance with the tax rules. For people with modest (and often inadequate) savings, it is not uncommon for DC balances to be used as emergency funds, in the event of disability, for instance.

Disability benefits are provided separately from DC plans, but the DC balance may be paid out on termination of employment, which often occurs during long-term disability. The overall retirement system does not do much beyond Social Security to ensure adequate retirement to disabled Americans. Many salaried employees have long-term disability benefits, but they do not protect against using retirement funds too early. There are gaps in overall disability protection for many people.

THE COMBINATION OF PURE DC PLANS AND VOLATILE INVESTMENT MARKETS HAS PUT MANY PARTICIPANTS IN A DIFFICULT SITUATION. …

THE NEW NORMAL

In a new normal environment, investment market returns are anticipated to be lower than what we have experienced in the past while the market volatility and risk of sudden market shocks may be greater. Downside risks considered in the definition of the new normal include market shocks, "flation" and household savings spikes. The shocks include natural disasters, terrorism and political tensions among nations. Flation is defined as central banks overshooting or underreacting, triggering inflation or deflation. While less probable, there is potential for upside in the markets spawning from forces such as emerging markets, innovation and productivity gains, and effective policies in some nations.

The traditional measures and communication of investment returns show ranges of one-, three-, five-, 10- and 20-year returns and make it appear that risk dissipates the longer the investment horizon. For instance, one-year returns on the Dow Jones Industrial Average from 1930 to 2009 range from more than negative 50 percent to plus 60 percent. The range in returns tightens as we consider longer rolling periods. However, this analysis is flawed for DC investors as it fails to take into account the amount of money they may have invested at the time as well as the sequence of returns. Risk does not dissipate over time; rather it increases as the participants have more money at stake and they near retirement—a time at which they no longer have the number of years to work or "human capital" to make up for market losses.

An alternative view is to consider the time frame of investing. As we evaluate historic per-

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formance of the equity markets, we observe many extended periods of time where the markets failed to return anything to investors. Over the past 209 years (1801 to June 2010), 173 years were in spans of at least 15 years before the next real high. DC participants currently are experiencing such a period given markets have not appreciated beyond the level reached in 2000. Those nearing retirement over the past decade unfortunately did not benefit from the market appreciation that fueled investment growth of earlier generations.

What's worse is many investors have been hurt by sudden, unexpected market shocks or "black swans." Most of the asset allocation and retirement income modeling conducted in the market employs lognormal distribution assumptions, i.e., a normal bell curve of observations. Yet when we consider actual market performance using the Dow Jones average from 1916 to 2009 relative to the lognormal expectation, we see a mismatch in extreme days. For example, the lognormal distribution predicted that over a long time frame using the daily change in the Dow Jones Industrial Average (DJIA) 1916–2009 (23,451 trading days) there should be only six days of market change greater than 4.5 percent, but there were actually 388 days with changes in market value greater than 4.5 percent. Further, the distribution predicted virtually no days with market change greater than 7 percent, but there were actually 53 days. This analysis illustrates the danger of relying on normal probability assumptions in modeling retirement income replacement, as well as underscores the importance of protecting participant assets from sudden market shocks.

New normal investing requires models with lower return assumptions, higher volatility and stressing with market shock events. Investment management needs to reach beyond U.S. equity markets to broader asset and risk diversification, including global emerging as well as developed bonds, equities, real estate, commodities, Treasury inflation protected securities (TIPS) and other securities. Further, introducing risk hedging strategies such as buying out of the money equity put options or other indirect hedges is important to cushion retirement assets from market shocks.

RESEARCH HAS REPEATEDLY SHOWN THAT THERE ARE GAPS IN KNOWLEDGE ABOUT RETIREMENT PLANNING.

WHAT PEOPLE KNOW AND DO

Research has repeatedly shown that there are gaps in knowledge about retirement planning. Many people do not plan at all and for those who do, many have too short a time horizon. Some of those who plan do not support their effort by performing calculations of alternative scenarios. The Society of Actuaries 2009 Post-Retirement Risk Survey again highlighted that the major method people say they use for managing risks is to reduce spending, and there is little focus on risk management products. Many things change during retirement, but often people do not focus on that.[13]

THE FUTURE

We need to focus on improvements within DC plans, getting employees to use them more effectively, and some actions that are outside the plans but affect security in retirement. Improving security within the context of the existing policy environment requires a combination of employer and individual action. Further improvements are possible

Replacement Ratios for 40-Year Employee

WITH SAVINGS RATES OF 6 PERCENT TO 9.8 PERCENT PLUS EMPLOYER MATCH OF 3.5 PERCENT

Investment Strategy	Median Replacement Ratio	1% Percentile	99% Percentile
Stable Value Only	36.6%	21.0%	58.4%
TIPs Only Portfolio	36.0%	21.0%	58.2%
Stock/Bond Target Date	58.5%	17.0%	171.2%
Diversified Target Date	57.4%	19.6%	146.7%
Target Date Fund with Tail Hedge Added	60.8%	27.9%	128.6%

Chart info: Based on stochastic modeling for $50,000 employee salary with 1 percent real wage increases over 40 years and average contribution rates by age.

through public policy changes and a more robust market of products to support retirement savings, accumulation and payment.

BEEFING UP BALANCES

There are two elements of this challenge—getting more people to save, and getting larger amounts contributed on behalf of those who do save. Auto-enrollment and auto-increases provide for a path to getting more people into plans and getting those who are not good savers to gradually increase their savings. Among large employers, the participation rate in auto-enrolled plans is 86 percent compared to 65 percent in plans without auto-enrollment.[14] As discussed below, the amount that needs to be saved to give a reasonable chance of adequate retirement funds varies with the investment strategy.

Employers can improve their DC plan outcomes by including auto-increases and expanding their match. Offering a match encourages people to save, and increasing the match both increases the employer's contribution, and often what employees will save. They can also help participants understand what level of savings is needed to have a reasonable expectation of adequate funds for retirement, particularly when they consider the new normal investment environment.

NEW NORMAL FRIENDLY FUNDS

There are five different approaches to managing DC assets over a participant's lifetime to consider: stable value only, TIPS only, and three types of target-date glide paths (e.g., asset allocation that becomes more conservative as the participant ages). The first glide path was made up of stocks and bonds, the second added real assets (TIPS, commodities and real estate investment trusts (REITs)) as diversifiers, and the third added "tail risk hedging" (e.g., equity puts). The chart above shows the results of hypothetical modeling as to how the various investment approaches may turn out in terms of replacement income percentages.

These results, of course, depend on the construction of the model and the assumptions used. They demonstrate that participants may be more likely to reach an income replacement target given a diversified glide path that includes tail-risk hedging strategies. The chart shows the highest median expectation of 60.8 percent using this diversified and risk-managed approach. Notably, the added risk management brings up the lowest expectation to a 27.9 percent replacement rate, which is an improvement relative to a stable value or TIPS only portfolio.

It is important to think about what messages should be given to participants to encourage more saving. Messages can be framed to encourage saving for a good return based on median expected returns, but that would mean falling short half the time. A better way to think of this is to consider the question: "What do you have to do if you want to increase the certitude of having enough retirement income to meet a 50 percent income replacement goal?"

REDUCING LEAKAGE

One of the challenges today is preserving amounts saved for retirement for that purpose. Too much of the amount saved ends up being used before the time of retirement, and as an emergency fund. Some of the ideas to think about as we focus on reducing leakage would be:

- Encouraging the use of loans rather than hardship withdrawals;
- Modifying loan rules to make them portable (transferable between plans) and extending repayment periods;
- Encouraging plan sponsors to allow repayment after termination; and
- Provide education and modeling tools.

This is an area where some policy changes may be desirable.

MOVING BEYOND THE PLAN

Some of the things for individuals, employers and financial services providers to think about in trying to prepare individuals for an adequate retirement include:

- More long-term planning;
- Encourage increased savings via communication and/or auto-escalation programs;
- Improve diversification and risk management in asset allocation defaults;
- Re-examining solutions for the payout period, and providing more options for structured solutions and a portfolio of options;
- Prepare people to work longer, and keeping our skills up-to-date;
- More consistent focus on emergency funds so that 401(k) plan funds do not become emergency funds;
- Enhancing approaches to disability benefits so that when they work next to DC plans they support appropriate lifetime security. The disability benefit ideally should support continued saving for retirement until expected retirement age, but this is very rarely explicitly done when benefits are provided through DC plans; and
- Re-examining whether survivor and death benefits are adequate.

Policymakers may wish to re-examine policy for people without employer-sponsored plans, policy for the distribution period, and loans and safe harbors.

An examination of the current environment shows that many people are saving in DC plans, but for the population as a whole, the results are mixed. There is a lot of work to do, requiring effort on the part of plan sponsors, individuals, service providers and policymakers. Research on behavioral finance leading to new plan management ideas and research on investments leading to new approaches to asset management open the way to achieving better results. By working together, we can encourage plan sponsors to update plans, and we can encourage people to save more, focus on risk more effectively, update their investment options and not use their funds too early. The existing system offers a base on which we can build to enhance the retirement security of today's workforce, who will be tomorrow's retirees. A

AN EXAMINATION OF THE CURRENT ENVIRONMENT SHOWS THAT MANY PEOPLE ARE SAVING IN DC PLANS, BUT FOR THE POPULATION AS A WHOLE, THE RESULTS ARE MIXED.

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ENDNOTES:

1 Hewitt Retirement Income Adequacy at Large Companies: the Real Deal 2010. The 2.1 million employees included were from 84 larger companies. Their average age was 39 and their average pay was $71,200.

2 Employee Benefit Research Institute, Retirement Confidence Study series.

3 PIMCO Research using OECD Pension Models.

4 Society of Actuaries, Segmenting the Middle Market Retirement Risks and Solutions, Phase 1 Report, 2009.

5 Average based on 248 large employers who offer defined benefit plans for newly hired salaried employees and are included in Hewitt's 2010 Spec Book.

6 Average based on 504 large employers who offer only DC plans to newly hired salaried employees and are included in Hewitt's 2010 Spec Book.

7 Hewitt 2010 Universe Benchmark.

8 Hewitt 2010 Universe Benchmark.

9 Hewitt 2010 Universe Benchmark.

10 401(k) Plans in Living Color, Hewitt and Ariel Capital, data is as of Dec. 31, 2007 and based on the companies who contributed their data to this study.

11 PIMCO.

12 Hewitt 2010 Universe Benchmarks.

13 Society of Actuaries Risk and Process of Retirement Surveys.

14 Hewitt 2010 Universe Benchmarks.