



SOCIETY OF ACTUARIES

Article from:

Pension Section News

January 2013 – Issue 82

INVESTMENT CHOICE, AND WHERE THE ACTUARY CHOOSES TO STAND

By Mark O'Reilly



Mark O'Reilly, FIA, ASA, MAAA, is senior advisor, Deloitte Actuarial and Insurance Solutions (Hong Kong) Limited in Hong Kong. He can be reached at moreilly@deloitte.com.

A new employee enrolls in a defined-contribution plan and reviews the investment funds available. There is no lack of choice: bond, stock and balanced funds, large and small cap, income and growth, domestic and international, passive and active; there may be industry sectors and commodities. There are performance histories and probably some measure of risk/return category. In terms of advice, there are general words about long-term savings, but they don't help much with the detailed fund menu. If the employee is rolling over funds, prior choices are probably a big influence. If it's new money going in, the monthly amounts don't seem so large to agonize about just yet. A gut choice is made, and the uncomfortable feeling created by the fund menu eases as the employee clicks "done." That moment's gut choice may well determine many years later how comfortably the employee will survive in retirement.

For professional advisors, investment strategy is the third rail of private retirement plans today. We know how important performance is to the end result, and we know how little the average employee knows about financial markets. We give employees the online tools to buy high and sell low, chasing yesterday's winners in response to powerful advertising and superficial media coverage. Yet we are wary of offering much advice which may well be proved wrong. We constantly repeat that past performance is no guide to future performance, yet all our advice refers to past performance because we have no other way of justifying our equity and other investment guidelines. We may mention percentages of different asset types in a retirement portfolio and even relate them to the employee's age, but no convincing justification is given. Similarly vague words are offered about diversification, rebalancing and "buy and hold"—this last one having been ridiculed widely in the media during the 2008/9 collapse.

I am fully aware of the pitfalls actuaries face should they offer more specific advice. Not only is there a danger of being proven wrong or even appearing wrong, but there are potential conflicts with the marketing of our own industry's services and products. Given the flood of market advice available, would our advice as actuaries be heeded anyway? And how sure are we that we are right? Even academics have fundamental disagreements about the underlying workings of markets. Should we actuaries express our opinions for the good of the small investor, at the risk of our free advice being drowned out? Do we even share a common, coherent message?

As a profession we are already discussing some sensible, positive steps related to investment choices. An example is the "nudge" approach born of behavioral economics. Through nudging, more sensible investment options are made a default rather than an active choice. Assuming we can decide on the most sensible approach, we actuaries can approve of appropriate nudging, but few people would recognize us as experts in such design. For the media to listen to us and create a wider audience for our advice, the advice needs to involve concepts of measurable risk and its mitigation. Risk measurement is also a key to the level of interest we can generate. If we can show areas where retirement investors over-estimate or under-estimate risk, this can be perceived as news. For our advice to be useful, it needs to gain attention, and interesting news is the best path.

The great majority of today's investment material focuses on achieving the highest return. It is not so difficult to show with recent market history why such a goal is seriously flawed. Before this century, superficial cases could be made for an aggressive equity strategy. From the birth of the 401(k) plan until 2001, all the experience of participants had pointed that way. Recent market recovery

notwithstanding, there is now rich material to show that pitfalls exist for every distinct strategy aiming for the highest return. In my view, a convincing argument can be made that the extra earnings attempted are fully balanced by an equally large risk of loss. When effectively illustrated, the general risk-aversion of most small investors should be sufficient to have them consider alternative strategies, which is what I hope we can offer them.

I believe it makes little sense to design strategies without a good understanding of the investor's personal preferences. I don't believe individual counseling is needed (and is cost-prohibitive to the vast majority if truly independent) because most people's preferences can be grouped into broad but distinct categories. The first step on our journey to better investment advice is to understand the range of potential preferences, and their relative popularity. Useful existing data is available, but I think it would be more newsworthy if we make the effort to gather some of our own. Results are often highly sensitive to the phrasing of a question, and ours would be quite specific. Here are some examples (suitably abbreviated) which would have carefully crafted, multiple-choice answers:

- How frequently do you check the markets, and/or their impact on your investments' value?
- What is your response to your portfolio losing a year's salary in half that time?
- What is your response to your portfolio gaining a year's salary in half that time?
- What is the likelihood you would move to a lower-cost region after you retire?
- What is the likelihood you would sell your home and get a much smaller one after you retire?

- What will keep you busy in retirement, and how much money will it cost/make/risk?
- If you are reasonably comfortable in retirement, how much would it concern you if your investments had substantially underperformed those of your peers?
- Would you be willing to stay with a long-term investment strategy if it performed consistently poorly over a three-year period? A seven-year period?

These examples illustrate the two broad types of preference to explore. The first relates to financial needs in retirement, and requires a strategy to improve the chances of meeting those needs. The second relates to risk tolerance, and importantly includes the investor's willingness to maintain a risk strategy even when it appears to be delivering poor results. There is little purpose in suggesting a given risk strategy, no matter how appropriate, if interim performance loses the investor's confidence.

These two types of preference—needs and risk tolerance—are also interdependent, and explaining their relationship is an important aspect of investment advice. For instance, we do not know exactly how much money we will need in retirement, but instead develop ranges from “basically adequate” to “more than adequate but useful anyway.” Beyond this range is what we might call “surplus”—investment savings which, no matter how nice to own, we are unlikely to need. Our view of Investment risks will therefore depend upon how likely we are to meet our needs. A potential \$10,000 gain into the surplus area should not be seen as balancing a potential \$10,000 loss in the target range, which in turn is not as bad as an equal loss below the target range.

There is another link between financial need and risk tolerance which is subtler and there-

fore less well understood, but which I believe is of even greater importance and an area custom-made for actuaries. It is the link between our ability to achieve a certain standard of living in the distant future, and the inflation-related returns available on equities, commodities, and other securities. The case for commodities and inflation-linked bonds is clearer, though I would guess that very few investors use commodities as part of a “financial need” strategy rather than a “highest return” strategy. Let’s consider the less obvious case of the general equity market.

When markets plummet, as they did in late 2008 and early 2009, many investors fear further losses and start selling. They then face the dilemma of when to buy again when the market recovers. Unless they sold early—and there was little reason for doing so, given that markets frequently correct – they will lose a good part of the later upswing. It can be argued that the loss represents an insurance premium paid to avoid even steeper losses. Did it make sense to pay that premium?

When a market falls sharply, there are broadly three potential outcomes. First, it can bounce back relatively quickly and resume its course as if nothing had happened, as most markets did in 1987. Second, it can stay down for an extended period; gradually regain its old ground. For example, the 1929-32 decline was not fully put behind investors until the 1950s; the Dow Industrials touched 1000 in 1966, but did not stay permanently above that level until 1982. Third, some markets can fail to return to their original levels even over many years, e.g. the Japanese stockmarket and the NASDAQ.

Each scenario remains a plausible one for any country’s stockmarket. How should investors view such a prospect, and what should be their response at the various stages the market would go through?

I believe there are three cornerstones to explaining an appropriate strategy, each of which can have practical rules based on economic analysis. First, define within a fairly narrow range how much of our retirement savings should be subject to the equity market. Under a financial-needs strategy, the portion is likely to be lower than we are typically advised today, because of a general “no sell” discipline. Second, define what can be classified as a dangerous, speculative bubble, triggering rare, defensive steps. Third, explain the relationship between the performance of the equity market and the cost of living. A proper explanation of the third cornerstone permits us to provide more precise measurement for the other two.

In retrospect, most people can accept that the Japanese market in the late 1980s, and the NASDAQ in the late 1990s, were dangerously inflated. Long-term, negative equity-risk premiums required long-term future growth at levels unknown in history – possible, but hardly likely. By contrast, it can be argued that most major economies’ broad stockmarket indices, once stripped of “fad stocks” (e.g., 1990s technology and 1840s railways) may have been frothy at times but never in such bubble territory. Their occasional, extended collapses were triggered by one of two types of fear: runaway inflation (1970s) and chronic deflation (1929-32 and 2008-09.) It is vital to understand these reasons because of their impact upon the cost of living in retirement.

First, deflation. By collapsing, the market is expressing its fear of extended weakness in pricing power for businesses, as spending and credit enter a downward spiral. Let’s assume our investor is holding 50% equities and 50% cash. The equity holding is cut in half by the market collapse and the portfolio is down 25%. If deflation does not occur, it’s because pricing power has returned and the market recovers. If long-term deflation does

result, and the market stays down, it is now a highly relevant question to ask if the investor's spending needs in retirement have reduced by 25%, in line with the portfolio value.

I hope it is becoming clearer what role actuaries can play in developing an answer. We can help determine both the most appropriate percentage of equities and also the most suitable types of equity. No one can know the long-term direction of the market at any time, and Japan demonstrates that past, long-term success can be followed by more than a generation of economic loss. But I believe there are meaningful correlations to be found between market responses to bad news, and the relationship of that bad news to consumer price forecasts. Most importantly, we are telling long-term investors why not to constantly fear falling markets. There is good reason to believe that a suitable, global-equity portfolio, if balanced with an equal amount of cash or near-cash, will never be subject to long-term, wealth-destroying forces in *real terms*.

Commodities are a key link between future consumer prices and equity markets. They are the building blocks of our basic costs of living. Changes in commodity prices affect commodity-producing and commodity-consuming businesses, and the resulting pattern of their market prices can be explored. The beauty of commodity prices is that they work for inflation as well as deflation. A heavily energy-weighted portfolio would have relieved an investor of much of the pain of the 1970s bear market. The implications of this observation runs counter to much standard investment literature today: because of their volatility, commodity investments are typically viewed as being the "speculative end" of equities. But, *in appropriate proportions*, history shows how they have acted as a valuable inflation hedge. The educational task is to explain how, even

when certain investments decline in nominal terms temporarily, their hedge in real terms remains intact.

Pure cost-of-living maintenance is not the whole story. Depending upon our survey results, I suspect we will find that most people attach a premium to maintaining their living standards *relative* to their peers. If others are better off and we are not, we feel we have fallen behind. Such a preference can justify equity investment in technology, healthcare and entertainment—again, in the appropriate proportions. Investment products can be scientifically designed to reflect these proportions, so our advice as actuaries can be supported by a commercially viable section of the fund-management industry.

An important clue to the adequacy of our investment performance is the value of the currency in which we measure our assets. Between 2002 and 2012, rising U.S. equity indices were broadly accompanied by a falling US dollar, yet media coverage largely ignored this "global devaluation" of dollar-denominated assets. In May 2013 we heard about U.S. market indices' "new records," but exchange rates, dividend yields and inflation make five-year comparisons meaningless. I would also argue that the level of the market needs to be viewed in the context of the equity risk premium. New indices are sorely needed, and which gain similar following to the Case-Shiller housing index.

Fifty years ago, the United States could be viewed as a relatively self-contained economy. Now the U.S. dollar is more a market mechanism by which globally-set prices determine much of our living costs, even if we never go abroad. Some basket of currencies, ultimately feeding price levels through exports and imports, will signal the future spending power of our savings. It may be impossible to define the precise basket, but any reasonable attempt will give a better

measure than the U.S. dollar alone. Fortunately, we now have good mechanisms for investing in other economies at low cost. Unfortunately, all too often the rationale offered is to chase higher returns, rather than to hedge rising import prices and a weakening currency. Careful weighting of global portfolios can reduce future spending-power risk, yet the current “dollar” approach to returns characterizes foreign funds as “high risk.”

The small investor is confused by this century’s experience, and needs to understand better what markets are guessing about the future. Actuaries can, and should, provide better guidance and supporting illustrations. I believe we can be uniquely trusted to provide good-faith advice. The challenge is to make it both attractive and convincing. ■

WHAT'S WRONG WITH DC PLANS?

By Beverly J. Orth

As defined benefit (DB) plans fade from the picture, virtually around the globe, the vast majority of future retirees will depend primarily on defined contribution (DC) plan assets to supplement their first pillar benefits (Social Security in the United States). If designed and used properly, DC plans can provide adequate retirement savings. Unfortunately, legislative restrictions and design flaws doom many DC plans to failure. Only the most sophisticated—and luckiest—DC plan participants can be assured of having sufficient assets to last a lifetime. I won't attempt to describe all the potential problems and barriers that DC plan participants face. Instead, I will focus on some of the low-hanging fruit: barriers that can be eliminated by legislative action or by simple changes that plan sponsors can make under existing rules.

SOLUTION ONE: ELIMINATE "VOLUNTARY"

The foremost problem, at least in the United States, is that retirement plans in the workplace are entirely voluntary. Employers are not required to offer anything more than Social Security, and about half don't offer anything. Even when offered a plan that requires voluntary employee contributions in order to receive an employer-paid benefit, a high percentage of employees fail to contribute, due to inadequate wages or an inadequate understanding of the implications of not participating.

The cure is simple, but requires Congress to back away from its *laissez-faire* approach to workplace benefits. The passage of the Patient Protection and Affordability Act of 2010, which will require large employers to "pay or play" with regard to health benefits, is a chink in the wall. To extend the concept to retirement benefits, two changes are necessary. First, all employers should be required to offer a minimum level of employer-paid benefit, either DB or DC or a combination. Second, employee participation should no longer be voluntary. Automatic

enrollment is a step in the right direction, but allowing employees to opt out means many employees fail to accumulate enough assets for a successful retirement. The ones who opt out tend to be in the youngest groups, at the precise time when contributions should be maximized to take advantage of time and the power of compounding investment returns.

SOLUTION TWO: ELIMINATE "CATCH-UPS"

Congress thought they were doing workers a favor by legislating catch-up contributions for DC and IRA participants. The problem with catch-ups is that they occur too late to do much good. As I observed earlier, the most valuable, most impactful contributions are those that happen early in a working career, when a participant has time on her side. By the time she has fifteen years of service with one employer (for 403(b) plans) or is age 50 (for 401(k) or governmental 457 plans or IRAs) or is within three years of retirement age (for 457 plans), she is dangerously close to retirement. There is little time left to generate investment gains. Furthermore, if her timing is bad, she could see those extra contributions lost to market downturns in those few years just prior to her anticipated retirement date. The idea of "catching up" just before retirement also might falsely reassure younger participants that they can save little or nothing now because they can "make it up later." This type of planning is worse than no planning. It is a fallacy to suggest to a young worker that timing does not matter. An essential rule for successful retirement saving is to start as early as possible.

Instead of allowing larger contributions by near retirees, Congress should consider offering government matching funds for contributions made by participants under age 35, both to boost early contributions and to provide incentives for young workers to contribute more than the mandatory minimum I advocate in Solution One.



Beverly J. Orth, JD, FSA, is principal at Mercer in Portland, Ore. She can be reached at beverly.orth@mercer.com.

SOLUTION THREE: ELIMINATE “LEAKAGE”

Plan sponsors are well aware of the many forms of retirement savings leakage that occur, especially from DC plans. Participants fail to roll over their plan assets when they change jobs, they take hardship withdrawals in order to buy a house or to pay college expenses, or they take a plan loan and fail to repay it completely. Availability of loans and hardship withdrawals gives participants comfort that they have access to their funds and these plan features are shown to increase voluntary participation rates. But we won't need such enticements if Congress makes participation mandatory. Even if participation remains voluntary, hardship withdrawals should be severely restricted. Houses and college are expenses that can be planned for. For low-income households, there are many housing and college assistance programs available. There is no logical justification for using retirement savings for these unrelated purposes.

Many plan sponsors complain that their plan loan programs have turned into short-term savings accounts for many participants. As soon as the participant's account balance reaches \$1,000 (a common minimum loan amount in many plans), the participant takes out another loan. The solutions are simple: either impose a much higher minimum, require a longer period between loan payoff and a new loan, or eliminate all future loans from the plan. If plan sponsors are afraid of antagonizing their participants, they can lobby Congress to impose new restrictions. Plan sponsors can then claim that the new limits are outside of their control.

Leakage upon termination of employment is easy to prevent. Again, it takes only some political will by Congress to make rollovers mandatory for all distributions larger than \$5,000 (or an even smaller amount) for employees under age 55. At age 55 or older, distributions should be limited to an annu-

ity or periodic distributions absent a severe financial hardship such as medical or long term care needs.

The Internal Revenue Service should put an end to IRA owners investing their IRA assets in the owner's own start-up business. Why this strategy isn't considered a violation of the prohibited transaction rules for IRAs is beyond my comprehension. If there is a loophole that makes this strategy legal, it should be closed. Using IRA assets to start a business is clever but not conducive to preserving retirement assets for retirement purposes.

SOLUTION FOUR: SIMPLIFY NONDISCRIMINATION TESTING

Plan sponsors currently spend huge amounts of time and money to demonstrate that their retirement plans do not discriminate in favor of highly compensated employees (HCEs). The purpose of the nondiscrimination rules is laudable, but the lengths that employers go to in order to give more benefits to HCEs without crossing the line is often laughable. As a consultant, I find the rules interesting and challenging to apply, but I think the time and money could be better spent on providing benefits. The dilemma is that our current U.S. retirement system is centered on the workplace rather than on the worker. Providing broad-based benefits in exchange for tax benefits seems sensible and fair, but many employees work for employers that are not subject to the nondiscrimination rules, making the current rules difficult to justify.

A logical first step would be to simplify the nondiscrimination requirements. For example, we could eliminate the convoluted ADP (actual deferral percentage) test for employee voluntary deferrals by adding a percentage of pay limit to Section 402(g), such as the lesser of \$17,500 or 15 percent of pay up to \$150,000. Many plans already cap HCEs' contributions to a percentage of pay or a lower dollar amount in order to avoid having to make refunds due to an ADP test failure.

An even simpler alternative would be to apply the Section 403(b) approach to 401(k) plans. Require that virtually all employees have the opportunity to make voluntary deferrals and eliminate the testing requirement entirely.

The opinions expressed herein are solely the author's and do not reflect the position of the author's employer or any other organization. ■

SOLUTION FIVE: ELIMINATE "DO-IT-YOURSELF" INVESTING

Yes, it sounds empowering to give employees the right to direct their own investments in DC plans. But the reality is that most employees aren't up to the task and don't appreciate the freedom to make a mistake with their largest financial asset, their DC plan account. Let's put the ERISA 404(c) genie back in the bottle and ask plan sponsors to take back fiduciary responsibility for DC plan investments. Study after study has shown that participant-directed investment returns lag both the returns of the broad market (e.g., S&P 500) and the average returns of DB plans. The experiment has been a failure. Let's stop gambling with the retirement savings of even more generations of workers.

CONCLUSIONS

There are more problems with DC plans that I could address, and I've addressed some of them in other papers. (See, for example, my July 2006 *NAAJ* paper on mandatory annuitization, or my December 1998 paper on revising the minimum required distribution rules.) My goal is not to convince you that my suggestions are the best way to proceed. Rather, my goal is to start a discussion.

Incremental changes around "automating" participant behavior have helped, but they are too timid in their approach. If we could start over in legislating and designing retirement plans for the 21st century, we would likely end up with something quite different from our current system, which is high in flexibility but also laden with complexity and low in achieving retirement security. I believe that if we try, we can do better.