

An Actuary's View of The Future of Life Cycle Saving and Investing: A Report and Some Discussion on Key Issues

This is a time of major change to the American retirement landscape. Are we ready to meet the challenges? BY ANNA RAPPAPORT



I recently attended a very interesting conference, The Future of Life Cycle Saving & Investing, sponsored jointly by the Federal Reserve Bank of Boston, Boston University, and the CFA Institute. The conference was attended by a diverse group: several important academics, economists and experts on finance, members of the Federal Reserve bank, actuaries, policymakers and regulators, attorneys, representatives of the financial services industry, CFAs and people in advisory roles.

The topics included discussion of the Life-Cycle Model, findings from behavioral finance, a discussion of managing risks post-retirement, a discussion of the role of government, some discussion on software and some perspectives on the future. The full program, papers and presentations can be found on the conference Web site, <http://smg.bu.edu/exec/elc/lifecycle/>. I recommend the papers to you.

I found a lot of overlap between the topics covered there with recent research within the actuarial profession, and with the topics discussed at Retirement 20/20, a major project of the SOA. This article will link some of the content to topics of interest to actuaries and to some of the work that actuaries have been doing and raise questions and perspective. For a summary of the content, look at the summary provided by Zvi Bodie, a professor of economics and finance, and conference organizer. That summary can be found on the Web site referenced above.

Challenges to Traditional Ideas

Challenges to traditional investment ideas were central to the discussion. Bodie has collected numerous examples of ideas that he views as false, that are in the public domain and presented as correct information on the Web sites of large and highly regarded institutions. Bodie identifies three notions he suggests purging from the popular literature along with three replacement ideas from the discipline of financial economics that are, in contrast, worthy of wide promotion:

Popular Literature	Financial Economics
Saving is for the short run. Investing is for the long run.	Saving means income minus consumption; investing means selecting your portfolio of assets.
The only way to reduce risk is to diversify.	The simplest ways to reduce risk are to hedge, insure or hold safe assets. A safe way to achieve a future consumption target is with CPI-linked bonds.
Stocks become safe in the long run due to "time diversification."	Stocks do not become safe even in the long run. If they did, they would not have a risk premium.

He raises an important issue with regard to equity investment and causes us to ask the question, "When is it appropriate for individuals to invest in stocks?" I find it very interesting that well-schooled financial people including economists, actuaries and others have very different views about the appropriateness of stock investment in different circumstances. Divergent views exist within each of these





professions. I also think that some of the discussion about stock investment, while appropriately focusing on the risk, fails to recognize that stock investment is a form of ownership and gives people a chance to participate in the growth of the economy. I am not prepared to take a position on the question of who is right and who is wrong in these many discussions.

Perspectives on Consumption Targets

The key paper, “The Theory of Optimal Life Cycle Saving and Investing,” by Zvi Bodie, Jonathan Treussard and Paul Willen sets the stage for the dialogue. The authors review the theory and point out that there are gaps between theory and practice. In her discussion, Deborah Lucas from Northwestern University raised practical issues about the use of this model. She cautioned us to realize that people have many different life paths and that an exclusive focus on phases of the life cycle tends to oversimplify for many people. She also focused on the importance of contingent events, and emphasized the importance of decisions such as marriage, divorce and family size and the fact that uncertainty surrounding them limits the ability to make forecasts with precision.

Another paper by Laurence Kotlikoff introduced practical models and focused us on consumption smoothing. Life cycle saving and investing are linked to consumption smoothing or some other method of reallocating consumption over the life cycle. A common way of focusing on income needed after retirement is through the use of replacement ratios. Actuaries have commonly used replacement ratios in thinking about pension plan design and measuring benefit adequacy. Some of the models of life cycle financial planning presented focused on lifetime consumption smoothing (inflation adjusted so that consumption is smoothed on a real basis). While this is appropriate for some people, many others will have different ideas. It is hoped that actuaries can have some dialogue on this issue, focusing on different approaches to determining what is needed and wanted in retirement, how they differ and how they are the same. I see actuaries as being able to add to the discussion in several key areas:

- Identification of risks together with information about what risks can be transferred effectively in the current marketplace and how this happens.
- Very good participants in a discussion about how the marketplace may evolve.
- Practical knowledge of how retirement systems work and regulations interact with each other. Many actuaries have hands-on experience working within the system. The combination of hands-on experience and theoretical knowledge is very valuable as we think about these issues.

My opinion about life cycle consumption as we think about retirement needs and wants is as follows:

A way to link traditional replacement ratios and consumption targets is to make an implicit assumption that income is consumed except for the amount saved and paid in taxes, and what does not need to be replaced is savings, Social Security payroll taxes and/or work related expenses.

For example, an individual who was saving about 10 percent of income prior to retirement and consuming all the rest of current income, and who no longer does paid work and therefore no longer pays Social Security payroll taxes can probably continue his or her standard of living with about 70 percent to 80 percent of pre-retirement income plus the increased cost of medical premiums. This links traditional replacement ratios with consumption targets.

That amount would be adjusted in some common situations. For example, a family saving more than 10 percent would need a lower amount relative to pre-retirement income. When a family pays off its mortgage at time of retirement, the income needed to maintain consumption post-retirement is reduced by the reduction in current housing cost. Similarly, a family that had heavy college expenses in the years before retirement will not need to count that money in consumption that will continue into retirement.

During retirement, consumption may be higher early on as people pursue their retirement dreams, such as travel for example.

Consumption levels may also change. Some people may want to stay in the same house and geographic area, whereas others want to move, perhaps to lower-cost housing to enable earlier retirement. Others may want to spend more on housing and become snowbirds or have multiple-type dwellings for different uses. People who have larger homes are ultimately likely to downsize, even if they do not have to for economic reasons. The problem of caring for larger homes can be substantial later in life.

Medical costs and the need for care are likely to increase in retirement. When an individual not eligible for Medicare exits an employer paid health plan, costs for insurance are likely to increase greatly.

Consumption varies over working adult life, and the new retiree probably will want to continue or modify spending based on consumption just before retirement.

We can think about income as representing a bare minimum, plus added amounts to do things that we want to do. We might think about the need for guaranteed income as linked to the bare minimum.

In my view, neither consumption smoothing or traditional replacement ratios properly address the issue of changing needs during retirement, by focusing on the one-time transition from pre-retirement to retirement. The premise of consumption smoothing is a good start, however, by recognizing at least the reality of fluctuations due to the occurrence of different events over time.

Part of the discussion about consumption smoothing over the life cycle included the idea of borrowing early in life. If borrowing goes beyond student loans and a home mortgage, I do not think it is a good idea. We do not really know what our ultimate income will be.

I also find that inadequate focus on risk management is a failure of both consumption smoothing and traditional replacement ratio analysis.

The Role of Defined Benefit Plans

Most of the conference was focused on challenges with regard to providing retirement security and income in personal savings accounts and defined contribution plans. These systems do not usually provide lifetime income and offer significant challenges with regard to lifetime security. These challenges do not exist in traditional defined benefit plans, which are a natural way to provide income. While most of the discussion in “The Future of Life-Cycle Saving & Investing” relates to individual saving and defined contribution plans, we need to remember that defined benefit plans work very well in the appropriate setting.





These plans are facing many challenges today. A key question is whether it is worth trying to meet those challenges and continue to use defined benefit plans. Public sector employers are generally continuing defined benefit plans, although state legislatures are increasingly challenging them and some plans have moved to defined contribution. The number of private sector employers offering these plans is shrinking markedly. The paper by Alicia Munnell provides trend data on the overall use of various plan types in the private sector. The discussion by Deborah Lucas focuses on the importance of DB plans.

I believe that DB plans are a direct and easy way to provide lifetime income, and that they remain valuable. There are many threats to these plans and the existing designs are not attractive to plan sponsors in the U.S. accounting and regulatory environment. There are different views of how to move forward. Some people are seeking ways to strengthen and preserve these plans; some are seeking new plan models; and others have essentially given up on defined benefit plans as a part of the future retirement income delivery system. I strongly encourage not giving up on defined benefit plans, but rather seeking out models that can work in the evolving environment.

Risks and Risk Management

The primary focus of the conference was on life cycle saving and investing, with a lot of focus on consumption smoothing. At the same time, speakers recognized that risk management and particularly lifetime income are part of the picture. My paper focused on post-retirement risks and risk management issues. Mark Warshawsky focused on long-term care risk, and how packaging long-term care with a life annuity may be a good way to manage both risks. Jerry Golden talked about income annuities and how their price might vary depending on the risk management decisions the buyer made. He showed the difference in cost for a single life annuity versus a joint and survivor annuity, and then showed the effect of lifecare provisions, indexing and inflation and some other features. I believe that one of the primary weaknesses of much

personal financial planning is an inadequate focus on risk and how to manage it.

The Role and Importance of the Employer

The conference discussed the employer's role and the importance of the employer several times, although there was no panel specifically focused on that topic. I feel that there was inadequate focus on the importance of the employer. It was clear from the discussion that individuals are not managing well enough on their own, and that some combination of government programs, employer programs and mandates are essential for financial security. There was no way to conclude from the discussion what the preferred mix was by the group in total. However, from the panel on the role of government, it was clear that some presenters preferred mandates to plans voluntarily established by employers.

Traditionally employers offer income through defined benefit plans, and while they offer a reliable source of life income, most private sector plans in the United States do not include inflation indexing, leaving a gap in income protection. However, most defined contribution plans offer lump sums and not life income and as these plans are growing, it is important to consider issues surrounding life income in defined contribution plans. These plans have evolved, are more often the primary retirement vehicle and in the last few years there has been a growing focus on results produced by these plans. For instance, default options are now recognized as critically important, since many employees stay with them and do not make an active choice. The paper presented by David Laibson made clear just how important default options are and how much they influence the results produced by plans. Common defaults today include auto-enrollment, auto-increases and investment defaults using balanced and life cycle funds. It is uncommon to find benefit distribution defaults in DC other than a lump sum. This is an area for further development and default options for payment of benefits were discussed in several different panels.





The distribution of benefits and making funds last during retirement are important issues in achieving success and meeting life savings plan goals and employer plan goals. Satisfactory results post-retirement will depend on having good methods for providing advice and life income to employees and retirees in an efficient and unbiased manner. Employers could play a key role in selecting the providers that would offer group products for risk protection through the employer.

Plan sponsors are reluctant to offer annuity options directly because few people choose them and in addition, regulatory issues such as joint and survivor annuity and spousal consent requirements, the implications of the Norris decision, “safest annuity rule issues,” and/or fiduciary responsibilities, etc., create more work and uncertainty. It should be noted that the regulatory climate tends to offer incentives to employers not to offer income. The employer who offers only a lump sum option does not need to get spousal consent for plan distributions. In contrast, the employer who offers an annuity option must offer a joint and survivor annuity and must get spousal consent in order for someone to elect out of the option. One of the other complexities is linked to the Norris decision: while annuities are usually priced using different rates for males and females, employers are prohibited from using sex-based rates or features inside of defined contribution pension plans. A third complexity is the minimum distribution rules. The most desirable form of annuity option would be one that allows purchase in several chunks over time, but the minimum distribution rules fight against this. The safest annuity rule also opens the employer up to fiduciary liability.

Instead of offering income directly through the defined contribution pension plan, companies such as IBM are beginning to offer annuity options outside of the plan, but with institutional pricing through a third-party IRA rollover program. Under one third-party program now being used by some large companies, the annuity is shopped using an automated process to get a good price; it can be purchased at retirement or later, and in steps over time. A

group of employers is also working on an annuity purchasing coalition using institutional pricing of the product. Note that the Pension Protection Act opens the way to an easing of the safest annuity rule issues. Working through the employer is one way to deal effectively with the distribution system issues. It will, however, have a chance only if the regulatory issues are dealt with to make it easier.

Regulatory Issues and the Role of Government

Alicia Munnell presented a paper on the role of government in life cycle saving and investing. That paper focused on longer term options for the role of government. The author recognizes that there are limitations on the effectiveness of individual efforts and she recommends mandated saving as a second layer on top of Social Security. Such a mandate is similar to the MUPS, recommended by the President’s Commission on Pension Policy in the Carter administration or to add-on private accounts in Social Security. There was also a discussion from the Netherlands. That discussion advocated mandatory personal accounts invested in a type of multi-employer arrangement. The use of a “non-profit” insurance company is advocated, and it is proposed that the government issue longevity bonds to assume the mortality risk.

These structures offer alternatives for reconfiguring the retirement income system. Within the present system, there are regulatory issues that create roadblocks to payment of retirement funds as income. These regulations are important in understanding the functioning of the current system, and modifying them offers a path to improving income delivery aspects of the system. In addition to the issues mentioned above, the intersection of regulations affecting the insurer and plan sponsor must also be considered. When the regulatory issues facing all of the stakeholders in the retirement system are merged, the total impact of the regulations is overwhelming. Two of the most serious issues are the conflicts with regard to uni-sex rates and issues surrounding minimum distribution rules. Employer plans are not permitted to use sex-based rates, whereas virtually all annuity contracts are priced using sex-based rates. The

minimum distribution rules require that qualified plan funds be distributed beginning after age 70-and-a-half. Their structure creates complexity for purchasing annuities over time on a staggered basis and for combination products that put annuity and long-term care into the same insurance product. Both annuities and long-term care are heavily regulated, but by different rules, and the regulations make it hard to combine them. Provisions of the Pension Protection Act open the way to combination products in the future.

There are also regulatory complexities in products sold to individuals. Some of these products require compliance with both securities and insurance law.

Conclusion

This is a time of major change and challenge to the American retirement landscape. This conference set forth many interesting ideas and perspectives. The way of thinking about the ideas is quite different from much of what we have traditionally done. It helped me to think more about benefit adequacy and replacement ratios and the retirement system, ideas that I have lived with for many years. My concerns about the discussion were as follows:

Lifetime consumption smoothing is unrealistic. However, when taken together with replacement ratios, a focus on consumption adds to our understanding of retirement needs.

Risk management needs to be much more prominent in our thinking about this topic.

The employer is a very important part of the retirement system and we need to encourage and value employer sponsorship of plans.

Regulation is often a roadblock to doing some things that are desirable.

I plan to bring these ideas back to the Committee on Post-Retirement Needs and Risks. One of the issues that needs work, which the committee identified over the last few years, is retirement needs and more understanding of spending. We have a paper-call out on that topic. It is hoped that this article will also encourage you to think about these issues, read the papers and add to the dialogue. ■

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