Measuring Success to Improve Long-term Economic Security when DC Plans are Primary

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Introduction and current situation

Individuals are subject to a wide range of risks in retirement. The U.S. retirement system has experienced a major shift away from primary DB plans to primary DC plans. The risks facing individuals do not change with the type of plan, but the extent to which they are handled in the plan changes drastically, with much more risk shifted to the individual with the DC plan. Within a DC environment, successful retirement for the population depends on success within DC plans and it also depends on management of the shocks outside of the plan. Success in the plan depends on adequate contributions, success in investing, and not using money too early. Overall success must also consider several potential shocks: pre-retirement disability, job loss, health problems, premature death or loss of a spouse, and adverse family issues. I believe that there is no general agreement on what constitutes success overall in retirement security in a DC environment and how it should be measured. A focus on these issues and the supporting research is an important opportunity for the actuarial profession.

The system today consists of a combination of social benefits and employer-provided benefits. Social benefits are vital for the population as a base layer. The employer-based second tier system today works very well for some people and not at all well for others. This essay focuses on elements of success in a system linked to employment. Employment-based systems can be mandated or voluntary, and if voluntary, voluntary at the level of the employer and/or at the level of the employee. The focus of the essay is success in specific voluntary employer sponsored DC systems, with a major focus on the employer and the individual. I believe that success within a voluntary market DC-based system depends on four elements: mindset, measurement tools, in-plan program structure and management, and out-of-plan life and risk management to complement the plan. In this essay, I discuss mindset and measurement, ideas for supporting research, and the role of the actuary. To set the stage, I highlight decisions on the path to security. As part of the potential outcome from research, I present elements of a checklist. While this essay is primarily about mindset and measurement and the related role of the actuary, the decisions on the path to security and checklist elements provide brief insight into some of the important in- and out-of-plan issues. Program structure is beyond the scope of the essay.

Decisions on the path to security

In a DC environment, there are a number of decisions that must be made to ensure security. The structure of the benefit package will determine to what extent employees must make decisions, and to what extent the program will make the decisions for them.
# Early and Mid-career Decisions

<table>
<thead>
<tr>
<th>Decision</th>
<th>Employer Role</th>
<th>Employee Role and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in the plan</td>
<td>Decide whether to offer auto-enrollment and if so for how much; establish process and communications to encourage participation</td>
<td>Depends on enrollment. Much more likely to participate if auto-enrolled The earlier savings starts the better</td>
</tr>
<tr>
<td>How much to save</td>
<td>May be built into auto-enrollment; match gives incentive with regard to how much to save</td>
<td>Employee needs way to understand how much must be saved to produce adequate income at retirement. Motivation is essential. The amount needed is linked to retirement age.</td>
</tr>
<tr>
<td>How to invest</td>
<td>Designing investment options and defaults; providing education; providing feedback to participants</td>
<td>Depends on plan structure Make decisions and monitor results (including appropriate changes)</td>
</tr>
<tr>
<td>Don’t spend money too early</td>
<td>Plan structuring and education</td>
<td>Depends on managing finances so that there will not be a need to withdraw funds</td>
</tr>
<tr>
<td>Disability coverage (likely out of plan)</td>
<td>Offer disability coverage – to all or voluntary program; possibly include added coverage to cover retirement savings; educate employees about the importance of this issue</td>
<td>Participate in employer LTD if available; if not or if not adequate, consider buying individual LTD (some individual policies offer riders to protect retirement savings)</td>
</tr>
<tr>
<td>Emergency funds to weather challenges (usually entirely separate from plan except to extent plan includes loan and hardship provisions)</td>
<td>Education and encouragement; loan and hardship provisions can make plan funds available for some emergencies</td>
<td>It is purely up to employee to do this; failure to do this makes plan vulnerable to being used as an emergency fund</td>
</tr>
</tbody>
</table>
Near and at Time of Retirement

<table>
<thead>
<tr>
<th>Decision</th>
<th>Employer Role</th>
<th>Employee Role and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to use funds during retirement</td>
<td>Decide whether to offer employees option to leave funds in plan, what payout options including access to annuities, education</td>
<td>Employee makes decisions and selects options. Competitive pricing is very important. Decisions should be coordinated with Social Security planning.</td>
</tr>
<tr>
<td></td>
<td>Employer can create culture encouraging focus on paycheck replacement</td>
<td></td>
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</tbody>
</table>

## Mindset

Where retirement benefits are provided through DC plans, decisions are needed throughout the individual’s working life, at retirement, and after retirement for long-term success. Fundamental to such long-term success is a mindset focused on long-term security. Mindset issues affect both the plan sponsor and the individual. This list applies to the plan sponsor, but some of the issues apply to the individual as well.

- Recognizing the importance of longer-term planning and goal setting
- Focusing on the importance of benefit adequacy and what it means
- Creating a culture of measurement of progress along the way
- Fostering holistic thinking about long-term security — do we focus on the plan or the bigger picture?
- Incorporating risk management thinking into decision making
- Focusing on paycheck replacement in retirement as a goal of the program
- Recognizing the reality of how individuals make decisions and the issues they face
- Recognizing the potential to influence behavior through messaging, program structure, and support tools
- Recognizing marketplace realities
- Deciding how active a role the plan sponsor wants to take in ensuring security

Mindset defines what we think is important and what we are interested in measuring.

## Measurement

Students of corporate and personal behavior have observed that what gets measured gets managed. It is much more likely that we will focus attention on what is measured, particularly when it is visible and when there is a shared interest in the measurement. In many areas of society, index values are very important in how we view what is happening. In the economy, we
pay attention to market indexes, the consumer price index, rates of employment and unemployment.

The actuarial valuation is central to the management of DB plans. There is no similar process for DC plans, but in reality their success depends on accumulating enough money and not using it too early. However, there is no commonly accepted measure of success for the plan sponsor and for the employee participating.

**Link to other work:**

The Society of Actuaries Retirement 20/20 Measurement Framework focused on how well broad plan designs met the needs of society at large, employers, individuals, and markets. This essay focuses on specific DC plan implementations, and looks primarily on individuals and employers, but the approach could be expanded to include society at large and markets.

Measurements of benefit adequacy could build on Society of Actuaries research project: Measures of Benefit Adequacy.

Measurements of investment success are well established, and it well established that investment managers should be measured regularly and chosen in a rational manner. This essay focuses on issues going beyond investment success.

What is needed is a good definition of success measurement from both plan sponsor and employee perspectives, some professional agreement about how they are derived, and acceptance of their validity. There is a role for the actuarial professional in defining these measurements at the conceptual level and in supporting research about alternative measurements and their value. There is a role for the marketplace in implementing these measurements for individuals.

Benefit structures have a major influence on the outcome with regard to benefit adequacy. A measurement system could include a rating methodology to consider the likelihood of meeting plan goals. Plan provisions that would probably be considered would include level of match, auto-features, encouragements to participate, etc. One of the potential research questions is the feasibility and definition of evaluation systems that would define likelihood of meeting certain goals.

A culture of measurement may provide for items such as:

- Clearly articulated goals for the plan.
- A regular periodic set of measurements at the plan and individual level linked to plan goals and a system of communicating these results to the right people.
- A periodic report (possibly annual) on DC plans that included items such as participation rates, definition of adequacy, contribution rates needed for retirement success based on
entry age and assumed retirement age, percentage of employees on track for success, evaluation of the investment decisions made by employees, etc.

- Planning tools focused on paycheck replacement and long-term success using the plan.
- Statements that linked the plan to paycheck replacement and illustrated what level of income replacement was forecasted by current contributions.

There is a role for the actuary in defining and implementing the measurement systems. Longer-term, there is also a role in defining best practices and/or minimum standards. While these concepts sound relatively simple when first stated, there are a variety of different things that can be measured and different time periods that can be used. There are different ways to state the measurements to make them clear. Longer-term measurements depend on assumed rates of return, inflation rates, and changes in the cost of living. Goals affect what should be measured. It is a major challenge to translate such measurements into clear information that provides a sense of progress and that encourages action. Business organizations may want to benchmark results against goals and competitors. Indexes would be very helpful. Uncertainty is important and challenging to deal with. Longer-term calculations involving uncertainty may be executed on a stochastic basis, with scenarios or both. There are issues of explanation and interpretation of the results. Protection of retirement savings in the event of disability falls between the cracks of disability and retirement plans. There is a question of how to recognize and evaluate this risk in a measurement system.

Supporting research

I recommend a major research project focused on the use of measurements, indexes and benchmarks to enhance DC plan success. This might include perspectives of the employer/plan sponsor, the individual, the market and society at large. There should be an accumulation phase and a spend-down phase part of this project. One potential path would be to start with a Delphi exercise on identifying and defining success measurements. Phase two could be an exploration of how to calculate and communicate success measurements including issues surrounding uncertainty, assumptions, etc. In parallel with phase two could be an approach to gaining acceptance of the ideas. Phase two could be staged by issue. Actuaries can be particularly valuable in dealing with issues that require consideration of risks over a longer time horizon.

A “dream” I would suggest is an “actuaries’ index of DC plan success.” One of the outcomes of such a project could be to explore whether there are indexes or benchmarks that could be provided by the profession. The Melbourne Mercer Global Pension Index rates retirement systems; a system could be derived to rate plans.

Mindset helps drive what we want to focus on as we think about research, and also suggests an added research agenda. Some of that agenda includes understanding current mindsets and behavior, understanding how behavioral finance affects decisions and understanding current economic realities.
A checklist and rating system for retirement security success in a DC environment

One of the outcomes of the research may well be a checklist for retirement system success in a DC environment. One of the key decisions in structuring a checklist is whether it focuses solely on the plan, or on the plan and elements outside of the plan needed for a successful outcome. I have assumed the broader interpretation. These are examples of what might be included on such a checklist. The research could also provide criteria for meeting each item. While some items might be yes or no, a system of ratings would be very helpful for others. This could be a focus of the research, and measurements could be developed and refined over time. Possibly, they would then be accepted by the marketplace.

Examples of items that might be included in a checklist/rating system

- System to measure plan success
- System to measure benefit program success in meeting retirement security needs
- Defined goals for plan and total retirement security strategy
- Regular communication to participants about what they have and what would be needed to maintain their standard of living
- Tools available to help participants model different scenarios
- Organized approach to dealing with uncertainty within tools and communication to participants
- Strategy in place to encourage participation
- Shared understanding of benefit adequacy situation between employer and plan participants and strategy to increase savings when more savings is needed
- Method of providing disability coverage to maintain retirement security in the event of long-term disability (probably out of plan)
- Rational process to define number and types of investment options
- Default options to support plan participation goals
- Default options to support plan investment goals
- Default options to support employer goals with regard to the payout period
- Information provided about methods of paycheck replacement
- Access to efficient methods of implementing paycheck replacement including at least one option with income guaranteed for life
- Method of providing death benefit coverage to support surviving spouses in the event of death (out of plan)
- Strategy to discourage use of funds too early
- Strategies to minimize expense charges and to disclose them to participants
- Strategy with regard to rollovers from other plans at job change
- Method to provide participants unbiased guidance and advice
- Effectiveness of participant communications measured
Conclusion and roles for actuaries

I believe that there are great opportunities to improve overall retirement security in a DC environment by changing mindsets, developing new measurements, and measuring success in new ways. Actuaries can help with both research and synthesis of the research ideas so that they are useful both to plans sponsors and to individuals. Once there is some agreement about a desirable checklist, it would be best to select an area or two for further development. Priority areas for actuaries could be tools for measurement of adequacy in a DC context including the impact of uncertainty, treatment of assumptions within such tools, and the handling of disability coverage.

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i Managing Post-Retirement Risks, Society of Actuaries, 2011
ii For more insight into in-plan vs. out-of-plan issues, see “Improving Retirement Security in a Heavily DC World” by Anna Rappaport, Stacy L. Schaus and Jeff B. Clymer, Benefits Quarterly, Third Quarter, 2011.