iTDFs: 'Self-Driving' Retirement Cars

By Per U. K. Linnemann *Wed, Apr 19, 2017*

'We've added intelligent shock absorbers and an automatic transmission to existing TDFs,' writes the former chief actuary of Denmark about his new retirement product. They 'convey clients seamlessly from the accumulation stage to the income stage.'

An awareness of the need to improve target date funds (TDFs), which according to Morningstar had a combined value of $880 billion in the U.S. at the end of 2016, has been steadily growing. As Nobel Prize winner Robert Merton has said, the use of an investor's age as the sole determinant of a TDF's glidepath doesn't pass even a "minimal test of common sense."

My startup company in Denmark has developed a new TDF design, which we call iTDFs. Our "smoothed income" approach gives each individual investor a dynamically self-adjusting glidepath with automatic re-balancing and re-allocation of assets.

Metaphorically speaking, we've added intelligent shock absorbers and an automatic transmission to existing TDFs. We've used these new features to convey clients seamlessly from the accumulation stage to the income stage. iTDFs, we believe, could be the retirement equivalent of self-driving cars.

A smoother ride

Smoothed income iTDFs can be delivered as a fully automated solution. They may also be developed for the Internet as a direct-to-consumer concept. The algorithm-based product design allows scalability, portability and low cost. It can work well for life and pension companies, banks, wealth managers, asset managers, financial advisors, "robo-advisors" or technology companies.

Where traditional TDFs never convert savings to income, iTDFs are designed to produce smooth income during retirement, either for a pre-defined period or, if combined with longevity insurance (e.g., a deferred income annuity or Qualified Longevity Annuity Contract) for as long as the account owner lives.

In our design, the level of retirement income is managed in a capital-efficient way using an innovative formula-based shock absorber that smoothes payouts by adjusting to fluctuations in portfolio value over time. The product doesn’t require additional assets as buffer capital, and the provider assumes no investment risk.

A choice between payment profiles can be offered. For instance, income could be weighted toward the early years of retirement, when retirees tend to be more active. It could be weighted toward the latter years to offset the effect of inflation. The shock absorbers could be adjusted to provide a “harder” ride, with some exposure to the ups and downs of the markets, or to provide “softer,” more level income.

Key benefits of iTDFs include:

- Automated personalized investment management with built-in systematic withdrawals
- The potential for investment growth in retirement
- An optional lump-sum payout at the target date
- Smooth payouts despite fluctuations in portfolio value
- Seamless transition from wealth accumulation to retirement
- Adaptability to “phased retirement”
- A choice of investment risk levels
- Contributions that can be fixed or variable, e.g., with annual adjustments

Automated personalized investment management can also be combined with longevity insurance. Smoothed income iTDFs can offer a liquidity period followed by a life contingent period with seamless transition between the two phases.

During the last-mentioned period you may still be invested in accordance with the dynamic investment strategy and receive an investment return as well as a return for being alive (mortality credits) that increase with age.

Moreover, iTDFs can be combined with an ongoing floor and ceiling approach on withdrawals, e.g., for fulfilling minimum and/or maximum required distributions.

A lot at stake

In sum, iTDFs present a comprehensive, holistic and customized approach to retirement. They offer the opportunity to co-ordinate investment, distribution, and longevity protection strategies. Relying on a robust algorithmic framework, they will fit easily into an increasingly digitalized and mass-customized world. Different versions of iTDFs can be tailored to local market conditions and purposes.

There is a great deal at stake. Americans held $25.3 trillion in household retirement assets at the end of 2016, according to the Investment Company Institute. Of that number, $7.0 trillion was in defined contribution plans and $7.9 trillion in individual retirement accounts (IRAs). As Ernst & Young’s Malcolm Kerr wrote last year, “There will be little margin for complacency in this space. Almost all players now recognize that managing money in retirement for, say, 25 years, generates significantly greater revenues than those generated during the accumulation stage.”

iTDFs’ smoothed income and lump sum solutions provide an opportunity for firms to obtain key competitive advantages and a differentiated position in the huge retirement income market place. More importantly, they represent an opportunity to improve the lives of millions of people throughout the world by giving guidance to their withdrawal decisions for a smoother retirement journey.