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## A New DC Concept from Denmark

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By Editor Test      *Wed, Sep 4, 2013*

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*'Smoothed income annuities' represent an entirely new retirement and wealth accumulation strategy for the private and occupational pension markets in the U.S., writes Danish actuary Per Linnemann, Ph.D.*

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In the area of innovative defined contribution (DC) pension products, I believe that Americans can learn a lot from recent developments in Denmark.

Decades ago, Denmark took the DC route in providing for occupational pensions. Last year, the first year in which Denmark's pension system was rated by the Australian Centre for Financial Studies and Mercer, it ousted the Netherlands from the top position in the rankings. It also became the first system ever to be classified with an 'A' grade—an award that was widely publicized.

Less well known is the fact that a new product class, called "(formula-based) *smoothed income annuities*," has been invented and launched in Denmark. It is a hybridized approach that overcomes the limitations of variable income annuities (i.e., fluctuations in payments) and of so-called "with-profits" or "participating" policies (i.e., lack of transparency in calculating the bonuses).

Nobody knew this could be done. The unique design of this new product class gives participants greater potential for upside, while also providing participants with partial downside protection over their lifetimes (with the option to add more). [See today's RIJ cover story, "Have Your Danish and Eat It Too"]

Specifically, the design makes it possible for the fund manager to maintain a higher proportion of equities and other real assets throughout the payout period, thus generating higher expected returns and higher expected pension benefits. It allows greater stability in income payments by using an individual buffer fund for each policy (one that may be negative as well as positive) to absorb market volatility.

These products also offer an innovative enhanced income payment profile with "more money when you need it" based on realistic assumptions of future mortality and longevity avoiding conservative margins. The retirement income level may be gradually adjusted up or down in accordance with continuously updated assumptions of the future mortality rates. The smoothing of the retirement income payments is made possible by the mechanism for smoothing of investment returns and risk sharing.

This design relieves participants of the need to lock in unfavorable interest rates when they convert savings to income. Their income level is set at retirement, and it won't fluctuate with market conditions. This holistic approach to pension plan design make possible a seamless financial transition from working life to retirement, providing an effective bridge between the accumulation and decumulation phases.

Smoothed income annuities represent an entirely new retirement and wealth accumulation strategy for the private and occupational pension markets in the U.S. It has the potential to set a new standard for retirement income solutions and to become the backbone of one's retirement income portfolio. It also provides for attractive default investment alternatives and solutions. It is possible to design default

investment alternatives and solutions that are tailored to different market segments –also giving providers an opportunity to differentiate themselves from competitors.

The next generation of DC and collective defined contribution (CDC) retirement income products in the United States could be designed as smoothed income annuities. My work and the work of others have demonstrated that these products have particularly attractive return/risk properties in relation to life-cycle products, such as target date funds.

I believe that this new product class can yield exciting—even game changing—opportunities for early adopters who want to seize a competitive advantage and capture a larger share of the growing DC market. It could lead to a revival of the pension fund industry, and help to ease the transition from defined benefit to defined contribution pension products. More importantly, it also represents an opportunity to improve the lives of millions of people throughout the world.

*Per Linnemann, a Danish actuary, was one of the designers of smoothed income annuities, which are currently marketed by SEB Pension under the short name Tidspension (TimePension). His bio is available at LinkedIn or on request. He can be reached at [per.uk.linnemann@gmail.com](mailto:per.uk.linnemann@gmail.com).*