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Longevity Risk Solutions: Coming to the USA Soon!

By Efrem L. Epstein

In 1960, the life expectancy at birth in the United States was 69.8. By 2010, it had increased to 78.2 with some futurists predicting the number to rise even faster in the decades to come. Obviously, this is good news on many levels, but the silver cloud is not without its lining. On the personal level, as life expectancy increases, so does the chance of outliving one's savings, a phenomenon that is often referred to as "longevity risk." On the corporate level, longevity risk is of strong interest and concern to the administrators and providers of defined benefit pension plans as they may now be paying out benefits to their recipients for a significantly longer period than was originally expected. While many in Europe have been strategizing in this area for some time, the threat of longevity risk is just beginning to be recognized in North America. It was in this vein that roughly 70 attendees converged on the afternoon of March 22, 2012 to a seminar on longevity risk sponsored by the Actuarial Society of New York (ASNY).

Mattias Eng and Peter Nowell from BNP Paribas, London were the guest presenters and drew on their expertise and experience in illustrating the latest global trends for the audience. The Solvency II directive has forced the hand of European companies and they are now designing and implementing solutions to ensure EU compliance ahead of the Jan. 1, 2014 deadline. Certain countries such as Denmark and the Netherlands have been more in front of the problem than others.

In short, there are three common ways to hedge longevity risk. The first is a longevity swap where Party A transfers a large amount of its longevity risk to Party B. In exchange for a risk premium, Party B pays the differences in liability cash flows to Party A (which can be positive or negative) between the expected and actual payments. The second is an interest rate swap where Party A can pay a premium to Party B to ensure a fixed interest rate with Party B assuming the floating rate. The third manner, which borrows elements from the previous two, is the balance guarantee swap. The balance guarantee swap reduces volatility by continuously adjusting the notional amortization to insure the matching of assets and liabilities. Eng and Nowell believed that different solutions are appropriate for different institutions dependent on their appetite for risk retention and ability to meet the cost of the risk transfer. A large number of solutions to date have emphasized an all-out transfer of *all* longevity risk associated (primarily) with pensions in payment liabilities, whereas it might be more appropriate for institutions to retain some longevity risk to reduce costs, hedge complexity, and transaction maturity, and thus counterparty risk.

Howard Zail, FSA, a partner at specialist longevity actuarial advisor Elucidor, LLC, was one of the attendees at the seminar and later noted that America may be catching up faster than people realize. Earlier this summer, Prudential Financial and General Motors broke a new barrier in the American market when the former acquired a portion of the latter's pension obligations for $29 bil-

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CONTINUED ON **PAGE 16**

lion. "This could be just the tip of the iceberg," noted Zail, "As the volatility of longevity increases, more and more companies are going to need to find solutions to hedge their risks. Some will opt for the example set by General Motors, but others may seek alternative solutions that better suit their needs."

Society may view longevity risk as a good problem to have, however even the best of problems still require solutions. Some companies may pursue balance guarantee swaps as recommended by the aforementioned presenters. Others may look to the General Motors-Prudential deal as their blueprint. Individuals looking to hedge longevity risk will face their own challenges in the years to come and will need to be catered to as well. If trends from Europe are any indication, longevity risk is likely to be an issue of increased importance on domestic and international fronts in the years to come. ☆