

Thomas Schmitz-Lippert Chair The Joint Forum c/o Bank for International Settlements (BIS) CH-4002 Basel Switzerland

Handled by Chris Madsen The Hague October 18, 2013

Subject: consultative document on longevity risk transfer markets

Dear Mr Schmitz-Lippert,

We are writing in response to your request for comments on the Joint Forum paper "Longevity risk transfer markets: market structure, growth drivers and impediments, and potential risks" published August 2013. The paper touches on an important topic and we welcome the effort to inform regulators as well as insurers of the opportunities as well as the pitfalls in this newly developing market. In developing our transaction with Deutsche Bank and capital markets investors that the consultative paper also refers to, we spent a significant effort to make sure that the transaction would be scalable and prudent. This included looking in detail at transactions in the UK as well as studying lessons learned from the non-life catastrophe bond market and past attempts at issuing longevity bonds. Based on our experience, we would like to make a few comments on the consultation papers' description of the in this evolving market.

In addition to buy-ins and buy-outs, longevity risk can be transferred in three main ways: reinsurance, derivatives and bonds. While reinsurance is the traditional way for insurers to hedge risk, it does not scale well relative to the potential size of the risk that needs to be transferred. Reinsurers continue to play an important role in the risk transfer market - also for longevity - but additional sources of capital are needed if even a small part of the world's longevity risk seeks to be hedged. Historically, reinsurance has not been collateralized, but as reinsurers participate in capital markets structures, this is changing. This is an important development for long-dated liabilities that without collateral would be very exposed to credit risk. Thus, collateral is a key differentiator between a more traditional approach and new capital markets approaches.

A bond approach to longevity risk transfer posts the full limit up front as collateral. For extended time frames, this can be quite expensive from a capital funding perspective, but the counterpoint to this is that it is a very safe solution. The consultative paper mentions on page 5 that longevity bonds remain a concept for now. This is true, but the structures that we have used and are using could also be issued in bond form. In determining the most appropriate type of transaction a tradeoff must be made between redundant collateral and cost. We fully agree that this trade-off needs to be weighed carefully.



On page 9, the paper mentions that "hedge funds may be put off by the long duration of the contracts and by the potential need to post collateral". Hedge funds are quite familiar with the need for collateral. Some hedge funds - like venture capital funds - may prefer a long-term illiquid investment with no collateral. These hedge funds, we agree, are not likely to look for longevity risk at this time. However, there are many others that may have an interest nevertheless. Further, the long duration of the contract may be addressed as the market develops. Once a market maker enters the market, liquidity will increase and secondary trades occur. This will in our opinion draw in additional investors. This is similar to how other markets have developed.

On page 9, it is mentioned that "while a pandemic may have a large impact on current mortality, its impact on longevity would in principle be lower". This sentence in our opinion misses the economic aspect of the two risk types. They can be balanced to a reasonable degree even if cash flows emerge differently. In other words, the cash impact of a pandemic could be significant but it would be offset by a decrease in longevity reserves. As a result, the main potential stress is on liquidity and would materialize if the insurer did not have sufficiently liquid investments. Taking into account that life insurance policyholders and annuity policyholders tend to be of different age groups, there is still significant correlation between these age groups and as a result, there is an offset to be realized for an insurer writing both mortality and longevity risks.

On page 12, it is stated that "standardized cohorts would improve market liquidity". In our opinion, standardized cohorts will not drive liquidity. Only a secondary market will. A secondary market only develops if primary trades can be made. The so-called "q-forwards" and similar derivatives are too granular in our opinion to start a major market. Instead, a cat bond structure, with market makers has a better chance of improving liquidity. Once this basis has been established, q-forward derivatives may well complement the market helping transacting parties to fine-tune exposures.

On page 16, the paper talks about a cure for cancer and the longevity risk chain potentially breaking. It is worth noting that a so-called cure for cancer would have an impact of up to 10-20% on the annuity reserves. A cure for cancer does not mean eternal life, but rather that mortality will come from other sources and later. Such cure will realistically be realized and observed gradually giving risk takers time to adjust collateral positions. Note that if the longevity market develops in bond form, then the risk is fully funded and there is no chance of the chain breaking.

Thank you again for putting forth this important consultation paper. We are happy to follow up on our comments or answer any other questions.

With kind regards, [signed]

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