ISSUE BRIEF 2:
THE 'LOW FOR LONG' CHALLENGE

THE GENEVA ASSOCIATION

Protracted low interest rates may place the life insurance industry's socio-economic role at risk

Daniel M. Hofmann, Senior Advisor Financial Stability and Insurance Economics

Life insurers assume risks that are more effectively borne by institutions than by individuals. Longevity and mortality risks provide diversification benefits when grouped together and they are much more predictable when pooled by insurers across large numbers. As institutional investors, life insurers play a key role in funding the real economy and the public sector. And like any other business, life insurance provides jobs for employees. This Issue Brief summarises life insurance activities for a number of advanced economies and traces how the current low interest rate environment could place the socio-economic roles of life insurers at risk.[1]

THE CHALLENGES OF LONGEVITY RISK

Life insurers deliver three essential services. They protect against the financial consequences of biometric risks such as longevity and mortality; they provide savings and retirement solutions; and as large investors, they channel long-term funds to the corporate and public sectors. The first two roles make for unique value propositions.[2] Retirement savings products often include an element of asset protection in the form of guaranteed investment returns or guaranteed minimum retirement benefits. These products are distinctly different from the all-purpose savings products offered by other financial institutions. Moreover, no matter the interest rate environment, the ability of life insurers to invest and pool risks will almost always result in insurers providing more effective options than individuals can find when they try to manage risk on their own.

When talking about longevity risk, it is important to distinguish between individual and aggregate perspectives. From an individual perspective, longevity risk is defined as the 'risk' of a person living longer than the average life expectancy of his or her cohort. Insurers call it a specific risk that they mitigate through pooling and diversification. From the aggregate perspective (insurers and public and private pension funds), the challenge of longevity risk arises from the potential misspecification of future mortality trends. This is a systematic risk that cannot be mitigated as easily as the specific longevity risk.

From the perspective of individuals, the financial predicaments associated with longevity risk are exacerbated by behavioural characteristics that make most people ill-prepared to cope with the burden of old age. First, most individuals are not saving enough and tend to make poor investment choices. Second, they tend to underestimate longevity risk. Research has shown that subjective life expectations fall short of actuarial expectancies by roughly five and seven years for males and females, respectively. As a result, people tend to overestimate the value of their pension plans. They are under the impression that they are better protected than actuarial arithmetic reveals.

To this we must add the inconvenient implications of low interest rates. First, they make it hard to accumulate adequate retirement savings. And second, once savings are accrued, they either constrain the future retirement income stream or they deplete the capital very quickly if a retiree wants to sustain a specific income level.

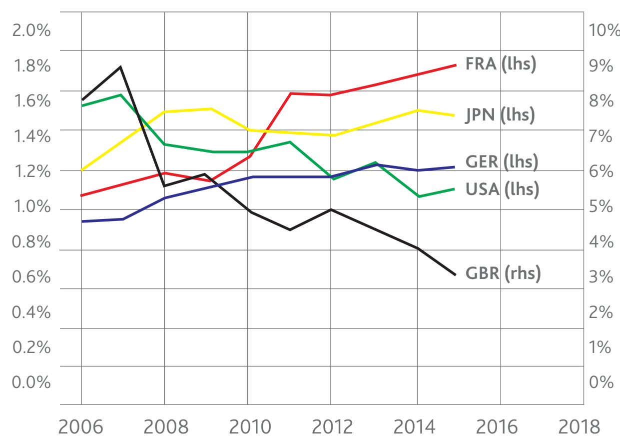
Life insurance products alleviate in part or in full the two most important concerns of retirees: first, having enough money to maintain a given lifestyle, and second, ensuring that they do not run out of money in retirement. In that sense, life annuities are an essential ingredient in an optimal retirement portfolio, and insurers fulfil a critical social function in providing them. However, because customers tend to underestimate longevity risk, the actual demand for annuities keeps lagging behind what

1 The full report, *The 'Low for Long' Challenge: Socio-economic implications and the life insurance industry's response*, is available at: http://bit.ly/TheGenevaAssoc_LowforLong. The study is based on in-depth interviews with 16 senior executives of large, globally active life insurance companies with operations in North America, Europe and Asia.

2 It is, of course, understood that this unique role is also supported by regulation, which excludes banks and other financial service providers from offering an insurance contract.

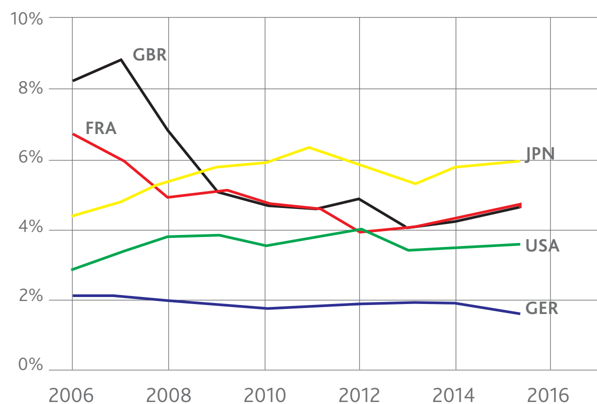
might be considered a societal optimum. It will be a noble challenge for life insurers to help improve financial literacy and make a contribution to mitigating the financial consequences of longevity risk.

Figure 1: Penetration of protection products (premiums in per cent of GDP)



Sources: ACLI, Axco, OECD and The Geneva Association.

Figure 2: Penetration of savings products (premiums in per cent of GDP)



Sources: Axco, OECD, and The Geneva Association.

Figure 1 provides an overview of life insurance penetration rates for longevity and mortality protection products over the past decade, i.e., how much policyholders spend on those products relative to GDP. The record is mixed. In the U.K. penetration rates declined from a very high level, and there also appears to be a decline in the U.S., which in fact started more than 30 years ago. In all other countries, protection penetration rates have increased, rising slightly in Germany and Japan and nearly doubling in the case of France. There appears to be no detectable influence of interest rates on these changes over time.

However, low interest rates seem to have had an adverse impact on savings penetration rates in France and Germany (Figure 2). There are many reasons why this is the case. Each country started out from different initial conditions, with products offered under different regulatory regimes and with different tax incentives. And needless to say, low investment yields make these products less attractive. From the more complete data presented in the background paper, one can derive these tentative conclusions:

1. In the long run, life insurers did indeed gain a foothold in the retirement solutions markets,

2. The current low interest rate environment is likely to make further gains in this area a tough challenge,

3. Continued low interest rate pressure could force life insurers to move away from their unique role in the delivery of retirement savings solutions with asset protection. This would open a gap that cannot easily be filled.

FUNDING THE ECONOMY

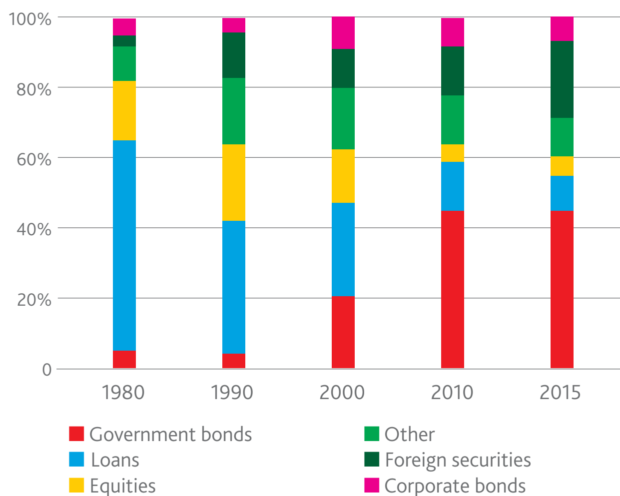
Together with mutual funds and pension funds, insurers are the world's largest institutional investors.[3] According to the OECD, in 2016 global insurers held USD 30.8 trillion in financial assets, of which more than USD 23 trillion were held by life insurers. These amounts enable insurers to provide substantial funding to governments and the corporate sector. Moreover, as a result of stable premium cash flows and their long-term, liability-driven investment approach, insurers are a stable source of funding for the real economy. They play an important role in meeting long-term funding needs and, based on stable premium in-flows, their steady portfolio allocations contribute to financial market stability.

3 Institutional investors are defined as non-bank institutions or individuals that trade financial securities in sufficiently large volumes to receive preferential treatment and lower commissions. As presumably knowledgeable investors, they are also not sheltered by consumer protection laws geared to smaller retail investors.

Figure 3: Investment portfolios of German life insurers

Source: GDV.

Figure 4: Investment portfolios of Japanese life insurers



Source: The Life Insurance Association of Japan.

In Figure 3, a number of asset classes were consolidated to reduce clutter: mortgages include mortgage bonds; government bonds include loans to states and bonds included in funds; corporate bonds include loans to companies; and equity shares also include participating interests.

Investments of insurers must meet future policyholder claims (liabilities), and it is in the nature of this liability-driven investment approach that the allocation of investment portfolios is fairly stable over the medium term. This is supported by the observation that, on an industry-wide level, the allocation to broad asset classes has not revealed a discernible interest rate sensitivity in recent years.[4]

The picture changes, however, when one looks further back in history, as illustrated by the portfolio reallocation of Japanese life insurers in Figure 4. Between 1980 and 2015, the share of loans in the portfolios shrank from 60 to 10 per cent. At the same time, the share of government bonds expanded from 5 to 45 per cent, a growth that picked up sharply after 2000 when the government incurred a swelling debt burden to stimulate the economy. In insurers' portfolios, government securities replaced corporate bonds, which is another way of saying that Japanese insurers withdrew from funding the real economy in favour of the government. Also striking is the growing share allocated to foreign securities. This potentially increased foreign exchange risk, although some or all of that risk may have been hedged or (as in the case of unit-linked products) passed on to policyholders.

Similar developments were observed in Germany. The share of government bonds held in investment portfolios more than doubled after the year 2000 (Figure 3). This was in some part also the result of solvency regulations that kept capital charges on sovereign debt in EU countries at zero, thus providing an incentive for insurers to hold sovereign debt at the expense of other securities. The result was the same as in Japan: a declining role of German life insurers in support of private sector activities, as evidenced in the strong decline of mortgage lending and in lending to banks. In other words, the German government was rather successful in displacing or crowding out the private sector.

To the extent that government spending went on consumption, such crowding out may have reduced the long-term growth potential of the German economy. One should also allow for the possibility that some changes in portfolio allocation may be attributed to a search for yield. In Germany, the allocation to higher-yielding corporate bonds nearly doubled from 2.4 to 4.2 per cent between 2011 and 2015. And Japan entered, and never escaped, the low interest rate environment in the 1990s, which is the time when the allocation to foreign securities began. Thus, it appears that low interest rates had an impact on the portfolio allocation of Japanese and German life insurers.[5]

4 More granular data on annual allocations may tell a different story, but they are not available on a consistent cross-country basis.

5 This abstracts from the impact that changes in solvency regimes might have had on the portfolio allocation of life insurers.

ASSESSMENT AND POLICY CONCLUSIONS

The supply of and demand for life insurance products appears to show some degree of interest rate sensitivity. Low interest rates made the supply of long-term savings products with guarantees an unattractive offer for insurers. They responded by adjusting guarantees on new products to the 'new normal' and emphasising unit-linked products. The emphasis on unit-linked products entails a transfer of investment risk away from insurers to individual policyholders. In the absence of professional support, these individuals are not necessarily well-equipped to manage and absorb this risk. This may contribute to policyholder vulnerabilities at some point, which could cause reputation risk for life insurers.

More worrisome is the risk that continued low interest rate pressure could force life insurers to move away from their unique role in the delivery of retirement savings solutions with asset protection. This would open a gap that cannot easily be filled.

In the longer term, the investment portfolios of life insurers appear to have been quite sensitive to interest rates. German and Japanese life insurers allocated a larger share of their portfolios to sovereign debt and foreign securities. This suggests that a prolonged period of low interest rates may, at least at the margin, impair the sector's ability to provide long-term funding for the domestic economy.

For the industry to extend its traditional socio-economic role in the future, policymakers must provide a conducive environment. Building blocks of such an environment may include:

- A stable macro-financial and regulatory environment that allows for long-term planning, reduces the risk of disruptive financial crises and promotes long-term savings,

- Regulatory, accounting and risk management frameworks that are viable under many different interest rate scenarios and properly reflect the life insurance business model. It requires in particular acknowledgement that life insurance liabilities are illiquid with very long durations. Insurers are therefore well-positioned to hold assets with a liquidity premium, thereby funding long-term investments in support of economic growth,

- The creation of new asset classes with durations that better match the long liabilities of life insurers.