October 2015

Are there solutions to the low interest rate environment?

By Max J. Rudolph, FSA CFA CERA

If you work at an insurance company, there are consultants coming out of the woodwork to tell you how to deal with low interest rates. They generally making the argument that this is a temporary situation and rates will soon rise. But what if they don't? I wrote a paper, published in 2014, titled *Sustained Low Interest Rate Environment: Can it Continue? Why it Matters*, which can be found at https://www.soa.org/Research/Research-Projects/Risk-Management/research-2014-sustained-low-interest.aspx . In 2015 I led a team that wrote *Transition to a High Interest Rate Environment: Preparing for Uncertainty* https://soa.org/Research/Research-Projects/Life-Insurance/research-2015-rising-interest-rate.aspx . This paper included a summary of learnings from the low interest rate paper, so I recommend that you read the most recent paper first. It received some nice comments at this year's Valuation Actuary Symposium and I will be talking about it at the SOA annual meeting in Austin (session 91).

These research projects mean that I have been thinking about interest rate risk a lot over the past 3 years. Not that I was not doing this earlier. I wrote my first paper on the risk of lower rates in 1999 for LOMA magazine and have worked to optimize asset-liability management practices for insurers for longer than that.

What I see amazes me. Consultants are swarming the market with "solutions" that always seem to involve paying them something. The very product they offer will solve your problem. Please use a little common sense when they come to visit you. Many of them actually believe their solutions will work, and maybe they will. I would never root against someone who takes a bet on interest rates, but make it a conscious bet. Here are some of the solutions I see being offered. Each should be tested thoroughly and understood before purchase.

Illiquid assets. An asset with features that do not allow unfettered access at all times must pay a higher yield or no one will buy it. In good times you collect the extra, but in bad times liabilities may pay out and leave you searching for cash to pay them. Key: stress testing.

Leverage. Borrowing, or mismatched assets and liabilities, works great when times are good but multiplies the pain during stressful environments. Key: stress testing.

New asset classes. Outsiders continually visit insurers to talk up their "book", the latest and greatest asset class that they alone can provide. If you don't understand both the risk and return across a variety of scenarios then you should walk away. Do not invest in risks you don't fully understand. Key: stress testing, outside peer review.

Market timing. Many insurers are currently holding excess cash, waiting for rates to rise. In the meantime their assets and liabilities are not matched and they are giving up yield. It is not clear that firms understand that this is a form of market timing, and unlikely to work. If insurers stick to their knitting, insuring liabilities using the law of large numbers, matching assets and liabilities, and carrying over pricing assumptions to incentive compensation schemes, they are nearly guaranteed a profit. Key: don't do it.

Smart Beta. This is a currently popular asset class that tries to outperform a market cap weighted index like the S&P 500. Some studies have shown that using market cap weightings emphasizes stocks about to underperform due to their large size. It makes sense that another style of index fund may be more effective, but it is when these funds imply excess gains due to alpha and the fees that accompany them that they get into trouble. In addition, high capital requirements make it hard to justify equities to back life insurance products. Key: stress testing.

By now you should have recognized that I think stress testing is very important. Scenario generators have built-in biases (mean reversion to higher rates), as do other historically based assumptions.

Companies should become familiar with attempts to deal with a Japan scenario by the experts, Japanese life insurers. They have moved their product mix away from interest rate risk (e.g., health supplemental products life critical illness), bought companies that do business in currencies other than the yen, and worked with their regulator to push out insolvency a few years (their cash flow testing only needs to show enough cash for 10 years). They have coincidentally benefited from lower mortality, and reduced their expenses. Some of these processes seem to be accelerating, especially the acquisition phase, so it will bear watching as the industry faces solvency risk.

An asset class that could make sense is dividend paying equities from stable companies. This is a risky strategy but has the potential to pay off. Methods have never been developed for ALM matching, but I believe this should not stop you. At first a firm might focus on investing surplus assets rather than those backing a product line. It seems like if this is a reasonable strategy for retirement savings then it could work for an institutional investor too. I would avoid companies that received bailouts or have canceled their dividend in the past (e.g., banks), and those threatened by technology (e.g., AT&T). Many of these have the highest dividends, so it might be best to stick to an index fund with close to 2% dividend. Key: price with that as a return and make sure the product is supportable and sustainable.

The ACLI should be working with the NAIC to consider long-term low rate scenarios. Solutions could include things that have always made sense to me, like deferred annuity spreads that vary based on the duration of the product. For example, when a policy is issued with a 7 year surrender charge assets can be invested longer to match them, but after 7 years there is little to keep the policy holder from treating the account like a checking account. The credited rate and assets purchased should reflect that. The guaranteed rate should either reset periodically or be set using real rates rather than nominal rates. If we experience negative rates, the NAIC regulatory system should be able to handle that. It can't today because it works from nominal rates.

There are a limited number of solutions when rates are low, but the industry avoidance of the issue has been frustrating. Hopefully it will become proactive before the Japan scenario comes true.

Warning: The information provided in this newsletter is the opinion of Max Rudolph and is provided for general information only. It should not be considered investment advice. Information from a variety of sources should be reviewed and considered before decisions are made by the individual investor. My opinions may have already changed, so you don't want to rely on them. Good luck!