To Our Subscribers

We want to thank our new subscribers and welcome everyone to the ninth issue of the ARM quarterly newsletter recently renamed to Crossing Thin Ice! We hope that you all find this publication valuable. With a few short articles meant to provide unique insights, we present ideas about how to address specific issues related to ERM and introduce potential risks and opportunities that may not yet be on your radar.

The primary authors are Dave Ingram and Max Rudolph. We have been active participants in the risk management, actuarial, investment and insurance spaces for many years.

Subscribers are encouraged to suggest topics for articles and ask questions of the authors during our follow-up webinars and podcasts. Ever cognizant of regulatory requirements, leveraging them to add value to you in practical ways, is our focus.

Sponsored by Actuarial Risk Management (ARM), the Crossing Thin Ice subscription is free to all readers.

A free webcast is also available and our podcasts covering these topics is called Crossing Thin Ice. If you would like to further engage the authors as consultants, for continuing education purposes or to join our ERM Discussion Group, please reach out. More info can be found throughout this newsletter. We hope to help you find a solution that meets your needs!

Please forward to others who study risk.

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The content of this newsletter is meant to be educational and thought provoking.

Nothing in it should be interpreted as investment advice.

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Interest Rate Risk for Insurers

Interest rates cycle. They go up. They go down. I think about them like a clock, where your guess of the current time is right twice a day. There is some randomness to changes in rates, but some factors get the direction right over time. Respondents to the Dangerous Risks Survey ranked it 10th overall for 2024. Over longer time horizons, government fiscal policy becomes the biggest factor (fiscal dominance). Monetary policy can temporarily influence rates, but there is always an underlying pull towards a natural rate, like mean reversion, based on government spending, types of spending (infrastructure is better than tax reductions), regulation and economic market forces.

Learn from the Mistakes of Others

Before we get into the three ways (borrowing, assets, liabilities) that higher interest rates impact an insurer, let's look at history. If rates are at historic lows and a financial firm fails to test a mean reversion scenario to historically normal levels, they are failing to do their job. In spring 2023 the crisis that engulfed Silicon Valley Bank (and other regional banks) was that simple. Rates went up and neither management nor regulators planned adequately for that possibility. Neither did their customers, including venture capital firms and other startups in the tech industry, caught with deposits well beyond FDIC guarantees and bailed out. The banking industry retains large unrealized losses on their balance sheet, and many depend on FHLB loans. In the murky world of shadow banks, the risks are less transparent and the business less regulated. Additional problems are likely, especially if rates move up from current levels. Insurance regulators tend to be slow identifying a new risk but try their best to protect retail customers.

While this spike in rates provided an opportunity for those who think ahead to share what they had done to hedge this type of "bet", it's best to focus on learning from the mistakes of others and move forward. Many hope interest rates have peaked, but history tells us that rates can go higher. Five-year maturity Treasuries peaked in 1981 at 16%, over triple those of today. It is not the risk manager's job to predict rates, only to prepare and provide competent counsel for management to discuss and make decisions.

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Interest Rate Risk for Insurers (cont'd)

Impact on insurers

For insurance companies, it is important to stress test in both directions. Rates below zero and above 15% are not out of the question. Government issued bonds considered risk-free in Europe have experienced negative rates. Previous rules of thumb have been disproved so it is not clear where the limits are. Higher rates impact insurers in three ways: borrowing, assets and liabilities.

Borrowing

Bonds and loans will have higher rates as they are rolled over or floating rates reset. This cuts into profitability and needs to be stress tested. Indirectly, higher coupons increase both credit and inflation risk.

Assets

Credit spreads on fixed income assets purchased by insurers in a higher rate environment will also be elevated, but there may be offsetting costs (and increased volatility) to the higher rates. A tight Asset-Liability Management (ALM) match without convexity risk allows asset and liability cash flows to move in unison with rates, minimizing the impact on intrinsic value. A mismatch acts as leverage, magnifying small rate changes into material changes in value.

Many loans, both bonds and mortgages, require dynamic repayment models. As rates rise, few borrowers choose to prepay the principal. This lengthens the duration of assets and adds convexity risk. It also indirectly impacts the economy as movement between jobs to a different town or region becomes sticky and inefficient. The recent rise in rates has left many companies struggling to meet their debt obligations as debt rolls over. These "zombie" companies could survive only when rates were abnormally low. Defaults have already started to rise.

Liabilities

Life insurers need to stress test scenarios more in the tail than those built for regulatory purposes. We have seen how quickly rates can rise, both recently and 40 years ago, and this should be tested. Rates increasing quickly to levels 10% above current levels, as well as negative rates, help determine the sensitivity and convexity of a specific block of business. Products should be priced including these sensitivities to avoid a catastrophic scenario and ALM, with interactions between assets and liabilities, should also be contemplated. Our current understanding of dynamic lapses and the impact on defaults of higher rates are among the concerns. We don't have a full cycle of historical data for either.

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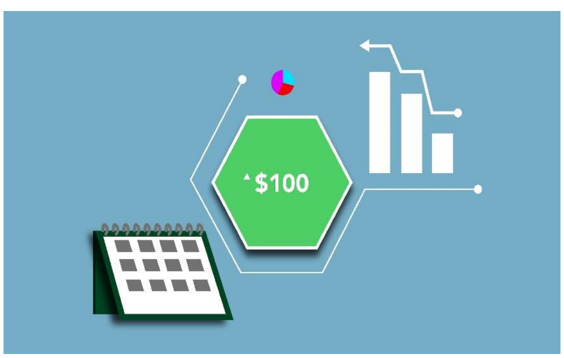
Interest Rate Risk for Insurers (cont'd)

Lapse formulas are old. The recent rise in rates has left many companies struggling to meet their debt obligations as debt rolls over. These "zombie" companies could survive only when rates were abnormally low. Defaults have already started to rise.

Some insurers tend to think of assets and liabilities as separate buckets, but it is important to make sure the assumptions behind the sensitivities and stress tests are consistent. High inflation has led to high combined ratios (over 110%) for auto policies, and homeowners continue to see higher premiums due to the increasing frequency of extreme weather events. Reinsurers are likely to react quickly, and this business reprices each year. The pandemic created mischief in the auto market, with fewer miles driven but more high-speed crashes. This recent experience has put pressure on auto policy profitability. Some writers cut advertising and allowed new business to stagnate until premium increases were approved by the local regulator.



Conclusion

While the Federal Reserve and its policy committee are followed closely in the press and investors attempt to outguess their future actions and motives, they are not the key player. The key player in the US is Congress, where deficits are the norm. Politicians have delegated management of the economy to the Fed along with monetary policy. Congressional actions that ignore federal debt levels could be the primary reason rates increase from current levels. The lack of discipline has led to rating agency downgrades and a higher overall likelihood of rates going moderately higher. There are also increased possibilities of hyperinflation and stagflation, initially in countries that tie their economy to the US and eventually even in the US economy despite the dollar being the reserve currency.

Interest rates are not easily predicted over the short term, but continuing deficit spending increases the likelihood of higher rates at some point and even a possibility of hyperinflation or stagflation. Rate changes will directly and indirectly impact profitability through borrowing, and cash flows from assets and liabilities. Regulators and insurers will need to work together to ensure that pricing is both equitable to customers and sustainable for insurers.

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Crossing Thin Ice

Now providing three ways for you to get insights, strategies and solutions from ARM consultants to help resolve your risk issues.

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- 3 to 5 articles quarterly
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- One-hour live webcast once each quarter following the newsletter publication
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Podcasts

- Two per month
- Delivered by Dave Ingram & Max Rudolph
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“ While insurers have been challenged by low interest rates and the pandemic, the next few years will see a radically changing environment for insurers. We will be using this provocative platform to identify emerging risks and delve into what we see as the drivers of future success. ”

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