

## **Reinsurance News**

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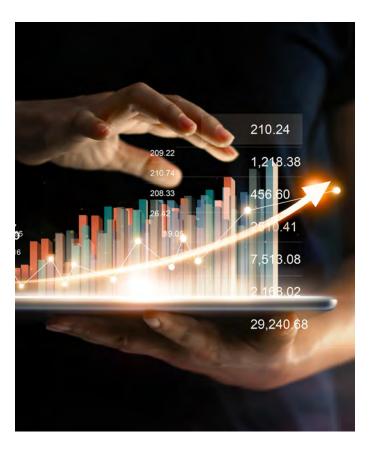
## Lower for Even Longer What Does the Low-yield Economy Mean for Insurers?

By Thomas Holzheu

uick and decisive interventions by monetary and fiscal authorities helped cushion the impact of the COVID-19 crisis. Governments took bold measures to provide liquidity to households and private firms through direct transfers or by providing loan guarantees to banks. As a result, public debt levels have skyrocketed from the already elevated levels going into this crisis. Central banks have been quick to react to market turbulence and tighter financial conditions by cutting policy rates, re-enacting their 2008 playbook of quantitative easing and special lending facilities as well as entering into new territories with the U.S. Federal Reserve (Fed) buying corporate credit.

With a protracted recovery, we believe Fed funds rates will remain close to zero for the next three years at least. Bond yields have fallen farther from already low levels, with the U.S. 10-year Treasury yield hitting a record low of 0.4 percent in early March before regaining some ground. We expect that central banks worldwide will keep borrowing costs low to keep higher debt burdens more sustainable. This is particularly relevant for Europe where several of the peripheral economies were already struggling with elevated debt levels during the Euro crisis. We forecast the U.S. 10-year yield to stand at around 1 percent through 2022, and that the German 10-year yield will remain negative.

The Fed and the European Central Bank have been performing strategic reviews of their monetary policy frameworks. In late August, the Fed concluded that process in late August and adopted a flexible average inflation targeting framework. That means it will allow inflation to overshoot the 2 percent level to make up for periods of undershooting inflation and the ensure that the labor market also improves for low- and moderate-income communities. The Fed will not just allow, but welcome, inflation that exceeds 2 percent when it has been below target for some time. These developments imply interest rates will remain

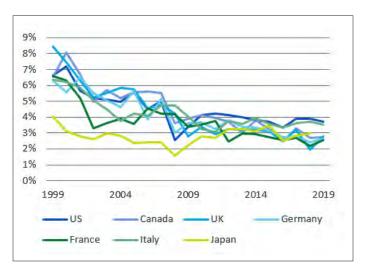


lower for longer even as inflation accelerates. That would be an uncomfortable combination for insurers.

# PROPERTY & CASUALTY INSURERS WERE UNABLE TO OFFSET LOW INTEREST RATES PRE COVID-19

Property & Casualty (P&C) insurers are generally less sensitive to interest rate changes than Life and Health (L&H) insurers, given a low share of multi-year contracts in their policy portfolios and the absence of product guarantees. Nevertheless, P&C insurers are dependent on investment returns, as profitability is driven by both underwriting and investment performance. Investment income on invested cash flows, which for long-tail lines can remain on the balance sheet for a couple of years, is an integral part of the business model. Accordingly, pricing for P&C products considers the time value of money. Premium rates need to rise if investment yields are lower. For claims with long settlement periods, the investment of underwriting cashflows between occurrence and settlement are more exposed to interest rate risk. On average, premiums for long-tail lines like general liability, medical malpractice and workers' compensation are invested for about three to four years

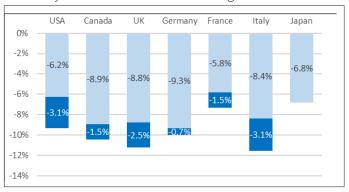
Figure 1 Total Investment Yield Non-life Insurance, 1999–2019



P&C insurers' yields on their asset portfolios have fallen post GFC, putting pressure on profitability in the past decade. However, soft market conditions have left insurers with little pricing power to offset lower investment returns, even before COVID-19. As Figure 1 shows, pre-GFC total yields in most G7 markets were in the 4 percent to 6 percent range. By 2019, earned yields had fallen to 2 percent from 4 percent.

Before COVID-19, most major markets were already in a prolonged phase of below-average profitability. In the last decade, the average ROE of the G7 markets was relatively low, around 7 percent, reflecting a period of soft underwriting cycle, weak investment performance, and a high level of capital funds. For last year, we estimated that non-life insurers in the G7 markets would have needed to improve their underwriting margin by six to nine percentage points (ppt), depending on the market, to achieve long-run ROE expectations. With the projected farther drop in interest rates, we estimate that the sector's profitability gap will widen by another one to three ppt through 2021. Even

Figure 2 Estimates of the 2019 Non-life Profitability Gap and Sensitivity to Lower Interest Rates Through 2021



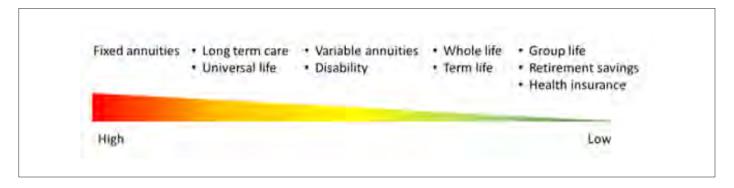
with recent price rises in commercial lines, more re-underwriting is needed to address profitability shortfalls.

## LIFE INSURANCE IS MORE INTEREST-RATE SENSITIVE THAN NON-LIFE

Life insurers have more exposures to interest rate changes on the asset and liability side of their business. The average maturity of U.S. life insures' bond portfolios was 10.7 years in 2019 compared to 5.8 years for Property & Casualty. Many non-life policies are short-tail in nature and can be re-underwritten annually. The life sector, however, is dominated by savings products and long-dated multi-year contracts. Interest rates have a large impact on savings products, for which investment income is a major source of earnings for life insurers and where embedded guarantees determine insurance liabilities. Interest rate sensitivity is the highest for products where guarantees are rigid, and the duration of the business is high.

As Figure 3 shows, by product the most significant impact is on: (1) fixed annuities, where the insurer guarantees the policyholder a certain crediting rate over a given period. In a low interest rate environment, it is harder to earn a spread over the

Figure 3 Sensitivity of Life Products to Interest Rates by Product Type, Ranked From Highest Impact to Lowest Impact



rate promised to the consumer from invested assets; (2) long-term care, where the contribution to profitability from investment income is expected to be sizable; (3) Universal Life products, where profitability depends on the insurer earning a spread above the crediting rates promised to the consumer, which also face spread compression and where secondary guarantees have become "in the money" from the policyholder perspective; and (4) variable annuities, which are more sensitive to equity markets. Still, the fees charged for the guarantees offered can be insufficient to maintain profitability in a low interest rate environment, as low and volatile interest rates lead to increased hedging costs. Hedging the interest rate sensitivity for many products has become more expensive and difficult to manage. Re-pricing and de-risking activities have dampened sales in several product categories.

Policyholder behavior in response to interest rate changes can foil insurers' asset-liability matching and hedging strategies, which both are heavily reliant on reasonably accurate predictions of future cash flows. Policyholder behavior can be a significant issue for savings products because of the options and guarantees embedded in the products. For example, policyholders usually have the right to reduce or increase premium payments for regular premium contracts in later years, and to withdraw money from both regular and single premium accounts. Another option sometimes granted to policyholders is the right to extend a contract at maturity under the original terms. Declining interest rates can also reduce the motivation for policyholders to lapse their savings policies. As rates decline, embedded interest rate guarantees gain in value and attractive alternative investment opportunities for policyholders are in short supply. Cash flows from life savings products are therefore hard to predict, which gives rise to many challenges in managing interest rate risk.

The importance of investment income is compounded by the issue of duration mismatches for long-duration life products. There is a lack of sufficiently long-duration financial instruments for life insurers liabilities. Both insurers and pension funds have high demand for long-term investments, making the lack of long-term investment opportunities even more precarious. Life insurer liabilities often last 30 years or more, and assets with such a long duration are either unavailable or illiquid in many markets. This generates a reinvestment risk for the insurer. If the duration of an insurer's assets and liabilities is not properly matched, falling interest rates will erode profitability. This can also be problematic under a market consistent valuation of assets and liabilities (as required under Solvency II, for example) because a decline in interest rates increases the value of the liabilities more than the value of the assets. This could lead to a drop in the market value of equity capital, impairing insurer's solvency.

#### COPING WITH THE LOW-YIELD ENVIRONMENT

The most effective means for life insurers to manage interest rate sensitivity is to change product features. According to a global survey from the Bank of International Settlements, 40 percent of life insurers lowered the guaranteed benefits in their new savings products business, and 26 percent abolished guaranteed products to counter the negative impact of already low interest rates in 2017. For in-force business, they sought to incentivize policy holders to surrender their policies in favor of other products (15 percent) and reduce benefits (29 percent). A survey of CFOs at European life insurers found similar results, with 29 percent having changed product features in new business, and 18 percent doing so for in-force business, while also sometimes increasing the price of products. In some cases, the insurers have withdrawn from certain market segments altogether. Another that has occurred over the last decade is a shift from savings to protection business such as term-life, critical illness, disability or health.

With these actions, life insurers effectively moved some of their interest rate and other investment risks to policyholders, and profit sharing was reduced. Portfolios have been steered towards unit-linked or asset-management-type business, which reduces insurers exposure to financial market risks. The profitability challenges of the extended low interest environment on legacy business has pushed many life insurers to also pay increased attention to implementing an in-force management strategy for long-run sustainable profitability.

Changes in the market environment have also led insurers to realign their asset allocations. Search for yield has led to more investments in higher-risk assets, albeit with caution and within a strict solvency framework in most jurisdictions. Asset allocations increased moderately to higher-risk credit, private loans, private equity and other more illiquid asset classes. U.S. insurers gradually shifted their bond allocations toward the lowest investment grade category BBB, which implies a higher exposure to rating migration. Capital charges from regulators and rating agencies create strict trade-offs for adding more risk to the asset mix. The introduction of risk-based prudential regulations in certain markets has made some asset classes more costly in terms of capital requirements. Overall, asset allocation could not offset the underlying decline in market yields and insurers' portfolio yields have steadily declined over the last decade, despite higher levels of equity, credit and illiquidity risk.

#### **CONCLUSIONS**

The COVID-19 crisis has amplified the downward pressure on interest rates. Amid the mounting debt levels resulting from the massive fiscal and monetary stimulus and a subdued medium-term economic outlook, we expect monetary policy to stay very accommodative for the foreseeable future. Considering also the rise of implicit or explicit yield curve control, as well as the redesign of monetary policy frameworks, we believe interest rates will remain very low for even longer.

Interest rates are a key parameter for insurance operations, not least because investment income is an important earnings stream. Sustained low interest rates are negative as fixed income investments make up most insurers' portfolio investments. Low rates in the last decade have prompted insurers to invest more in higher-risk, higher-yielding assets, with caution. Portfolio yields have declined over the last decade and we expect a further decline with the recent farther drop in market rates.

With declining investment yields, insurers need to focus on underwriting results, especially as prospective fixed income gains in existing portfolio holdings will be less likely. Though non-life insurance prices are hardening in the major markets, our analysis shows more re-underwriting is required to narrow the existing profitability gap. We believe the trend of declining investment yields will continue given the recent drop in re-investment rates. The predicted decline in interest rates will widen the profitability gap into 2021 by about one to three ppt in the G7 non-life markets. More rate increases in excess of claims trends will be needed to achieve a sustainable improvement in profitability.

Life insurers are more exposed to interest rate risks given the dominance of savings and prevalence of long-dated multi-year contracts in their product mix. Many have reduced and shortened the duration of guarantees and shifted from savings to protection products. The extended low interest environment since the GFC has also pushed many to look more closely at management of in-force business as a route to longer-run sustainable profitability.



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### **ENDNOTES**

- 1 Insurance Supervisory Strategies for a low interest environment, Bank for International Settlement, October 2017.
- 2 Based on responses from 18 European insurers, including multinationals. European Insurance: Insurers Ready to Deploy Excess Capital in 2017 - CFO Survey, Moody's, 12 June 2017.