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The Possible Effects of Negative Interest Rates on the U.S. Life Insurance Industry

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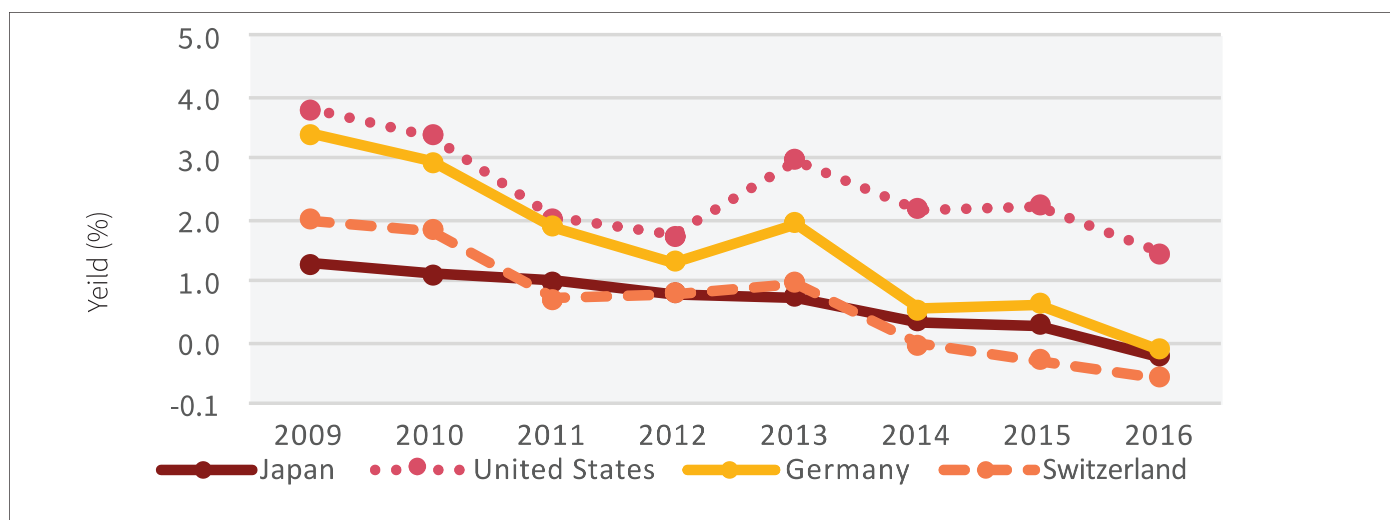
The persistent low interest rate environment in the U.S. has impacted life insurers for far longer than many expected. However, with potentially rising economic headwinds, negative nominal interest rates, as experienced in some developed economies, are more than merely a hypothetical possibility for the U.S. Negative interest rates challenge life insurers' value, profitability, and solvency and affect their product strategy and pricing, product portfolio management, financial reporting and investment management and asset adequacy.

BACKGROUND

Eight years after the great financial crisis of 2008, U.S. treasury rates remain at multi-generational lows. Federal Reserve Bank and Treasury programs of various types have kept rates at levels intended to spur lending and overall economic growth. Central banks in much of the developed world have kept rates at even lower levels. Low rates have driven down anticipated returns on fixed income investments for both life and P&C insurers in a number of developed economies and have even resulted in the need to rehabilitate some life insurers. In Germany, for example, near zero or negative yields on sovereign bonds have put German insurers with significant exposure to fixed-income intensive, guaranteed-return insurance products under significant pressure. Moreover, investors' flight to safety in the wake of Britain's recently announced plans to exit the European Union has put further pressure on U.S. treasury rates.

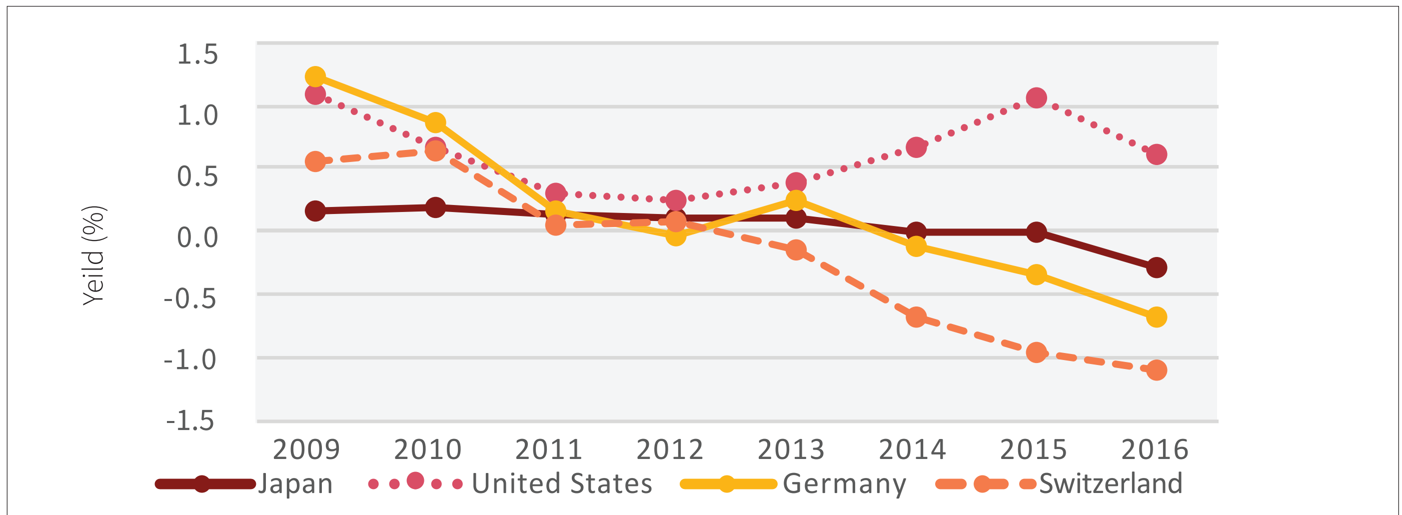
Sovereign interest rates in many developed economies have shown little sign of rising. In fact, charts 1 and 2 show that rates in a number of developed economies are already in, or are headed toward negative territory. For the U.S., the future direction is less certain, although there are mounting pressures that increase the possibility that sovereign rates in the U.S. might go negative, particularly in the first 10 years of the yield curve. Pressures include the flow of capital from developed economies with near zero or negative rates seeking greater positive yields and more attractive credits in the U.S. (increasing demand increases price, lowering fixed income yields). Also, as waves of retiring baby boomers seek guaranteed returns, and as pension plans increase their allocations to fixed income in order to manage pension-funding risks, the demand for guaranteed yield is also likely to suppress and even drive yields on debt into negative territory.

Chart 1
10-year Sovereign Yields (Rates through June 30, 2016)



Sources: CNBC Finance, Investing.com

Chart 2
Two-year Sovereign Yields (Rates through June 30, 2016)



Sources: CNBC Finance, Investing.com

The possible impacts of negative nominal treasury rates on 1) product development and pricing, 2) product portfolio management, 3) asset adequacy, 4) financial reporting and 5) investment management in the U.S. life insurance industry are as follows:

- **Product Development—**U.S. standard non-forfeiture laws largely put a floor on interest rate guarantees. In the absence of substantial revisions of the law to account for the possibility of negative interest rates, insurers would likely need to manage this regulatory constraint by offering longer rate guarantee terms (where state insurance laws or interstate product compacts allow) or by simply taking or lengthening portfolio yield terms relative to rate guarantee terms. Taking on more asset-liability risk in itself is bound to make rate guarantees less capital efficient and thus more expensive to offer from an economic standpoint. More expensive rate guarantees may result in insurers offering policies with less guaranteed rate elements. Insurers also would likely seek the option to reset rate guarantees much more frequently than they have historically.

  Low interest rates in the U.S., coupled with the rising equity markets that have been punctuated by periodic market crashes, have made and will continue to make equity-indexed life insurance and annuities an attractive proposition for policyholders. As sovereign rates fall and go into negative territory, insurers will look to find ways to offer insured products without making substantive interest rate guarantees. As a result, structured equity participation products that offer participation in the equity markets while limiting downside losses may increase in popularity.

  As insurers reach for yield in order to avoid the impact of negative benchmark rates at the short end of the yield curve, it is likely that they will limit their long-dated guarantee offerings to payout annuities and whole life insurance in order to meet non-forfeiture requirements and still earn sufficient interest margins.

  Insurers also may choose to offer more credit risk guarantees as they reduce their exposure to interest-rate guarantees. Institutional products such as stable-value wraps, for example, allow insurers to make credit risk guarantees with little rate guarantee risk. Insurers may look for ways to offer such products on a retail basis.

- **Product Pricing**—Public companies typically price products to earn an internal rate of return of 10 percent or more. The equity investor community implicitly sets this rate based on its broader expectations about risks and rewards for financial services companies relative to lower return and lower risk opportunities. Negative interest rates could lower investor expectations about the risk premium for financial services companies and hence result in a realignment of expectations of product and, ultimately, sector returns. Mid single-digit risk-adjusted return targets may not be an uncommon pricing target for insurance products in a negative interest rate environment.

Recent deals activity by certain Asian investors confirms this. The desire for positive returns in the U.S. insurance market relative to near-zero or negative rates in Japan has served as motivation to make acquisitions. This activity also has raised the valuations of life insurance companies (at the margin) relative to the unchanged or lower profitability expectations for their in-force businesses.

- **Product Portfolio Management**—Insurers will face much greater pressure on margins earned from legacy blocks of annuity and insurance premiums with high minimum rate guarantees. Negative rates may encourage insurers to offer buyouts on products (e.g. fixed annuities) with larger rate guarantees than they currently offer or can offer in at least the near-term future. In order to do this successfully, insurers would need to conclusively show policyholders the value of taking upfront gains in lieu of holding onto their attractive rate guarantees.
    - **Product risk disaggregation**—The process of unbundling product risks on a component by component basis may play a more prominent role in helping companies manage their businesses. Reinsuring or transferring interest rate risks to parties willing and able to assume such risks may present new opportunities for insurers to manage the risks of their legacy businesses. They will need to evaluate and minimize risk-transfer counterparty risks in this process. They likewise will need to weigh the benefits of these potential opportunities both for formulaic regulatory reserves and asset-adequacy reserves.
    - **Product-line disaggregation**—Divestitures or spin-offs of underperforming closed blocks of business or specific lines of business could become the favored approach to dealing with interest-rate sensitive lines of business that drag down insurer earnings and capitalization ratios as rates fall. This could present a new wave of opportunity for private-equity buyers of insurance business and for public-equity investors who can set an appropriate bid for prospective returns on interest-sensitive products.
- Asset Adequacy and Capital Requirements—U.S. life insurers periodically assess the adequacy of assets backing reserves under moderately adverse interest rate scenarios in order to

identify possible gaps between assets on hand and liabilities as they come due. They typically evaluate anticipated cost of minimum interest rate guarantees on life insurance, long-term care, and annuities via the assessment process' rate scenarios. The possibility of negative interest rates could lead regulators to change asset-adequacy testing scenarios and effectively place additional surplus strain on insurance companies. The Federal Reserve's increased focus on stress testing also could drive companies to consider and model the impact of negative rate outcomes.

Another impact to consider is the valuation and credit rating of underlying investments. Write-downs of book value and credit downgrades will reduce available statutory capital and increase risk-based capital requirements, and also will place additional pressure on insurer capitalizations. This could lead to insurer credit rating downgrades and result in scaling back or shutting down ratings-sensitive lines of business. Insurer ratings downgrades also may make it more expensive for insurers to refinance their debt. And, while negative rates may offset higher debt refinancing costs resulting from downgrades, such offsets will be less meaningful for insurers that are more exposed to rate guarantees.

- **Financial Reporting**—Negative rate scenarios have statutory asset adequacy and capital implications that could result in additional reserves needing to be held in respect of minimum rate guarantees. Public companies also would need to re-evaluate their GAAP Reserving and DAC investment yield assumptions and loss-recognition/recoverability testing processes under US GAAP to account for the possibility of negative interest rates. Insurers would need to review and retool interest-rate scenario generators that support these testing processes in order to account for negative interest rates along the yield curve. Insurers also would need to review their enterprise reporting, valuation, and administration systems for both assets and liabilities to ensure consistent reflection and reporting of negative interest rates and their financial impact.
- **Investment Management**—As we previously noted, negative interest rates will put more pressure on insurers who take on more credit, equity and duration risk in search of yield. State regulations on insurer asset allocation and the impending reduction in risk-capital requirements for below-investment-grade securities will help temper credit risk pressure. However, structured equity participation products—many of which pay equity-linked coupon income and come with a principal guarantee—may take on a more significant place in insurer portfolios despite their higher surplus-volatility implications relative to traditional fixed income.
- Insurers may look to take on more duration risk, but most likely with the option to shorten portfolio durations if the need arises. They may obtain this option through the trading of interest rate options; accordingly, they would need to carefully evaluate derivatives trades of this nature to determine their fit with investment portfolios.

CONCLUSIONS

The consequences of possible negative U.S. treasury rates pose a significant threat to life insurer value, profitability, financial reporting and solvency. Negative rates require a thoughtful reevaluation of insurer product strategies in order to offer meaningful value to current and future customers. In particular:

- Insurers may have to earn the margins they hitherto earned on interest rates by taking more traditional insurance risks, deemphasizing interest rate guarantees, and taking more credit risk.
- Negative interest rates would effectively lower capitalization ratios more significantly for insurers that offer long-dated interest rate guarantees.
- Insurers may need to manage their capital in respect of in-force business via reinsurance, by modifying their investment management strategy, through product buyback offers, and/or product portfolio sales.

Even though the possibility of negative interest rates may be somewhat remote, life insurers should determine the range and severity of potential impacts on their business, and develop strategies and plans to execute should negative interest rates ever become a reality. ■

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