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Solvency II – 2020 review

Yield Curve Extrapolation

August 2026

Why the Yield curve is changing

The new Solvency II is coming
This post is part of a series where we discuss the amendments to the Solvency II regulation captured under the name SII 2020 review. These changes will come into force in January 2027. This post sets out the main changes related to the extrapolation of the yield curve. In the next post, we will discuss the changes in the volatility adjustment.

Limitations of the current requirements
The main challenge with the current yield curve extrapolation is that it does not fully reflect market information beyond 20 years, causing the long-term liabilities to possibly be less closely aligned with the actual market conditions.

Currently, EIOPA uses the Smith-Wilson method to extend the yield curve beyond the Last Liquid Point of 20 years. This means that market interest rates for maturities above 20 years are not directly included in the published curve. As a result, valuations of long-term liabilities may not fully capture prevailing market conditions beyond the 20-year point.

Since market conditions beyond 20 years are not fully reflected in the Solvency II yield curve, insurers have less incentive to manage interest rate risk in line with their Solvency II liabilities. This can create a gap between economic hedging outcomes and Solvency II interest rate sensitivities, resulting in additional volatility.

Finally, the current SCR interest rate stresses do not fully capture the possibility of further declines in interest rates when rates are already negative. This is not consistent with the market developments observed in recent years.

Changes under Solvency 2020 Review
The review addresses these limitations by changing the extrapolation method, data used and the calibration of the interest-rate shocks.The main changes are presented on the right.

Area of Change	Current assumption	Proposed assumption
Liquidity Data	Last Liquid Point (LLP) set at a maturity of 20 years	First Smoothing Point (FSP) set at a maturity of 20 years
Extrapolation method	Smith-Wilson	Liquidity-weighted smoothing of forward rates
Shock scenarios	Multiplicative factors including floors	Multiplicative factors, parallel shifts and including term-dependent floors

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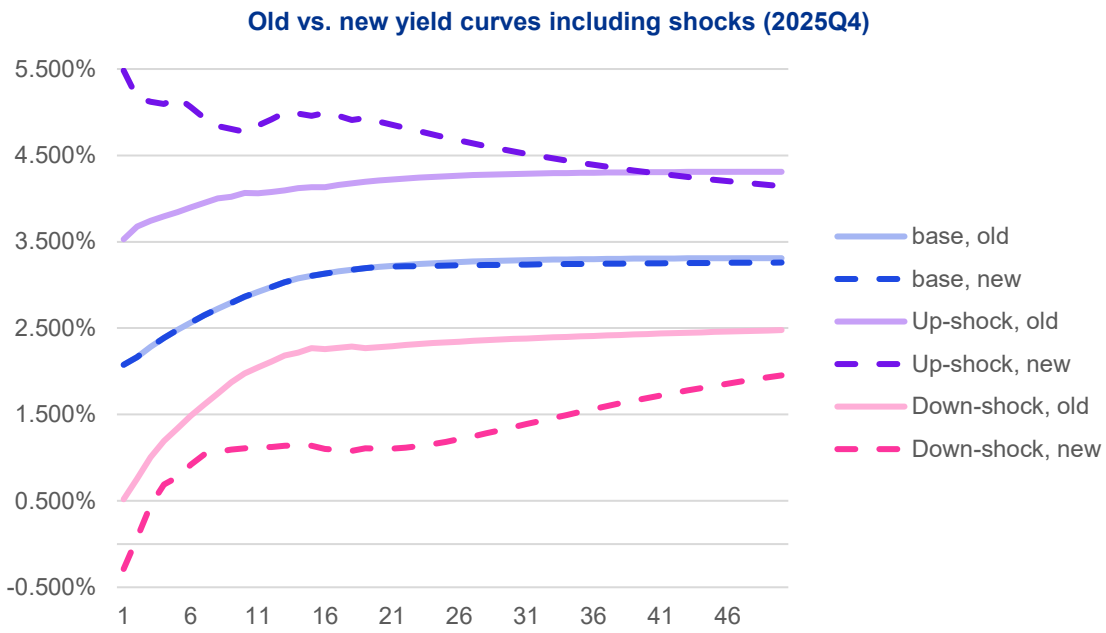
Impact on the yield curve



Base curve

Although the methodology for constructing the yield curve is substantially revised, its impact on the base curve under current market conditions is limited, as shown in the 2025 Q4 comparison. These curves are constructed without Volatility Adjustment (VA). The differences at maturities beyond 20 years remain modest in magnitude. As a result, the revised framework can be introduced without causing a material change in liability valuations.

The impact of the revised methodology is highly dependent on market conditions. European long-term interest rates have varied significantly over time, from near-zero levels around 2020 to more than 3% in recent years. Because the revised framework relies more heavily on market information beyond the 20-year point, alternative interest-rate environments could result in larger differences compared with the current approach. The table below illustrates this sensitivity. Consequently, insurers should closely monitor the impact as the transition date approaches.

Impact on BEL	2018Q2	2025Q4	2026Q2
Duration 25	3,40%	0,30%	0,64%
Duration 16	1,02%	0,00%	0,15%
Duration 10	0,03%	0,00%	0,00%
Duration 5	0,00%	0,00%	0,00%

SCR shock

In addition to the revisions to the yield curve extrapolation methodology, the approach used to determine interest rate shocks within the SCR interest rate risk module has been fundamentally redesigned. The new framework replaces the previous purely multiplicative shock approach with a combination of multiplicative shocks and additive parallel shifts.

Furthermore, the former 1% floor on upward shocks has been removed. Under the revised methodology, upward stressed yield curves are extrapolated using the same approach as the base risk-free curve, while applying a stressed UFR that is 15 basis points higher than the base UFR. The corresponding weighting mechanism, applied up to the Last Liquid Forward Rate (LLFR), results in larger upward shocks, particularly at medium to long-term maturities except for the extremely long-term, as illustrated in the graph.

A similar framework has been introduced for downward interest rate shocks. The previous treatment, under which negative interest rates were not stressed, has been replaced by maturity-dependent negative rate floors. In addition, downward stressed curves are extrapolated using the revised base curve methodology, with a UFR set 15 basis points below the base UFR. Although the impact is generally less pronounced than for upward shocks, it remains significant at longer maturities, as shown in the graph.

The overall effect on the SCR for interest rate risk will vary depending on an insurer's liability profile, duration mismatch, and interest rate hedging strategy. As a result, a detailed impact assessment is essential to understand the implications for capital requirements and risk management.

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Consequences for insurers

Main benefits
- At longer durations, the yield curve provides a more representative indication of market rates, resulting in closer alignment with Asset Liability management purposes.
- New SCR methodology specifically addresses the market situation of negative interest rates as observed during 2019-2021.

Main risks
- The revised extrapolation methodology relies more heavily on market information at longer maturities, where trading activity and market liquidity may be limited, particularly during stressed market conditions.
- The revised interest rate shock methodology changes the shape and magnitude of shocks across maturities, leading to different SCR outcomes depending on an insurer's liability profile.
- EIOPA's interest rate proposals are expected to increase capital requirements, despite EIOPA's reiteration there is no need for a further increase of capitalization of insurers

Transitional measures
- Optional for insurers wishing to apply for the phasing-in mechanism under the revised extrapolation framework
- Available in specific low-interest environments (if the 20Y spot rate <= 0,5%)
- Gradual reduction from alpha 20% to 11% between 2027 and 2032
- Reduces short-term solvency and balance sheet impact

ALM considerations
By increasing the impact of interest rates for longer durations on the yield curve, the gap between asset liability management based on fully market-observed rates and based on EIOPA's yield curve's decreases, further aligning economic hedging with SII interest rate sensitivity.

This on the other hand does come at the cost of expected higher Solvency Capital Requirements for interest rate risk.



Latest updates

1. EIOPA published the final RTS, technical information and accompanying Excel implementation tools for the revised extrapolation methodology in May 2026, providing insurers with the definitive specifications for the new framework.
2. DNB has published application forms for insurers wishing to make use of the transition measures (phasing-in mechanism). Applications must be submitted by 4 December 2026.

Financial effects



Higher SCR interest rate shocks



Higher capital requirements



Better alignment for Asset Liability management

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Posts

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