

AEGON INSIGHTS

The Solvency II review has finished – What will change?

The global 2020 Solvency II review has finally reached its conclusion after a political compromise was reached at the end of 2023. We here analyze some major changes, namely the liability discount curve, the required capital for interest rate risk, the treatment of equities, the risk margin and the volatility adjustment, and assess the impact on European insurers.

Executive summary

- The global Solvency II review is now coming to an end
- We here focus on some core elements of Solvency II which have a direct impact on the valuation of insurance liabilities and the standard required capital calculation
- Some changes will have a significant impact, especially the changes to the risk margin, volatility adjustment and interest rate stress scenarios
- After the official legislation has been published, the Member States will have a two-year period to implement the legislation in their national frameworks
- The full implementation is therefore not expected before 2026-2027

Introduction

The Solvency II Directive 2009/138/EC entered into force on January 1, 2016 for European insurance companies.¹ The Solvency II Directive states that certain areas of this legislation should be reviewed periodically. Currently, the global 2020 review of Solvency is finishing. This review covers the following areas:

- Long-term guarantee measures and measures on equity risk
- Methods, assumptions and standard parameters used when calculating the solvency capital requirement standard formula
- Member States' rules and supervisory authorities' practices regarding the calculation of the minimum capital requirement
- Group supervision and capital management within a group of insurance or reinsurance undertakings

In an earlier first phase, the European Commission adapted the Solvency II Delegated Regulation to review the treatment of infrastructure investments² and the treatment of simple, transparent and standardised (STS) securitisations.³ In this paper we focus on some core elements of Solvency II and discuss the changes that will take place as a consequence of this review:



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¹See EU (2009) and EU (2014) and the Delegated Regulation in EU (2015) and EU (2016).

²See EU (2016).

³See EU (2017) and EU (2018).

- Valuation of the liabilities
 - Extrapolation of the discount curve
 - Volatility adjustment
 - Risk margin
- Solvency capital requirements
 - Interest rate risk
 - Equity risk

Note that the official legislation has not been published at the time of writing (September 2024), so details can still change. The sources that we used are indicated for each separate topic.

Valuation of the liabilities

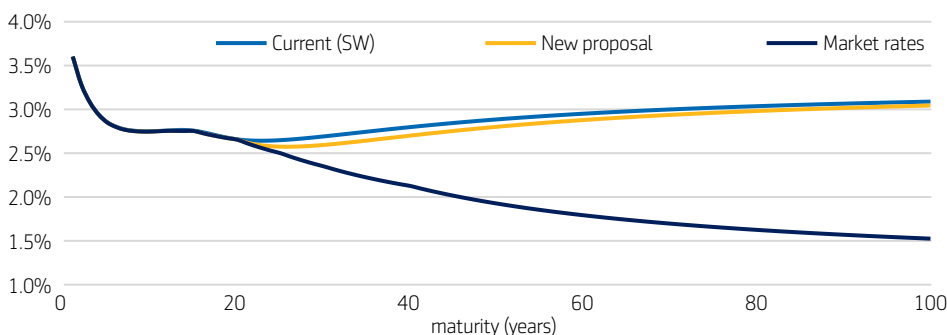
Extrapolation of the discount curve

For the liability discount curve a new extrapolation method to the ultimate forward rate (UFR) is proposed. This new approach is similar to the technique that was used in the past for Dutch pension funds.⁴ This alternative method differs in some major ways from the current approach under Solvency II:⁵

1. Extrapolation to the UFR is done with a simple exponential function instead of the more complex Smith-Wilson (SW) extrapolation method. The extrapolation starts at the “first smoothing point” (FSP), which remains at 20 years for the euro curve.⁶
2. The starting point for the extrapolation is the “last liquid forward rate” (LLFR). The LLFR is a weighted combination of forward rates pre and post FSP with weights that depend on the liquidity of the respective swap rates.⁷ In this way, market information beyond the FSP is also taken into account. The current extrapolation method only uses the 15- to 20-year forward rate as the starting point of the extrapolation beyond 20 years.
3. Insurance entities may phase in the new liability discount curve gradually, with a full transition to the new curve due on 1 January 2032.⁸ This is subject to prior approval by their supervisory authority. The effect of the application of this transitional measure should be reported in the Solvency and Financial Condition Report (SFCR).

Figure 1 shows the difference between the new extrapolation method (yellow line) and the current method (light blue line) as of April 2024. We here show the curve without volatility adjustment.

Figure 1: Effect of the new extrapolation method



Source: EIOPA, Bloomberg, Aegon Asset Management, as of 30 April 2024.

For the liability discount curve a new extrapolation method to the ultimate forward rate (UFR) is proposed.

⁴See Langejan et al. (2013) for more information about the Dutch UFR curve methodology. Currently this UFR method is not used anymore by Dutch pension funds. The Dutch regulator (DNB) now requires a valuation of the liabilities using the market rate curve.

⁵See EIOPA (2020a, Section 2.1) for more details.

⁶The convergence parameter is set to a value of 11% in this paper. As a consequence, the weight on the UFR is equal to 77.5% for a maturity of 60 years. This is in line with the revised Directive which states that for maturities of at least 40 years past the first smoothing point the weight of the UFR shall be at least 77.5%. See EU (2024, Article 77a) for more information.

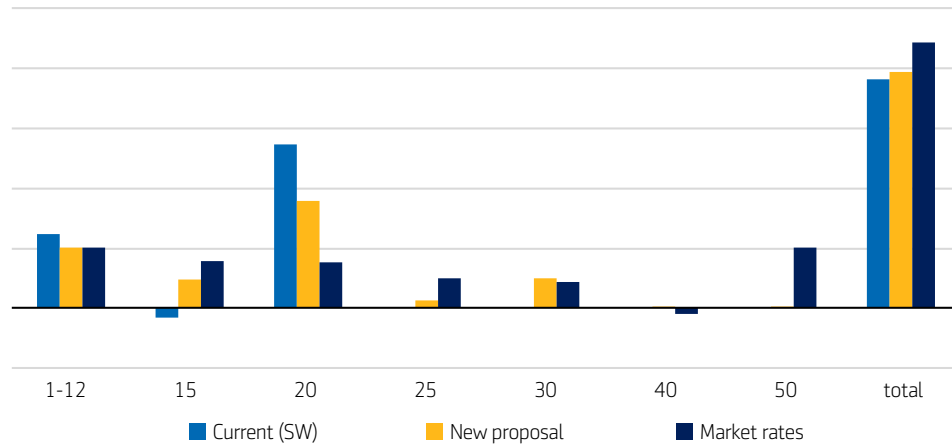
⁷The basket includes forward rates from 15 to 20 years (like the current SW approach) and additional forward rates from 20 years to 25, 30, 40 and 50 years. The basket weights are based on trading volumes for the different maturities. For this paper we use the latest available volumes in EIOPA (2020b), p. 769.

⁸See EU (2024, Article 77a).

Note that the new extrapolation method currently leads to a slightly lower discount curve for long maturities, which will result in marginally higher liabilities.⁹ Because of the limited effect, the need to apply a transitional period is probably small at current interest rate levels. Differences with the current method were much more pronounced, however, in the low yield environment of a few years back.¹⁰ Note also that differences with market rates remain very substantial for large maturities.

Figure 2 shows the impact of the new extrapolation method on the interest rate sensitivities.

Figure 2: Interest rate sensitivities



Source: EIOPA, Bloomberg, Aegon Asset Management, as of April 2024. Interest rate sensitivities are calculated for an example life insurance company with a duration of 13 years.

For the proposed new method (the yellow bars), the total interest rate sensitivity is slightly larger than for the current method (the light blue bars), but still lower than the true market rate sensitivity (the dark blue bars).

Looking at the distribution of the interest rate sensitivities, we see that the new curve reduces the extreme interest rate sensitivity at the 20-year point. A higher interest rate sensitivity is created at longer maturities (especially the liquid 30-year point), more in line with the sensitivities according to the market curve. The artificial short position at the 15-year point also disappears under the new approach. The alignment with market sensitivities thus improves, although significant differences remain, especially for the 20- and 50-year maturity.

Volatility adjustment

The volatility adjustment (VA) is added to the discount rate for the liabilities and should mitigate the negative effect of market stress on the fixed income investments.¹¹ This should create a dampening effect on the solvency ratio and prevent pro-cyclical investment behavior. The VA is published each month by EIOPA. The technical calculation is based on the spread of a representative fixed income portfolio. This spread is then corrected for the part of the spread which can be attributed to expected losses, unexpected credit risk or any other risk to arrive at the risk-corrected (RC) spread.¹² The volatility adjustment is currently equal to 65% of the RC spread.

Looking at the distribution of the interest rate sensitivities, we see that the new curve reduces the extreme interest rate sensitivity at the 20-year point.

⁹Only 0.3% higher for an example insurance company with a duration of the best-estimate liabilities of 13 years.

¹⁰EIOPA (2020a, p. 15) also proposed an additional mechanism for low interest rates. This mechanism would kick in when the risk free rate at the FSP (so 20 years for the euro) drops below +0.5%. The convergence parameter would then be increased to (at most) 20% when this rate reaches -0.5% or lower, but this maximum percentage would gradually go back to 10% in 2032. This mechanism is no longer mentioned in the revised Directive, probably due to the much higher interest rates at this moment.

¹¹In the extrapolation of the risk-free interest rates, see the previous section, the VA is also added to the last liquid forward rate.

¹²The risk-adjustment will become a percentage of the spread. That percentage shall decrease as spreads increase and depends on the current spread relative to the long-term average spread. See EU (2024, p. 58).

The VA depends on the currency and the specific country – different reference fixed income portfolios are used for this purpose. If the country RC spread is at least 85 bp higher and more than twice the currency RC spread, a country-specific volatility adjustment is currently added. This adjustment is now equal to 65% of the excess of the RC country spread over twice the RC currency spread. This mechanism can, however, lead to an abrupt activation of the country VA add-on and a sudden jump in the VA.

Several adjustments to the VA are introduced in the Solvency II review, to make the mechanism more effective compared to the current implementation. The main changes are:¹³

- The general application ratio of 65% is increased to 85% and a credit spread sensitivity ratio (CSSR) is introduced to account for volume and duration mismatches between the fixed income investments and the liabilities
- This leads to the following form of the currency VA: $VA_{cu} = 85\% * CSSR_{cu} * RCS_{cu}$, with RCS_{cu} the risk-corrected currency spread
- The country component of the VA is replaced with a macroeconomic VA for the euro countries, which should avoid a ‘cliff-edge’ effect as can occur with the current mechanism
- The macro VA kicks in if the RC country spread is more than 30% higher than the RC euro spread:
- $VA_{Euro,macro} = 85\% * CSSR_{Euro} * \max(RCS_{co} - 1.3 * RCS_{Euro}, 0) * \omega_{co}$
- ω_{co} is a country-specific adjustment factor which lies between 0% and 100% and depends on the RC country spread times the percentage of investments in debt instruments relative to the total assets held by insurance companies in the specific country

Risk margin

The risk margin is added to the present value of the best-estimate liabilities to determine the total technical provisions. This sum should represent the value for which the insurance liabilities could be transferred to another insurer who is acting independently and in its self-interest. Importantly, it is assumed that all risks that can be hedged in the market are removed before this (hypothetical) transaction takes place.¹⁴ Technically, the risk margin is calculated by first making a projection of the company’s solvency capital requirement (SCR) in all future years. Currently, this SCR stream is then multiplied with a cost of capital of 6% and discounted with the risk-free rate.

As a result of the Solvency II review, the cost of capital will be reduced from 6% to 4.75%.¹⁵ In addition, an exponential weighting function is introduced to account for the time dependency of risk. This will significantly reduce the base level and interest rate sensitivity of the risk margin for insurers with long-term liabilities. The details are not known yet, but EIOPA has suggested earlier to use an exponential function with a decay factor of 0.975 and a floor of 50%.¹⁶ This means that the reduction is 40% for a cashflow with a maturity of 20 years. The floor of 50% is reached at a maturity of 28 years.

The cost of capital shall be periodically reviewed by the European Commission, but not

Several adjustments to the Volatility Adjustment (VA) are introduced in the Solvency II review.

¹³See EU (2024, p. 56-59) for more details.

¹⁴This excludes actuarial risks, although it has become more common to hedge these via the financial market as well (e.g. via longevity swaps).

¹⁵See EU (2024, p. 53).

¹⁶So $\max(\lambda; 0.5)$, with t being the maturity and λ an exponential decay factor.

earlier than 5 years after the revised legislation comes into force. Overall, the expected modifications of the risk margin have received positive feedback, especially from long-term life insurers, since it will significantly reduce the level and interest rate sensitivity of the risk margin.

Solvency capital requirements

Interest rate risk

In their opinion on the Solvency II review, EIOPA (2020a) has indicated that the current standard approach for calculating the SCR for interest rate risk leads to a severe underestimation of the actual risks. For example, interest rates have moved more than in the SCR stress scenario (which should only happen once every 200 years).¹⁷ The current approach also fails to stress negative rates, although negative rates can of course continue to decrease in practice as we have seen in recent years. Users of internal models for the SCR calculation typically adopt alternative, more realistic, approaches in practice. This has led to a broad consensus that the current standard formula has severe shortcomings.

EIOPA (2020a) has therefore advised to model interest rate risk in the standard formula using an approach which is widely used by internal model users. In particular, the increased term structure for a given currency shall be equal to:¹⁸

$$r_t^{up}(m) = r_t(m) * (1 + s_m^{up}) + b_m^{up}$$

Where $r_t(m)$ denotes the risk-free rate in the corresponding currency, m denotes the maturity and s_m^{up} and b_m^{up} are specified by EIOPA. The minimum shift b_m^{up} starts at 2.14% for a maturity of 1 year and decreases to zero for a maturity of 60 years. The relative change s_m^{up} starts at 61% for a maturity of 1 year and decreases to 20% for a maturity of 90 years.¹⁹

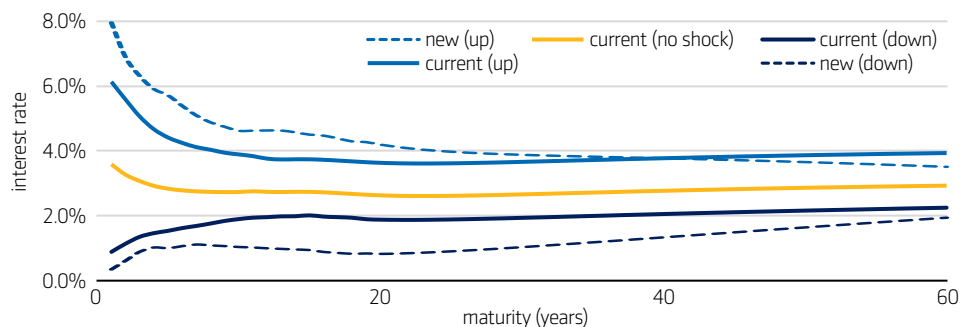
A similar approach is used to specify the decreased interest rate curve:

$$r_t^{down}(m) = r_t(m) * (1 - s_m^{down}) - b_m^{down}$$

In this case, the minimum shift b_m^{down} starts at 1.16% for a maturity of 1 year and decreases to zero for a maturity of 60 years. The relative change s_m^{down} starts at 58% for a maturity of 1 year and decreases to 20% for a maturity of 90 years.²⁰

As an example, Figure 3 shows the base risk-free euro curve as published by EIOPA at the end of April 2024 (the central yellow line) and the (current and new) stressed interest rate curves.^{21,22} The dashed light blue line shows the curve of an upward stress test using the new methodology and the dashed dark blue line shows the new curve of the downward stress test. The solid light blue and dark blue lines show the upward respectively downward shocked curves based on the current methodology.

Figure 3: Impact of the proposed new interest rate risk methodology



Source: EIOPA, Aegon Asset Management, as of 30 April 2024.

¹⁷Under Solvency II, capital requirements are determined on the basis of a 99.5% value-at-risk measure over one year.

¹⁸See EIOPA (2020a, Section 5.1).

¹⁹For maturities which are not specified by EIOPA, the value of b_m^{up} and s_m^{up} shall be linearly interpolated. For maturities shorter than one year the value s_m^{up} and b_m^{up} shall be equal to 61% and 2.14% respectively. For maturities longer than 90 years, the value of s_m^{up} shall be equal to 20%. For maturities longer than 60 years, the value of b_m^{up} shall be equal to 0%. A similar approach should be used for the downward shock.

²⁰The calculation of the downward shock should not lead to levels below a negative floor, see EU (2024, p. 75). The negative floor is determined in such a way that the likelihood of interest rates across relevant currencies and across maturities not being at all times above the negative floor is sufficiently small. EIOPA (2020a) proposed to use a floor of -1.25% for the euro risk free curve.

²¹See <https://eiopa.europa.eu/regulation-supervision/insurance/solvency-ii-technical-information/risk-free-interest-rate-term-structures> for the published risk-free and stressed curves. Note that we here consider interest rate curves without volatility adjustment (VA).

²²For clarity, we do not show the new base curve in this figure, but the difference with the current base curve is small (see Figure 1).

If we compare the old and new methodology, we see that the applied stress is much larger for the shocked down interest rates. The additional shock is approximately 73 basis points (averaged over maturities from 1 to 60 years) in this case. The effect is smaller for the increased interest rates: on average 31 basis points more. The impact is especially large for short and intermediate maturities (and negative for maturities of 40 years and more).

These changes could well lead to an increased focus on interest rate hedging, because - ceteris paribus - interest rate risk will be penalized more severely. Exposure to a downward interest rate shock will especially require more capital, which can lead to a larger demand in the market for receiver swaps or swaptions. Given the potentially big impact of these changes, this new approach may be implemented gradually over a period of up to 5 years.²³

Equity risk

Base capital charge for equities

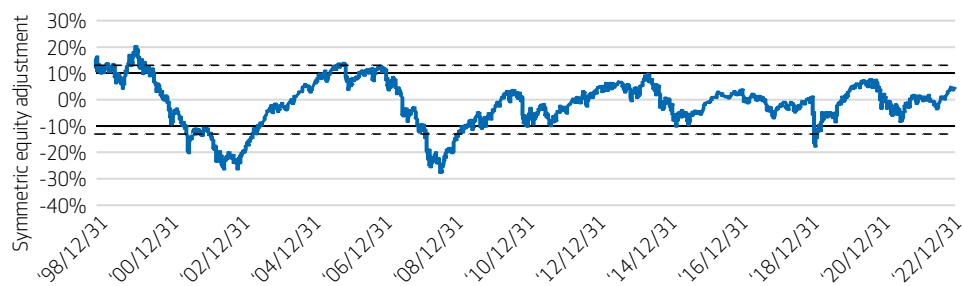
We now evaluate the revisions to the standard required capital model under Solvency II for equities. The base shock level remains 39% for Type I equities and 49% for Type II equities. Type I equities consist of equities listed on regulated markets in countries which are members of the European Economic Area (EEA) or the Organization for Economic Cooperation and Development (OECD). Type II equities consist of equities listed on stock exchanges in countries which are not members of the EEA or OECD, equities which are not listed, commodities and other alternative investments.^{24,25}

Symmetric adjustment

The base shock for equity (either 39% or 49%) is currently modified by at most +/- 10%, depending on the evolution of equity markets over the past three years. This modification is the symmetric adjustment of the equity capital charge.²⁶ The symmetric adjustment aims to mitigate pro-cyclical market effects by making equity more expensive (in terms of required capital) in an equity bull market and vice versa. The shock to be applied for equity risk thus lies between 29% and 49% for Type I equity and between 39% and 59% for Type II equity. This amplitude is very material, particularly considering that equity is already the most penalized risk module (i.e. has the largest shock).

As a result of the Solvency II review the symmetric adjustment bandwidth becomes +/- 13%.²⁷ This wider bandwidth should allow for more variation of the capital charge and thus improve the effectiveness of this countercyclical measure. Figure 4 shows the effect of widening this corridor in a historic simulation.

Figure 4: Evolution of the symmetric equity adjustment



Source: EIOPA, as of 30 April 2024.

If we compare the old and new methodology, we see that the applied stress is much larger for the shocked down interest rates.

²³Such phasing-in shall be mandatory and apply to all insurance or reinsurance undertakings (EU, 2024, p. 76).

²⁴See EU (2015, Articles 168 and 169).

²⁵The downward shock for strategic equity participations (related undertakings) is fixed and equal to 22%, see EU (2015, Articles 169 and 171). A fixed downward shock of 22% also applies for Type I equities that are treated as long-term equity investments, see EU (2015, Article 171a).

²⁶See EU (2015), Article 172.

²⁷Down from +/- 17%-point, as has been proposed earlier by the European Commission (see EU, 2021).

The blue line shows the equity adjustment without applying any corridor. The current bandwidth of +/- 10% (the solid black lines) is breached during extreme bull or bear markets. The upper bandwidth of +10% is for example only breached during the dot.com equity bubble at the end of the 1990's and before the Global Financial Crisis (2008-2009). The equity downturn that followed after the dot.com bubble (in 2002-2003) also caused a breach of the lower (-10%) bandwidth. This again happened during the Global Financial Crisis (2008-2009) and briefly during the coronavirus crisis in the spring of 2020. Widening the bandwidth to +/- 13% (the dashed black lines) will allow for a slightly stronger anticyclical impulse when extreme movements of the equity market occur, although the additional effect is limited in case of extreme market movements.

Long-term equity

A more beneficial capital treatment of long-term equity holdings is possible if certain restrictions are satisfied. Under Solvency II, insurers can create a long-term equity portfolio with a low and stable SCR of 22%. These equity investments must now be ring-fenced, assigned to specific insurance liabilities, and held for more than five years. When the average holding period of the portfolio is lower than five years, the insurer may not sell any equity investments until the average holding period exceeds five years. The solvency and liquidity position should also be such that forced sales of these equity investments can be avoided for at least 10 years. In addition, the equity investments consist only of equities that are listed in the EEA or of unlisted equities of companies that have their head offices in countries that are members of the EEA.

Despite the attractive SCR, insurance companies have generally found it difficult to satisfy the constraints for this approach. Jiang and Drukier (2021) list several reasons: the requirement of ring-fencing; the difficulty to maintain the long-term equity assignment over the lifetime of the matched insurance obligations; the question of what happens if insurance obligations need to be restructured; and the difficulty to define and test the forced selling criterion.

To alleviate these points, EIOPA (2020a) has proposed several adjustments in the current Solvency II review. Importantly, they propose to remove the requirement that the long-term equity assignment needs to be in place during the lifetime of the insurance obligations. In their legislative proposal, the European Commission (EC, 2021) also states that the more favorable standard parameter for long-term equity investments should be facilitated, provided that insurance and reinsurance undertakings comply with sound and robust criteria that preserve policyholder protection and financial stability. Such criteria should aim to ensure that insurance and reinsurance undertakings are able to avoid forced selling of equities intended to be held for the long term, including under stressed market conditions.

In the conclusion of the Solvency II review, the long-term equity module is moved to the Directive instead of the Delegated Regulation, which highlights its importance. The main changes are:²⁸

- The explicit coupling between the equity portfolio and a portfolio of best-estimate liabilities is removed
- The restriction of a listing or head office in the EEA is now expanded to EEA or OECD
- The no forced selling condition is now limited to 5 instead of 10 years
- A new restriction is added which states that the equity portfolio should be appropriately diversified

A more beneficial capital treatment of long-term equity holdings is possible if certain restrictions are satisfied.

²⁸See Article 105a in EU (2024, p. 70).

- The consequences of non-compliance with the restrictions are slightly toned down

These changes appear to make it easier to apply the long-term equity module, but it remains to be seen if this really clears the main hurdles for a widespread adoption of this approach by insurers.

Conclusions

This article reviews some important changes of the Solvency II framework, as a result of the global 2020 Solvency II review which is now coming to an end. We here focus on some core elements of Solvency II which have a direct impact on the valuation of insurance liabilities and the standard required capital calculation.

A new extrapolation method for the **liability discount curve** is proposed. The new approach is similar to the approach that has been used in the past for Dutch pension funds. This alternative method currently leads to a slightly lower discount curve for long maturities, which will result in a slightly higher valuation and markedly different interest rate sensitivity of long-dated liabilities. In general, the alignment with market rate sensitivities improves, although significant differences remain at the 20- and 50-year point.

The **volatility adjustment** —which is added to the liability discount curve up to the first smoothing point— will also be amended to increase the efficiency of this counter-cyclical measure. The main changes here are a higher application ratio (from 65% to 85%), a duration correction to avoid overshooting and a more robust implementation of the country VA. Most changes to the volatility adjustment have received positive feedback, especially the higher application ratio, the duration correction and the modification of the country adjustment.

The **risk margin** will become smaller and less sensitive to interest rates, due to a lower cost of capital and a new exponential factor which puts a lower weight on long-maturity cashflows. These changes have also been received well by the industry, as the risk margin was generally perceived as being too large.

Another major change concerns the calculation of the solvency capital requirement under the standard model. For **interest rate risk**, a new methodology is introduced. This will have a major impact because the interest rate stress scenarios, especially the downward shock, will become much more severe than before. This will lead — ceteris paribus — to a larger solvency capital requirement for interest rate risk. To mitigate the impact, a five-year transition period may be used.

For equities the bandwidth of the **symmetric adjustment** of the equity risk charge will be widened from +/- 10% to +/- 13%. As a consequence, this mechanism will allow for a slightly stronger anticyclical incentive when extreme movements of the equity market occur. For **long-term equity** portfolios a much lower and fixed capital charge of 22% applies, but at the cost of a more constrained portfolio. The Solvency II review leads to a more practical set of constraints, although several important restrictions remain. This makes it uncertain whether this approach will be pursued more in the future by insurance companies.

Some recommendations will have a significant impact, especially the changes to the risk margin, volatility adjustment and interest rate stress scenarios.

All in all, this concludes a comprehensive review of the current Solvency II methodology. Some recommendations will have a significant impact, especially the changes to the risk margin, volatility adjustment and interest rate stress scenarios. After the official legislation has been published (probably in the second half of 2024), the Member States will have a two-year period to implement the legislation in their national frameworks. The full implementation is therefore not expected before 2026-2027.

Full implementation is not expected before 2026-2027

References

- EIOPA (2020a), "Opinion on the 2020 Review of Solvency II", 17 December 2020. Available at https://www.eiopa.europa.eu/document/download/3c7759d5-a97a-4bc4-bfae-875c5d460d56_en?filename=Opinion%20on%20the%202020%20review%20of%20Solvency%20II.pdf.
- EIOPA (2020b), "Background Document on the Opinion on the 2020 Review of Solvency II - Analysis", 17 December 2020. Available at https://www.eiopa.europa.eu/document/download/5ed96239-ccc1-4716-af03-46edd0444bad_en?filename=Background%20analysis.pdf.
- EU (2009), "Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)", Official Journal of the European Union, 17 December 2009. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ.L:2009:335:0001:0155:en:PDF>.
- EU (2014), "Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014 amending Directives 2003/71/EC and 2009/138/EC and Regulations (EC) No 1060/2009, (EU) No 1094/2010 and (EU) No 1095/2010 in respect of the powers of the European Supervisory Authority (European Insurance and Occupational Pensions Authority) and the European Supervisory Authority (European Securities and Markets Authority)", Official Journal of the European Union, 22 May 2014. Available at <https://eur-lex.europa.eu/eli/dir/2014/51/oj>.
- EU (2015), "Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)", Official Journal of the European Union, 17 January 2015. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L.2015.012.01.0001.01.ENG>.
- EU (2016), "Commission Delegated Regulation (EU) 2016/467 of 30 September 2015 amending Commission Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for several categories of assets held by insurance and reinsurance undertakings", Official Journal of the European Union, 1 April 2016. Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0467&from=EN>.
- EU (2017), "Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012", Official Journal of the European Union, December 28 2017. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2402&from=EN>.
- EU (2018), "Commission Delegated Regulation (EU) 2018/1221 of 1 June 2018 amending Delegated Regulation (EU) 2015/35 as regards the calculation of regulatory capital requirements for securitisations and simple, transparent and standardised securitisations held by insurance and reinsurance undertakings", Official Journal of the European Union, September 10, 2018. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32018R1221>.
- EU (2021), "Proposal for a Directive of the European Parliament and of the Council amending Directive 2009/138/EC as regards proportionality, quality of supervision, reporting, long-term guarantee measures, macro-prudential tools, sustainability risks, group and cross-border supervision", European Commission, 9 September 2021. Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0581>.
- EU (2024), "Solvency II consolidated text plus amendments by 2020 Review", January 9 2024. Available at <https://www.verzekeraars.nl/media/kokd4vws/2009-138-consolidated-on-9-jan-2024-en.pdf>.
- Jiang, Z. and G. Drukier (2021), "Unlocking Long-Term Equity", Neuberger Berman. Available at <https://www.nb.com/handlers/documents.ashx?id=98ddf848-f832-427c-a63b-8d81c7f87bb8>.
- Langejan, T.W., Van Ewijk, C., Nijman, Th.E., Pelsser, A.A.J., Sleijpen, O.C.H.M. and O.W. Steenbeek (2013), "Advies Commissie UFR", 9 October 2013. Available via <https://zoek.officielebekendmakingen.nl/blg-254010.pdf>.

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