

Unlocking opportunities under Solvency II Revisions effective 2027



Contents

Executive summary	4
Implications of the expected Solvency II Review: A case study with EU Insurance AG	6
1. Background	7
2. Purpose of the study	7
3. Setting the scene	8
4. Implications of expected key revisions	10
5. Summary of our results	18
6. Potential management actions	19
Conclusions	21
References	22
Appendix	23
VA calculation formulas	23
RM calculation formulas	23
Contacts	24



Executive summary

A 'golden opportunity'?

The anticipated changes to the Solvency II regulations, which are set to take effect earliest from 2027, offer a seemingly attractive opportunity for EU-regulated (re) insurers to potentially unlock around 70 billion EUR in capital, as recently reported by Insurance Europe from Reinsurance News (2024,[1]). These estimated amounts are remarkable and raises the question of whether the deployment of excess capital will create a **golden opportunity** for (shareholders of) EU-supervised insurers. Instead, insurers may **rethink their strategy** with respect to, for instance, underwriting, asset allocation or operations to also benefit in the long term from greater degrees of freedom due to updated solvency regulations.

By when?

The revisions to the Solvency II, Directive (Level 1) entered into force from 8 January 2025, with member states having a transition period of up to 24 months to adopt them **by earliest from January 2027**. The detailed rules in the Level 2 Delegated Regulation, as well as the underlying Technical Standards (Level 2.5) and Guidelines (Level 3), will be developed in parallel and be directly applicable to firms.

Case study to assess potential impacts and management actions

To illustrate the possible range of capital relief resulting from the proposed changes to the Solvency II regulations, as well as to analyse potential management actions, a case study has been conducted on a hypothetical European life insurer called **EU Insurance AG**. In our study, we focus on life insurance products and analyse a few quantitative key elements of the revised Solvency II regulations, which are:

1. **Volatility Adjustment ('VA')**
2. **Risk Margin ('RM')**
3. **Long-Term Equity ('LTE')**

For our analysis, a quantitative model is used to estimate cash flows and potential impacts on the solvency ratio when using the Solvency II standard formula. Inherent secondary effects of the suggested changes on other regulatory and financial reporting requirements, such as ORSA, IFRS 17, and the Swiss Solvency Test (SST)¹, are briefly outlined.

Key observations

Three key observations are made. Firstly, the proposed modifications to the underlying mechanics for determination of the **Volatility Adjustment** are likely to offer benefits to European insurers. Accordingly, for our illustrative EU Insurance AG, an increase in the solvency ratio of about 4 percentage points is expected. Secondly, the **Risk Margin** is expected to be lower, mainly due to the reduction of the Cost of Capital rate and the introduction of a new 'lambda' factor. This factor mainly aims to reduce the sensitivity of the projected capital requirements to volatile interest rates. The reduction of the Cost of Capital rate is expected to enhance the solvency ratio of EU Insurance AG by an additional 20 percentage points. Thirdly, the revision of the eligibility criteria for **Long-Term Equity** investments is expected to boost the solvency ratio by an additional 5 percentage points for our considered insurer.

The solvency ratio of EU Insurance AG is expected to **increase by nearly 30%**.

Overall impact on solvency ratio

There is **no unique strategy** to optimise the resulting benefits of the updated Sol-

¹ For example, if a Group Insurance Undertaking is subject to Solvency II reporting and an entity subject to Swiss Solvency Test or vice versa.

vency regulation in the EU, but (re)insurers may have several management options. In the short term, the available but no longer required capital could be distributed to shareholders in the form of dividend payouts or share buy-back programmes. However, it could be more effectively used to optimise the business strategy, such as allocating free capital to the underwriting of new products that cover emerging risks and may improve operational results. Another option is to refine the asset allocation strategy to achieve improved financial results in the coming years. Whatever action is taken by management, (re)insurers may also consider certain second-order effects on other regulatory and financial reporting frameworks, such as ORSA, IFRS 17, and even the Swiss Solvency Test (SST)¹.

While the chosen strategy moving forward will depend on each (re)insurer's individual situation, we believe that the anticipated changes to the Solvency II regulations provide the management with **more than just a 'golden opportunity' to release capital in the short term.** (Re)insurers may need to rethink their current strategy regarding capital allocation, optimisation of their insurance portfolio or financial position, or consider other potential ambitions for transformation or modernisation of the organisation. New requirements regarding climate and/or nature-related risk assessments and disclosures, as well as the implementation of transition plans by insurance undertakings for a sustainable transformation, may need to be addressed (e.g. Corporate Sustainability Reporting Directive, CSRD; Swiss Climate Ordinance and TCFD; as well as EU taxonomy and TNFD).

By understanding the changes to the revised Solvency II and their potential impacts, (re)insurers will be better equipped to navigate the revised Solvency II regulations and capitalise on a range of opportunities over the coming years.



How to maximise the benefits of the change?

Opportunities ahead

Due to the scope limitations of this paper, certain key aspects of the ongoing Solvency II review, are not addressed. These include, for example, changes in extrapolation, interest rate risk, symmetric adjustment, proportionality, climate risks and macroeconomic factors.

The impact presented in our case study is open to debate and may vary depending on the products and company portfolio. However, the products in question were conventional, and the case study's tool allows us to analyse an unlimited portfolio or scenario.

For European P&C insurers, the case study's relevance and benefits may be limited on the products side, but the business impact assessment will depend on the specific characteristic of each business.



Implications of the Solvency II Review – A Case study with EU Insurance AG

1. Background

Following the initial proposal of the Solvency review in 2020, the Council and Parliament reached a provisional agreement on amendments to the Solvency II Directive in January 2024. The revisions to the Solvency II, Directive (Level 1) entered into force from 8 January 2025, while current negotiations among European Union member states suggest that the changes are expected to be adopted **within 24 months**.

This lower-level regulation may create a seemingly **'golden opportunity'** for EU-supervised (re)insurers due to the potential deployment of excessive capital. However, (re)insurers may instead rethink their strategies regarding risk appetite, written business or asset allocation to benefit from the degrees of freedom provided by the updated solvency regulations.

2. Purpose of the study

To understand the expected contribution of the key revisions to the quantitative Pillar 1 framework under the Solvency II standard formula, we analyse an illustrative insurer operating within the European Economic Area (EEA). This insurer, subject to Solvency II regulation, is called EU Insurance AG. By assuming a typical mix of business and asset allocation strategy, it is possible to assess how the Solvency Capital requirements are evolving with the proposed changes to Solvency II. We focused on the following key changes:

1. **Volatility Adjustment**
2. **Risk Margin**
3. **Long-Term Equity**

While these three key changes will be briefly summarised, the focus of this paper is on investigating the economic impacts on the Solvency II ratio and on providing potential implications for IFRS 17 and other regulatory frameworks, where applicable.



3. Setting the scene

EU Insurance AG is a primary life insurance undertaking that offers two products: term insurance and immediate annuity products. Life term insurance provides financial protection in the event of death during the term of the policy, while the payout annuity provides a regular income stream to policyholders in exchange for an initial premium or lump sum payment (see Table 1). Our model projects cash flows which are discounted using a single interest rate to arrive at best-estimate liabilities. Although in reality, term life insurance and annuity products experience different mortality patterns, for simplicity we rely on a single base mortality table for both products. The assets consist of bonds with varying durations, as well as real estate and equity-type investments (see Table 2). The risk appetite of the insurer is set to retain a solvency ratio of over 150%. The company does not hold subordinated loans, and it is assumed that no dividends are paid out to its shareholders. Additionally, it is assumed that no transition measures have been required. An overview of the assumptions underlying the insurance and investment portfolio can be found in the following two tables.

Key assumptions

Table 1: Insurance Portfolio

Liability assumptions ⁽¹⁾	Average attained age	Face amount ⁽²⁾ (CHF thousand)	Reserves (CHF thousand)	Annual regular premium (CHF thousand)
Life (30-year term)	50	175,000	5,002 ⁽³⁾	583
Annuity	70	529	7,500	

(1) Product assumptions (2023, [11])

(2) For the term life insurance, the amount is referred to as the "sum insured." For annuity, it is the annual benefit paid in advance until death.

(3) 20 years remaining until maturity

The investment portfolio is categorised according to prescriptions provided by EIOPA. This categorisation distinguishes between fixed income (i.e. government bonds and corporate bonds) and non-fixed income instruments (i.e. real estate, equity).

Table 2: Investment mix

Asset assumptions	Market value (CHF thousand)	Expected financial return %	Duration (years)	Investment portfolio weight %	Risk-free rate
Cash	400				2.50%
Fixed Income1 – Government Bonds	10,609	1.0%	20.0	50.0%	
Fixed Income2 – Corporate Bonds	6,203	2.0%	5.0	30.0%	
Real Estate	1,950	4.0%		10.0%	
Equity (75% from stocks in EEA ⁽⁴⁾ countries and 25% OECD)	1,950	6.0%		10.0%	

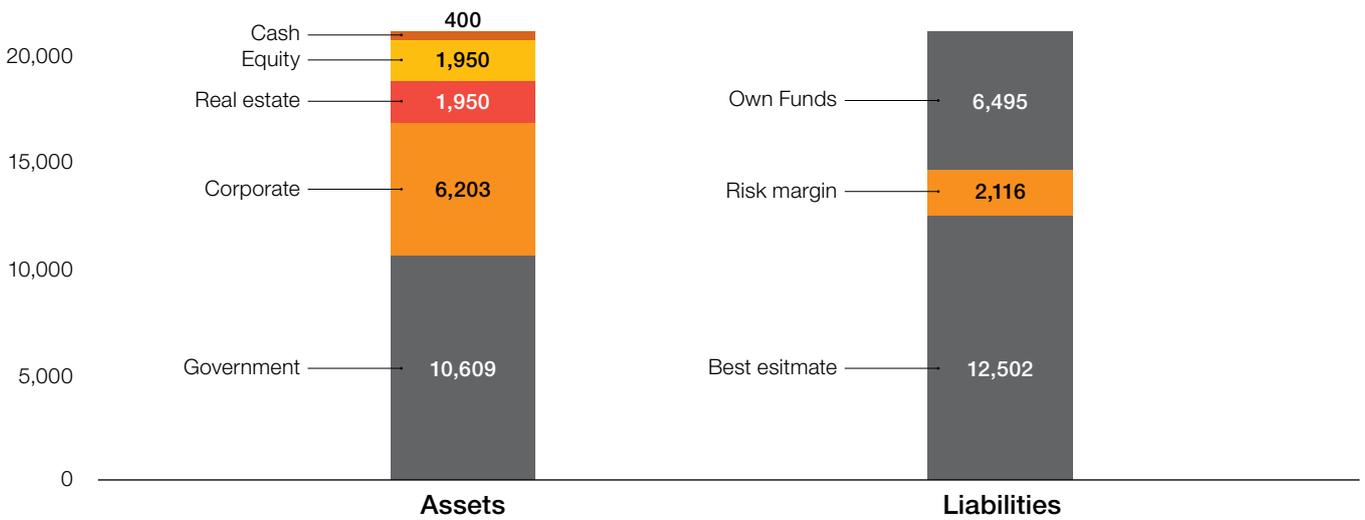
(4) OECD: Organisation for Economic Cooperation and Development

Source: EEA: European Economic Area

Subsequently, the following market-consistent balance sheet is obtained. The market value of the underlying assets is approximately 21.1 million CHF. These assets back both the Technical Provisions and the Own Funds as shown in the market-consistent balance sheet according to Solvency II (see Figure 1).



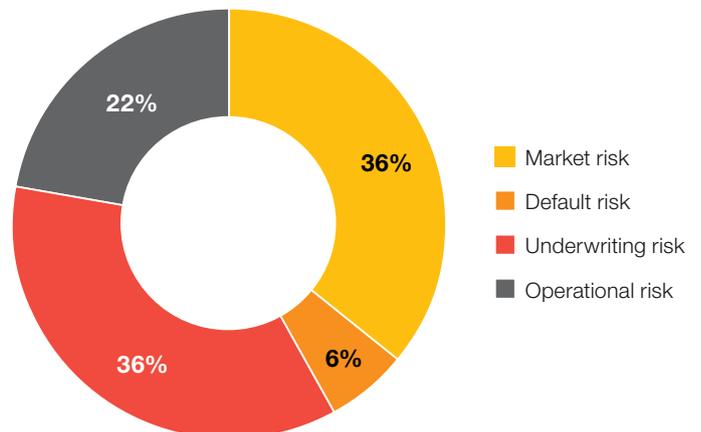
Figure 1: Composition of balance sheet



When employing our deterministic cash flow model and the current standard formula for risk capital measurement under Solvency II, we obtain the following risk figures as illustrated in Table 3.

Table 3: Determination of the Solvency Ratio prior to implementation of key revisions (base case)

	Base case (CHF thousand)
Solvency ratio %	180%
Own Funds	6,495
Solvency Capital requirement	3,599
Market risk	1,386
Default risk	220
Underwriting risk	1,376
Operational risk	831
Diversification BSCR and LAC Tax	-213





4. Implications of expected key revisions

In this section, the proposed changes to the key concepts of Volatility Adjustment, Risk Margin and Long-Term Equity are summarised, and the financial impacts on the capital requirements of EU Insurance AG are assessed.

4.1. Volatility Adjustment

As EU Insurance AG offers long-term products and reports capital requirements based on the Solvency II standard formula, the company recognises that changes to the Volatility Adjustment ('VA Adjustment') will have an impact on its Solvency II figures.

The Volatility Adjustment is an adjustment that is applied to underlying risk-free curves. Its purpose is to account for credit risk, such as that associated with high-quality corporate bonds or lower-quality sovereigns. The VA is calculated based on a pre-defined reference investment portfolio that represents an average investment portfolio of European (re)insurers. The purpose of the VA is to mitigate the impact of (irrational) short-term market fluctuation of fixed-income instruments on the (re) insurers' balance sheet. To address the asymmetric effects on the valuation of liabilities under Solvency II, the EIOPA allows (re)insurers to add a correction in the form of a VA on top of the risk-free rate which is used for discounting liability cash flows. As a result, when spreads are widening and market values of bonds deteriorate, the application of an increased discount rate for the valuation of policyholders' cash flows, under specific circumstances, leads to a simultaneous (or at least partial) reduction of the best estimate of liabilities. According to EIOPA, this way the volatility adjustment prevents pro-cyclical investment behaviour of (re)insurers.

In the current approach, the calculation of the VA is based on a 65% weight of the risk-corrected spread

In the current approach (2009 [2], p.74) the calculation of the VA is based on a **65% weight** of the risk-corrected spread (so-called general application ratio). This spread is defined as the difference between the interest rate that could be earned from a reference portfolio of assets and the risk-free interest rates without the use of any further adjustments. The VA for the currency EUR offers the possibility to add a country-level specific adjustment if the **risk-corrected spread for the country is greater than 100bps**. The Appendix VA covers the calculation formulas in the current and proposed approach.

The VA is calculated based on a pre-defined reference investment portfolio that represents an average investment portfolio of European (re)insurers. The purpose of the VA is to mitigate the impact of (irrational) short-term market fluctuation of fixed-income instruments on the (re)insurers' balance sheet.



Revisions to the Volatility Adjustment

According to Recital 45 of the European Parliament (2024, [3], p.23), the primary objective of redefining the VA is to better mitigate the impact of observed spread movements in the company-specific underlying portfolio on the insurer's liabilities, in particular when an adequate Asset-Liability Management is in place.

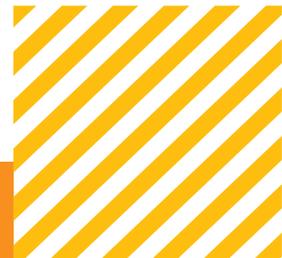
It is important to note that a change of the method for extrapolation of the risk-free rate (from the Last Liquid Point to convergence to an Ultimate Forward Rate) should be considered (2024, [3]). These changes may have an offsetting effect on business with long-tail durations exceeding 20 years. However, it is immaterial for the business of our case study.

The impact on the revision of VA is likely to contribute to an overall improvement of the Solvency II ratio when it is used for the valuation of long-term liabilities.



Key changes

- The **general application ratio** for the risk-corrected spread is derived from the representative portfolio and will increase **from 65% to 85%**. This translates to an approximate 30% increase in the VA, however, it may not be constant due to the new credit spread sensitivity ratio.
- An additional measure, called the **credit spread sensitivity ratio (CSSR)**, is newly introduced to the concept of VA. This CSSR ratio should be between 0 and 1 and is used to reflect the quality of the existing Asset-Liability matching.
- For the currency Euro, the requirement to add a country-level specific adjustment when the risk-corrected spread for a country exceeds 100bps has been removed. Instead, the VA will be increased by a **macro volatility adjustment ('macro-VA')** to effectively mitigate exaggerated bond spreads in a specific country. The calculation formulas for this proposed approach are provided in the Appendix VA.
- Subject to regulatory approval and without being increased by the macro VA mentioned above, (re)insurers may apply an **undertaking-specific adjustment** based on their own portfolio spread. This additional multiplicative factor, which is capped at 105%, can be applied for two consecutive quarterly reporting periods (2024, [3], p.140).
- Regulatory approval will be required when applying the newly defined VA.



The impact of these amendments will depend on a company's specific risk profile. According to A. Scarsini – R. Wang (2024, [4]), the revision of the VA is expected to result in an increase of the VA from 5 to 25 basis points, depending on a company's specific risk profile. For insurance companies utilising internal models, the impact of the dynamic VA is expected to be even more significant.

A higher VA eventually reduces the value of the liabilities, thereby increasing Own Funds, which are defined by the difference between the market value of assets and liabilities. Consequently, the Solvency ratio will increase as well. This perspective is solely from a regulator's point of view and (re)insurers should also take the current economic conditions into account when assessing the financial impacts.

A sensitivity test was conducted, increasing the VA from 5 to 25 basis points, resulting in a solvency ratio increase from 2% to 11%

Impacts on EU Insurance AG

To assess the impact of the revised mechanism for the VA, EU Insurance AG assumes an increase of the VA by 10 basis points. While the proposed changes to the weighting of the risk-corrected spreads of the VA do not directly impact the market value of the investments, the Own Funds of EU Insurance AG increase mainly due to the reduction of the best estimate of the technical provisions. A sensitivity test was conducted, increasing the VA from 5 to 25 basis points, resulting in a solvency ratio increase by 4%.

In addition to the impact of the VA in Pillar 1, the Solvency II Working Group of the Actuarial Association of Europe (2024, [5], p.3), recommends considering "the impact of the VA in the Own Risk and Solvency Assessment (ORSA)" within Pillar 2.

VA +10bps		Comments	
Solvency ratio %	↗ 4%	Overall impact of 4%	
Own Funds (CHF thousand)	↗ 26	Increase in Own Funds due to lower technical provision	
SCR			
Interest risk (CHF thousand)	→ -11	Due to reducing mismatch on asset and liabilities	
Underwriting risk (CHF thousand)	↘ -43	Due to discounting reduction	

Potential implication on IFRS17

The proposed changes to the VA could potentially affect the results reported according to IFRS 17 as well, in particular for (re)insurers that are relying on EIOPA's risk-free rate when discounting the fulfilment cash flows. These rates may be determined using either a top-down approach, where the asset portfolio's total return serves as the starting point, or a bottom-up approach, where in contrast a liquidity premium is added to the risk-free rate. Despite some differences in discounting between IFRS17 and Solvency II, an IFRS 17 implementation report published by EIOPA (2024, [6]) indicates that approximately 75% of surveyed (re)insurers relied on EIOPA's risk-free rate as the basis when following the bottom-up approach. Around 17% of the surveyed (re)insurers are already using EIOPA's curve, including expected changes resulting from the Solvency II review. This shows that (re)insurers are proactively aligning the expected changes from the Solvency II review with their IFRS 17 calculations.

Since **EU Insurance AG uses EIOPA's curve for IFRS17 reporting**, the applied discount rate impacts the evaluation of the present value of fulfilment cash flows and the Contractual Service Margin (CSM) when using the General Measurement Model (GMM). Consequently, the profit and loss (P&L) and/or Other comprehensive income (OCI) may also be impacted.

Comparison with the Swiss Solvency Test

Unlike Solvency II, the SST does not apply a VA to the risk-free curve for discounting liability cash flows. According to our understanding, the Swiss Financial Market Supervisory Authority (FINMA) argues that even if (re)insurers intend to hold their assets until maturity, an exemption from liquidity and migration risk cannot be granted as in extreme events these risks may be material. The risk-free rate for CHF under SST is based on the yields of Swiss government bonds, whereas EIOPA uses swap rates as underlying risk-free curves. Nevertheless, the SST CHF curve, which is based on risk-free government bonds, still implicitly includes a liquidity spread. This is because, as Swiss government bonds become more illiquid, the 'liquidity spreads' of these bonds will widen, causing yields to rise. Consequently, the discount rates derived from these bond yields will also increase and lead to lower best estimates of the liabilities. From this perspective, one can argue that the SST CHF risk-free curve reflects market dynamics implicitly rather than being explicitly adjusted by a VA. For other currencies, the SST relies on swap curves and does not incorporate a VA.

4.2. Risk Margin

The Risk Margin (RM) ensures that the costs for transferring the insurance obligations to a third party can be covered if the insurance undertaking is unable to fulfil its commitments. The RM is currently calculated by projecting the required capital a third party acquiring the portfolio would need to hold for risks until fulfilment of the contracts but that cannot be mitigated by liquid instruments available in the capital market (i.e. non-hedgeable risks). The annual cost for this capital, known as the Cost of Capital (CoC) rate, is based on a specified percentage of 6%. The underlying Cost of Capital approach is widely accepted by insurers and investors. However, the Cost of Capital rate has been recently criticised for being too high and too static with respect to movements in the underlying interest rates, especially when persisting low-interest rate environments occur. According to a study by PwC (2022 [7]), there are five key points of criticism, three of which are considered to be significant:

Calibration: The Cost of Capital rate is 6% per annum without transparent evidence and rationale for how the level was calibrated.

Response to market conditions: The Cost of Capital rate is static and does not vary with market conditions, which creates volatility in the Risk Margin.

Definition of non-hedgeable risks: The distinction between hedgeable and non-hedgeable risks is not always clearly justifiable. While it is generally assumed that all market risks are hedgeable, the reality is that not all market risks can be easily hedged at an acceptable price. Conversely, all underwriting risks are assumed to be non-hedgeable, even though certain risks such as longevity risk are regularly reinsured.





Revisions to the Risk Margin

The proposed changes to the CoC according to the European Parliament (2024 [3], p.21 Recital 41) state that the Cost of Capital “should be decreased compared to the level set at the time of adoption of the Directive 2009/138/EC and its delegated acts, while maintaining a sufficient level of prudence and protection of policyholders. In addition, the calculation of the Risk Margin should account for the time dependency of risks and reduce the amount of the Risk Margin, in particular for long-term liabilities. This would reduce the sensitivity of the Risk Margin to interest rate changes. An exponential and time dependent element should be introduced to implement this adjustment”.

In response to the discussed drawbacks for modelling the Risk Margin, a risk tapering ('lambda') approach has been introduced. This approach allows for a time-varying Cost of Capital within the existing Cost of Capital framework. It is achieved by applying a tapering adjustment to the projected Solvency Capital Requirements (SCRs) when calculating the Risk Margin (see the formula in Appendix RM).

In the current Cost of Capital approach, the SCR is projected independently in each period without considering any events that may have occurred in previous periods. The calculation effectively assumes that the third-party reference entity is recapitalised at the end of each period and that the capital is only held for the next year, ensuring it is independent of prior periods. In practice, however, the risks and projected SCR for each period may not be entirely independent as losses incurred in one period could lead to a reduction of the SCR in the following period. The core concept of the risk tapering (lambda) approach is that the SCR in future periods is not independent of previous periods. To account for this, the projected SCRs incorporate a time scaling factor, lambda, which ranges between 0 and 1 (denoted by λ^t , where t is the year and $0 \leq \lambda \leq 1$). This adjustment would reduce the sensitivity of the RM towards interest rate changes over time.

In addition to the implementation of a time-varying component for the Cost of Capital rate, the European Council and Parliament have agreed to lower the Cost of Capital rate from 6% to 4.75% (2024 [3] p.133, Recital 38b).



Key changes

- Changes on exponential tapering parameter ('lambda' of 0.975 and floor 0.5) which **account for the time dependency** of risks and reduce the amount of the Risk Margin in particular for long-term liabilities.
- CoC factor reduced from 6% to 4.75%

Applying a 4.75% rate instead of 6% leads to an approximate 30% reduction of the RM. Factoring in discounting and tapering lambda, the RM is likely to reduce by 20% to 40%.





Impacts on EU Insurance AG

RM (change of CoC and applying lambda)		Comments
Solvency ratio %	↗ 20%	Overall impact of 20%
Own Funds (CHF thousand)	718	Smaller RM implies an increase of Own Funds
SCR	→	No change

By implementing a CoC rate of 4.75% instead of 6% and applying parameter $\lambda = 0.975$ (floor 0.5), the release of the RM is approximately 718 thousand CHF, representing a reduction of 34% from previously 2,116 thousand CHF (in Figure 1) to 1,398 thousand CHF.

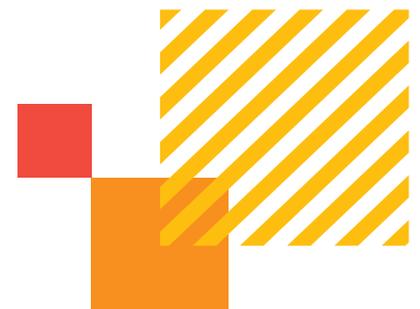
Potential Implications on IFRS17

When calculating the Risk Adjustment for IFRS17 reporting purposes, a common approach is to use a Cost of Capital (CoC) approach and/or to leverage the concept of Risk Margin (RM) used for Solvency II reporting purposes. EIOPA (2024 [8]) revealed that 47% of the surveyed companies choose CoC to calculate the risk adjustment for IFRS 17. While the RM framework aims at capturing non-hedgeable risks, including operational risks, IFRS 17 explicitly excludes operational risks but addresses non-financial risks. Despite this discrepancy, many companies have opted for a Cost of Capital rate of 6% or lower for the Risk Adjustment under IFRS 17. It is worth noting that the Risk Adjustment is likely to impact the CSM under IFRS17 for EU Insurance AG (e.g. when the general measurement model is chosen).

Despite this discrepancy, many companies have opted for a CoC rate of 6% or lower for the Risk Adjustment under IFRS 17.

Comparison with the Swiss Solvency Test

The RM included in the technical provision for Solvency II differs from the Market Value Margin used under the SST. To our knowledge, the introduction of the 6% CoC rate from Solvency was heavily influenced by the SST framework a decade ago. The rationale behind choosing a 6% CoC is detailed in the publication by the Swiss Federal Office (2006, [9], p.8) which states “The capitalisation required under the SST is based on the expected shortfall of change of risk bearing capital over a 1-year time horizon on a 99% confidence level. This corresponds to approximately 99.6% to 99.8% Value at Risk or a strong BBB rating. The observed Cost of Capital for A or AA rated company is within the range of 3% to 4.5%. FOPI assumed that the Cost of Capital for BBB companies is higher and 6% was deemed to be a reasonable estimate.” Although both frameworks apply a similar Cost of Capital rate, they differ in various aspects. For instance, the SST excludes operational risks when determining the required capital and uses the risk measure “tail value at risk” at different confidence level.



For the change in LTE, within the equity-risk module of the Solvency II standard formula, a lower capital charge is applied to LTE at fund level

4.3. Long-Term Equity

Long-Term Equity (LTE) refers to equity investments that are held for an intended long-term investment horizon. While (re)insurers typically hold these investments to match long-term liabilities such as life insurance policies and annuities, it is assumed that these equity investments are less exposed to the risk of forced sales. For this reason, within the equity-risk module of the Solvency II standard formula, a lower capital charge is applied to such equities at fund level. Similar to the proposed changes for VA, which aim at reducing the sensitivity to market fluctuations, the capital charges under LTE are designed to incentivise (re)insurers to invest in higher-yielding long-term equity investments while offering a decrease of the capital requirements.

LTE investments benefit from a lower capital charge of 22% compared to 39% or 49% for equity type 1 (listed in regulated EEA/OECD) and type 2 (non-EEA/OECD), respectively.

Revisions to the LTE

The objective is to enhance insurers' capacity to contribute to a long-term financing of economic entities by updating **criteria for LTE eligibility**.



Key changes

- The requirement to ring-fence* assets and liabilities for application of LTE has been removed in the latest proposal (2024 [3], p.3).
- The required minimum average holding period of 12 years has been reduced to 5 years (Article 105b European Parliament, 2024 [3], p.158).
- The scope has been expanded beyond the EEA to include OECD countries (e.g. UK, CH) to promote greater diversification.
- Firms are required to demonstrate their ability to hold the investment for at least 5 years to avoid forced sales under stress conditions.
- A new diversification requirement has been introduced to avoid overreliance on particular assets within an LTE portfolio for risk management purposes.

*A (re)insurer may choose to set up a ring-fenced fund to allocate a subset of assets to back a specific risk portfolio in liabilities, thereby protecting local policyholders in times of crisis. This measure helps prevent the relocation of capital and assets, particularly those set aside to cover technical provisions, and reduces capital charges.

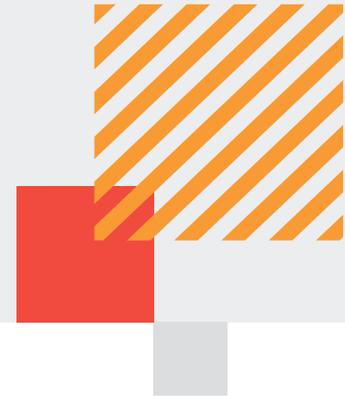
In theory, with the relaxed requirements on eligibility criteria for LTE and revised equity risk charges, (re)insurers have the opportunity to invest in long-term equity and to potentially benefit from higher expected returns at the same time without incurring additional penalties in the form of capital charges. The AAE Working group (2024, [5]) emphasised that the reduction in the holding period and the removal of ring-fencing requires some form of 'liquidity test'. This highlights the importance of still maintaining liquidity and diversification in investment portfolios. For example, the European Parliament (2024, [3] p.38) outlines the power of supervisors with regards to liquidity risk, including requiring (re)insurers to strengthen their liquidity position and to temporarily suspend redemption rights on life insurance policies and the dividend payments.

Impacts on EU Insurance AG

EU Insurance AG shifts 30% of its existing equity investments (which account for 3% of its total asset) into LTE funds. The impacts of this reallocation are as follows:

Equity risk reduction: With an equity investment exposure of 1,950 thousand CHF (in Table 2) without long-term equity, EU Insurance AG incurs a capital charge of 766 thousand CHF for equity risk. By shifting 30% of the equity investment to LTE (i.e. 585 thousand CHF), the equity capital charge decreases to 659 thousand CHF, thus reducing the total SCR by 101 thousand CHF (after diversification).

LTE			Comments
Solvency ratio %	↗	5%	Overall impact of 5%
Own Funds	→	-	No change
SCR			
Market risk (CHF thousand)	↘	-101	Due to equity risk reduction





5. Summary of our results

The review of the Solvency II results in improvements of EU Insurance AG's solvency position as summarised in Table 4:

- The changes in VA result in a 4% improvement in the solvency ratio when compared to the base case (prior to the Solvency review). This enhancement is primarily due to a 1% contribution from Own Funds and a 3% reduction in the solvency capital requirements.
- Subsequently, proposed changes to the RM led to a further 20% improvement in the solvency ratio, mainly driven by an increase in available Own Funds due to reduction of the RM.
- Lastly, adjustments in the LTE improved the solvency ratio by approximately 5%, primarily due to a reduction in the capital requirements for market risks.

Table 4: SCR results of EU Insurance AG

CHF thousand	Base case	Solvency review					
		VA +10bps	delta	RM 4.75%	delta	Eligibility LTE	delta
Solvency ratio %	180%	184%	4%	205%	20%	210%	5%
Own Funds	6,495	6,520	26	7,238	717.6	7,238	-
SCR (including diversification)	3,599	3,534	-65	3,534	0.0	3,443	-91
of which market risk	1,386	1,375	-11	1,375	0.0	1,274	-101
of which underwriting risk	1,376	1,333	-43	1,333	0.0	1,333	-



The three key changes have improved EU Insurance AG's solvency ratio from 180% to 210%, representing a nearly 30 percentage point increase. As a result, the Executive Board of EU Insurance AG is considering the possibility of paying dividends to its shareholders. Considering the cumulative impact of these changes, a distribution of dividends in the amount of 1,025 thousand CHF is feasible while maintaining the solvency ratio at the current base case level of 180%.

In light of the European Parliament (2024 [3], p. 4, Recital 4), EIOPA advises against freeing up capital for shareholder distributions or management bonuses, but instead EIOPA expects (re)insurers to strive for the **use of available financial resources to increase the productivity of the investments or facilitate the development of new technologies**. Alternatively, the company could choose to reinvest in long-term equity or to increase its appetite for existing or newly emerging or insured risks.

6. Potential management actions

6.1. Optimisation of ALM and Asset Management Strategy

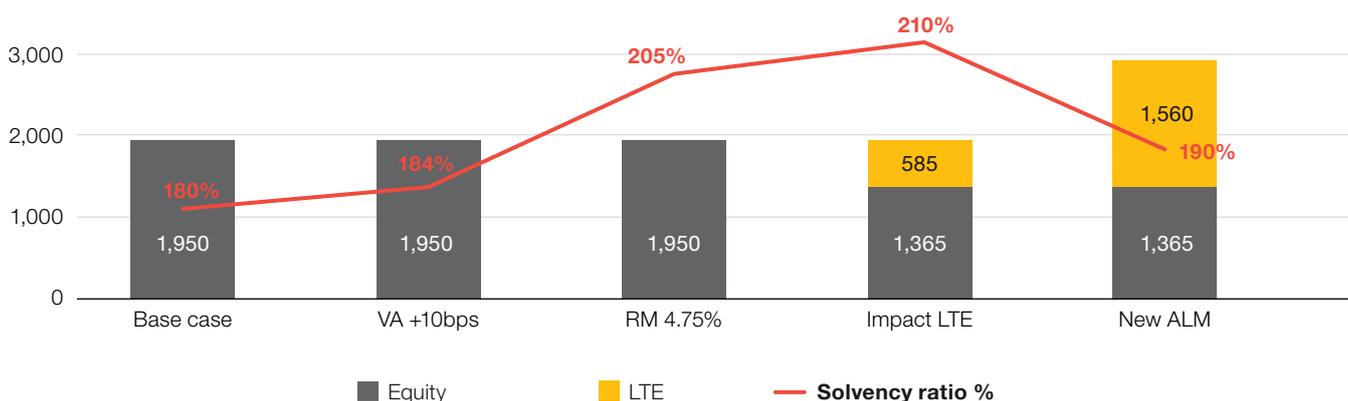
When writing this paper, the LTE is still being discussed among European insurers regarding its efficiency. EU Insurance AG is interested in conducting a scenario test to explore the potential benefits of further investment in LTE. This strategy is expected to result in higher average investment returns while at the same time incurring lower capital charges compared to the regulations prior to the Solvency II review.

Equities currently constitute 10% of the portfolio while 50% of investments are allocated to government bonds. The expected investment result is 435 thousand CHF, with equity contributing an expected return of 6.0% and government bonds assumed to yield 1.0% (see Table 2). Our sample insurer decided to reduce the investment in government bonds from 50% to 45% and to reallocate the freed-up resources to LTE funds, thus increasing the proportion of LTE from 3% to 8%. That is, the total equity investment hold increases to 15% of the asset portfolio (Figure 3). This adjustment is expected to raise the expected investment result to 487 thousand CHF (or by +12%) and to boost the Return on Capital (RoC) by 9% compared to the period before the Solvency II review (driven by higher returns from investments).

It is important to note that the overall capital consumption can be reduced when optimising diversification effects between invested instruments as well as other risk categories. Recognising the strategic importance of maintaining a diversified portfolio, EU Insurance AG acknowledges that investments should qualify at the portfolio level rather than at the level of individual equities. As a result, EU Insurance AG invests in collective investment funds or within alternative investment funds such as European Long-Term Investment Funds (ELTIFs). These are more attractive because the eligibility criteria are assessed at the fund level rather than at the level of the underlying assets held within those funds. The impact of increasing investment into long-term equity while reducing the proportion of government bonds is presented in the following graph Figure 3.

The result in the column “new ALM” shows a solvency ratio of 190%, which is higher than that in the initial base case of 180% despite a higher market risk from increasing the total equity allocation (which rises from 1,950 thousand CHF to 2,925 thousand CHF, including 1,560 thousand CHF in LTE investments). This hypothesis is also supported by Moody’s Beth Musselwhite (2024, [10]) which foresees some additional investment demand for illiquid real economic assets, while insurers’ capital is expected to remain strong. However, it is crucial to note that regulatory requirements are just one aspect of the investment decision-making process.

Figure 3: Impact of key changes and investment shift to LTE funds (CHF thousands) on Solvency Ratio





Regulatory requirements are just one aspect of the investment decision-making process

It is important to mitigate liquidity risk. For example, EU Insurance AG could face catastrophic scenarios such as unexpected large claims triggered by mortality shocks (e.g., a pandemic) or unexpected changes in customer behaviour (e.g., lapses or surrenders), which can also increase liquidity risk. To ensure financial stability and meet operational cash flow requirements, EU Insurance AG is closely monitoring its liquidity. The company considers several factors, including reinsurance, receivables and payables in order to maintain a minimum operational cash account balance of 400 thousand CHF (Figure 1). They have strengthened various tools to manage liquidity risks, such as stress testing for insurance and non-insurance test events and risk management planning.

Regulatory change is just one perspective, what's most crucial for companies is maintaining a mindful approach to asset-liability matching, regularly conducting liquidity stress tests and carefully mitigating currency risk.

If all companies adopt the same strategy, macroeconomic stability could be affected. According to the European Parliament (2024, [3] p.170), Article 132.6, "At the request of the supervisory authority, insurance and reinsurance undertakings shall take account of macroprudential concerns when they decide on their investment strategy and assess the extent to which their investment strategy may affect macroeconomic and financial markets." This paper will not explore this subject in further detail.

6.2. Further management options and opportunities

Companies may also explore the option of launching new lines of business or entering new market segments. With extra capital available to cover additional underwriting risks, insurers could benefit from new sources of profitability. This presents a valuable opportunity for shaping product strategy and advancing underwriting development, in particular under consideration of nature and climate-related aspects.

On 5 January 2023 the Corporate Sustainability Reporting Directive, CSRD, has been adopted by the European Commission and entered in force with an 18 month transitional period for member states. While insurers that are meeting certain qualifying criteria are expected to implement CSRD in Europe, in Switzerland the Swiss Climate Ordinance, effective since 1 January 2024 requires large companies to report on GHG emissions, climate risks and transition plans based on the requirements of the Task Force on Climate-Related Financial Disclosures, TCFD. Furthermore, the Swiss Financial Market Supervisory Authority, FINMA, has recently published its new "Nature-related financial risks" circular, which is clarifying the supervisory practice on the management of climate- and other nature-related financial risks.



Other implications:

In addition to the opportunities highlighted in this case study, it is important to acknowledge that the Solvency II review introduces increased disclosure requirements in the SFCR for transitional provisions and long-term guarantee measures. Furthermore, there are new requirements related to conducting cyber scenarios, climate change scenarios and potential future emission metrics in ORSA. These changes bring both opportunities and challenges for European insurers. We recommend conducting an impact analysis by early 2025 and initiating the planning process for the implementation of these changes.

Conclusions

The European Commission has recommended revisions to the current Solvency II Directive regarding the Volatility Adjustment, Risk Adjustment and Long-Term Equity. We concluded that although these revisions may not immediately release 70 billion EUR in capital across Europe (2024, [1]), a 'golden opportunity' for (re)insurers to reassess their strategies is seemingly on the horizon. We observe that across the three key revisions, a typical insurer could potentially experience an increase of its solvency ratio by about 30%.

We believe that the expected capital reliefs may lead to other transformations beyond merely preparing for the implementation of recommended changes or distributing capital. For example, (re)insurers have the opportunity to reassess their underwriting strategies. This could involve expanding existing lines of business or venturing into new business areas to cover emerging risks, with the ultimate objective to attract new clients and increase operational profitability. As illustrated in the case study, (re)insurers may also explore other management actions and, among others, optimise the asset allocation strategy that allows EU Insurance AG to maintain a similar solvency ratio while potentially achieving higher asset returns in the long term. As demonstrated above, the exposure to equity risk could nearly triple while maintaining current solvency levels. The example showed that the expected financial results may increase by up to 12% per year while the return on capital is increasing by 9% compared to pre-Solvency II review levels.

It is important to highlight that the Solvency II review presents both opportunities, as mentioned above, and challenges. These challenges include increased disclosure requirements for transitional provisions and long-term guarantee measures in the SFCR, as well as new obligations related to cyber scenarios, climate change scenarios and potential future emission metrics in ORSA. To effectively navigate these changes, we recommend conducting an impact analysis by early 2025 and initiating the planning process for implementation.

Leading story of EU Insurance AG

Other implications



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Appendix

VA calculation formulas

Current approach:

$$VA_{\text{currency}} = 65\% * RCS_{\text{currency}}$$

$$VA_{EUR, \text{country}} = 65\% * \text{Max}(RCS_{\text{country}} - 2 * RCS_{EUR}; 0) \text{ only if } RCS_{\text{country}} > 100\text{bps}$$

The new formula in the Level 2 Delegated Regulation is given by:

$$VA_{\text{currency}} = 85\% * CSSR_{\text{currency}} * RCS_{\text{currency}}$$

While for the euro, the volatility adjustment will be increased by a macro volatility adjustment, which is calculated as follows:

$$VA_{EUR, \text{macro}} = 85\% * CSSR_{EUR} * \text{Max}(RCS_{\text{country}} - 1.3 * RCS_{EUR}; 0) * W_{\text{country}}$$

where $RCS_{\text{currency}/\text{country}}$ is a risk-corrected spread for the currency / country and W_{country} is a country adjustment factor given by

$$W_{\text{country}} = \text{max}(\text{min}(\frac{RCS_{\text{country}} - 0.6\%}{0.3\%}; 1); 0)$$

The $CSSR_{\text{currency}/\text{EURO}}$ is the credit spread sensitivity ratio of an insurance or reinsurance undertaking for the currency / EURO. According to the proposal to amend Article 77d of Directive 2009/138/EC, the $CSSR_{\text{currency}/\text{EURO}}$ shall not be negative and not be higher than one. It shall take values lower than one where the sensitivity of the assets of an insurance or reinsurance undertaking in a currency to changes in credit spreads is lower than the sensitivity of the technical provisions of that undertaking in that currency to changes in interest rates.

RM calculation formulas

Current approach:

$$RM = 6\% * \sum_{t \geq 0} \frac{SCR(t)}{(1 + r(t + 1))^{t+1}}$$

The new formula in the Level 2 Delegated Regulation is given by:

$$RM = 4.75\% * \sum_{t \geq 0} \frac{\lambda^t SCR(t)}{(1 + r(t + 1))^{t+1}}$$

Contacts



Dr. Harald Dornheim
Partner
Actuarial and Risk Modelling Solutions
PwC Switzerland
+41 79 874 95 08
harald.dornheim@pwc.ch



James Norman
Partner
Actuarial and Risk Modelling Solutions
PwC Switzerland
+41 58 792 17 91
james.x.norman@pwc.ch



Quynh Nguyen
Manager
Actuarial and Risk Modelling Solutions
+41 78 694 97 00
quynh.b.nguyen@pwc.ch

www.pwc.ch

PwC, Birchstrasse 160, 8050 Zurich, +41 58 792 44 00

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