

Solvency II under review: EIOPA's Final Opinion on the 2020 Review

In its final opinion on the 2020 Review of Solvency II, EIOPA proposes changes to various parts of the Delegated Regulation. This paper summarises and discusses the most material changes with a main focus on investment-related areas.

On 17 December 2020, the European Insurance and Occupational Pensions Authority (EIOPA) published its final opinion on the 2020 review of the Solvency II framework, which had been requested by the European Commission (EC). EIOPA opines that whilst Solvency II works well overall, evolutionary improvements can be made in several areas.

This paper mostly focuses on the market related aspects of the opinion, including:

1. **Extrapolation of the risk-free interest rates.** The final recommendation includes only a moderate adjustment towards the lower benchmark swap rates reflecting the substantial impact this would otherwise have.
2. The **Standard Formula** for Solvency Capital Requirements (SCR). Notable changes include a more permissive long-term equity treatment, clarifications around strategic participations, widening the symmetric adjustment, and likely having the most quantitative impact, removing the interest rate down-shock zero floor.
3. **Long-term guarantee measures.** The Volatility Adjustment is substantially updated to be more relevant and less volatile while the Matching Adjustment is updated to allow diversification and clarify repacks.

Extrapolation of the risk-free interest rates

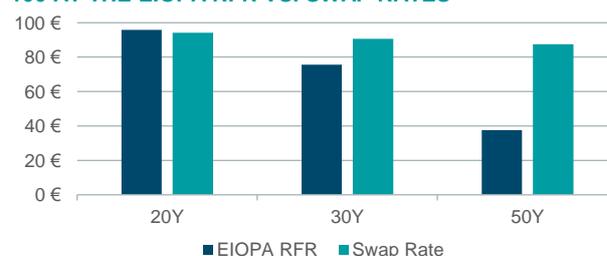
Background

One of the most substantial changes in the publication relates to the calculation of the risk-free interest rate curve used in the valuation of liabilities. In general, the economic view of an insurer's balance sheet is that policy obligations

should be valued as if there were little to no possibility that the insurance company might default, i.e. to the system, they are risk free. Thus, from a theoretical perspective, all liabilities should be valued at a market risk free rate. The many practical problems of applying this theory directly has led to the adoption of the current method which blends market rates with a target long-term rate.

Under the current method, the Euro risk-free rates for maturities before the last liquid point (LLP) of 20 years are directly derived from swap rates. But after the LLP, interest rates are smoothly extrapolated towards a constant ultimate forward rate (UFR). Since swap market information past the LLP is not taken into account in this extrapolation, there can be a significant divergence (in particular, in today's low interest rate environment) between the extrapolated rates and the actual swap rates. This divergence and the associated concern that the value of liabilities are severely underestimated (see Figure 1) is the basis for supervisory concern and EIOPA's review.

FIGURE 1. ILLUSTRATIVE EXAMPLE OF DISCOUNTING EUR 100 AT THE EIOPA RFR VS. SWAP RATES

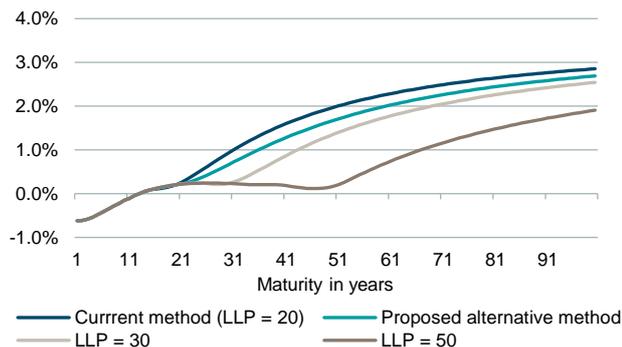


Source: EIOPA; As of 15 February 2021

Conclusion and Analysis

Unsurprisingly, EIOPA has recommended that the current method be amended to bring liability discount rates closer to the market swap rates. The new method will alter the mechanism for smoothing towards the UFR by taking into account additional market data about the underlying swaps (see technical details below). Figure 2 shows the final proposal as well as the current method and some alternatives.

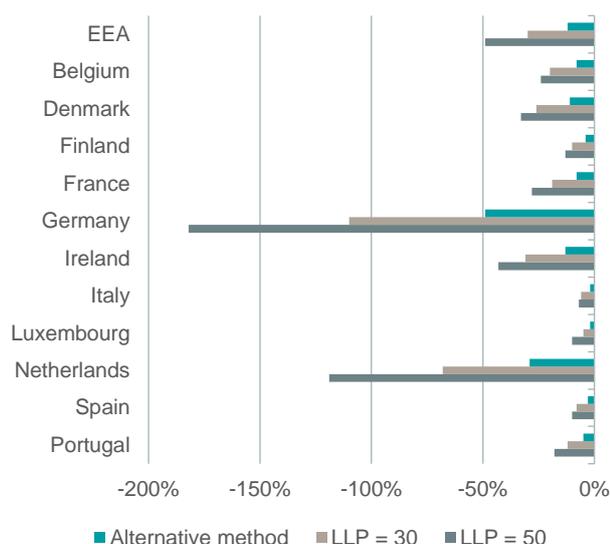
FIGURE 2. EXTRAPOLATION OF THE EURO RISK-FREE RATE AS OF 15/02/2021



Source: DWS International GmbH. As of: 15 February 2021

EIOPA reviewed several options for reducing the divergence to swap rates, ranging from significant reduction to moderate, but ultimately arrived at a moderate reduction due to practical and potentially political considerations. More severe deviation reductions included extending the last swap observation date (LLP) out much further. The analysis of the solvency impact for such a change can be seen in Figure 3.

FIGURE 3. IMPACT OF DIFFERENT EXTRPOLATION METHODS ON THE AVERAGE SCR RATIO BY COUNTRY



Source: EIOPA. As of: end-2018

For countries like Germany and the Netherlands, solvency positions would have been severely impacted due to the long-dated nature of life insurance liabilities in those countries. Additionally, some insurance companies raised the concern that moving the LLP to a higher maturity can lead to a more volatile discounting curve which itself could cause stronger fluctuations in insurers' own funds and hence in solvency ratios. Moreover, moving the LLP could create additional pro-cyclicality. If all insurers increase allocations to long-dated bonds or swaps to improve asset-liability matching, this additional demand would place downward pressure on risk-free rates and generate further demand for such instruments creating a vicious cycle.

Even though the proposed alternative extrapolation method will have a less severe impact on the solvency position of insurance companies than moving the LLP, it still has a significant impact on companies with long-dated liabilities. Therefore, EIOPA proposes a smooth transition to the new method through 2032. Additionally, a part of the negative capital impact might also be absorbed by the proposed re-calibration of the risk margin, especially for long-dated guaranteed liabilities. The proposed re-calibration allows for a relative reduction in the risk margin by approximately 15% on average.

Technical Details

EIOPA suggests an alternative extrapolation method in which the current extrapolation is blended with additional market data. This method will smoothly extrapolate interest rates from the first smoothing point (FSP) to the UFR by means of a last liquid forward rate (LLFR), which is determined as the volume weighted average of swap forward rates before and after the FSP.

The FSP, which serves an analogous purpose to the prior LLP, is determined based on the residual bond criterion. This criterion is set to the maturity (in years) beyond which the cumulative market value of outstanding sovereign bonds is less than 6% of all such bonds in the market. In the case that this value exceeds the maturity for which markets are considered deep, liquid and transparent (DLT), then the closest DLT maturity is chosen.

For the Euro, this bond criterion would result in 22 years, but the largest DLT point is 20 years (as of YE 2019), resulting in an FSP at 20 years. Finally, to avoid excess discount rate volatility, changes to the FSP should only be made if the residual bond criterion delivers a different result for two consecutive years.

Solvency Capital Requirement (SCR) for market risks

Equity risk

EIOPA was asked by the EC to conduct a comprehensive review of the equity risk sub-module, and in particular to assess the appropriateness of the design and calibration of the risk charges for all equity investments that are subject to a reduced capital charge of 22%. This includes duration-based equity investments but also strategic equity investments and long-term equity investments for which EIOPA has not yet provided any calibration. Figure 4 summarizes the equity risk charges adopted by the EC and those charges initially advised by EIOPA or its predecessor institution, CEIOPS. In general, EIOPA does not see any need for re-calibration of those capital charges for which they already have provided a calibration and only suggested changes related to long-term equity investments and strategic equity investments.

FIGURE 4. CAPITAL CHARGES FOR DIFFERENT TYPE OF EQUITY INVESTMENTS

	Current Solvency II calibration	EIOPA/CEIOPS calibration
Equity Type I (listed EEA/OECD)	39%	45%
Equity Type II (listed non-EEA/OECD)	49%	55%
Infrastructure project	30%	30-39%
Infrastructure corporate	36%	36%
Strategic equity investments	22%	–
Long-term equity investments	22%	–
Duration-based equity	22%	22%
Qualifying unlisted equity portfolios	39%	39%

Source: EIOPA. As of: December 2020

Long-term equity investments

In March 2019, the EC introduced a lower capital charge for specific long-term investments in equities. In order to qualify for the long-term equity (LTE) investment treatment, an equity investment must meet several requirements.

In fact, the LTE investment category can be considered as a revision of the duration-based equity risk (DBER) sub-module as both concepts aim to capture the risk of equity investments that are held for a longer period. In particular, the DBER sub-module can only be applied by life insurance companies that provide certain occupational retirement provisions or retirement benefits and that meet further criteria, such as a holding period of at least twelve years.

In contrast, the concept of LTE investments is less restrictive while in fact substantively capturing the same type of type of equity risk as the DBER sub-module. Hence, in order

to reduce complexity, EIOPA suggests phasing out the DBER sub-module and refining the requirements for LTE investments (without imposing the same restrictions as for DBER investments) to accommodate this type of risk.

EIOPA proposes following changes and additions to the requirements for LTE investments, which may allow a broader and easier use of the LTE concept:

- **Minimum holding period:** According to the current regulation, a LTE portfolio must have an average holding period of five years. This requirement is very strict as it effectively mandates a buy-and-hold strategy with little or no flexibility for ongoing management. Hence, EIOPA proposes to relax the requirement to a commitment to hold the global exposure to equity in the LTE portfolio for a period of more than five years on average. The actual management of the portfolio should be frequently reviewed against this policy. The current requirement that an insurer is not allowed to sell any security in a LTE portfolio with an average holding period below five years shall be removed accordingly. Consequently, the requirement to identify the holding period of each single position in the portfolio can be removed. Overall, this approach is in line with the commitment-to-hold approach supported by the European insurance and reinsurance federation 'Insurance Europe'.
- **Domicile:** EIOPA does not propose any changes to the requirement that the equities within a LTE portfolio must be listed/headquartered in European Economic Area (EEA). This substantially restricts the investment universe and it is also not in line with similar restrictions in the Solvency II framework that typically allow investments in OECD countries as well.
- **Asset-liability-management:** The current version of the LTE regulation requires that an LTE portfolio must be part of a portfolio assigned to cover clearly identified insurance obligations over the entire lifetime of these obligations. EIOPA sees the problem that in many instances the lifetime of an insurance contract exceeds the lifetime of the corresponding Solvency II obligations. This means that assets are typically held longer than what is recognized in technical provisions, e.g. in case of one-year non-life contracts with typically high renewal rates. Hence, EIOPA proposes that the assignment of the portfolio has to be maintained in principle (i.e. no switch in allocation of LTE between liabilities is allowed) but not over the entire lifetime of the obligations. This requirement should be less material for life insurance companies than for non-life given the average lifetime of the obligations.

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– **“Ring-fencing light”**: One of the most criticized requirement of the LTE concept is that the assigned portfolio and the insurance obligations it covers must be identified, managed and organized separate from other business. This requirement – sometimes referred to as “ring-fencing light” or “quasi-ring fencing” – is typically not applicable in practice as in most European countries insurance liabilities are covered generally by a pool of investments, with no allocation of individual investments to individual liabilities. EIOPA follows this view and proposes that only the assigned portfolio of assets should be identified and managed separately from other activities but not in conjunction with the covered liabilities. Additionally, the reference to a separate organisation is to be removed as it might be interpreted as requiring a strict separation of teams managing the assets. In EIOPA’s view, setting up a separate fund/account for the assigned portfolio of assets is sufficient.

– **Liquidity/solvency position**: The EC requires that an insurer must be able to hold an LTE portfolio for at least ten years, even under stressed conditions. This makes the LTE category less applicable to P&C insurers. Additionally, the EC has not specified how an insurance company should demonstrate its ability to hold the portfolio for at least ten years. Hence, EIOPA proposes to specify different liquidity conditions for life and non-life insurers.

For life companies, EIOPA advises that the assigned portfolio of assets must back liabilities with high or medium illiquidity (see Volatility Adjustment) and that the Macaulay duration of these liabilities should exceed 10 years. Insurance Europe has criticized this target duration as it is not in line with the average duration of most European insurers (6-7 years).

Non-life insurers have to demonstrate a sufficient liquidity buffer for the portfolio of non-life insurance liabilities and the assigned portfolio of assets. This is considered demonstrated if the ratio of high-quality liquid assets (backing all non-life liabilities and applying a defined liquidity haircut) to the non-life best estimate liabilities (net of reinsurance) is greater than one.

– **Sub-set of total investments**: The current regulation requires the assigned portfolio can only cover a part of total insurance obligations. EIOPA proposes to replace it by a specific requirement for life insurers only. The requirement sets a limit on the proportion of equity assets to eligible liabilities. This avoids the potential abuse of the

framework, which could be an issue in particular where there is no specific allocation of assets to specific liabilities.

– **Policies**: EIOPA does not propose any changes to the requirement that the long-term character of LTE portfolios shall be reflected in all relevant policies, e.g. investment guidelines or risk management policies.

– **Diversification**: The current regulation does not set out diversification requirements. Hence, the LTE treatment may also be applied to even single equities whereas the lower risk charge of 22% was calibrated based on well-diversified equity indices. Therefore, EIOPA suggests to introduce a new requirement on proper diversification of LTE portfolios

– **Exclusion of controlled intra-group investments**: EIOPA sees a potential overlap between LTE investments and strategic equity investments. In particular, if controlled intra-group investments were classified as LTE investments, it could be that the minimum average holding period of five years is still met even though the rest of the equity portfolio is traded daily. Hence, EIOPA proposes to exclude controlled intra-group investments from LTE eligibility. Insurance Europe has a critical view on excluding intra-group investments since intra-group investment might meet the LTE criteria (thereby correctly receiving lower capital treatment) while failing to qualify as strategic participation merely because the qualifying condition of lower forward-looking short-term volatility is difficult to demonstrate.

In addition to the general framework assessment for LTE, EIOPA also performed a quantitative calibration assessment of the reduced risk charge of 22%. This reduced charge had been set by the EC based on, among other things, the CEIOPS calibration of the DBER sub-module in 2010. However, when EIOPA used an adjusted version of this work for LTE investments, it could not corroborate the 22% charge. Despite this, EIOPA does not explicitly propose a change to capital charge.

Strategic equity investments (Strategic participations)

Background

Like LTE investments, strategic equity investments can also benefit from a reduced capital charge of 22%. However, the motivation and justification for the lower capital charge is different. Whereas the motivation for the LTE charge reflects the idea that equities might hold lower risk over a longer investment period, the charge for strategic equity investments is based on the idea that it has some form of lower short-

term risk. This can be both the nature of the investment and the influence exercised by the investor (the insurance company) over the related company. However, it has been difficult for insurance companies to demonstrate this reduced volatility.

Conclusion and Analysis

EIOPA suggests extending the 'beta method' already used for unlisted equity portfolios to strategic equity investments as one method to make this demonstration. The beta method is a static formula applied to fundamental data of target equity investments which estimates a market "beta", or degree of sensitivity to general market movements.

Besides adding the beta method, EIOPA suggests the following clarifications:

- The required minimum ownership and control threshold of 20% should be kept as control is seen as the mechanism to influence volatility.
- The strategic equity treatment should only apply to related companies. Hence, 'strategic equity investments' should be renamed to 'strategic participations' in order to avoid misunderstandings seen in the past.

Finally, since there was a concern that this would be viewed as the benchmark method instead of only one-of-many, EIOPA suggests introducing the beta method via additional guidance instead of a change in the legal text.

Technical details

For the beta approach, a strategic equity investment has a sufficiently lower risk if it has a calculated beta below 0.5641 for type 1 equities (22% over 39%) and below 0.4590 (22% over 49%) for type 2 equities. EIOPA specifies that the application of this method is restricted to investments in companies established in the EU or EEA with a majority of revenues generated in EEA or OECD countries. Additionally, it should have been larger than small-sized enterprises, as defined by the Commission Recommendation (2003/361/EC), for the last three years.

Symmetric adjustment

Background

The symmetric adjustment is an additional variable capital charge published by EIOPA on a monthly basis ranging between +/-10%. The objective of the measure is to dampen the volatility of own funds resulting from changes in equity prices, thereby in particular reducing the risk of procyclical investment behavior of insurance companies (e.g. "fire sales").

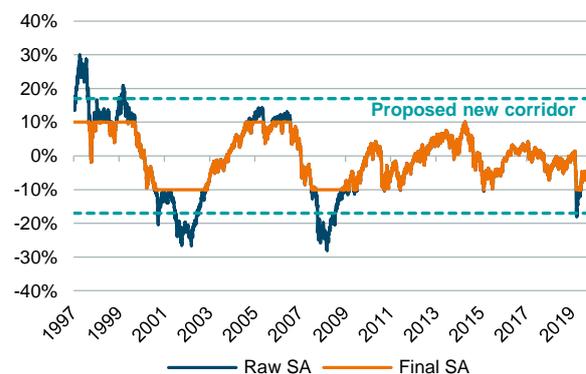
Conclusion and Analysis

EIOPA assessed both the calibration of the symmetric adjustment and the reference portfolio from which the adjustment is calculated.

EIOPA advises to widen the corridor boundaries of the symmetric adjustment from +/- 10% to +/- 17% and to introduce a floor of 22% to the equity capital charge. This was based on a positive qualitative assessment of the performance of the symmetric adjustment through the COVID-19 pandemic as an effective measure allowing flexible reaction in case of deterioration of insurers' financial position and a quantitative calibration review since the beginning of 2020 (see Figure 5).

EIOPA concluded that there is no need to change the current reference index composition due to the high overall correlation among the main stock markets in Europe. Although the country weights of the index, which were set in 2015 based on the composition of the average equity holding of European insurance companies at that time, now have changed, it was not views as material due to the high correlations.

FIGURE 5. DEVELOPMENT OF THE SYMMETRIC ADJUSTMENT (SA), 31/12/1997 – 31/12/2020



Source: EIOPA. As of: 31 December 2020

Interest rate risk

Background

Under the SCR standard formula, the interest rate risk is modeled as the implied asset repricing based on a relative shift of the risk-free rates curve, with relative shocks declining by maturity. In the rising interest rate scenario ('shock up' scenario) the relative shocks range from +70% of the based rate for a maturity of one year to +20% for maturities beyond 90 years, subject to a minimum increase of 1% for all maturities. In the decreasing interest rate scenario ('shock down' scenario), the relative shocks range from -75% for a maturity of one year to -20% for maturities

beyond 90 years. Critically, the current model applies no shock to negative interest rates. For insurance companies with liabilities of longer duration than assets, this rate floor in the calculation results in a small or zero risk to the joint asset and liability position in the shock down scenario.

Conclusion and Analysis

EIOPA finds that the current calibration severely underestimates the actual interest rate risk both due to higher observed rate volatility in recent years and that the current approach does not stress negative rates in the down scenario despite the empirical reality that negative rates can continue to decrease.

In order to address these issues, EIOPA proposes to combine a relative shift in interest rates with an additional absolute shift component, which will also apply to negative interest rates. Supported by many stakeholders, EIOPA does maintain an adjustable floor of -1.25%, calibrated based on historical rates observed for EUR, JPY and CHF swap curves and German government bonds with a maturity between one and ten years.

Besides this combined approach also being widely used by internal model users, EIOPA views it as maintaining its overall philosophy:

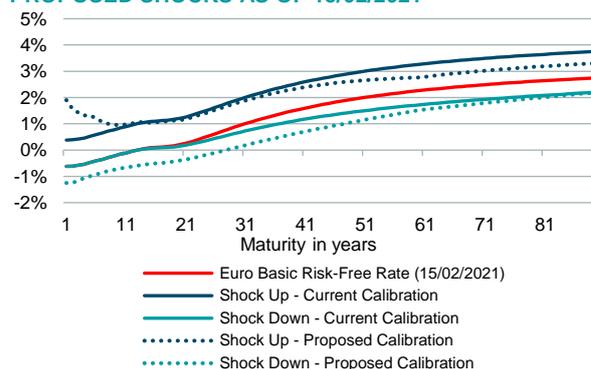
- _ simple and transparent
- _ purely data-driven
- _ risk-sensitive applicable to any yield environment.

Figure 6 shows the risk-free Euro interest rate curve as of 15 February 2021 (based on EIOPA's current extrapolation method) and the upwards and downward shock scenarios with both the current and proposed calibrations. In the falling interest rate scenario, the proposed shocks are larger than the current shocks for all maturities. For the rising interest rate scenario, the proposed shocks are also larger for shorter maturities but smaller for longer maturities. The floor of -1.25% currently kicks in for maturities of two years and below which otherwise would be stressed below -1.4%.

Overall, the proposed calibration will most likely result in a significant increase in SCR for insurance companies that have material duration gaps. Recognizing this impact, EIOPA suggests to implement the new downward shock gradually over a period of up to five years.

Additionally, some of the negative effects of the proposed new calibration might be offset by a reduced correlation factor between the SCR for the interest rate downwards shock and the SCR for the spread risk. EIOPA proposes to reduce the correlation from currently 50% to 25%.

FIGURE 6. EURO RISK-FREE RATE WITH CURRENT AND PROPOSED SHOCKS AS OF 15/02/2021



Source: EIOPA, DWS International GmbH. As of: 15 February 2021

Spread risk

Background

For bonds and loans, the spread risk SCR is determined as a function of the credit quality step (CQS) and modified duration with charges increasing both with CQS (i.e. deteriorating quality levels) and with duration. EIOPA evaluated the option to introduce a framework for lower capital charges for specific long-term investments in bonds and loans with similar conditions as for long-term equity investments.

Conclusions and Analysis

Ultimately, EIOPA does not propose any changes to the spread risk sub-module.

EIOPA concludes that there is no need to further incentivize (long-term) fixed income investments as:

- _ Solvency II may already over-incentivize fixed income investments due to relatively mild spread risk charges. In general, EIOPA finds that the current calibration of the spread risk charges is relatively mild compared to the calibrations originally proposed by CEIOPS in 2010 and by EIOPA in 2011. This is prevalent in bonds and loans with a duration between 1 and 10 years where the current spread risk charges are approx. 30% lower than the original calibrations. With increasing duration, the differences between the current and proposed calibrations decreases. In EIOPA's analysis, these lower capital charges might not reflect the actual spread risk and could make fixed income investments more attractive than other investments.
- _ Sovereign bonds issued by EEA member states are already subject to a zero capital charge.
- _ The proposed reduction in risk charges was similar to matching adjustments already available (though at 50% of the matching adjustment reduction due to the lesser liability matching requirements)
- _ A new long-term treatment would also be inconsistent with the 1-year Value-at-Risk (VaR) framework.

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Property risk

Currently, Solvency II sets a uniform risk charge of 25% for all real estate investments irrespective of the type of property or its location. Due to limited market data available, the 25% capital requirement was calibrated solely based on data for the UK real estate market, which is deemed to be the most volatile property market in Europe. Hence, this was viewed as overly conservative and not representative for other real estate investments outside the UK.

Overall, EIOPA shares this view but does not see a sufficient improvement in availability of granular historical data, which would allow for a re-calibration of the existing shock for different real estate markets. Additionally, the impact of COVID-19 would be expected to increase volatility, but EIOPA finds it difficult to quantify the potential impact on prices for residential and commercial real estate.

Volatility Adjustment (VA)

Background

Under the VA, insurance companies can add a spread to the risk-free discount curve in order to stabilize their Solvency II balance sheet in times of higher spread volatility. For each currency, the VA spread is derived from a representative portfolio of assets, which is updated by EIOPA on an annual basis largely using the average asset allocation of European insurance companies. The spread is calculated on a monthly basis and is adjusted by a fundamental spread, a spread measure that should reflect the long-term average default and downgrade risk of the underlying fixed income instruments in the representative portfolio (and not short-term liquidity effects or similar). Ultimately, 65% of the residual (i.e. risk-adjusted) spread is added to the risk-free discount curve. In times of a significant spread widening in a specific country, a higher VA spread based on a country-specific reference portfolio is applied. Overall, EIOPA has identified key shortcomings in the current design of the VA:

- Company specific circumstances could be better reflected in the VA design
- “Cliff-edge” effects during periods where spreads fluctuate around the trigger point of the country-specific VA. In the past, this had been a problem for undertakings in Southern Europe, for example during the 2011-2013 sovereign debt crisis.

Conclusions and Analysis

Firstly, EIOPA advises to split the VA into a permanent VA and a macro-economic VA, which under the current framework correspond to the currency-specific VA and country-specific VA, respectively.

The permanent VA should become more company-specific by taking into account the illiquidity of liabilities and asset-liability matching features of the individual insurer. This is done by the means of two firm-specific application ratios. The first application ratio measures the degree of illiquidity of liabilities of a company, clustered into three categories of high, medium and low illiquidity (see Figure 7). Companies with a larger share of less liquid liabilities are allowed to make greater use of the VA.

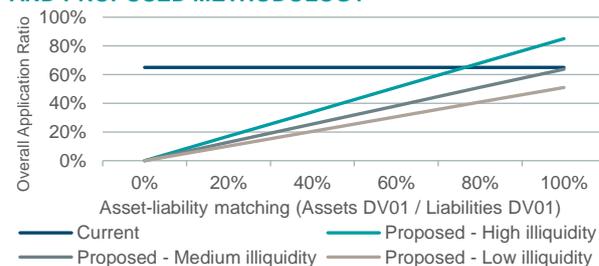
FIGURE 7. APPLICATION RATIO BASED ON THE ILLIQUIDITY OF LIABILITIES

Illiquidity category	Criteria	Application Ratio
Category I – High illiquidity	<ul style="list-style-type: none"> – No surrender/cancellation options or where the take up of the surrender option or the cancellation of the contract can never lead to a loss in own funds – Low best estimate impact of mortality risk 	100%
Category II – Medium illiquidity	<ul style="list-style-type: none"> – Low best estimate impact of permanent increase in lapse rates – Low best estimate impact of mortality risk 	75%
Category III – Low illiquidity	<ul style="list-style-type: none"> – Contracts that do not fall into category I or II 	60%

Source: EIOPA. As of: December 2020

The second application ratio is based on the asset-liability spread-sensitivity matching of a company to reduce potential “overshooting” effects of the VA. Companies with well-matched sensitivities are allowed to benefit more of the VA. Since the introduction of the two firm-specific application ratios reduces some of the uncertainties and risks inherent in the VA, EIOPA suggests to increase the general application ratio for the VA from 65% to 85%. As outlined in Figure 8, only companies with a very high share of highly illiquid liabilities and well-matched assets and liabilities can benefit from a higher overall application ratio compared to the current general application ratio of 65%. Based on data provided by EIOPA, the average overall application ratio across Europe would be around 59%. The average illiquidity application ratio and the average asset-liability application ratio is 76% and 91% respectively. Especially, the illiquidity ratios differ significantly across countries. For example, very high values can be observed for Germany, France and Italy while low values are observed for the Netherlands in particular.

FIGURE 8. OVERALL VA APPLICATION RATIO – CURRENT AND PROPOSED METHODOLOGY



Source: DWS International GmbH. As of: February 2021

The macro-economic VA is a revised version of the country-specific VA. Under the current design of the VA, the country-specific VA is activated if the spread on the country-specific reference portfolio exceeds the spread on the currency-specific reference portfolio by 200% (relative trigger) and the country-specific spread is at least 85 bps over the risk-free rate (absolute trigger). In that case, the currency-specific VA is increased by 65% of the amount of the relative trigger spread (i.e. in excess of 200%).

Under the new macro VA, the relative trigger is reduced to 130% of the scaled risk-adjusted currency spread (the scale is based on the proportion of fixed income assets in the representative portfolio). The absolute trigger is reduced to 60 bps after which a linear activation of the country-specific VA starts. The full activation occurs at spreads over 90 bps. Overall, these proposed changes would make the macro-economic VA more likely to be activated due to lower triggers as well as more stable as the absolute trigger leads to a gradual activation rather than a binary outcome.

Finally, EIOPA proposes two other changes. First is a change in the current design of the risk correction. They propose decoupling the risk correction from the fundamental spread since analysis indicates a “sticky” risk correction with less reflection of recent changes in credit risks. Hence, they propose the risk correction be calculated as a fixed percentage of current spread levels but with an allowance for a higher VA impact when spreads exceed their long-term average. Overall, the new design of the VA would partially limit the benefit of the VA in times of widening spreads.

Second, EIOPA proposes that standard model users should not be allowed the usage of the dynamic VA. However, internal model users may still use the dynamic VA. This might disproportionately impact insurers whose asset allocation differs significantly from the reference portfolio.

Matching Adjustment (MA)

In contrast to the VA, the MA has received relatively little attention under the Solvency II review. The MA is currently only used by insurance companies in the UK and Spain.

An MA portfolio is a separated portfolio of assets and liabilities in which cash flows are matched and assets assigned to that portfolio are exclusively devoted to cover the best estimate of the liabilities included in the portfolio. Like LTE portfolios, MA portfolios are subject to a “ring-fencing light” but not to a legal ring-fencing. Nevertheless, under current treatment, MA portfolios and legally ring-fenced funds are treated in the same way by not taking into account diversification

benefits when aggregating the SCR across those and other portfolios.

EIOPA noted that this ring-fencing is not symmetric; while it is true that the assets in the MA portfolio cannot be used to cover losses outside the MA portfolio, other outside assets can be used to cover losses from the MA portfolio. Additionally, the assets in the MA portfolio only have to cover expected losses (best estimate) but not unexpected losses, which are covered by assets that back the risk margin and the SCR. Hence, EIOPA opines that a higher SCR resulting from limited diversification benefits cannot be justified and may discourage insurers from using the MA. In fact, there are examples where the loss of diversification in the SCR exceeds the increase in own funds resulting from the use of the MA in the calculation of the liabilities. Therefore, EIOPA advises to remove the limitations to the diversification between the assets in the MA portfolio and other assets in the SCR calculation. This is also in line with the methodology of most internal model users.

Besides changes to the diversification benefits, EIOPA has also reviewed the MA eligibility of restructured assets (i.e. assets that may have been restructured specifically to meet the MA cash flow requirements) and of assets with an uncertain timing of cash flows, such as callable bonds.

With respect to restructured assets (e.g. securitisation structures), EIOPA proposes to introduce a look-through approach to assess the eligibility of those assets. More specifically, restructured assets must meet the following conditions in order to be eligible for inclusion in a MA portfolio

- _ The underlying assets have to provide a sufficiently fixed level of income. For example, securitisations backed by residential mortgages might not be MA eligible in case the underlying mortgages are exposed to prepayment risks (unless such pre-payments are cured as below).
- _ The cash flows of the restructured asset must be supported by loss absorbency features such that those cash flows are sufficiently fixed in term. For example, an asset can be securitised into a range of tranches where the junior tranche absorbs specific losses so that the MA-eligible senior tranche is only exposed to default and downgrade risks.
- _ Where underlying assets include financial guarantees written on the performance of non-MA eligible assets, these guarantees cannot provide an additional MA benefit, i.e. the additional spread resulting from the guarantee cannot be added to the MA spread.
- _ The insurance company must be able to properly identify, measure, monitor, manage, control and report the underlying risks.

Besides this, EIOPA also evaluated the option to allow MA eligibility for assets with uncertain timing of cash flows given that the MA benefit will be calculated based on the yield-to-worst. However, EIOPA decided to not follow this approach as it remains detrimental to the principle of cash flow matching.

Conclusions

Overall, EIOPA describes the proposed changes to the market risk module as an evolution rather than a revolution. We would agree to this statement. In many aspects the review lacks revolutionary elements.

Nevertheless, some changes will still have a significant impact on the Solvency II balance sheet of European insurers. In our view, the most material changes relate to interest rates. Even though the proposed methodology for extrapolating the risk-free interest rate curve is only a small step towards greater realism of lower interest rates, it will still have a severe impact on the solvency position of insurance companies with long-dated liabilities. Additionally, the proposed increase of the downwards interest rate shock will result in a significant increase in SCR for companies that run larger duration gaps. Consequently, affected insurers will likely further increase their efforts in narrowing their duration gap by either increasing their asset duration and/or shortening their liability duration for new business and, where possible, for in-force business. For increasing the asset duration, companies may rely on both traditional asset classes such as government bonds or high-rated corporate bonds as well as on alternative assets such as infrastructure debt, government-guaranteed loans or residential mortgages.

A sound asset-liability management will also be encouraged by the proposed design of the VA, which will make this measure more effective for companies with well-matched assets and liabilities. However, the suggested changes to the risk correction may dampen the effect to a certain degree and will make the VA probably more volatile.

Besides this, potential changes to the long-term equity investments treatment may allow a broader and easier use of this concept across Europe instead of only the few countries, which have favourable liability structures. This may encourage further passive equity investments and in particular private equity investments where the capital benefit is the highest and the holding period is anyway rather long-term by nature given the illiquidity.

Nevertheless, in the end it is worth noting that EIOPA's opinion is not binding. As we have already seen in the past, the European Commission (EC) may decide – e.g., for political reasons – not to follow EIOPA's guidance in certain areas. In particular we have seen this with regard to changes to the interest rate shock previously.

The current proposal would bind up further more capital in the fixed income instruments, which is contrarian to the positioning of the EC with regard to the Capital Markets Union (CMU) where they would want to foster stronger allocations to Equity markets from the Insurance Industry.

Therefore, it remains to be seen if the considered changes will be adopted as proposed by EIOPA.

We have looked at the effects on asset-liability management from the changes and show the impact on own funds and strategic asset allocation. Please reach out for more information to your DWS Sales representative or to the authors of this paper.

Our Authors



Marlon Rockefeller
Global Head of Insurance Strategy & Advisory
marlon.rockefeller@dws.com



Thomas Gillmann
Global Insurance Strategy & Advisory
thomas.gillmann@dws.com



Anthony Lupa
Global Insurance Strategy & Advisory
anthony.lupa@dws.com

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