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Solvency II 2020 Review: what potential impacts on the management of assets by insurance companies?

By **Olivier Trecco**, Client Portfolio Manager,
Natixis Investment Managers Solutions

The European Insurance and Occupational Pensions Agency (EIOPA) published on October 15th 2019 its Consultation Paper on the Opinion on the 2020 review of Solvency II.

The Solvency II Directive provides that certain areas of the framework should be reviewed by the European Commission at the latest by 1 January 2021, including long-term guarantees measures and measures on equity risk, as well as methods, assumptions and standard parameters used when calculating the Solvency Capital Requirement standard formula.

Against that background, the European Commission issued a request to EIOPA for technical advice on the review of the Solvency II Directive in February 2019 (call for advice –CfA). The CfA covers 19 topics.

EIOPA is requested to provide technical advice by 30 June 2020. EIOPA will provide its technical advice in the form of an opinion, in line with the requirement of Article 77f(2) of the Solvency II Directive to provide an opinion on the assessment of the application of the long-term guarantees measures and measures on equity risk.

The review of Solvency II is broad but will leave the fundamentals of Solvency II unchanged. As stated by the European Commission in the letter accompanying the CfA: "[...] the fundamental principles of the Solvency II Directive should not be questioned in the review (including the confidence level underlying the calibration of capital requirements and the market-consistent valuation)".

The Consultation Paper is a very dense and exhaustive document, detailing options, recommendations and impacts across 878 pages. We chose to focus in this memo, sticking to the words of EIOPA, only on the elements in the Consultation more likely to have an impact on the management of assets by insurance companies, hoping to allow the reader to have a better view of the potential changes coming up by 2021.

The original Consultation Document can be accessed here: https://eiopa.europa.eu/Publications/Consultations/EIOPA-BoS-19-465_CP_Opinion_2020_review.pdf

The Consultation period will end on January 15th 2020.

1. Long Term Guarantee Measures and measures on equity risk

1.1. Extrapolation of Risk-Free Rates

The issue

The setting of the Last Liquid Point (LLP) implicitly impacts the size of interest rates in the extrapolated part of the interest rate term structure. Starting with the LLP, the extrapolation method ensures that interest rates converge smoothly to the ultimate forward rate (UFR). Market information for maturities after the LLP are not taken into account in the interest rate term structure; the extrapolated interest rates can therefore significantly diverge from market rates.

The LLP for the euro being set at 20 years was identified to be the major issue to review with respect to extrapolation of risk-free interest rates. However, it is noted that any implications of the LLP always need to be considered jointly with the setting and calibration.

The Options

Option 1: No change

Option 2: the LLP stays at 20 years for the Euro and additional safeguards are introduced in pillar 2 and 3

- prescribed sensitivity analyses on an extension of the LLP for the euro to 50 and include the results in the regular supervisory reporting (RSR).
- Results of this sensitivity analysis in the SFCR to foster transparency and market discipline.
- Where an undertaking does not meet its SCR or MCR if the LLP is moved to 50: provide evidence that their dividend payments or other voluntary capital distributions do not put at risk the protection of policyholders and beneficiaries.
- NSAs are able to limit or withhold the capital distribution to ensure that the solvency position of the undertakings concerned is sustainable.

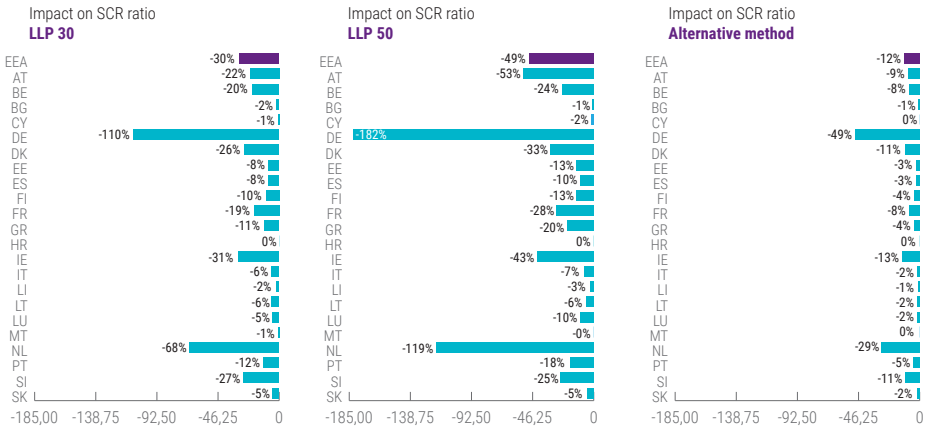
Option 3: the LLP is increased to 30y for the Euro

- The option aims to strike a balance between, on the one hand, improving the market-consistency of technical provisions and avoiding problematic risk management incentives and, on the other hand, the stability of technical provisions and own funds.
- Identical pillar 2 & 3 safeguards as under Option 2.

Option 4: the LLP is increased to 50y for the Euro

- Option in line with the outcome of the Depth, Liquidity and Transparency (DLT) assessment for Euro swap markets

FIGURE 1: Impact of the different options on the risk-free interest rate term structure (Euro)



EIOPA Advice:

EIOPA does not choose a preferred option on this issue & leaves the question open to stakeholders

1.2. Matching Adjustments

1.2.1. MA: Diversification Benefits

The issue

The regulation does not require the MA portfolio to be a ring-fenced fund, as clarified in recital 36 of Directive 2014/51/EU (Omnibus II). The legal texts clarify that the separated portfolio should be understood in an economic sense and a legal ring-fenced fund is not required.

Nevertheless, according to Article 217 of the Delegated Regulation, MA portfolios and ring-fenced funds are treated in the same way in the calculation of the SCR standard formula. In particular, the SCR of an undertaking with MA portfolios is the sum of notional SCRs calculated for those portfolios and for any other business

The limitation to the diversification benefits stated in Article 217 of the Delegated Regulation may discourage the use of the MA because it requires a higher amount of capital. There are examples where the loss of diversification in the SCR exceeds the increase of own funds resulting from the use of the MA in the calculation of technical provisions.

Attention: approved internal models allow for diversification benefit between the MA portfolio and the remaining part of the undertaking. The restriction stated in Article 217 of the Delegated Regulation is applicable **only to standard formula users**.

The Options

Option 1: No change

- Maintain the limitation to diversification benefits for MA portfolios in the SCR standard formula

Option 2: Remove the limitation to diversification benefits for MA portfolios in the SCR standard formula

- No different risk correlation by the mere fact of the existence of a MA portfolio
- Lower market risk in a MA portfolio than in a non

EIOPA Advice:
EIOPA advises to remove the limitations to the diversification benefits according to the Option 2

1.2.2. MA: Asset Eligibility Criteria

The issue

Undertakings can attempt to overcome asset eligibility requirements by providing assets whose legal form appears to ensure that the asset is "bond-like" (e.g. are legally loans) and which technically have a fixed schedule of cash flows, but which expose undertakings to the same risks as the ineligible assets.

Separately, there are assets with some uncertainty as to the timing of the first/last cash flows but with a limited range of cash flow patterns and therefore more akin to bonds than to real assets. These assets are suitable for backing annuity liabilities and include callable bonds or loans that have fixed cash flows only after an uncertain start date (e.g. as used to back infrastructure projects).Nevertheless, a literal reading of the "fixed cash flow" requirement would penalise such assets by treating them as if they had the same uncertainty as real assets.

Analysis 1

Look-through Principle

Following a 'look-through' approach could aid undertakings and NSAs when assessing the suitability of restructured assets to be included in the MAP. The proposal is to clarify a look-through principle to help identify asset structures where the underlying assets are not suitable to match MA liabilities, in particular because they are not sufficiently fixed in term. For example securitisations backed by residential mortgages (RMBS) are ubiquitous, have well established price histories and can achieve high ECAI ratings. In this case the underlying assets are loans with fixed terms, but subject to prepayment risk which likely renders them ineligible for inclusion in the MAP.

it is possible to restructure a portfolio of such mortgages in such a way that the resulting senior notes meet MA eligibility requirements; conversely, it is also possible for those

securitisations to not meet the MA criteria and remain ineligible. Where the resulting RMBS meet the MA eligibility conditions, the securitisation will have eliminated the part of the mortgage spreads that corresponds to idiosyncratic risk (e.g. prepayment on an individual loan via a loss-absorbing junior tranche, which is not eligible for inclusion in the MAP).
At the other end of the spectrum, it would not be appropriate to securitise real assets (e.g. property) that do not match the nature of MA liabilities. In these cases the undertaking still remains exposed to the risk of changing spreads on the underlying assets and cash flows will be dependent on the realisable value of the underlying asset.

EIOPA Advice:

EIOPA advises that an additional requirement is introduced in the Delegated Regulation to clarify the eligibility of restructured assets:

For assets whose cash flows depend on the performance of other underlying financial assets, undertakings shall be able to demonstrate that, in addition to meeting the other MA eligibility criteria,

1. the underlying assets provide a sufficiently fixed level of income;

2. the restructured asset cash flows are supported by loss absorbency features such that those cash flows are sufficiently fixed in term and will remain so even as operating conditions change;

3. where the underlying assets include financial guarantees, those guarantees do not result in additional matching adjustment;

4. the undertaking is able to properly identify, measure, monitor, manage, control and report the underlying risks.

Analysis 2

Loss absorbency features on restructured asset cash flows

Where an asset has been structured into a range of tranches, the junior tranches should provide loss absorbency to protect the senior note payments, e.g. a proportion of the cash flows accruing to the junior note in the early years of the transaction being kept in reserve in case of subsequent losses that reach the senior notes. In this way the lower rated structured notes provide genuine loss absorbency and ensure that the senior note is only exposed to default and downgrade risks such that it is MA-eligible.

Analysis 3

Financial guarantees do not give rise to MA

Where the underlying assets include a written guarantee on the performance of other assets, then they are subject to an increased level of risk compared to an equivalent asset without such a guarantee. Therefore such a guarantee will also increase the amount of spread that should properly be attributed to risks retained by the firm and in consequence this element of spread should not give rise to MA benefit.

Analysis 4

'Yield to Worst Approach'

For assets (eg. Callable bonds) where there is some uncertainty regarding the timing of cash flows, EIOPA considered whether it would be appropriate to allow such assets to enter the MA portfolio based on a 'yield to worst' treatment where an undertaking would assume whichever call date were the most onerous in the calculation of the MA to produce the lowest MA benefit.
However EIOPA concluded there were considerable difficulties in allowing such a treatment whilst maintaining consistency with the underlying principles of MA which require the matching of fixed cash flow liabilities by fixed cash flow assets.

1.3. The Volatility Adjustment

1.3.1. Technical Improvements of VA calculation

The issue

As part of the current EIOPA methodology for the computation of the VA on basis of representative portfolios, information on spreads and yields per individual "buckets" in the fixed income investments of insurers need to be aggregated to average spreads and yields at the level of the overall government bonds or corporate bonds portfolios.

To investigate the robustness of this aggregation mechanism under different economic environments, EIOPA has simulated a computation of the VA for the time period January 2007 to February 2019.

This exercise revealed two technical deficiencies in the current aggregation mechanism, which are related to the following technical aspects:

- the fact that the representative portfolios is only updated at a yearly basis, which requires a "freeze" of assumptions on the representative portfolio during this period; and
- the disallowance of negative average spreads for the government bond and corporate

Options on the Freeze issue

Option 1: No change

Option 2: Use of a cash flow (CF)-Freeze approach instead of a Market Value (MV)-Freeze approach

EIOPA Advice:
EIOPA prefers Option 2, CF-Freeze approach. It would not require to change the legal framework of Solvency II

- The MV-Freeze approach assumes that the relative weights of the market values of the buckets that constitute the representative portfolio are constant over time. At the same time, it assumes that the weight of the cash flows in the individual buckets change when there is a change in interest rates.
- Under a CF-Freeze approach, the cash flows and durations are frozen. Hence this approach assumes that, for each bucket, the duration and the (relative) volume of cash flows in the bucket remain constant during the freeze.
- The differences between the two approaches tend to be significant only in case of extreme interest rate environments, where the CF-Freeze approach leads to lower VA levels.

Options on the negative spreads issue

Option 1: No change

Option 2: Allowance of negative spreads for corporate and government bond portfolios.

EIOPA Advice:
EIOPA prefers Option 2, allowance of negative spreads. EIOPA does not expect a large impact on the calculated VA values.II

1.3.2. Design of the VA

The issue

EIOPA identified the following main objectives that can be attributed to the VA:

1. Prevent procyclical investment behaviour;
2. Mitigate the impact of exaggerations of bond spreads on own funds; and
3. Recognise illiquidity characteristics of liabilities in the valuation of technical provisions.

Against these objectives, EIOPA identified the following main deficiencies in the current design of the VA

1. Impact of VA may over-or undershoot impact of spread exaggerations on asset side (e.g. due to asset allocation, credit quality, duration mismatches): Impairs fulfilling objectives 1 and 2
2. Application of VA does not take into account illiquidity characteristics of liabilities: Impairs fulfilling objectives 2 and 3
3. Cliff effect of country-specific increase, activation mechanism does not work as expected: Impairs fulfilling objectives 1 and 2
4. Misestimation of risk correction of VA: Impairs fulfilling objectives 2 and 3
5. VA almost always positive; not symmetric, i.e.no resilience buildup in “good times”: Impairs fulfilling objective 1
6.. Underlying assumptions of VA unclear: No direct relation to VA objectives, but impairs supervision of the VA application
7. Risk-free interest rates with VA not market-consistent: No direct relation to VA objectives, but impairs supervision of the VA application

The Options

Option 1: Undertaking-Specific VA

- Calculating the VA based on the undertaking-specific asset weights
- For each asset class, the spreads used in the calculation of the VA would still be the same for all undertakings and taken from market indices
- Mitigates Deficiency 1
- Addresses deficiency 3: Country-specific increases would not be needed any more

Option 2: Middle-bucket approach

- In addition to the current VA an undertaking-specific VA is introduced, but subject to strict application criteria that relate to the ALM of the undertaking
- This option would be part of a framework where undertakings should allocate their insurance liabilities to three buckets (the matching adjustment bucket, the middle bucket and the remainder bucket) to which different adjustments to the risk-free interest rates apply.
- In particular, for liabilities falling in the middle bucket, an undertaking-specific VA is introduced, but subject to strict application criteria that relate to the level of cash-flow matching of insurance liabilities portfolios, in order to ensure that the undertaking can earn

the adjusted discount rate which is usually higher than the basic risk-free interest rate.
- The application ratio for the middle bucket would be fixed between 65% and 100% (concrete calibration to be discussed).
- Mitigates deficiency 1 for those undertakings which apply this option

Option 3: Asset driven approach
- Instead of applying the VA to the risk-free interest rates of technical provisions it would be used to revalue the bonds held by the undertaking by adjusting the bond spreads by the VA.
- The difference in the value of the bonds without and with the VA adjustment is recognized as an own funds item
- This option does not suggest an alternative to calculating the VA, but it may be combined with one of the other options that suggest so
- This option is based on observations that adjusting the risk-free rates has undesirable effects. The idea is to adjust the own funds of the undertakings by correcting the technical provisions for the effect of exaggerations of bond spreads in another way
- Mitigates deficiency 1 & addresses deficiency 7

Option 4: An adjustment that takes into account the amount of fixed-income assets and the asset-liability duration mismatch by means of application ratios
- The general idea of this option is to introduce an undertaking-specific application ratio which addresses the over-and undershooting stemming from duration and 'volume' allocation mismatches. This undertaking-specific application ratio is applied to the current, or potentially adjusted, VA.
- Note that this option is not intended to address under-or overshooting effects, which could occur due to credit quality mismatches between the undertaking-specific portfolio and the reference portfolio
- Mitigates deficiency 1

Option 5: An adjustment that takes into account the illiquidity features of liabilities by means of an application ratio
- The more stable and predictable the cash flows, the more the liabilities can be considered as illiquid. If cash flows are fixed irrespective of whatever scenario, they are considered as fully illiquid because they are perfectly predictable and stable. The measurement of the illiquid part of the liabilities can be based on liabilities sensitivities (Approach A) and/or on liabilities' contractual features and risks characteristics (Approach B)

> Mitigates deficiency 2

Option 6: The risk-correction to the spread is decoupled from the fundamental spread, and instead calculated as a fixed percentage of the spread.
- The risk correction (RC) for the VA according to Article 77d of the Solvency II Directive shall correspond the portion of the spread that is attributable to a realistic assessment of expected losses or unexpected credit or other risk of the assets.
- This option suggests to decouple the calculation of the RC for the VA from the calculation of the FS for the MA. The RC for the VA can be simple in design and can be determined based on current spread information rather than on long-term averages.
- May mitigate deficiency 4

Option 7: Amend the trigger and the calculation of country-specific increase of the VA
- This option proposes that the VA country add-on activates gradually. the changes aim at achieving:
  1. a smooth activation mechanism, with the objective of mitigating the cliff effect
  2. a prompt activation in cases of country market distress, with the objective of mitigating the volatility of undertakings' own funds and excessive undershooting
- Mitigates Deficiency 3 and in some circumstances deficiency 1

Option 8: Establish a clearer split of the VA between its function as a crisis and a permanent tool.
- It is suggested to split the VA in the following components:
- A permanent VA reflecting the long-term illiquid nature of insurance cash flows and its implications on undertaking's investments decisions.
- A macro-economic VA that would only exist when spreads are wide, in particular during crises that affect the bond markets. The macro-economic VA would mitigate the effect

of temporary exaggerations of bond spreads, thereby contributing to avoid pro-cyclical investments by undertakings.

> Applied to the current VA, option 8 would lead to a replacement of the country-specific add-on by a macro-economic VA.

> The macro-economic VA should not be anticipated in the SCR, neither in the standard formula nor in internal models.

> Hence no change in the standard formula calculation of the SCR would be required. But the introduction of a macro-economic VA would have consequences for the application of the dynamic VA in internal models.

> Might address deficiencies 1, 2, 3, 5, and 6

Possible Combination of Options

EIOPA has assessed the following two combinations of options to design a permanent VA:

Approach 1: Under this approach, the permanent VA would be determined by combining options 4, 5 and 6

- Under this approach, the VA is split into the following components:
  - A permanent VA reflecting the long-term illiquid nature of insurance cash flows and its implications on undertaking's investments decisions; and
  - A macro-economic VA that would only exist when spreads are wide in particular during a financial crisis that affects the bond market. The macro-economic VA would mitigate the effect of temporary exaggerations of bond spreads, thereby contributing to avoid pro-cyclical behaviour of undertakings.
- The permanent VA is calculated as a combination of the following options:
  - Option 4 (adjustment accounting for amount of fixed-income assets and asset-liability duration mismatch undertaking specific VA);
  - Option 5 (adjustment accounting for the illiquidity of liabilities); and
  - Option 6 (calculation of the risk correction as a percentage of the spread).
  - The macro-economic VA is based on Option 8.

The Impact in terms of SCR Ratio would vary across countries, oscillating between 0 and -2% for all countries except the Netherlands which would be hit the hardest at -12%.

Approach 2: Under this approach, the permanent VA would be determined by combining options 1, 4 and 5.

- The combination of options 1, 4 and 5 intends to mitigate the impact of exaggerated bond spreads.
- The combinations of options 1 and 4 intend to address all identified under-and overshooting issues; this combination implies the same compensation of changes in bond spreads for all undertakings, irrespective of the actual allocation and duration of their investments as well as the duration and illiquidity of their liabilities.
- Adding option 5 to this combination implies that this same compensation for all undertakings can only be attained if the liabilities are sufficiently illiquid to withstand forced sales and the realization of losses due to the bond spread exaggerations.
- Under this option, as for option 1, a macro-economic or country VA would become obsolete as the undertaking investments specific illiquidity VA would already reflect any potential crisis in the bond markets which the undertaking is exposed to.

The impact in terms of SCR ratio would lead to higher variations across countries: positive impacts for Italy and Greece (+14% and 11% respectively), largest negative impacts for NL followed by FR and DE (-17%, -3% and -3% respectively).

EIOPA Advice:
EIOPA does not choose a preferred option on this issue & leaves the question open to stakeholders

1.3.3. General application ratio (GAR) of the VA

The issue

Article 77d (3) of the Solvency II Directive prescribes that the volatility adjustment (VA) shall correspond to 65% of the risk-corrected currency spread.

The calibration of the GAR has a direct impact on the level of the calculated VA, and hence on the efficient functioning of the VA. Where the GAR is set too high, this could contribute to overshooting effects and bears the risk of underreserving as the liabilities may be valued

too low if the VA is set too high. On the other hand, where the GAR is set overly prudent, this could impede the functioning of the VA as a mechanism to prevent pro-cyclical behaviour on financial markets and to mitigate the effect of exaggerations of bond spreads. EIOPA has therefore considered whether the current GAR factor of 65% should be changed, and if yes by which amount.

EIOPA Advice:
The preferred option is option 1 (no change of the GAR)

The Options

Option 1: No change

Option 2: Increase the GAR to 100%

Option 3: Change the GAR to a value between 65% and 100%

Increasing the GAR could be motivated by the expectation that some of the risks that the GAR should address can be mitigated by an improved design of the VA. However, the additional complexity that would be introduced by a more sophisticated VA design could also lead to additional risks and uncertainties in the quantification of the VA. Moreover, EIOPA notes that the current level of the GAR is already significantly higher than the previous EIOPAs recommendation of a value of 20%. Therefore, EIOPA considers that there is not sufficient evidence to justify an increase in the value of the GAR.

EIOPA Advice:
EIOPA advises that the SCR standard formula should not be changed to allow for the dynamic VA, on the grounds that:

> It might create an uneven playing field in favour of standard formula users as long as government bond risks are not fully captured in the standard formula

> Lower capital requirements for spread risk may incentivise undertakings to hold more corporate bonds of lower credit quality

1.3.4. Dynamic VA for the Standard Formula

The issue

As at year end 2018, 192 insurance and reinsurance undertakings calculate their SCR with an approved internal model. 62 of these undertakings apply the dynamic VA, i.e. their internal models take account of the possible change of the VA during the following 12 months. Such an approach is currently not possible in the SCR standard formula, where the spread risk sub-module does not take account of VA changes.

The application of a dynamic VA has a significant impact on the SCR. As reported in the LTG report 2018, at the end of 2017 the average SCR reduction caused by the dynamic VA was 25%. **In contrast, where the standard formula was applied to derive the SCR, the VA caused on average a reduction of the capital requirement by 1%.**

1.3.5. Dynamic VA in Internal Models

EIOPA Advice:
Regarding whether the DVA should be maintained, EIOPA advises as follows:

1.The DVA could be maintained, if disincentives are solved in the VA ('at source'). This could open the way for more harmonization, as solving at source would allow more insurers to directly model the EIOPA VA methodology with acceptable outcomes and would avoid unintended risk management incentives. Depending on the concrete future design of the VA, this approach to internal models might potentially need to be supported in regulation.

2. If no or partial VA solution would be introduced, measures (in regulation) are needed. Such measures would have the ambition to avoid disincentives and ensure that the DVA is risk sensitive and protect the level playing field. This might

The issue

The DVA does not introduce disincentives itself but transports potential disincentives from VA in valuation to SCR and amplifies them. This is especially true for undertakings suffering from 'overshooting' for which direct modelling approaches for DVA could distort sound risk management.

Attempts to solve this lead to a range of holistic approaches and partly needed significant supervisory effort. Also, in those cases the prudency principle compared to favoured holistic approaches could lead to lower SCR.

One specific aspect is that the current VA risk correction is rather static, leading to the majority of stressed spreads being treated as 'exaggeration', regardless of risk characteristics. Where DVA models result in spread risk that is inconsistent with the underlying risk characteristics, undesirable investment and risk management strategies may follow. Similarly, different movements of spreads and VA compared to undertakings' portfolio, make investing in riskier assets without increasing the SCR possible, if not counteracting measure are taken.

impact the use of 'direct approaches' as well as the design of 'holistic approaches'.

The following principles should be used to design an appropriate solution:

3. No disincentives for risk and investment management, especially no 'overshooting' (or 'undershooting')

4. DVA benefit should be risk sensitive, reflecting the risks present in assets and liabilities covered. In particular, there should be no full elimination of credit spread SCR, and the DVA benefit should reflect expected losses, unexpected credit risk (esp. migration & default) and other risk of the assets.

1.4. Transitional Measures on the Risk Free Interest Rates and on Technical Provisions

Issue 1: Predominant application of the transitionals by undertakings without capital gap

The application of the transitionals does not appear to be very targeted. At EEA level they create about nine times as much own funds as is needed to meet the SCR. This gives rise to the question whether all undertakings that apply the transitionals need it achieve a smooth transition to Solvency II. Some undertakings may simply apply the measures to boost their solvency ratio.

The Options (can be adopted separately or in combination)

Option 1: Restrict the use of transitionals

- Articles 308c and 308d do not set out any conditions for the application of the transitionals that relate to the undertaking's need for the transitional. This could be corrected by introducing a requirement that restricts the application of the transitionals to undertakings that need the transitional to ensure a smooth transition to Solvency II.
- According to the requirement, undertakings should demonstrate:
  - That there would be negative consequences in case they do not apply the transitional, in particular with regard to existing and new insurance products.
  - That the application of the transitional would mitigate those negative consequences.

Option 2: Limit the impact of transitionals for undertakings without capital gap

- The transitional deduction of an undertaking could be capped so that its SCR ratio does not exceed the following amount: max(100%, SCR ratio without transitional)
- For undertakings that do not comply with the SCR with the transitionals, no change should be made

Option 3: Strengthen disclosure on transitionals

- The SFCR should set out the reasons for the use of the transitional.
- In case the undertaking does not comply with the SCR without the transitional, this fact would be sufficient reason.
- Where undertakings comply with the SCR without the transitional other reasons should be provided.
- The SFCR should include an assessment of the dependency of the undertaking on the transitional. In case of a dependency, the undertaking should describe the measures it has taken to remove the dependency by the end of the transitional period.

Option 4: Extend use of phasing-in plans to all undertakings depending on the transitional.

EIOPA preferred option:

The preferred policy option for this policy issue is to strengthen disclosure on transitionals (Option 3) because it improves transparency on the transitionals which will be for the benefit for policyholders, supervisory authorities an stakeholders that need to assess the financial position of insurance and reinsurance undertakings (for example investors, analysts, rating agencies and journalists).

Issue 2: Approval of transitionals after 1 January 2016

There is no consistent approach in the approval of new applications after 1 January 2016. The approval of applications for transitionals after that date gives rise to the question whether that approach is in line with the fundamental idea of a transitional to smooth introduction of

The Options (can be adopted separately or in combination)

Option 1: Allow new approvals for the transitionals

Option 2: Disallow new approvals for the transitionals

Option 3: Allow new approvals for the transitionals only in specified cases:

- An undertaking newly falls under Solvency II because it has passed the thresholds of Article 4 of the Solvency II Directive
- An undertaking transfers a portfolio that is subject to the transitional to another undertaking

EIOPA preferred option:

The preferred policy option for this policy issue is to allow new approvals for the transitionals only in specified cases (Option 3) because, compared to the other options, it best contributes to a consistent application of the transitional provisions and a market-consistent technical provisions.

1.5. Disclosure on LTG measures

EIOPA Advice:

Regarding the disclosure of qualitative information on the use of LTG-measures, EIOPA advises to define and prescribe minimum information requirements. Special consideration should be given to the inclusion of the LTG-measures in the part of the SFCR which is addressed to policyholders.

EIOPA holds the view that the SFCR template on the impact of the LTG measures should also show the impact on the SCR and MCR ratios. No additional derived ratios need to be included.

EIOPA recommends that insurance and reinsurance undertakings should disclose in their SFCR the outcome of a sensitivity analysis regarding the ultimate forward rates (UFRs) used in the extrapolation of risk-free interest rates. The sensitivity to assess is a fixed downward shift of the UFRs by 100 basis points. Undertakings should disclose the impact of that shift on their financial position, including on the amount of technical provisions, the SCR, the MCR, the basic own funds and the amounts of own funds eligible to cover the SCR and the MCR

1.6. Disclosure on LTG measures

1.6.1. Duration-Based Equity Risk Module

EIOPA Advice:

Only one undertaking in France is using the DBER as at 31 December 2017.

> EIOPA proposes to phase out the DBER

1.6.2. Design of the Strategic Equity Risk Treatment

EIOPA Advice:

In its second set of Advice to the European Commission on specific items in the Delegated Regulation, EIOPA proposed a beta method as a requirement for unlisted equity to qualify for the lower capital requirement of 39 percent for type 1 equities instead of the 49 percent for type 2 equities. If the beta for the unlisted equity was below the ratio of 39 over 49 percent, i.e. 0.7960, in that advice the risk was considered to be sufficiently low to allow the type 1 equity capital charge rather than the type 2.

In line with that advice, a 22 percent capital charge for strategic participations with a beta below 0.5641 (22 percent over 39 percent) for a portfolio of type 1 strategic equities and a beta below 0.4590 (22 percent over 49 percent) for a portfolio of type 2 strategic equities would also be justified.

> EIOPA proposes to clarify the requirement and add the beta method as an optional method.

Issue 1: Criterion of lower volatility

According to Article 171 (a), in order to qualify an equity investment as "strategic", the insurer must demonstrate that the equity investment is likely to be materially less volatile for the following 12 months than the value of other equities over the same period.
A well-diversified portfolio of strategic participations with a beta lower than one has a lower volatility than the typical average diversified, 'market', portfolio of equities. The question is then, which beta would justify a reduction of the capital requirements from 39 and 49 percent to 22 percent. Also, in case there is no well-diversified portfolio of strategic participations what 'residual risk' is acceptable to allow for this reduction?

Issue 2: Control threshold of 20%

Reason to keep the threshold of 20 percent was considered to be the influence the participating undertaking has on the related undertaking which can materially influence the volatility of the related undertaking's own funds.

EIOPA Advice:

The preferred policy option for thispolicy issue is to keep that requirement but clarify the scope of application (in particular that it applies to participating and relating undertakings).

Issue 3: Correlation of Risks

EIOPA Advice:

The preferred policy option for this policy issue is to provide NSAs the legal basis to require that undertakings demonstrate that the valuation of the strategic participation does not significantly depend on, nor is significantly correlated to, the performance of the insurance undertaking and changes in own funds of the insurance undertaking. To be noted that one could consider this option to be a limit to the use of the strategic equity.

1.6.3. Design of the Long-Term Equity (LTE) Risk Treatment

Issue 1: Diversification between LTE and other risks

Similar to the regulation in the context of the Matching Adjustment (MA), the assigned portfolio of assets (including the sub-set of equity) is not identified as a ring-fenced fund. In contrast to the MA where explicit diversification limitations are reflected, the regulation does not provide further specification on diversification for LTE.

The Options

Option 1: No change

- This option would imply that no diversification limitations would be set for LTE
- The LTE would be treated similar to the current equity risk sub-modules, simply adding up the different requirements for equity risk and jointly aggregating them via the existing correlation matrices with the other market risks.

EIOPA advice:
Option 2 is favoured

Option 2: No diversification between LTE and other equity risks.

- This option would imply that diversification of LTE would be partly limited as the LTE equity risk charge would be added up to the type 1 and type 2 equity charge and no diversification with short-term equity risks would apply.

Option 3: No diversification between LTE and other risks.

- This option suggests to explicitly allow for the different time horizon in the calibration of the LTE risk module by including a separate treatment for LTE. Under this option, LTE would be a separate risk charge that would be added to the BSCR (similar to operational risk).

Issue 2: Diversified LTE portfolios

The analysis above as well as the analysis on equity risks over longer horizons are based on well-diversified portfolios or indices of equities. The appropriateness of a 22 percent capital charge for a single equity or not well-diversified portfolio of equities cannot be derived from those analyses.

The Options

Option 1: No change

EIOPA advice:
Option 2 is favoured : The preferred policy option for this policy issue is to require LTE portfolios to be diversified because those are generally less risky.

Option 2: Only diversified portfolios are eligible

- It would be up to the undertakings to demonstrate sufficient diversification of their LTE equity portfolios.

Issue 3: Controlled Intra-group investments

In practice, the average holding period of investments in strategic equity often exceeds 10 years. Strategic investments may therefore also qualify for the long term equity risk sub-module, leading to unwanted overlap.

The Options

Option 1: No change

EIOPA advice:
Option 2 is favoured

Option 2: Exclude controlled intra-group investments from LT

2. Solvency Capital Requirement Standard Formula

2.1. Interest Rate Risks

EIOPA Advice:

EIOPA advises to model interest rate risk in the standard formula with a relative shift approach, parameters of which vary in function of the maturity.

EIOPA advises that the parameters for the increased and decreased term structures should take into account the starting point of the extrapolation of the euro term structure.

The increased term structure for a given currency shall be equal to: $rtup(m)=rt(m).(1+smup(\Theta m))+bmup$

where rt(m) denotes the risk-free interest rate in the corresponding currency, m denotes the maturity and bmup and smup are the calibrated maturity dependent up-shock components.

The decreased term structure for a given currency shall be equal to: $rtdown(m)=rt(m).(1-smdown(\Theta m))-bmdown$

where rt(m) denotes the risk-free interest rate in the corresponding currency, m denotes the maturity and bmdown and smdown are the calibrated maturity dependent down-shock components.

The issue

EIOPA upholds its view that the risk-free interest rate risk sub-module severely underestimates the risk.

EIOPA thoroughly analysed several approaches to improve the calibration and recommended a relative shift approach because:

- It is a simple and transparent approach,
- the shifted approach is a purely data-driven approach,
- it is a risk-sensitive approach applicable to any yield environment,
- it can well cope with low and negative interest rates.

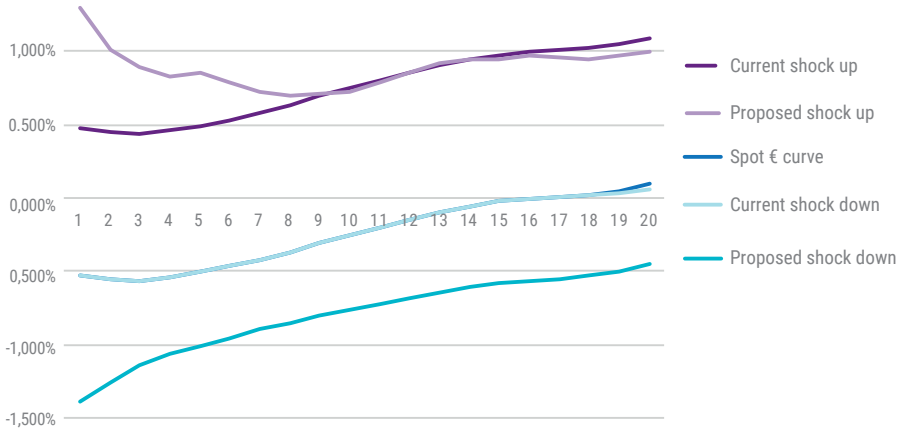
EIOPA upholds its view that the relative shift approach is the most appropriate approach to model interest rate risk in the SCR standard formula.

EIOPA's advice on the interest rate risk calibration of 2018 included the suggestion to implement the changes gradually during a period of up to three years. EIOPA will revise the need of gradual implementation in view of the combined impact of the changes suggested for the 2020 review of Solvency I.

Proposed shock components, with LLP at 20y:

	---	B DOWN	S UP	B UP
1	58%	1,16%	61%	2,14%
2	51%	0,99%	53%	1,86%
3	44%	0,83%	49%	1,72%
4	40%	0,74%	46%	1,61%
5	40%	0,71%	45%	1,58%
6	38%	0,67%	41%	1,44%
7	37%	0,63%	37%	1,30%
8	38%	0,62%	34%	1,19%
9	39%	0,61%	32%	1,12%
10	40%	0,61%	30%	1,05%
11	41%	0,60%	30%	1,05%
12	42%	0,60%	30%	1,05%
13	43%	0,59%	30%	1,05%
14	44%	0,58%	29%	1,02%
15	45%	0,57%	28%	0,98%
16	47%	0,56%	28%	0,98%
17	48%	0,55%	27%	0,95%
18	49%	0,54%	26%	0,91%
19	49%	0,52%	26%	0,91%
20	50%	0,50%	25%	0,88%

Impact of the Proposition on the € Curve (LLP 20y)



Source: Natixis Investment Managers calculations.

2.2. Spread Risk

The issue

The current Solvency II spread risk charges appear relatively mild compared to the proposed calibrations. On average, the Solvency II spread risk charges are 30% lower than the advised calibrations in the duration range of one to ten years.

EIOPA advice:

EIOPA advises not to modify the existing SCR spread risk sub-module (Option 1). In EIOPA's (technical) view it is unnecessary and even unwarranted to introduce a separate, long-term treatment of insurance and reinsurance undertakings' investments in fixed income assets, beyond the current, long-term calculation of the spread risk charge of assets contained in matching adjustment portfolios

The Options

Option 1: No change

- Do not alter the current SCR spread risk sub-module

Option 2: Long-term treatment of long-term investments in bonds and loans: avoidance of forced sales and reduced, long-term spread shocks

- Analogous to the treatment of long-term equity investments in the SCR equity risk sub-module.
- An important difference between bonds and loans and equities is that bonds and loans usually have fixed time to maturity while equities can be held indefinitely. This distinction does not affect the relevance of the holding-period and forced-sales conditions (in the fifth and sixth bullet).
- An average holding period of 5 years implies that undertakings would have to include –at least on average over the lifetime of the insurance obligations –bonds and loans with a maturity exceeding 5 years in the sub-set of investments in bonds and loans.
- Also the avoidance of forced sales for at least 10 years can be applied to bonds and loans. However, if the sub-set contains bonds and loans with a maturity below 10 years –which is likely to be the case –then these bonds and loans will automatically mature within a 10-year timeframe.
- The calibration of the lower spread shocks for the sub-set of investments in bonds and loans can take inspiration from the reduced risk charges for bonds and loans included in a portfolio subject to the matching adjustment:

CQS	0	1	2	3	4	5	6 & UR
Reduction factor	27.5%	25%	20%	12.5%	0%	0%	0%

Option 3: Long-term treatment of long-term investments in bonds and loans: hold-to-maturity conditions and spread risk charge based on increase in fundamental spreads

- Option 3 is the same as option 2 with the following two modifications:

1. The conditions relating to the average holding period and the avoidance of forced sales are replaced by the following:
   - the average maturity of the investments in bonds and loans over the lifetime of the pension obligations exceeds 5 years;
   - the solvency and liquidity position of the insurance or reinsurance undertaking, as well as its strategies, processes and reporting procedures with respect to asset-liability management, are such as to ensure, on an ongoing basis and under stressed conditions, that it is able to hold to maturity each investment in bonds and loans;
2. In line with this rationale, the spread risk charge for the sub-set of investments in bonds and loans is calculated by means of shocks to the risk-corrected spread, representing only losses due to expected downgrades and defaults. Similar to option 2, the calibration of the risk-corrected spread shocks can be based on the spread shocks applied to bonds and loans included in a matching portfolio:

CQS	0	1	2	3	4	5	6	UR
% of standard stresses	72.5%	75%	80%	87.5%	100%	100%	100%	100%

Option 4: Reflection of a dynamic VA in the standard formula for bonds and loans covering illiquid/predictable liabilities

- Where undertakings have illiquid liabilities and these are covered by bonds and loans, it can be argued that these investments carry lower spread risks as undertakings are less exposed to forced sales of bonds and loans.
- Such argument can be extended to the calculation of the spread risk charge for bonds and loans by allowing undertakings, which make use of the volatility adjustment, to apply a dynamic VA in the spread risk sub-module for bonds and loans. This would be implemented by either allowing undertakings to apply a re-calculated VA after stress, implying a recalculation of technical provisions post stress or by reducing the spread risk factors directly (e.g. applying reduction factors equal to the general application ratio) to the calculated capital requirement for spread risk on bonds and loans.
- This option is linked to the functioning and purpose of the VA.

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INVESTMENT MANAGERS

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