

Solvency UK reforms – considerations for life insurers

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Executive summary

HMT published [Review of Solvency II: Consultation – Response](#) on 17 November 2022, setting out the Government's final reform package and the plans for implementing changes to the UK's prudential regime for insurers.

The changes to Solvency II relate to: risk margin (RM), matching adjustment (MA), increasing investment flexibility, and reducing reporting and administrative burdens. The Government expects that the package of reforms will enable insurers to increase investment in long-term productive assets and ensure that the UK maintains an internationally competitive insurance sector without compromising policyholder protection.

This paper focuses primarily on the changes to the MA and investment flexibility.

With regard to the MA, the key changes include:

- The overarching methodology of the fundamental spread (FS) calibration will remain largely unchanged.
- The new rules will, however, increase the risk sensitivity of the current FS approach by allowing different notched allowances to be made within major credit ratings (e.g. different allowances for assets rated AA+ or AA- compared with AA).
- The Prudential Regulation Authority (PRA) will publish technical information needed for the calculation of the MA, reflecting the assets held by UK firms.
- The introduction of a series of new measures to mitigate any potential prudential risks. These will require insurers to participate in regular stress testing exercises prescribed by the PRA and for firms to nominate senior managers to attest to the PRA whether or not the level of the FS is sufficient.
- The potential of FS add-ons being used where the FS is not deemed to be sufficient.

Maintaining the current FS methodology should be welcomed by life insurers as it ensures continuity of the current approach. There will be challenges to overcome to introduce notched ratings, however this should mean that the FS

better reflects the risk profile of the firm's asset portfolio.

A key challenge for firms will be the need to attest that the FS covers all retained risks. It is not yet clear what firms will need to be able to do this, given the current lack of detail. The nominated senior manager is likely to need internal processes and governance to support their attestation.

On increasing investment flexibility, the key changes include:

- The requirement that all MA eligible assets have fixed cash flows will be replaced with a less stringent requirement that such assets have highly predictable cash flows.
- The penal treatment of assets whose ratings fall below BBB (the so-called 'BBB cliff') will be removed.

These changes should be welcomed by firms, as it will expand the universe of MA eligible assets. In particular, it should be easier to accommodate assets with prepayment risk and construction phases in MA portfolios.

However, there are also challenges to address here, such as how to define 'highly predictable', and how to measure, monitor and manage the possible mismatch between assets and liabilities that may arise as a result of introducing assets with non-fixed cash flows.



1. Attestation of the fundamental spread

To consider how the nominated senior manager might assess the adequacy of the FS it is useful to consider: the current FS methodology, what the revised FS methodology might look like, and the challenges a senior manager might face when assessing the appropriateness of the FS.



The current FS methodology

The current FS methodology consists of three elements:

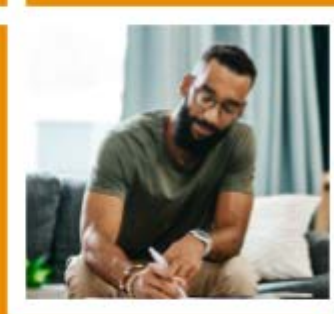
- LTAS = long-term (30-year) average spread for the bond type.
- PD = probability of default, which is the expected losses caused by the bond defaulting (based on long-term average transition rates and an assumed 30% recovery rate).
- CoD = cost of downgrade, which is the expected losses caused by the bond's credit rating deteriorating (based on long-term average transition rates and a cost of migration).

The FS tables are currently split by currency, sector (government, financial, non-financial), rating and maturity.

Revisions to the FS methodology

The HMT response suggests that the FS methodology will remain largely unchanged, but will be expanded to allow for notching and the removal of the BBB cliff.

The PRA will be required to publish the information needed to calculate the MA, reflecting the assets held by UK firms. However, there is currently a lack of clarity as to whether the PRA will keep the same granularity as in the current FS tables, or whether it will choose to publish a more granular set of FS tables which include notches and / or specific FS for certain illiquid asset classes.



Assessing the appropriateness of the FS

The level of granularity at which the appropriateness of the FS will be assessed is unclear. It could be at an aggregate level, where firms may be able to allow for some offsetting between different asset classes. Alternatively, the attestation could be at an individual asset class level. Whatever the granularity of the formal assessment, the senior manager will need to have access to a more granular view e.g. asset class or asset class / rating / tenor buckets in order to understand how the FS compares to the internal view of retained risk.

To assess the appropriateness of the FS for a specific asset or asset class, one could look at the construct of the FS and consider if the default assumptions, recovery rates, and probability of transitions are appropriate. This may be reasonable for traded assets, where comparative data is readily available.

However, for illiquid assets, the structure of the FS is arguably not directly applicable as the assets are held to maturity and there is a lack of comparative data because these assets are not publicly traded. In this case, firms may need to take a first principles approach to consider the actual risks, and to assess if the retained risk on these assets over their lifetime results in a higher or lower spread deduction than the FS. The models needed to do this will need to consider a range of risk drivers, and their impact on both probability of default and the value of underlying collateral. This may be more sophisticated than current modelling will allow. Market practice for equity release mortgages is largely in line with this approach already, which may give some useful insights for other asset classes.

Justifying the assessment and quantification of sources of retained risk is likely to be a key area

of debate going forward. There may also be a need to consider the structure of the firm's existing Solvency Capital Requirement (SCR) model, in light of the reforms.





2. Introduction of notched ratings for the fundamental spread

Currently, the same FS is applied to all assets with the same currency, credit rating, sector and maturity.

What this means is that an asset rated, for example, A-, has the same FS as the equivalent asset rated A. In turn, this means that the asset rated A- has a higher MA benefit than the equivalent asset rated A.

To overcome this challenge, and to increase the risk sensitivity of the MA framework, HMT has proposed to introduce notched ratings for the FS. It is not yet clear how the new notched FS levels will be determined.

There are a number of practical considerations for firms:

Data and system updates

Actuarial data feeds and systems will need to be capable of capturing the asset's notched rating in order to be able to apply the correct FS.



Internal credit ratings

For many firms current processes will not allocate a credit rating at the notched level so these processes will need to be updated.



Internal model design

Most internal models for credit risk consider transition and default risk at the overall credit rating level (e.g. AA, A, BBB). It is not clear how these models will need to be updated (if at all), given that transition and default data is not readily available at the notched level.





3. Highly predictable cash flows

Under the current Solvency II framework, the fixity of an asset's cash flows is one of the key requirements for an asset to be eligible for an MA portfolio. This means the cash flow pattern of a typical asset within an MA portfolio resembles the pattern of a bond over its lifetime.

At the same time, during a decade characterised by low yields in the sovereign and corporate public credit markets, and to overcome a degree of asset scarcity in the sterling-denominated public credit markets, insurance companies have structured cash flows using Special Purpose Vehicles (SPVs), to generate senior notes which are bond-like and can be included in MA portfolios. These senior notes are designed to withstand severe stresses, and are typically rated investment grade as a result. Examples include the securitisation of lifetime mortgages (LTMs).

Nevertheless, the constraint of requiring fixity of cash flows still poses significant challenges for the eligibility of several asset classes. Examples include investments into real assets with a construction phase and assets whose cash flow timing may be altered by significant prepayment risk.



HMT is proposing to relax the requirement for fixed cash flows in favour of a less stringent requirement for highly predictable cash flows. While the precise details of how this will be implemented in practice are not yet known, below we set out some initial thoughts on potential implications for firms running MA portfolios:

Notional versus legal structuring

It is current market practice to securitise an asset portfolio (e.g. a portfolio of LTMs) into different notes whose cash flows are resilient to risk stresses in order to achieve more certain cash flows and investment grade internal credit ratings on the senior notes. The junior notes pick up non-MA friendly risks (e.g. unexpected prepayments) and therefore their cash flows are less certain. Under the HMT proposals, and subject to internal governance considerations, a full legal separation of the cash flows may no longer be necessary. Instead, a notional structuring of the cash flows might be sufficient, thereby reducing costs for the insurer.

Structuring as an MA optimisation tool

While legal structuring and cash flow fixity may no longer be required to achieve MA eligibility, there is the question of what internal credit rating can be achieved for an unstructured loan portfolio with highly predictable cash flows. Therefore, firms may still want to utilise structuring to achieve certain internal credit ratings and hence MA benefits. The use of structuring as an MA optimisation tool may also differ between different types of firms, e.g. new entrants versus firms with established platforms.



Ability to include uncertain cash flows

Under the current Solvency II MA framework, firms have to model the 'worst case' cash flows where these are unknown in timing and / or amount. Examples would be cash flows during the construction phase of an infrastructure project and cash flows on callable bonds. This treatment reduces the MA benefit on the asset, making it less attractive to invest in. With the move to highly predictable cash flows, it may be possible to achieve a higher MA benefit on such assets, thereby making them more attractive investments.

Impact on the PRA MA matching tests

While securities with fixed cash flows are still expected to constitute the majority of the assets within MA portfolios, allowing some assets with highly predictable cash flows poses some questions on how these new risks within a MA portfolio (e.g. construction and prepayment risks) are monitored on an aggregate basis and how this interacts with the current PRA MA matching tests.

New sensitivities (e.g. the impact of a prepayment stress on the maximum cash flow shortfall) may need to be added to the current suite of matching tests.

Limits on the inclusion of uncertain cash flows

The extent to which uncertain cash flows can be included within the MA fund may be limited by the need to satisfy the tests and sensitivities described above.

Impacts on strategies used to pair assets with an appropriate hedge

Currently, firms can 'pair' assets and / or hedges together to produce a fixed rate, bond-like asset. With the move to highly predictable cash flows, firms may consider whether there are alternative approaches that may be easier to implement and / or which can be used to improve economics – subject to limit frameworks and compliance with matching tests.



4. Other considerations

Strategy

- **Investment strategy and risk appetite** – There are a number of potential implications for investment strategy. For example, assets in lower notching categories will now look less attractive (from an MA benefit perspective), and there is greater scope to include assets with ‘highly predictable cash flows’. The removal of the BBB cliff will also lower the impact of holding sub investment grade assets. Firms will therefore need to consider the risk-reward trade off for a wider range of assets and may look to adjust their portfolios accordingly.
- **Reinsurance strategy** – The reduction in the RM at an aggregate level is not expected to create a wholesale change in the levels of longevity reinsurance across the industry, but for some marginal lines of business it may be economically attractive to retain more of the business than under the previous regime. Changes to the FS may also make asset-backed reinsurance more or less attractive, and this will need to be assessed as part of a wider review of reinsurance strategy and business volumes.
- **New liability classes** – One area where there is a clear opportunity for life insurance companies is the extension of the MA to morbidity business, which could reduce the required capital for this business line, depending on the underlying investment strategy.

Governance and shaping the debate

- **Assigning a senior manager and internal governance** – Firms will need to decide which individual will take responsibility for the attestation that the overall level of FS is sufficient. Internal governance and processes may need to change to give the senior manager the support and assurance they require to be able to make this attestation.
- **Regulatory interaction** – How the reforms are implemented could have material financial and logistical impacts on life insurance companies. Early interaction with the PRA will help firms to shape the implementation. Firms will need to agree how to interact with the PRA on an ongoing basis, particularly in areas such as the FS attestation.

Practical challenges

- **Stress testing** – Firms will be required to complete stress testing exercises for the PRA which will require the ability to update and run scenarios quickly. Firms will need to ensure that their models are sufficiently flexible and that sufficient resources will be available to complete these exercises. Depending on the scenarios requested by the PRA, more data and / or modelling changes may be required.
- **Risk margin methodology changes** – The HMT reforms require a modified cost of capital approach and reduce the level of the RM overall. The precise methodology has not been prescribed, but the changes will need to be implemented. It will also lead to a change in the value of the transitional relief many life insurance companies currently benefit from.

Thank you

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