Willis Towers Watson

19 February 2021

Her Majesty's Treasury
1 Horse Guards Road
Westminster
London
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Dear Sir / Madam

Response to HM Treasury's Call for Evidence: Review of Solvency II

We welcome HM Treasury's call for evidence on its review of Solvency II. We strongly support the stated objectives of spurring a vibrant, innovative, and internationally competitive insurance sector, protecting policyholders, ensuring the safety and soundness of insurance firms and supporting them to provide long-term capital to support growth.

Please find below a response from the UK insurance practice of Willis Towers Watson, a leading global advisory, broking and solutions company. We work closely with UK and continental European insurance firms, and have supported, and continue to support, many of them with Solvency II.

1 Our response

In considering our response, we have reflected on our role as not only an advisor but as a leading provider of actuarial technology and actuarial outsourcing. The latter of these responsibilities puts us in the unique position of having to implement regulatory requirements ourselves, meaning we have a great deal of alignment with the interests of our insurance clients.

Our response to this call for evidence therefore draws on our experience as an advisor and technology provider to insurers and reinsurers but also our direct experience as, in effect, the actuarial teams of several insurers.

We believe that regulatory change should avoid unnecessarily undermining "equivalence" with Solvency II, which has benefits for the reporting and regulatory approaches across the UK and the EU. Further to this, we think that there is value in developing a roadmap of change in the regulatory framework and to bring that change in gradually, for practical reasons but also to allow the impact on equivalence to be evaluated at each step.

We have set out our responses to specific questions in the call for evidence in the Appendix to this letter.

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2 Previous correspondence

As context to this response, we refer the reader to our previous correspondence on this topic. Willis Towers Watson provided a response to the Treasury Committee inquiry into Solvency II in light of the Brexit vote on 14 November 2016. Since 2016, valuable lessons have been learnt about Solvency II, which are reflected in our remarks in this letter.

In the previous correspondence, we stated our view that an effective insurance regulatory framework should meet the needs of three major stakeholders:

- Consumers;
- Capital providers; and
- Government, working on behalf of society as a whole.

These stakeholders remain at the heart of our thinking about the UK insurance market's future regulatory framework and are a central theme in our responses to the call for evidence. The challenges we describe for these three stakeholders in the following sections apply across Life and Non-Life insurance, albeit some are more material for long-term insurers.

Our focus on these three major stakeholders aligns with the three objectives underpinning the Solvency II review: to spur a thriving insurance sector, protect policyholders and provide long-term capital to promote growth.

2.1 Consumers

Insurance consumers benefit from the enhanced security arising from improved risk management practices under Solvency II. However, this benefit must be assessed against the cost of writing insurance cover and the burden of compliance under Solvency II, a significant proportion of which will be passed on to consumers through higher prices.

Our view is that Solvency II in its current form acts as a barrier to entry for new entrants and as a significant burden on existing providers. All other things equal, this is likely to lead to further consolidation and closure to new business, thereby limiting price competition and innovation in the medium term. Indeed, small mutuals, where policyholders are both the customers and the owners of the company, have increasingly faced pressure to consolidate.

Solvency II has led to certain life products having much higher capital requirements than might reasonably be considered necessary, reducing the viability of providing those products to consumers. A reducing range of products and product providers ultimately leads to consumers losing out.

We advocate for a reduction in unnecessary capital and expense costs through reverting to a more principles-based regulatory regime, simplifying the legislation and bringing it together in one place and increasing regulatory flexibility.

2.2 Capital providers

There are two different capital provider perspectives that we consider in this section:

- Insurers acting as capital providers to the markets; and
- Insurers raising their own equity and debt capital from external capital providers.

2.2.1 Insurers acting as a capital provider to the markets

The UK insurance industry acts as a capital provider by investing the premiums received from consumers into government debt and more illiquid assets, including corporate bonds, infrastructure debt and lifetime mortgages.

The insurance products which are particularly suitable to provide funding for such investments are those which have predictable liability cash flows. There is an important role for insurers with stable and predictable liability cashflows to play in providing finance to support projects that drive economic growth.

There are aspects of the Solvency II rules that discourage investment in certain asset classes and encourage investment in others, potentially causing unhelpful distortions given the scale of investments made by insurers. For example:

- Within the retirement annuity market, we have seen some asset classes – such as bonds with "make whole" payment provisions for the borrower – be deemed irrevocably ineligible for the Matching Adjustment (which is designed to recognise the illiquidity premium under Solvency II), and insurers have rebalanced their portfolios to focus on assets that are eligible.
- Within the with-profits market, we have seen a general move towards the swap market and away from other asset classes, such as government bonds, because Solvency II uses a swap-based basic risk-free rate.

These trends lead to a reduction in the extent to which the insurance industry can act as a capital provider in certain markets. They also create distortions in insurers' demand for bond-like assets. In particular, there is reduced demand for assets that were previously suitable and attractive but are not eligible without complex restructuring, such as callable bonds, lifetime mortgages and corporate bonds and infrastructure debt with certain features.

We support greater flexibilities and balance in setting the criteria for the eligibility of assets that can be used to back insurers' long-term liabilities, and enabling the option of using UK government bonds for the basic risk-free rate.

2.2.2 Insurers raising their own equity and debt capital from external capital providers

Customer premiums are typically not sufficient at outset to fund reserves and capital requirements, so insurers rely largely on retained earnings, the emergence of distributable profits and external capital providers to fund the business model and act as a risk buffer. These external capital providers are typically sourced from the equity (public and private) and debt markets.

External capital providers rely on a range of metrics to help their decision making, with solvency capital being only one of the considered measures.

Solvency II has posed several challenges for external capital providers:

- Solvency II has made UK regulation more risk-based, but the complexity in the Pillar 1 calculation has made it difficult to understand the insurer business model and rendered capital projections more difficult and more volatile. Where appropriate, a scaled-back approach will help facilitate a future move to easier capital projections and much more regular capital monitoring.

- Solvency II external reporting focuses on the solvency of the balance sheet at the calculation date. Additional metrics, including sensitivities and analysing the sources of surpluses or deficits arising in the reporting period, are critical to understanding the business model and risks faced by the firm, and are published by firms on a voluntary basis with no prescription or common approach. Also, some information in standardised reporting templates is time consuming to produce and of questionable value.

- The onset of Solvency II has decoupled the regulatory capital approach from accounting and taxation calculations, making interpretation to external capital providers difficult and adding practical and communication burden for insurers.

Overall, the effect is that these challenges contribute to external capital providers being more reticent to invest in the insurance sector than in other sectors, leading to a higher cost of capital and greater costs for insurers and consumers.

We believe that Solvency II disclosures have fallen short of expectations (primarily due to the lack of prescription on sensitivities and analyses of movement), require reductions in unnecessary information and improvements in areas where they can add clear value to external capital providers.

2.3 Government, working on behalf of society as a whole

In some territories the implementation of Solvency II has led to:

- Non-level playing fields for insurers within the EU; and

- Non-level playing fields between insurers within the EU and those outside.

2.3.1 Non-level playing fields for insurers within the EU

One major aim of Solvency II was to harmonise regulation across the EU, however our observation is that each regulator has applied a different approach to enforcing Solvency II compliance.

For example, many insurers within the UK have Internal Models, which the Solvency II requirements demand a great deal of effort to develop and maintain. In many other countries within the EU, a more limited number of companies have applied for Internal Models often reflecting local supervisor preferences.

When applying for Internal Models within the UK, for certain risks, companies have been required to accept the UK regulator's view which can be significantly more prudent than the Solvency II Standard Formula (the default formulaic approach to calculate regulatory capital where an Internal Model is not being used) and the industry's assessment (usually contradicting the "internal" nature of such models). This has led to increased regulatory capital and greater expense costs for UK insurers in implementing the Solvency II regime than insurers in many other EU countries.

In the cases where Internal Models are required, it is important to recognise the spurious accuracy of material, asymmetric risks such as operational, strategic and political risks.

We believe that a better tailored Standard Formula approach is necessary to reduce pressure to adopt an Internal Model. We advocate for regulatory flexibility to approve a capital add-on with the expectation that a formal Internal Model application will not be required. For where an Internal Model is required, these should primarily reflect the firm's own view of risk and solvency assessment.

2.3.2 Non-level playing fields between insurers within the EU and those outside

Some solvency regimes have been deemed to be "equivalent" for the purpose of Solvency II, so the local capital regime will be applied to those groups' insurance business, albeit that any EU-domiciled subsidiaries of such groups need to apply Solvency II rules directly. The reality of "equivalence" is that in several instances the non-EU group treatment outside the EU is materially more favourable than under Solvency II, so groups that write business within their EU subsidiaries but then materially reinsure this business within the group to a non-EU group entity can benefit from lower capital requirements than groups with global headquarters located within the EU.

We support removing incentives for regulatory arbitrage and advocate for a rethink of the Risk Margin which, under the low interest rate environment, has led to many insurers of long-term liabilities deciding to reinsure some of their business overseas.

3 Regulatory framework

While we have not separately responded to HMT's Future Regulatory Framework Review consultation running in parallel to this call for evidence, our general view is that the UK regulator should have the ability to exercise expert judgement in a proportionate manner. We support a regulatory approach which maximises the use of the regulator's expertise in the design of regulatory standards and ensuring those standards can be flexed and efficiently updated to address changing conditions and emerging risks.

We believe that our recommendations to improve the UK's prudential regulatory framework, as set out in this letter, will help the UK Government meet its objectives. We would be happy to discuss these issues and our proposals with you in more depth.

Yours faithfully

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Appendix: Specific responses to questions or on areas of the review

We set out below our detailed responses to a selection of questions raised in the review. Our responses are focussed on the questions which relate to Risk Margin, Matching Adjustment ("MA"), calculation of the Solvency Capital Requirement ("SCR"), reporting requirements and basic risk-free rates.

1 Risk Margin

Q1: What is the impact of the current design of the Risk Margin?

Insurers are holding greater capital than the original intent of the Solvency II framework, which acts to increase customer prices, deter new market entrants and limit the availability of some products.

The Risk Margin is a case in point. The purpose of the Risk Margin is *not* to ensure that firms hold sufficient resources to restore the solvency position or transfer business to a viable third party under stress. Directive Articles 75(1)(b) and 77(3) set out the principle of the Risk Margin: that it should be sufficient to ensure that the liabilities are valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction. The Directive contains no requirement to assume that the transfer value is based on stressed conditions or that the amount should act as a buffer to allow solvency positions to be restored after stress. This protection is provided by the SCR under Solvency II.

The Risk Margin definition has changed over time, as can be seen in the Call for Evidence itself where the scope of the Risk Margin goes beyond the principle enshrined in the Directive.

In our view, the current design of the Risk Margin has led to several detrimental outcomes:

- It has forced UK annuity companies to reinsure outside of the EU as much longevity risk as possible in order to reduce the adverse capital impact, which has been exacerbated by low interest rates.
- The link to interest rates creates volatility and leads to the situation where firms are required to hold significantly more in reserve when interest rates fall.
- The resultant overestimation of Technical Provisions detracts from the effort of determining a genuine 'best estimate' value of the Best Estimate Liabilities ("BEL"), since a sizable margin will apply on top.
- For some classes of business, it results in materially different durations of Technical Provisions under prudential and accounting bases (i.e. International Financial Reporting Standards) causing mismatch risk.

Q2: What changes, if any, should be made to the methodology to improve the operation of the Risk Margin?

According to the Solvency II Directive, the Risk Margin is the theoretical additional amount over the BEL to form the price at which a third party would set to take over and meet the insurance and reinsurance obligations. The method of approximating this amount – the "cost of capital" approach – results in an overstatement when interest rates are low. This is exacerbated by a flawed calibration: the 6% cost of capital rate, which, being originally based on the Swiss Solvency Test's approach observing weighted average cost of capital, effectively double-counts market and credit risks. However, before addressing the method and calibration, we believe that it is important to start from the underlying principle of the Risk Margin.

The Risk Margin principle is highly theoretical and, in our view, decoupled from reality. We suggest that the Risk Margin principle be revisited, and we note an opportunity to consider the Risk Margin being interpreted on a run-off basis, given that liabilities are only ever managed or transacted as blocks of business and not sold in isolation.

Alternative methodologies and calibrations of the Risk Margin have been considered by industry working groups, including the recent discussion paper published in the British Actuarial Journal[1]. Notable alternative designs are the so-called "tapering approach" proposed by EIOPA for Solvency II and the Margin Over Current Estimate ("MOCE") approach – percentile of run-off capital – adopted by the IAIS in the Insurance Capital Standard ("ICS").

While we do not wish to reiterate here the advantages and disadvantages of these approaches, we recognise that the reduction in interest-rate sensitivity and the overall onerousness of the Risk Margin that the two alternative designs above offer is attractive. However, there has so far been some reluctance to address the crucial issue, which is the principle of the Risk Margin.

Q3: What are the benefits, and costs, of any proposed changes to the methodology to calculate the Risk Margin?

The primary benefits are to mitigate the issues highlighted above, including removal of the strong inverse relationship with interest rates, not incentivising artificial risk decisions and allowing companies to offer better prices to customers.

2 Matching Adjustment

Q4: What changes, if any, should be made to the eligibility of assets for the Matching Adjustment?

Insurers are faced with a binary "in or out" criteria in terms of the eligibility of assets for the Matching Adjustment, which is prohibitive to investment in certain long-term assets.

For instance, prepayment risk can cause an asset to be ineligible for inclusion in the Matching Adjustment Portfolio ("MAP"). We would suggest that this cliff edge is replaced with the option of holding capital against prepayment risk. This would allow insurers to hold an asset in the MAP and obtain the benefit, albeit with some benefit offset to the extent that the asset has prepayment risk. As most assets involve some prepayment risk – because most businesses do not have 30-year planning horizons – this would allow insurers to support long-term growth more effectively.

Such a prepayment risk provision could also be used to address minor features of bonds which would otherwise disqualify them, for example Spens clauses. Furthermore, we would advocate for allowing floating rate instruments to be eligible, subject to appropriate capital, to capture possible reinvestment risk, remove distortion and increase infrastructure investment.

Similarly, cashflow variability (for example, during the construction period for a property) often disqualifies assets from being MAP-eligible. So, rather than restricting assets with cashflows that are not fixed in timing and amount, and instead allowing for assumptions to be made about when cashflows commence (for example, the construction completion date), insurers would be able to invest in a wider pool of assets (such as properties in the construction stage) and support longer term growth.

We also note that the incentive to use Special Purpose Vehicles ("SPVs") to restructure otherwise ineligible assets incurs costs and management focus for an arrangement which could be replaced by a less formalised approach.

[1] https://www.cambridge.org/core/services/aop-cambridge-core/content/view/4B2AAD320E4388A7EE6F1FA3ED69C4C3/S135732172000001Xa.pdf/review_of_the_risk_margin_solvency_ii_and_beyond.pdf

Q5: What changes, if any, should be made to the calculation of the Matching Adjustment?

We would welcome further discussion on how greater flexibilities can be provided in how MA is implemented, particularly in regard to the allowance for credit risk. Such discussion should reflect on the advantages inherent in the previous ICAS regime and the issues created by the existing Solvency II approach.

From a high-level perspective, we see two broad choices for discussion:

- Adopt an approach akin to that existing under the previous ICAS regime but with added rigour or guiderails. This approach would require strong regulation to ensure a robust allowance for credit risk in the discount rate, with the discount rate primarily driven by the assets held. Allowance for credit risk in this way works well in times of stress when there is clear value in holding illiquid assets.

- Continue with the Solvency II approach but creating opportunities for more flexibility without compromising security. Under this approach the broad MA structure remains but more flexibility would be available for how credit risk is allowed for in both the setting of the discount rate and the Internal Model. Currently, the approach to setting credit risk in the discount rate in isolation is not credible, but is offset by the strictness of the MA criteria and additional Internal Model requirements.

Additionally, to encourage investment in infrastructure debt, where the published Fundamental Spreads may not be appropriate, firms should be allowed to calculate the Fundamental Spread using a specified methodology. This should apply for highly illiquid asset classes or where there is much greater security, resulting in much higher recovery rates than for corporate bonds (where Loss Given Default ("LGD") is factored into bespoke Fundamental Spread calculations).

We would also propose that there be some linkage between Fundamental Spreads and large increases in credit spreads. If spreads increase by, say, 150 basis points it likely means that future expectations for credit losses have increased. This approach would also be better aligned with the way the Prudential Regulation Authority ("PRA") requires Matching Adjustment under stress capital to be calculated.

Q6: What changes, if any, should be made to the Matching Adjustment approval process?

The process of obtaining Matching Adjustment approval for firms is a long and resource-intensive process for firms and should be simplified or reformed.

Under the existing approach to Matching Adjustment approval, firms would benefit from having greater confidence in how their application to the PRA will fare. Slow approval processes and failure probabilities that are too high are deterrents to applying for and amending MAPs, and this leads to non-optimal investments and poorer deals for customers.

If reforms were to be considered, putting Matching Adjustment sign-off into the hands of firms – relying on the Chief Actuary, Chief Risk Officer and Internal Audit – would provide firms with greater opportunities to innovate and be agile, provided suitable regulatory safeguards are in place.

Q7: What changes, if any, to the Matching Adjustment could be made to support insurance firms' provision of long-term capital to support growth, including investment in appropriate infrastructure or other long-term productive assets?

The regulatory approach in this area should avoid stifling innovation provided that a suitable risk-based approach is taken. Artificial constraints on the structure of the Matching Adjustment and on how risk is allowed for in the Fundamental Spreads distort demand.

As suggested in our response above, we propose replacing existing asset eligibility rules with an approach that better reflects the security features of the assets in order to remove distortion in insurer demand for assets that would otherwise be ineligible for Matching Adjustment.

We would point out that a regulatory approach that blocks Matching Adjustment eligibility due to a lack of sufficient historic data on infrastructure assets or other long-term productive assets is not an approach that promotes innovation.

We do not believe that the granting of government guarantees in order to lower capital requirements to below those implied by the underlying risks is an appropriate approach. Such government guarantees are often offered on the debt of infrastructure of national importance.

Q8: What changes, if any, to the Matching Adjustment could be made to better reflect climate change-related risks arising from investments and contribute to sustainable investment?

There should be an explicit requirement in the Prudent Person Principle to understand and assess climate risk (physical and transition), especially in the context of investment in long-dated, illiquid debt. Informed by this, climate related risks need to be reflected in the Fundamental Spread.

Given the granular, asset-/sector-specific calculation and data required, progress will be impeded – and growth and innovation stifled – if the regulator is undertaking the Fundamental Spread calculations.

3 Calculation of the Solvency Capital Requirement

Q11: What other tools should be available to supervisors to assess and ensure the overall level of capital held by firms is appropriate?

The cost and effort involved in the Internal Model Approval Process ("IMAP") has detrimental implications for two broad classes of insurance companies:

- For a firm with a "non-standard" risk profile, the cost and effort of Internal Models becomes a necessary penalty due to the ill-fitting nature of the Standard Formula.

  Amendments to the Standard Formula to make the calibration better suited to UK insurance risks and bring it up to date should reduce the requirement for Internal Models. We elaborate on the nature of our suggested changes to the Standard Formula in our response to Q13, below.

- For a small firm where an Internal Model would indicate a lower capital requirement than the Standard Formula, the disproportionate cost of developing and maintaining an Internal Model may force it to hold a Standard Formula capital requirement that is too high, putting it at a competitive disadvantage.

  The PRA should be provided with more flexibility over how its power is applied. For example, the PRA should be able to give a capital add-on without triggering a disproportionate requirement for a firm to develop an Internal Model or take decisions which materially change its risk profile. Under this approach, a capital add-on would be viewed as a permissible long-term solution to an inadequacy of the Standard Formula to address non-standard risks.

Q12: What changes, if any, should be made to the current approval process for new internal models and changes to models? What type of supervisory tool would be an appropriate alternative to the rejection of an insufficient model application?

Insurers should be encouraged to develop Internal Models that reflect their view of risks and use them to make commercial decisions that they believe in. Such models should be positioned for a future where capital management decisions are analysed and executed much more quickly than they are today.

A laudable objective of the Solvency II regime is the Use Test, whereby risk-based capital management is put at the heart of decision making. However, few firms can claim that their Internal Model has driven their most

important strategic decisions. On the contrary, for many firms, Internal Model usage is limited to reinsurance decisions that provide capital relief due to differences in regulatory treatment.

Internal Models should become primarily Own Risk and Solvency Assessment ("ORSA") models that can be used to set Pillar 1 capital requirements. The Pillar 1 capital should be subject to PRA adjustments or capital add-ons to ensure that capital is at the level that the regulator deems necessary to protect policyholders and ensure financial stability.

The model change process should also be less cumbersome. It is challenging to maintain model relevance in a changing environment, and the process should not be a barrier to ensuring the model remains trusted. The regulator's sign-off on such complex models adds considerably to the process.

Q13: What changes, if any, should be made to the Standard Formula to better reflect the risk profile of the UK insurance industry? What are the costs and benefits of such changes?

The following elements – currently excluded from the Standard Formula design – should be considered in order to better reflect the risk profile of the UK insurance industry:

- Breakdown of longevity risk into level and trend risk components. The current longevity risk approach conflates level and trend and specifies a level stress when trend is typically the greater risk. The level stress also ignores portfolio size when it is the portfolio size that drives the underlying mis-estimation risk.

- Inclusion of inflation risk on inflation-linked benefits. Appetite for pension de-risking transactions by UK insurers has led to greater exposures to Retail Price Index ("RPI"), Consumer Price Index ("CPI") and Limited Price Index ("LPI") inflation on insurers' balance sheets.

- Inclusion of property yield risk (in addition to property value risk). Wider investment by insurers into property rental markets could mean the property risk component might need to be re-considered. For example, if there is a fall in demand for rental properties, this could severely impact an insurer's balance sheet and it is not reflected within the current property SCR calculation, which is aimed at fall in property values.

- Inclusion of implied volatility risk. In reality, falls in equity prices often result in higher implied volatilities.

- Explicit modelling of LGD as opposed to an implicit assumption embedded within the spread risk calculation.

More widely, the PRA should be able to amend certain aspects of methodology or parameters on a firm-by-firm basis if this results in a better fitting Pillar 1 capital requirement, and this should not result in a longer term requirement for an Internal Model or Partial Internal Model.

We would also recommend a review of the following issues created by the Standard Formula design:

- Several catastrophe risk perils are based on maximum sum insureds, so a single new risk can result in a material increase in the capital requirement if it happens to have a higher policy limit than existing risks.

- Counterparty default risk for debt overdue by more than three months incur a charge of 90% of the debtor value, so can drive large movements in the SCR if companies do not manage it carefully. Firms can limit the impact of this by changing their definition of "overdue".

- Currency risk is charged at 25% of the difference between assets and liabilities for all except the entity's own reporting currency so can also give rise to large fluctuations if not managed by insurers.

- Operational risk is difficult to model in a “standard” way but the current approach which is based on Technical Provisions, premium value or a percentage of the rest of the SCR is not particularly informative in terms of actual operational risk.

- Reinsurance arrangements which are not straightforward quota share or excess of loss arrangements, are not suitably allowed for by the Standard Formula, owing to stop-loss contracts and features like aggregate deductibles / limits being difficult to apply.

Q14: In circumstances in which there is insufficient justification for a full or partial internal model, how might the SCR be calculated for insurance firms or business for which the Standard Formula is deemed inappropriate?

Our general view is that the Standard Formula calibration is not based on the latest available information and does not provide a good fit for UK insurers. We recommend a review of each risk.

As mentioned previously, for non-standard risks which are not appropriately represented by the Standard Formula it should be permissible for a firm to apply for a capital add-on or deduction which focuses upon the appropriate difference, rather than leading to an Internal Model requirement.

Q16: What changes, if any, should be made to the SCR calculation to promote better measurement and capitalisation of climate change-related risks?

We believe that the sensible approach to climate change-related risks is to ensure insurers are thinking about the risk appropriately and disclosing useful information to their stakeholders. Therefore, our suggestions principally relate to the approach taken to ORSAs and disclosures, rather than the SCR capital. We would highlight that proportionality should be front of mind when further analysis or reporting such as this is being considered. The following are suggested in order to promote better measurement and capitalisation of climate change-related risks:

- Develop a common risk taxonomy for climate change-related risks.

- Encourage longer term projections in the ORSA process.

- Encourage further climate change-related scenario testing, again in the ORSA.

- Greater disclosures using common climate change-related scenarios and risk taxonomies.

- Further consideration of whether climate change should be introduced as a specific item within capital requirements.

We note that EIOPA is considering applying a "climate" adjustment to the natural catastrophe risk factors in the Standard Formula. Additionally, there will be certain expectations around embedding climate change in the risk management framework and reporting it in the ORSA.

Furthermore, and again beyond the scope of the SCR calculation alone, we note that there is a growing expectation from the regulator on stress and scenario tests. Firms are expected to carry out such analysis as part of their model validation. Like non-life catastrophe risk, the objective from the PRA should be to make the industry think about climate change risk, carry out stress tests, incorporate it into the risk register, monitor it regularly and make model adjustments if necessary. Board training and interviews serve a useful purpose in ensuring management attention.

4 Reporting requirements

Q20: What changes, if any, should be made to insurance firms' reporting requirements? What are the costs and benefits of such changes?

As a profit performance and cash generation measure, current Solvency II disclosures fall short. Two substantive issues need addressing:

- Because there is no requirement under Solvency II to produce an in-period movement analysis, nor sensitivities, investors do not have a clear picture of free capital generation.

- Solvency II has forced apart the accounting and solvency reporting, making it harder to understand the dividend-paying biting constraint.

We propose standardised templates for the insurance industry disclosing, inter alia, a movement in Solvency II free surplus, Solvency II sensitivities, and an explanation of whether Solvency II or IFRS is the biting constraint when it comes to cash remittances and dividend paying capacity. Further details on the nature of our proposals can be found in the joint report from Willis Towers Watson and Autonomous Research, *Solvency II One Year On*[1], published in April 2017.

We note that the PRA mandated market sensitivities for certain life insurer firms in late 2017, in Supervisory Statement 7/17.

We also believe that focused and proportionate changes linked to climate change risk are likely to be beneficial to investors. As previously indicated, we believe that improved disclosures of change-related risks will improve the thinking in this area across the industry.

Additionally, the level of detail required in some of the Quantitative Reporting Templates ("QRTs") is onerous and time consuming to produce and of questionable value. For instance:

- Asset data reporting requirements are onerous, particularly where the "look through" principle is applied to investment funds.

- Variation analysis reporting requires a breakdown of movement in the Technical Provisions over the year, but the steps of the breakdown do not line up with P&C approaches and are much more suited to life insurance business.

- Line of business reporting for P&C portfolios is also quite onerous, in particular because companies are generally not performing reserving calculations at the Solvency II Line of Business level and so don't have claim triangle data readily available with this segmentation.

We suggest a joint industry-regulator working group review of the existing requirements. It is possible that changes to the QRTs could be made to reduce insurers' reporting burden without compromising Solvency II equivalence.

[1] https://www.willistowerswatson.com/-/media/WTW/Insights/2017/04/Solvency-II-One-Year-On.pdf

5 Risk-free rates

Q28: What factors should be considered as part of the proposed transition of insurance firm discount curves from LIBOR to OIS rates? When should the transition be introduced?

Currently, the basic risk-free rates under Solvency II are based on London Interbank Offer Rate ("LIBOR") swaps and the PRA has proposed to transition to Sterling Overnight Index Average ("SONIA") swaps.

We perceive this transition to be a missed opportunity to allow the option of Gilts as the basis for discount rates, which would be better for financial stability and encouraging UK infrastructure growth. The move to SONIA will incur a cost for with-profits funds to change their hedging programmes (again) which is not in the interests of policyholders. This amounts to, effectively, a value transfer from customers to investment banks.

Longer term (once re-hedging is complete) there is a risk that there will not be an active and reliable long-term SONIA market to calibrate to, while we would expect the long-term Gilts market to remain more deep and liquid.

Incentivisation towards one reference rate over another creates the potential for distortion and we believe providing firms with an option between Gilts and SONIA-based swaps overcomes the depth and liquidity challenges.

In the transition, market liquidity and capacity factors should be considered alongside the term of sufficiently liquid assets and the reliability of the extrapolation approach. An undesirable outcome would be akin to where, as is the case of markets in some EEA Member States, the Solvency II Ultimate Forward Rate ("UFR") is disconnected from the prevailing market environment.