ACTUARIAL ASSOCIATION OF EUROPE

Survey on how Solvency II measures worked during COVID-19

July 2021

Key takeways from the survey

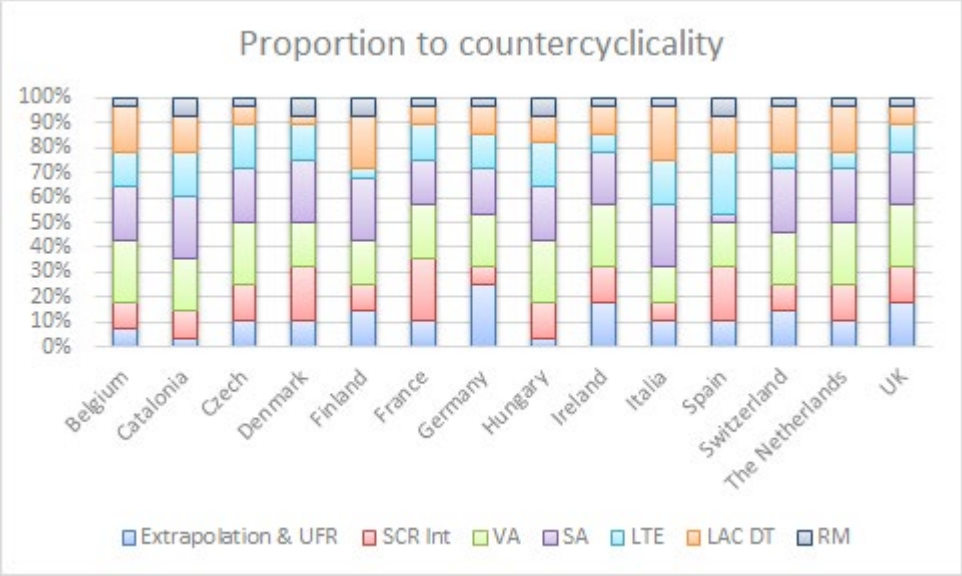
1. ***Countercyclical elements*** – both volatility adjustment and equity risk symmetrical adjustment, despite the inherent basis risk, are considered as the most effective countercyclical elements. Also the risk free rate extrapolation was seen as something that helped on smoothing the interest rate movements. In more technical areas, reduced procyclicality in the the loss absorbing capacity of deferred taxes was brought up and an solution for this to update the recoverability test less frequently in times of crisis. The Risk Margin was considered highly procyclical.
2. ***Appropriateness of the SCR standard formula*** – This was seen as generally adequate[1] and ORSA was considered as a good tool to give specific focus on topics like increased uncertainty, State Intervention and Management Actions
3. ***Calibration for pandemic coverage in SCR*** – this was considered to properly reflect the impacts of the pandemic, thus some non-life, pandemic specific exposures, could benefit from more granularity
4. ***Liquidity & default*** – approach and calibration was seen as appropriate[2] but further guidance on marked-to-model approaches in case of stressed markets and for illiquid instruments would be welcome
5. ***Recovery practices*** – significant informal divergences are observed across Member States and range between pro-active brainstorming, link with Risk Appetite, sensitivities on SCR ratio, specific thresholds
6. ***National State Initiatives*** – the support was mostly related to liquidity and work flexibility at this stage with a direct or indirect impact on insurance business
7. ***National Supervisor's Initiatives*** – bringing out EIOPA's recommendations and a close follow up of the national insurance sector was most common actions, Also some NSA's launched additional requests to reflect the uncertainty by provisioning and stress testing, increased dependency and analyzing insurance coverage w.r.t. pandemic

1- some attention points include SCR spread, SCR mass lapse, SCR Op, correlation between SCR int and other market risk submodules, with lapses

2 – some attention points include SCR spread on corp/govies, uneligible derivatives after downgrades, systemic risks on Covid_19 sensitive segments

1- Countercyclical elements

Contribution to countercyclicality and potential deficiencies



Key findings and messages

- Unsurprisingly, the **VA and SA are the most contributors** to countercyclicality in a volatile context
- Depending on business duration and interest rate sensitiveness, **extrapolation and SCR interest** (in their current version) **help to smooth interest rate movements**
- We note **different responses w.r.t. LTE and LAC DT**. This might be related to the effective use of Long Term Equity in some countries and eventual strict guidance by supervisory authorities on the recoverability test under the LAC DT
- There is a clear consensus that **RM acts procyclical**

Potential deficiencies per component

- Extrapolation and SCR int:
  - the relation between market movements and interest rates curve is not consistent
  - the absence of stress on negative interest rates has resulted in a positive effect on solvency positions
- VA
  - significant basis risk w.r.t. EU reference portfolio and application ratio
  - no recognition of the natural spread risk hedge in the absence of dynamic VA for standard formula companies
- LAC DT:
  - significant volatility on the SII ratio
  - quarterly LAC DT recalculations are questionable in the event of crisis where business plan has not been updated yet
- RM:
  - strong procyclical in a low interest rate environment: higher SCRs are discounted at a lower rate over time
  - CoC could be reduced to reflect lower expectations regarding the costs of capital then achievable in the market

2- Appropriateness of the Standard Formula

General comments

- The SF provides a generally adequate model and risk assessment for a typical insurer
- COVID-19 crisis does not seem to be an event that would bring significant new statistical information relevant for a better calibration of the SF
- The appropriateness of the SF and associated correlations should be considered as part of the ORSA process while COVID-19 could qualify for an ad-hoc ORSA

Detailed comments

Below information gives an overview of possible areas of analyses that are not necessarily related to COVID-19:

SCR Market

- New SCR Int calibration reflects negative rates
- Spread risk stress could be considered for some ratings
- Property risk stress is based upon a UK market calibration, which is questionable in a post-Brexit environment

SCR Underwriting

- Mass Lapse risk (life, health) is too high even in a crisis situation, also bearing in mind that products cover different risks

SCR Operational

- Decline in risk free interest rates following ECB intervention may lead to higher SCR Op although this risk does not naturally change with capital market movements
- The absence of loss absorbing capacity of technical provisions for the operational risk sub-module is unclear

2- Appropriateness of the Standard Formula

Correlations

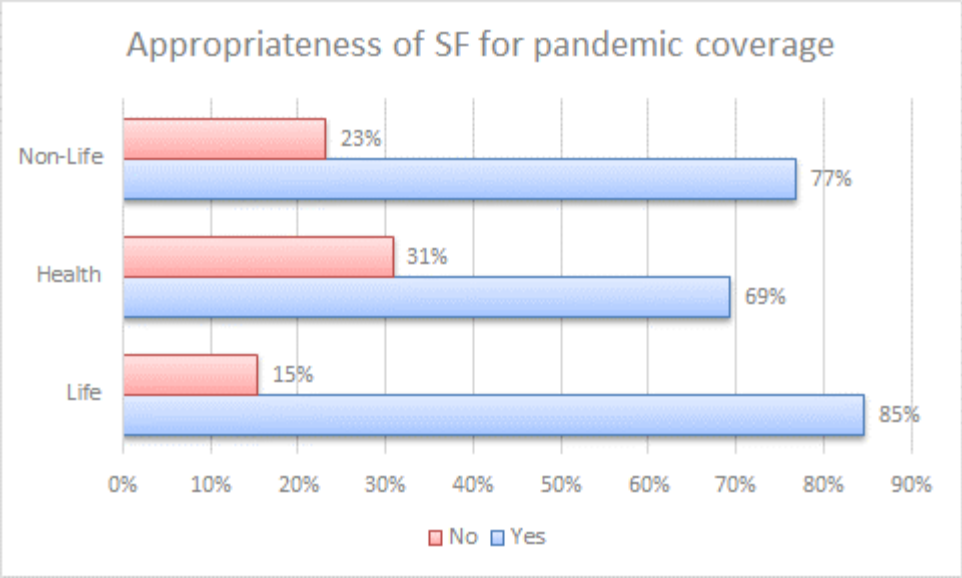
- Correlations between interest rate risk down/up and other market risks and also their relation to lapse (policyholder behavior) does not seem to work properly
- Market correlations have at times been volatile and have deviated from the long-term assumptions of the Standard Formula[1]. The observed temporary differences should not trigger a challenge of the calibration but be properly addressed as part of the ORSA process

Importance of ORSA

- Suitability of standard formula shock factors and correlations must be carefully assessed under Pillar 2 both in normal and crisis times, taking into account insurer specific exposure and country situation (ex: business lines, government intervention, type of IR shock, insurer equity portfolio vs EIOPA equity index, insurer fixed income portfolio vs EU representative portfolio, diversification of fixed income portfolio in terms of sectors and geography, cyber risk, etc.)
- To feed the ORSA, there is a need to further collect observed direct and indirect impacts from the pandemic whereas those will only be available in later months or years. It is also important to identify State responses and Management Actions:
  - State and ECB intervention influenced the pandemic impacts on claims and financial markets in previously unimagined ways. The future development of the pandemic and support from Public Institutions will be determinant of the experience development
  - Management actions will also be key and could include policy wording changes but also specific investments and partnership to relaunch the economy
- COVID-19 has increased the uncertainty and complexity of the insurance system and has further evidenced the importance of the Risk Management System and ORSA
- AAE therefore welcomes EIOPA CP on ORSA in the context of COVID-19 that will run until March, 21th 2021.

1- e.g. . positive correlation of Equity/Fixed income returns in periods of turmoil/higher VIX

3 - *Calibration for pandemic coverage in SCR*

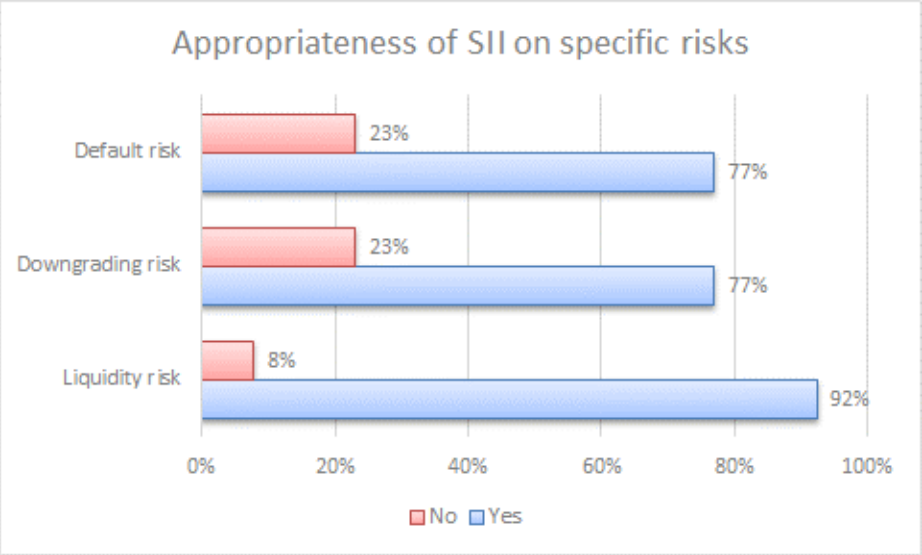


Key observations

- Globally, all scenarios are adequately addressing implicitly or explicitly the effects of a pandemic
- Concerns expressed by some respondents include:
  - Life: potential overestimation on mortality under a pandemic situation
  - Health: potential underestimation of pandemic situations
  - Non-Life: it might be helpful to improve the identification of relevant pandemic exposures and consider those more adequately
- Further comparing the pandemic experience to the standard formula may be a worthwhile exercise. This should be done both at LoB and country level.

4 - Approach on liquidity and default

Assessment of the global framework



Key observations

- Globally, data or experience observed up to YE2020 do not indicate the need to review the current approach or calibration w.r.t. liquidity and default risk.
- Concerns expressed by some respondents include:
  - The spread risk components might need updating on different rating classes and gov/corporate bonds
  - Some derivatives may not be eligible as RMTs if downgraded below credit quality 3 whereas their purpose is to protect against downgrades
  - Systemic risk factors (e.g. downgrades/default/liquidity) may need to be followed up based on recent observations with an increased focus on specific segments

4 - Approach on liquidity and default

Use of marked-to-model approaches in times of market illiquidity

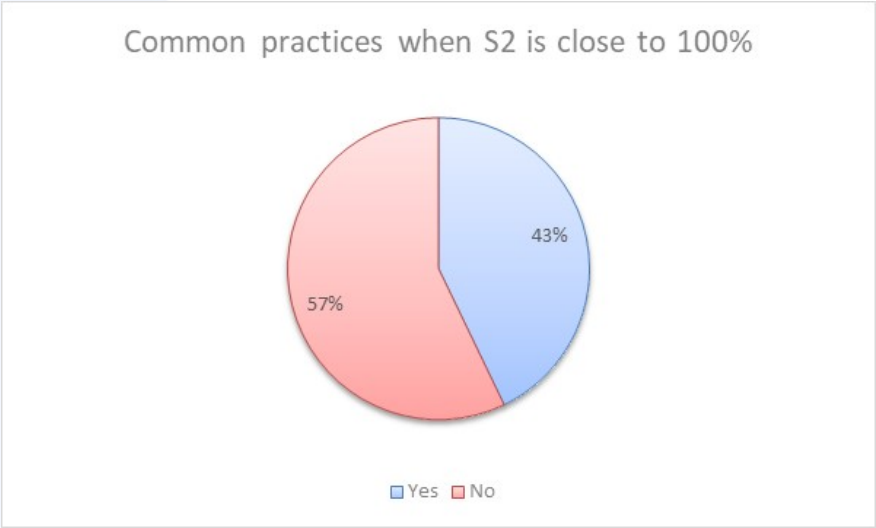
- ***Most respondents support the use of Mark-to-model valuations as allowed under SII whenever quoted market prices are unavailable.*** This should remain an exception, comply with IFRS13 principles and be subject to sufficient oversight/governance to ensure that the resulting valuation does not overstate the asset value
- The scope should be extended to any stress situation whenever the market price does not reflect its true economic value. ***This would require specific provisions to make a distinction between "normal" and "stressed situations" and to foresee some mechanism for smooth transition between marked-to-market and marked-to-model approaches***.
- Some issues identified include:
  - Risk of discrepancies between entities and countries
  - Developing new models can be costly whereas unrated investments are already highly capital consuming. Some liquidity management under pillar 2 should be sufficient
- ***Non-rated asset classes might need to be better dealt with under crisis*** as market value do not exist and if these need to be made some haircuts might need to be assumed. More flexibility could bring comfort to invest into these asset classes which then could increase the diversification of the portfolio

Proxies used for implied volatilities in times of market illiquidity

- 2 possible proxies are mentioned:
  - Smoothing implied volatilities mechanism: rather than focusing on all parts of the maturity/tenor surface, the areas with high bid-ask spread are excluded for calibration before applying intra/extrapolation
  - Volatility anchoring: defining a long-term target with average over some days/weeks based on historic volatilities
- Expert judgement can be applied if necessary with appropriate documentation, validation and disclosures

5 - Recovery practices

Overview of supervisors approaches w.r.t. low S2 ratio sensitiveness



Key observations

- There seems to be a lack of convergence across Member States, even the concept of formal versus common practices was difficult to classify for most respondents
- Where some common practices are observed, those include:
  - Encourage undertakings making early brainstorming (outside of any period of crisis) on recovery and resolution
  - Encourage entity to restore coverage when their risk appetite/capital target levels are breached
  - Use of thresholds:
    - Only for large companies according to their risk appetite
    - SCR sensitivity monitoring based on reverse stress tests on a quarterly basis. Stress factors are increased for a selection of SCR modules showing how SCR ratios could be reduced to 150% and 125%. 125% is often considered as a red-light limit
    - Other thresholds considered varying by country: 150%, 120%, 100% (but link with Risk Appetite)
- AAE welcomes EIOPA consultation on supervisory practices and expectations in case of SCR breach that runs until February, 17th 2021 but recommends consulting also on the flexibility of the supervisory ladder before any SCR breach situation

6 – National state initiatives

Overview of the measures taken by Governments (non-exhaustive list)

1. **Liquidity (most frequent tool)**
   - Private Pension schemes made liquid for policyholders in financial distress
   - Postponement of loans and premiums payments
   - Participation in MTPL gains
   - A posteriori premium adjustments depending on actual companies' activities
   - General support to companies facing liquidity issues
2. **Funding**
   - Credit lines by some public entities
   - Direct loans to SMEs
   - Specific loans benefiting from State Guarantee
3. **Tax**
   - Tax payments deferral
   - Extended loss carry-back
   - Tax exemption of special payments
   - Temporary VAT rate reduction
   - Refund of Social Security Contributions
   - Suspension of fees payment from self-employed
4. **Employment**
   - Pandemic unemployment payment
   - Flexibility in criteria w.r.t. temporary employment
   - Furlough schemes
5. **Macro economic**
   - Economic Stabilisation Fund

7 – National supervisory initiatives

Overview of the measures taken by Supervisors

1. General COVID-19 related measures in line with EIOPA recommendations

- Continuous supervision incl. Regular Covid19 reporting (covering solvency, financial and operational impacts of COVID-19 and evaluation of further potential risks)
- Recommendation to suspend dividend payments over 2020 and prudent distribution policy
- Recommendation to protect policyholders
- Flexibility regarding reporting deadlines

2. Specific COVID-19 related measures

- Impact on reserving:
  - Consideration of uncertainty in establishing technical provisions
  - Recalculation of TP-transitional
- Aggregation of extreme scenarios whose probability of occurrence has increased significantly following COVID-19 crisis
- Stress testing:
  - "Ad-hoc ORSA" reflecting uncertainty to be done before EY20
  - Weekly stress testing[1] reporting requirement for all insurance entities from 15/03 until 17/06/20
- Specific monitoring on downgrades, defaults, lapses and liquidity
- Insurance coverage
  - Establishment of business interruption insurance supervisory framework
  - Survey on pandemic exclusions (validity and applicability)

3. Other initiatives

- Guidelines on LAC DT
- Standardized reporting on USP
- Medical expenses indexation
- Liquidity risk management plan and liquidity reporting
- Internal model reviews
- Consultation on recovery and resolution planning
- Review of differential pricing (focusing on non-life)

1- S2 ratio in a base-case scenario as well as a combined scenario with decrease in equity (15%) and parallel movement of yield curve (25bp).

How the survey was made?
Objectives & Limitations

Objectives

This survey aims to assess the appropriateness of Solvency II following COVID-19 and identify possible areas of development to further contribute to SII evolution.

5 areas are covered:

1. Countercyclical elements
2. Appropriateness of the standard formula
3. Approach on liquidity and default
4. Recovery
5. National initiatives

14 Member States participated to the survey.

Limitations & Process

The questionnaire addresses the current Solvency II framework but the topics already discussed w.r.t. the SII 2020 review will inevitably influence some answers.

The survey took place in November 2020 in a second lock down context for most countries. However, the situation and consequences of the pandemic can be country specific and are rapidly evolving. The results should therefore be interpretated with care.

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