22 October 2013

SST 2013 Survey

FINMA Report on the Swiss Insurance Market
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1 Introduction

This document shows the SST results 2013 and includes the statistics of 116 insurance undertakings (17 life companies, 56 non-life companies, 20 health insurers and 23 reinsurers); the figures of insurance groups are not part of this survey.

A preliminary quality and completeness check led to the exclusion of 12 insurance undertakings out of 128 that are subject to SST reporting requirements. This considerable number of data files eliminated can be explained by a change in the reporting requirements and the concomitant additional sources of application errors. As of 1 January 2013, insurance companies can opt for temporary relaxations, see the FINMA Circular 13/2 "Temporary Adjustments to the Swiss Solvency Test (SST)". Thus, an insurance undertaking may increase its risk bearing capital by means of an additional term (so called relaxation term). This term equals the difference between two different values for the insurance liabilities, calculated according to the risk free yield curve and a risky yield curve including counterparty credit risk, respectively. These adjustments solely apply to the valuation of insurance liabilities (back book) and thus to the risk bearing capital; the calculation of the target capital is unaffected, hence still based on the risk free yield curve. The analysis presented in this document refers to the risk bearing capital that may or may not include the relaxation term, depending on whether an insurance company claimed for it or not.

The goal of FINMAs preliminary data quality check is to exclude those submissions which would distort the current survey. The data that passed this pre-examination test, however, may still be erroneous. Should FINMA during their thorough review process at a later stage come to the conclusion that an insurer’s SST reporting is inaccurate, it will impose add-ons on the target capital and / or deductions on the risk bearing capital (FINMA corrections). The current survey, however, presents the numbers prior to these FINMA corrections.

The so called "Fundamental Data Sheet" (FDS) is the data source for this survey. The FDS contains detailed quantitative information such as the composition of the risk bearing capital and the target capital. Each insurance undertaking is requested to fill in the FDS and to submit it to FINMA, regardless whether they use an internal model or not.

In order to make the results more meaningful, companies of comparable size are grouped together. For this purpose, the supervisory categories according to the FINMA Newsletter 19 (2011) "Overhaul of FINMAs supervisory approach" are used. All insurance companies under FINMA supervision are allocated to the categories 2 to 5; neither category 1 nor category 6 are relevant for insurance companies.

Insurance undertakings derive their SST figures either by means of a standard model or a company-specific internal model. If the internal model review is still in progress, FINMA generally grants the permission to use the internal model on a provisional basis, provided that the first inspection did not show any apparent insufficiencies.

A glossary of all the relevant terms and expressions used in this document can be found in Appendix 3.

1.1 Summary

Table 1 shows the number of companies whose data were used in the present survey (column "Considered") and the total number of insurers subject to SST reporting requirements. Because the data of 12 insurers did not comply with the minimum quality requirements, they had to be excluded from the survey.

Throughout this document, the analysis is broken down into the branches life, non-life, health and reinsurance. Due to the heterogeneity of the Swiss insurance market, the volume-weighted figures of the larger companies would dominate the statistics too much and hence make the
Considered Participants

<table>
<thead>
<tr>
<th></th>
<th>Considered</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Non-life</td>
<td>56</td>
<td>60</td>
</tr>
<tr>
<td>Health</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Reinsurer</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>116</td>
<td>128</td>
</tr>
</tbody>
</table>

Table 1: Number of companies considered in the current analysis and total number of insurers.

results per branch skewed. To circumvent this problem, the categorization concept according to the aforementioned FINMA Newsletter 19 (2011) will be used as a further dimension. Table 2 shows the breakdown of the 128 insurers into the dimensions “branch” and “category”.

<table>
<thead>
<tr>
<th>Category 2</th>
<th>Category 3</th>
<th>Category 4</th>
<th>Category 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Non-life</td>
<td>2</td>
<td>9</td>
<td>17</td>
<td>32</td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
<td>4</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Reinsurer</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>36</td>
<td>44</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 2: Split of all insurers subject to SST reporting requirements according to branch and supervisory category.

If required, the data of two neighboring categories will be pooled in order to avoid that conclusions can be drawn regarding the individual risk profile of an insurance undertaking.

The figures presented in Table 3 show the aggregated SST results of all participants split by branches. The overall solvency situation improved compared to 2012. The increase is most prominent for life insurers. Whereas in 2012 the aggregated SST ratio for life insurers equaled 105% (before FINMA corrections), it increased to 145%. Besides the temporary adjustments, the improvement is mainly due to a more favourable economic environment (lower credit spreads) and risk management oriented actions taken by insurers. In total, 23 insurers opted for the temporary adjustments (12 life, 8 non-life, 2 health, 1 reinsurer).

<table>
<thead>
<tr>
<th></th>
<th>Excluding adjustments</th>
<th>Including adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RBC</td>
<td>TC</td>
</tr>
<tr>
<td>Life</td>
<td>36’387</td>
<td>28’850</td>
</tr>
<tr>
<td>Non-life</td>
<td>66’135</td>
<td>34’427</td>
</tr>
<tr>
<td>Health</td>
<td>8’395</td>
<td>2’395</td>
</tr>
<tr>
<td>Reinsurer</td>
<td>52’684</td>
<td>24’052</td>
</tr>
<tr>
<td>Total</td>
<td>163’600</td>
<td>89’725</td>
</tr>
</tbody>
</table>

Table 3: Risk bearing capital (RBC), target capital (TC) and SST ratios as of 1 January 2013, split by branches.
2 Target capital, market risk, insurance risk and scenarios

2.1 Life insurance

2.1.1 Best estimate liability, market value margin and one-year capital requirement

Comments to Figure 1:

- Each column represents the sum of the best estimate liability (BEL) plus the market value margin (MVM) plus the one-year capital requirement (SCR), after normalization.
- The columns are ordered by increasing size of the BEL.
- The median and mean value of the MVM relative to the BEL amount to 3.2% and 2.2%, respectively.
- According to the FINMA Circular 2013/2, the risky yield curve has no impact neither on the BEL, MVM nor the SCR.

Figure 1: Best estimate liability (BEL) and target capital $\text{TC} = \text{SCR} + \text{MVM}$.
2.1.2 Best estimate liability and target capital in relation to the balance sheet total

Figure 2 depicts the best estimate liability (BEL), the target capital \( (TC = SCR + MVM) \) and the excess capital (EC) in relation to the market-consistent value of total assets.

Denoting the risk bearing capital by RBC, the core capital by CC, the supplementary capital by SC, the deductions by D, then the following relation holds:

\[
RBC = CC + SC = (MV(A) - MV(L) + MVM - D) + SC = MV(A) - (BEL + D - SC).
\]

In the last equation the relation \( MV(L) = BEL + MVM \) is used. Here, MV(A) and MV(L) denote the market-consistent value of total assets and liabilities, respectively. It follows

\[
MV(A) = (BEL + D - SC) + TC + EC.
\]

According to the FINMA Circular 2013/2, an insurer’s RBC may or may not include the relaxation term.

<table>
<thead>
<tr>
<th></th>
<th>BEL + D − SC</th>
<th>MVM</th>
<th>SCR</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST 2013</td>
<td>87.5%</td>
<td>1.9%</td>
<td>6.7%</td>
<td>3.9%</td>
</tr>
<tr>
<td>SST 2012</td>
<td>92.7%</td>
<td>1.6%</td>
<td>5.4%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Table 4: Best estimate liability (plus deductions minus supplementary capital; \( BEL + D - SC \)), market value margin (MVM), one-year capital requirement (SCR) and excess capital (EC) relative to the balance sheet total.
2.1.3 Target capital decomposition

The position Other in the target capital decomposition reflects the reducing effect of capital- or risk transfer instruments (such as guarantees) on the target capital.
**Life insurance: Analysis of target capital (Categories 2 and 3)**

![Graph]

Figure 4: Decomposition of the target capital into its components (mean values).

**Life insurance: Analysis of target capital (Categories 4 and 5)**

![Graph]

Figure 5: Decomposition of the target capital into its components (mean values).
2.1.4 Market risk analysis

![Market risk analysis diagram](image)

**Figure 6a:** Decomposition of the market risk into its components (mean values).

![Components of market risk diagram](image)

**Figure 6b:** Distributions of market risk components.
Figure 7: Decomposition of the market risk into its components (mean values).

Figure 8: Decomposition of the market risk into its components (mean values).
2.1.5 Scenarios

Life insurance: Coverage ratio after scenarios

Figure 9: Impact of scenarios on the RBC (median values).

Life insurance: Coverage ratio after scenarios (Categories 2 and 3)

Figure 10: Impact of scenarios on the RBC (median values).
Life insurance: Coverage ratio after scenarios (Categories 4 and 5)

Figure 11: Impact of scenarios on the RBC (median values).
2.2 Non-life insurance

2.2.1 Best estimate liability, market value margin and one-year capital requirement

Comments to Figure 12:

- Each column represents the sum of the best estimate liability (BEL) plus the market value margin (MVM) plus the one-year capital requirement (SCR), after normalization.
- The columns are ordered by increasing size of the BEL.
- The median and mean value of the MVM relative to the BEL amount to 4.9% and 1.2%, respectively.
- According to the FINMA Circular 2013/2, the risky yield curve has no impact neither on the BEL, MVM nor the SCR.
- Some companies report a very small MVM (close or equal to zero). This can be explained by a fast claim settlement.

Figure 12: Best estimate liability (BEL) and target capital \( TC = SCR + MVM \).
2.2.2 Best estimate liability and target capital in relation to the balance sheet total

Figure 13 depicts the best estimate liability (BEL), the target capital \( (TC = SCR + MVM) \) and the excess capital (EC) in relation to the market-consistent value of total assets.

Denoting the risk bearing capital by RBC, the core capital by CC, the supplementary capital by SC, the deductions by D, then the following relation holds:

\[
RBC = CC + SC \\
= (MV(A) - MV(L) + MVM - D) + SC \\
= MV(A) - (BEL + D - SC).
\]

In the last equation the relation \( MV(L) = BEL + MVM \) is used. Here, \( MV(A) \) and \( MV(L) \) denote the market-consistent value of total assets and liabilities, respectively. It follows

\[
MV(A) = (BEL + D - SC) + TC + EC.
\]

According to the FINMA Circular 2013/2, an insurer’s RBC may or may not include the relaxation term.

<table>
<thead>
<tr>
<th></th>
<th>BEL + D − SC</th>
<th>MVM</th>
<th>SCR</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST 2013</td>
<td>85.6%</td>
<td>1.1%</td>
<td>6.0%</td>
<td>7.3%</td>
</tr>
<tr>
<td>SST 2012</td>
<td>85.2%</td>
<td>1.1%</td>
<td>7.0%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Table 5: Best estimate liability (plus deductions minus supplementary capital; \( BEL + D − SC \)), market value margin (MVM), one-year capital requirement (SCR) and excess capital (EC) relative to the balance sheet total.
2.2.3 Target capital decomposition

Non-life insurance: Analysis of target capital

Figure 14a: Decomposition of the target capital into its components (mean values).

Non-life insurance: Components of target capital

Figure 14b: Distributions of target capital components.
Non-life insurance: Analysis of target capital (Categories 2 and 3)

Figure 15: Decomposition of the target capital into its components (mean values).

Non-life insurance: Analysis of target capital (Category 4)

Figure 16: Decomposition of the target capital into its components (mean values).
Figure 17: Decomposition of the target capital into its components (mean values).
2.2.4 Market risk analysis

Non-life insurance: Analysis of market risk

Figure 18a: Decomposition of the market risk into its components (mean values).

Non-life insurance: Components of market risk

Figure 18b: Distributions of market risk components.
Non-life insurance: Analysis of market risk (Categories 2 and 3)

Figure 19: Decomposition of the market risk into its components (mean values).

Non-life insurance: Analysis of market risk (Category 4)

Figure 20: Decomposition of the market risk into its components (mean values).
Figure 21: Decomposition of the market risk into its components (mean values).
2.2.5 Insurance risk analysis

Non-life insurance: Analysis of insurance risk

Figure 22a: Decomposition of the insurance risk into its components (mean values).

Non-life insurance: Components of insurance risk

Figure 22b: Distributions of insurance risk components.
Figure 23: Decomposition of the insurance risk into its components (mean values).

Figure 24: Decomposition of the insurance risk into its components (mean values).
Figure 25: Decomposition of the insurance risk into its components (mean values).
2.2.6 Scenarios

Figure 26: Impact of scenarios on the RBC (median values).

Figure 27: Impact of scenarios on the RBC (median values).
Figure 28: Impact of scenarios on the RBC (median values).
2.3 Health insurance

2.3.1 Best estimate liability, market value margin and one-year capital requirement

Comments to Figure 29:

- Each column represents the sum of the best estimate liability (BEL) plus the market value margin (MVM) plus the one-year capital requirement (SCR), after normalization.
- The columns are ordered by increasing size of the BEL.
- The median and mean value of the MVM relative to the BEL amount to 0% and 0.2%, respectively.
- The MVM generally vanishes for health insurers due to their short-term business. It is positive for those companies that also write non-life business.
- According to the FINMA Circular 2013/2, the risky yield curve has no impact neither on the BEL, MVM nor the SCR.

Figure 29: Best estimate liability (BEL) and target capital \( TC = SCR + MVM \).
2.3.2 Best estimate liability and target capital in relation to the balance sheet total

Figure 30 depicts the best estimate liability (BEL), the target capital (TC = SCR + MVM) and the excess capital (EC) in relation to the market-consistent value of total assets.

Denoting the risk bearing capital by RBC, the core capital by CC, the supplementary capital by SC, the deductions by D, then the following relation holds:

\[
RBC = CC + SC \\
= (MV(A) - MV(L) + MVM - D) + SC \\
= MV(A) - (BEL + D - SC).
\]

In the last equation the relation MV(L) = BEL + MVM is used. Here, MV(A) and MV(L) denote the market-consistent value of total assets and liabilities, respectively. It follows

\[
MV(A) = (BEL + D - SC) + TC + EC.
\]

According to the FINMA Circular 2013/2, an insurer’s RBC may or may not include the relaxation term.

<table>
<thead>
<tr>
<th></th>
<th>BEL + D – SC</th>
<th>MVM</th>
<th>SCR</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST 2013</td>
<td>47.2%</td>
<td>0.1%</td>
<td>14.1%</td>
<td>38.6%</td>
</tr>
<tr>
<td>SST 2012</td>
<td>52.8%</td>
<td>0.1%</td>
<td>16.4%</td>
<td>30.7%</td>
</tr>
</tbody>
</table>

Table 6: Best estimate liability (plus deductions minus supplementary capital; BEL + D – SC), market value margin (MVM), one-year capital requirement (SCR) and excess capital (EC) relative to the balance sheet total.
### 2.3.3 Target capital decomposition

#### Health insurance: Analysis of target capital

![Chart showing the decomposition of target capital into its components (mean values).](image1)

**Figure 31a:** Decomposition of the target capital into its components (mean values).

#### Health insurance: Components of target capital

![Chart showing the distributions of target capital components.](image2)

**Figure 31b:** Distributions of target capital components.
Figure 32: Decomposition of the target capital into its components (mean values).

Figure 33: Decomposition of the target capital into its components (mean values).
2.3.4 Market risk analysis

Health insurance: Analysis of market risk

Figure 34a: Decomposition of the market risk into its components (mean values).

Health insurance: Components of market risk

Figure 34b: Distributions of market risk components.
Health insurance: Analysis of market risk (Categories 2 and 3)

Figure 35: Decomposition of the market risk into its components (mean values).

Health insurance: Analysis of market risk (Categories 4 and 5)

Figure 36: Decomposition of the market risk into its components (mean values).
2.3.5 Scenarios

Health insurance: Coverage ratio after scenarios

![Graph showing health insurance coverage ratios after various scenarios](image_url)

Figure 37: Impact of scenarios on the RBC (median values).

Health insurance: Coverage ratio after scenarios (Categories 2 and 3)

![Graph showing health insurance coverage ratios after various scenarios](image_url)

Figure 38: Impact of scenarios on the RBC (median values).
Health insurance: Coverage ratio after scenarios (Categories 4 and 5)

Figure 39: Impact of scenarios on the RBC (median values).
2.4 Reinsurance

2.4.1 Best estimate liability, market value margin and one-year capital requirement

Comments to Figure 40:

- Each column represents the sum of the best estimate liability (BEL) plus the market value margin (MVM) plus the one-year capital requirement (SCR), after normalization.
- The columns are ordered by increasing size of the BEL.
- The median and mean value of the MVM relative to the BEL amount to 4.6% and 4.5%, respectively.
- According to the FINMA Circular 2013/2, the risky yield curve has no impact neither on the BEL, MVM nor the SCR.

Figure 40: Best estimate liability (BEL) and target capital \( TC = \text{SCR} + \text{MVM} \).
2.4.2 Best estimate liability and target capital in relation to the balance sheet total

Figure 41 depicts the best estimate liability (BEL), the target capital (TC = SCR + MVM) and the excess capital (EC) in relation to the market-consistent value of total assets.

Denoting the risk bearing capital by RBC, the core capital by CC, the supplementary capital by SC, the deductions by D, then the following relation holds:

\[
RBC = CC + SC = (MV(A) - MV(L) + MVM - D) + SC = MV(A) - (BEL + D - SC).
\]

In the last equation the relation \( MV(L) = BEL + MVM \) is used. Here, \( MV(A) \) and \( MV(L) \) denote the market-consistent value of total assets and liabilities, respectively. It follows

\[
MV(A) = (BEL + D - SC) + TC + EC.
\]

According to the FINMA Circular 2013/2, an insurer’s RBC may or may not include the relaxation term.

![Reinsurance - Comparison of liabilities over two years](image)

Figure 41: Best estimate liability (plus deductions minus supplementary capital; \( BEL + D - SC \)), market value margin (MVM), one-year capital requirement (SCR) and excess capital (EC) relative to the balance sheet total.

<table>
<thead>
<tr>
<th></th>
<th>BEL + D – SC</th>
<th>MVM</th>
<th>SCR</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SST 2013</td>
<td>62.2%</td>
<td>2.9%</td>
<td>14.4%</td>
<td>20.5%</td>
</tr>
<tr>
<td>SST 2012</td>
<td>74.6%</td>
<td>2.3%</td>
<td>9.3%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

Table 7: Best estimate liability (plus deductions minus supplementary capital; \( BEL + D – SC \)), market value margin (MVM), one-year capital requirement (SCR) and excess capital (EC) relative to the balance sheet total.
2.4.3 Target capital decomposition

Reinsurance: Analysis of target capital

Figure 42a: Decomposition of the target capital into its components (mean values).

Reinsurance: Components of target capital

Figure 42b: Distributions of target capital components.
Reinsurance: Analysis of target capital (Categories 2 and 3)

Figure 43: Decomposition of the target capital into its components (mean values).

Reinsurance: Analysis of target capital (Categories 4 and 5)

Figure 44: Decomposition of the target capital into its components (mean values).
2.4.4 Market risk analysis

Reinsurance: Analysis of market risk

Figure 45a: Decomposition of the market risk into its components (mean values).

Reinsurance: Components of market risk

Figure 45b: Distributions of market risk components.
Reinsurance: Analysis of market risk (Categories 2 and 3)

Figure 46: Decomposition of the market risk into its components (mean values).

Reinsurance: Analysis of market risk (Categories 4 and 5)

Figure 47: Decomposition of the market risk into its components (mean values).
2.4.5 Scenarios

Reinsurance: Coverage ratio after scenario

![Bar chart showing the impact of various scenarios on the RBC target capital](chart.png)

Figure 48: Impact of scenarios on the RBC (median values).

Reinsurance: Coverage ratio after scenario (Categories 2 and 3)

![Bar chart showing the impact of various scenarios on the RBC target capital (Categories 2 and 3)](chart.png)

Figure 49: Impact of scenarios on the RBC (median values).
Figure 50: Impact of scenarios on the RBC (median values).
### 3 Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best estimate liability</td>
<td>The expected value (i.e. the probability weighted average) of the present value of future cash-flows for current obligations, projected over the contract's run-off period, taking into account all up-to-date financial market and actuarial information.</td>
</tr>
<tr>
<td>Abbreviation: BEL</td>
<td></td>
</tr>
<tr>
<td>Catastrophe risk</td>
<td>The risk that a single event, or a series of events (natural hazards such as earthquake, flood, hail, storm, etc. as well as man-made disasters such as fire, nuclear fallout, etc.), of major magnitude, usually over a short period (often 72 hours) leads to a significant deviation in actual claims from the total expected claims.</td>
</tr>
<tr>
<td>Abbreviation: Cat, NatCat</td>
<td>Related terms: Premium risk, large claims</td>
</tr>
<tr>
<td>Core capital</td>
<td>Core measure of an insurer's strength from a regulatory perspective. Core capital equals the market-consistent value of assets minus the market-consistent value of liabilities minus deductions plus the market value margin</td>
</tr>
<tr>
<td>Abbreviation: CC</td>
<td>Related terms: Market-consistent valuation, market value margin, deductions.</td>
</tr>
<tr>
<td>Cost of capital charge</td>
<td>Cost rate used for the determination of the costs expected for all future one-year capital requirements until run-off.</td>
</tr>
<tr>
<td>Abbreviation: CoC</td>
<td></td>
</tr>
<tr>
<td>Deductions</td>
<td>Regulatory adjustments for determining an insurer's core capital. Deductions include, among others, own shares, goodwill and other intangibles, planned dividend payments or repayments of debt.</td>
</tr>
<tr>
<td>Abbreviation: D</td>
<td>Related term: Core capital</td>
</tr>
<tr>
<td>Economic balance sheet</td>
<td>Balance sheet statement based on market-consistent values for all assets and liabilities relating to in-force business, including off-balance sheet items</td>
</tr>
<tr>
<td>Related terms: Market-consistent valuation, total balance sheet approach</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Excess capital</td>
<td>Term commonly used to refer to that part of the risk bearing capital that is held by an insurer in excess of the target capital, i.e. risk bearing capital minus target capital</td>
</tr>
<tr>
<td>Related terms</td>
<td>Risk bearing capital, target capital</td>
</tr>
<tr>
<td>Expected shortfall</td>
<td>A coherent risk measure. For a given confidence level of $1 - \alpha$, it measures the average losses over the threshold defined (typically set as the Value-at-Risk for a percentile given), i.e. the conditioned mean value, given that the loss exceeds the $1 - \alpha$ percentile.</td>
</tr>
<tr>
<td>Frequency claims</td>
<td>Claims with loss amounts below a certain threshold value, typically characterised by high frequencies and low severities.</td>
</tr>
<tr>
<td>Related terms</td>
<td>Large claims, premium risk</td>
</tr>
<tr>
<td>Fundamental data sheet</td>
<td>Form including the most relevant numbers in the context of the annual SST reporting process. It needs to be filled in by all insurance undertakings, regardless whether they use an internal model or the SST standard model.</td>
</tr>
<tr>
<td>Large claims</td>
<td>Claims with loss amounts above a certain threshold value, typically characterised by low frequencies and high severities.</td>
</tr>
<tr>
<td>Related terms</td>
<td>Frequency claims, premium risk</td>
</tr>
<tr>
<td>Market-consistent valuation</td>
<td>The practice of valuing assets and liabilities on market values where observable with a given quality (mark-to-market), where not, on market-consistent valuation techniques (mark-to-model)</td>
</tr>
<tr>
<td>Market value margin</td>
<td>Expected cost of having to hold solvency capital for non-hedgeable risks during the lifetime of the insurance liabilities.</td>
</tr>
<tr>
<td>Related terms</td>
<td>Target capital, one-year capital requirement</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
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<td>-------------------------------------------</td>
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<tr>
<td>One-year capital requirement</td>
<td>The risk measure expected shortfall applied to the one-year change in risk bearing capital. The sum of the one-year capital requirement plus the market value margin equals the target capital</td>
</tr>
<tr>
<td>Related terms: SCR</td>
<td></td>
</tr>
<tr>
<td>Premium risk</td>
<td>Risk that ultimate costs relating to <em>future</em> claims vary from those assumed when the obligations were estimated. Premium risk originates from claim sizes being greater than expected or differences in claims frequency from those expected. Premium risk is composed of frequency claims, large claims and catastrophe claims.</td>
</tr>
<tr>
<td>Abbreviation: CY-Risk</td>
<td></td>
</tr>
<tr>
<td>Synonyms: Current year risks, underwriting risks, pricing risk</td>
<td></td>
</tr>
<tr>
<td>Related terms: Reserve risk</td>
<td></td>
</tr>
<tr>
<td>Reserve risk</td>
<td>Risk that ultimate costs relating to <em>incurred</em> claims (existing claims) vary from those assumed when the obligations were estimated. Reserve risk originates from claim sizes being greater than expected or differences in timing of claims payments from expected.</td>
</tr>
<tr>
<td>Abbreviation: PY-Risk</td>
<td></td>
</tr>
<tr>
<td>Synonyms: Previous year risks, run-off risk</td>
<td></td>
</tr>
<tr>
<td>Related terms: Premium risk</td>
<td></td>
</tr>
<tr>
<td>Risk bearing capital</td>
<td>Capital which may be taken into account when determining the insurer’s available capital for SST purposes. Risk bearing capital is defined as the sum of the core capital plus supplementary capital.</td>
</tr>
<tr>
<td>Abbreviation: RBC</td>
<td></td>
</tr>
<tr>
<td>Related terms: Core capital, supplementary capital</td>
<td></td>
</tr>
<tr>
<td>Risk margin</td>
<td>See market value margin.</td>
</tr>
<tr>
<td>Risk-free interest rate</td>
<td>Risk-free interest rate is the theoretical rate of return of an investment with no risk of financial loss</td>
</tr>
<tr>
<td>Related term: Risk-free yield curve</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Risk-free yield curve</td>
<td>Curve that shows the relation between the risk-free interest rate (or cost of borrowing) and the time to maturity, known as the “term”, of the debt for a given borrower in a given currency. The yield curves corresponding to the bonds issued by governments in their own currency are called the government bond yield curves and considered as risk-free in the context of the SST.</td>
</tr>
<tr>
<td>Risky yield curve</td>
<td>Curve that shows the relation between the interest rate (or cost of borrowing) and the time to maturity, known as the “term”, of the debt for a given borrower in a given currency. Risky yield curves are typically higher than risk-free yield curves as they reflect the creditworthiness of the different institutions that borrow money from each other. Banks with high credit ratings (Aa/AA or above) borrow money from each other at the LIBOR rates. The corresponding yield curves are known as the LIBOR curve or the swap curve. The risky yield curve within the SST context is based on the swap curve.</td>
</tr>
<tr>
<td>Supervisory category</td>
<td>System of six risk categories into which each supervised institution is allocated. Allocation is based on the risks posed to creditors, investors and policyholders, as well as to the entire system, and to Switzerland’s reputation as a financial centre. The supervised institutions in category 1 are characterised by their size and global relevance, and the associated significant risks posed at various levels. In the other categories, the institutions’ risk potential decreases incrementally down to category 5, while the market players in category 6 are not subject to prudential supervision.</td>
</tr>
<tr>
<td>Supplementary capital</td>
<td>Additional capital eligible to cover an insurer’s target capital. Supplementary capital is split between lower supplementary capital and upper supplementary capital, depending on how well the capital can absorb losses. Supplementary capital includes instruments with risk-absorbing properties such as hybrid capital or subordinated debt. For example, perpetual subordinated loans qualify as upper supplementary capital, whereas subordinated bonds with a fixed maturity date would qualify as lower supplementary capital.</td>
</tr>
<tr>
<td>Surplus capital</td>
<td>see Excess Capital</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
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<tr>
<td>Target capital</td>
<td>The amount of capital to be held by an insurer to meet the quantitative requirements under the SST. The target capital equals the sum of the one-year capital requirement plus the market value margin.</td>
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<tr>
<td>Abbreviation: TC</td>
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</tr>
<tr>
<td>Related terms:</td>
<td>One-year capital requirement, market value margin</td>
</tr>
<tr>
<td>Total balance sheet approach</td>
<td>Principle which states that the determination of an insurer's capital that is available and needed for solvency purposes should be based upon all assets and liabilities, as measured in the regulatory balance sheet to the insurer (e.g. market-consistently), and the way they interact</td>
</tr>
<tr>
<td>Related terms:</td>
<td>Economic balance sheet, market-consistent valuation</td>
</tr>
<tr>
<td>Value-at-Risk</td>
<td>Value-at-Risk is a percentile of a distribution and is used as a (non-coherent) risk measure.</td>
</tr>
<tr>
<td>Abbreviation: VaR</td>
<td></td>
</tr>
<tr>
<td>Related term:</td>
<td>Expected shortfall</td>
</tr>
</tbody>
</table>