

# Risk Management

Patrick Raaflaub, Group Chief Risk Officer





# Group risk appetite and risk tolerance ensure controlled risk-taking at Swiss Re

## Risk appetite

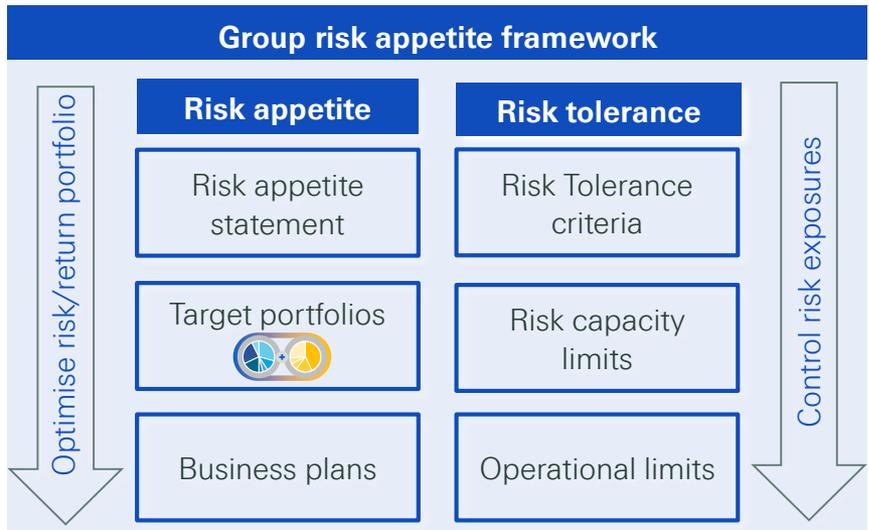
Expression of the types of risk Swiss Re wants to take or avoid, providing key directions for risk-taking and controlling

## Risk tolerance

Amount of risk Swiss Re is willing to accept within the constraints imposed by capital and liquidity resources, strategy, and the regulatory and rating agency environment

## Risk limits

Risk capacity limits ensure accumulation control for key contributors to Group risk. Risk limits are monitored on a quarterly basis, except for financial market (FM) and credit, which are monitored daily



**Overall 99% TailVaR<sup>1</sup> and key contributors**

P&C USD 9.4bn	L&H USD 7.2bn	FM USD 12.6bn	Credit USD 3.4bn
<ul style="list-style-type: none"> <li>Costing and reserving</li> <li>Inflation</li> <li>Man-made</li> <li>Natural catastrophes</li> </ul>	<ul style="list-style-type: none"> <li>Lethal pandemic</li> <li>Longevity</li> <li>Mortality</li> </ul>	<ul style="list-style-type: none"> <li>Credit spread</li> <li>Equity</li> <li>Inflation</li> <li>Interest rates</li> <li>Real estate</li> </ul>	<ul style="list-style-type: none"> <li>Credit (default &amp; migration)</li> </ul>

<sup>1</sup> Standalone 99% TailVaR as at 31 December 2015



# Large & tailored transactions are assessed against various risk aspects and require Risk Management approval

## Risk Management independently challenges the risks taken by the business

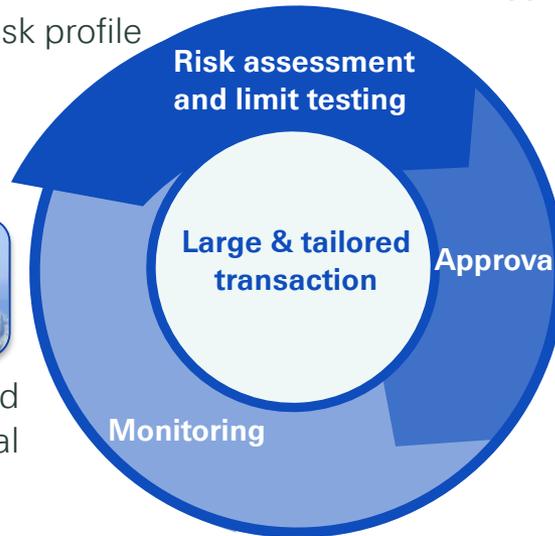
- Review of key risks, including reputation, sustainability and regulatory risks
- Impact analysis on risk profile and diversification



- Solvency impact analysis
- Accumulation and concentration risk control



- Reserves controlled and monitored against initial expectations



- Risk Management sign-off required as part of three signature approval process

Group risk appetite framework provides clear guidance, limits and checks for all risk-taking activities including large & tailored transactions



# Risk Management is based on robust modelling and sound valuation ensuring strong reserving adequacy

## Model risk management

### Model & tool validation framework

- Ensuring soundness of mathematical and scientific concepts
- Result testing and fit for purpose assessment
- Key tool to avoid inappropriate modelling



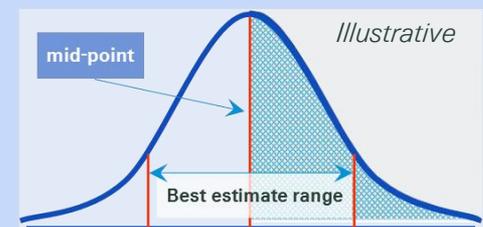
## Valuation risk management

### Independent price verification

- Ensuring appropriate valuations assigned to all financial exposures
- Assessing market parameters and valuation techniques
- Mitigating pricing challenges in periods of market volatility

### Reserve assessment

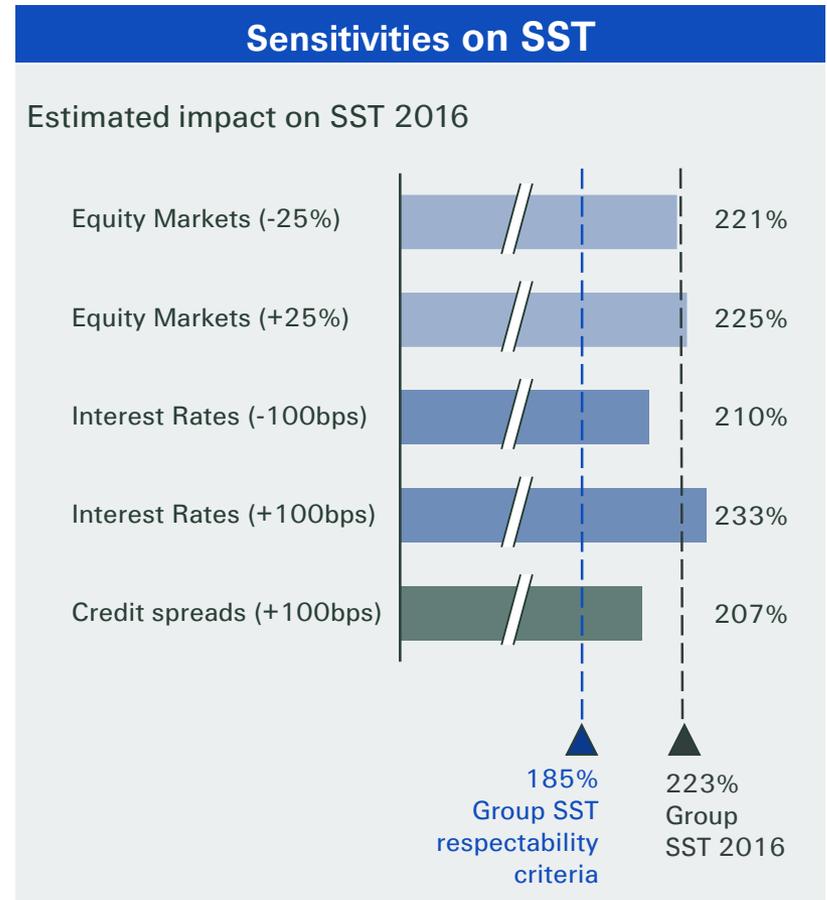
- Our reserving approach is consistent across the Group and ensures a best-estimate and transparent assessment of insurance liabilities
- Second line of defence control is regularly carried out to ensure reserving adequacy of all P&C liabilities
- Reserving is neither a way to manage capital or dividends nor about building buffers
- Reserve adequacy is strong – our booked reserves are typically between 60<sup>th</sup> and 80<sup>th</sup> percentile



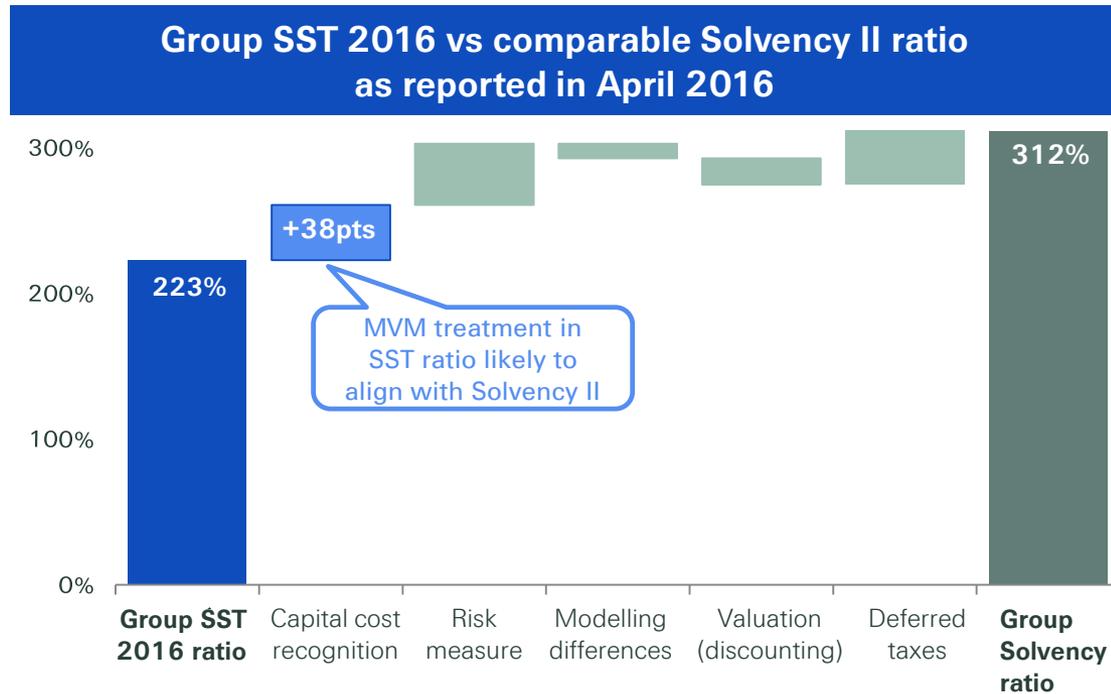


# Our internal Group risk model is the basis for SST and risk tolerance

- Central proprietary risk model used to measure the Group's capital requirements, for defining risk tolerance, risk limits and liquidity stress tests
- Risk model also used for regulatory reporting under SST and Solvency II
- Our model enables a holistic assessment of Swiss Re's risks to allocate risk-taking capacity to different lines of business
- As of SST 2016, Swiss Re remained strongly capitalised – strict risk limits curtail the impact of market moves on the SST ratio



# Group respectability criteria will be adjusted as new FINMA rules expected to increase our Group SST ratio



Expected FINMA change in January 2017

- SST capital cost recognition (MVM) is likely to change, positively impacting Group SST ratio<sup>1</sup>
- Capital requirement for a 100% SST ratio expected to remain unchanged
- Swiss Re Group respectability criteria for SST likely to be increased

Group respectability criteria to be adjusted from 185% to 220% following expected FINMA changes

<sup>1</sup> See Swiss Re's video about "SST vs Solvency II – Comparison analysis" from 29 April 2016

# Swiss Re's strong Risk Management forms the basis for protecting our franchise value and enabling profitable growth

We ensure controlled risk-taking...

...supported by industry-leading set-up, governance and tools

Risk Management is an integrated function with a holistic Group risk overview

---

Large & tailored transactions are assessed against various aspects and require Risk Management approval

---

Sensitive business transactions systematically assessed

---

Reserve adequacy is strong; absence of artificial buffers allows to access capital when needed

---

Revision of risk tolerance respectability criteria will keep targeted excess capital in line with client expectations

Independent Risk Management function embedded throughout the Group

---

Group risk appetite framework

---

Sustainability risk framework

---

Best estimate reserving

---

Risk tolerance adjustments to reflect regulatory changes



# Corporate calendar & contacts

## Corporate calendar

---

### 2017

23 February

**Annual Results 2016**

Conference call

16 March

**Publication of Annual Report 2016**

21 April

**153<sup>rd</sup> Annual General Meeting**

Zurich

## Investor Relations contacts

---

### Hotline

+41 43 285 4444

### E-mail

Investor\_Relations@swissre.com

Philippe Brahin

+41 43 285 7212

Jutta Bopp

+41 43 285 5877

Manfred Gasser

+41 43 285 5516

Chris Menth

+41 43 285 3878

Iunia Rauch-Chisacof

+41 43 285 7844

# Cautionary note on forward-looking statements

Certain statements and illustrations contained herein are forward-looking. These statements (including as to plans objectives, targets and trends) and illustrations provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to a historical fact or current fact.

Forward-looking statements typically are identified by words or phrases such as “anticipate”, “assume”, “believe”, “continue”, “estimate”, “expect”, “foresee”, “intend”, “may increase” and “may fluctuate” and similar expressions or by future or conditional verbs such as “will”, “should”, “would” and “could”. These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause Swiss Re’s actual results of operations, financial condition, solvency ratios, capital or liquidity positions, or prospects to be materially different from any future results of operations, financial condition, solvency ratios, capital or liquidity positions, or prospects expressed or implied by such statements or cause Swiss Re to not achieve its published targets. Such factors include, among others:

- further instability affecting the global financial system and developments related thereto;
- further deterioration in global economic conditions;
- Swiss Re’s ability to maintain sufficient liquidity and access to capital markets, including sufficient liquidity to cover potential recapture of reinsurance agreements, early calls of debt or debt-like arrangements and collateral calls due to actual or perceived deterioration of Swiss Re’s financial strength or otherwise;
- the effect of market conditions, including the global equity and credit markets, and the level and volatility of equity prices, interest rates, credit spreads, currency values and other market indices, on Swiss Re’s investment assets;
- changes in Swiss Re’s investment result as a result of changes in its investment policy or the changed composition of its investment assets, and the impact of the timing of any such changes relative to changes in market conditions;
- uncertainties in valuing credit default swaps and other credit-related instruments;
- possible inability to realise amounts on sales of securities on Swiss Re’s balance sheet equivalent to their mark-to-market values recorded for accounting purposes;
- the outcome of tax audits, the ability to realise tax loss carryforwards and the ability to realise deferred tax assets (including by reason of the mix of earnings in a jurisdiction or deemed change of control), which could negatively impact future earnings;
- the possibility that Swiss Re’s hedging arrangements may not be effective;
- the lowering or loss of one of the financial strength or other ratings of one or more Swiss Re companies, and developments adversely affecting Swiss Re’s ability to achieve improved ratings;
- the cyclical nature of the reinsurance industry;
- uncertainties in estimating reserves;
- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes, as significant uncertainties may be involved in estimating losses from such events and preliminary estimates may be subject to change as new information becomes available;
- the frequency, severity and development of insured claim events;
- acts of terrorism and acts of war;
- mortality, morbidity and longevity experience;
- policy renewal and lapse rates;
- extraordinary events affecting Swiss Re’s clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- current, pending and future legislation and regulation affecting Swiss Re or its ceding companies, and the interpretation of legislation or regulations by regulators;
- legal actions or regulatory investigations or actions, including those in respect of industry requirements or business conduct rules of general applicability;
- changes in accounting standards;
- significant investments, acquisitions or dispositions, and any delays, unexpected costs or other issues experienced in connection with any such transactions;
- changing levels of competition; and
- operational factors, including the efficacy of risk management and other internal procedures in managing the foregoing risks.

These factors are not exhaustive. Swiss Re operates in a continually changing environment and new risks emerge continually. Readers are cautioned not to place undue reliance on forward-looking statements. Swiss Re undertakes no obligation to publicly revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

This communication is not intended to be a recommendation to buy, sell or hold securities and does not constitute an offer for the sale of, or the solicitation of an offer to buy, securities in any jurisdiction, including the United States. Any such offer will only be made by means of a prospectus or offering memorandum, and in compliance with applicable securities laws.