



**Swiss Re**

Swiss Reinsurance Company Ltd

Predict.  
Prepare.  
Protect.




**Financial  
Condition  
Report  
2018**

# Introduction

## About this report

### Scope and requirements

This Financial Condition Report (Report or Financial Condition Report) is a mandatory public disclosure for Swiss regulated re/insurance entities required by FINMA Circular 2016/2 Disclosure – insurers (Circular). The publication requirements are set forth in the Circular. This Report includes qualitative and quantitative information on business activities, performance, risk management and the Swiss Solvency Test (SST) of the Swiss Re Group (Group) as well as its Swiss-regulated re/insurance entities: Swiss Reinsurance Company Ltd, Swiss Re Corporate Solutions Ltd, Swiss Re Life Capital Reinsurance Ltd and Swiss Re International SE, Luxembourg (Zurich branch). A large part of the required information included in the Report is available in other public disclosures provided by Swiss Re, such as the Group's Financial Report, which is part of the Annual Report available under [www.swissre.com/investors/financial\\_information/](http://www.swissre.com/investors/financial_information/) . Readers of this Report should in addition consult these public disclosures. Information not included in other publicly available disclosures can be found mainly in the valuation and solvency sections of this Report.

### Cautionary note on the Financial Condition Report

The preparation of the SST requires management to make a number of estimates and assumptions. The valuation of assets and liabilities reflects best estimates of underlying cash flows (eg premiums, claims, commissions, expenses, etc), using models and taking into consideration all relevant information available at the balance sheet date. In line with other valuation methods based on projections of future cash flows, economic valuations involve significant judgement when establishing which assumptions to use. The Group and its Swiss-regulated re/insurance entities actively and carefully review assumptions, selecting those that are considered most appropriate and seeking consistency among business activities. Valuations are updated at each balance sheet date as experience develops and more information becomes available. In-force business assets and liabilities include estimates for premiums as well as claims and benefit payments not yet received from ceding companies at the balance sheet date. In addition, the Group and its Swiss-regulated re/insurance entities have certain assets and liabilities for which liquid market prices do not exist.

All of the foregoing estimates are determined on a market-consistent basis using all relevant information available at the time of valuation. However, actual results could differ significantly from these estimates.

Please see also the [> Cautionary note on forward-looking statements](#) and the [> Note on risk factors](#) in this Report.

### Accounting and risk basis

The financial information included in this Report is based on the following accounting frameworks:

- The consolidated financial statements of the Group are prepared in accordance with US Generally Accepted Accounting Principles (US GAAP) and reported in US dollars.
- The statutory financial statements of Swiss-regulated legal entities are prepared in accordance with Swiss law and reported in Swiss francs (they are converted into US dollars for the SST balance sheet comparison with Swiss statutory).

- SST information uses Swiss Re's internal model which has been approved by FINMA. The internal Economic Value Management (EVM) framework is the basis for preparing the SST balance sheets as both frameworks are based on market-consistent valuation principles. Valuation differences between EVM and SST mainly affect capital costs and deferred taxes. EVM is the Group-proprietary integrated economic valuation and steering framework, consistently measuring economic performance across all businesses. EVM and SST financial statements are reported in US dollars.

The risk exposure basis for SST is a projection for the period from 1 January to 31 December 2019 and is based on the economic balance sheet as of 31 December 2018 and adjustments to reflect 1 January 2019 business shifts. Potential SST model or data limitations identified during the SST process are reported to FINMA as part of the SST Report 2019 with an impact assessment whenever possible. Risk figures are reported in US dollars.

The reported solvency information for 2019 is consistent with the information provided in the SST Report 2019 filed with FINMA in April 2019.

## **Audit**

This Report has not been audited. The US GAAP financial statements of the Group and the statutory financial statements of Swiss Re Ltd and its Swiss regulated re/insurance entities are audited. Please refer to the audit reports accompanying those financial statements and referred to in this Report.

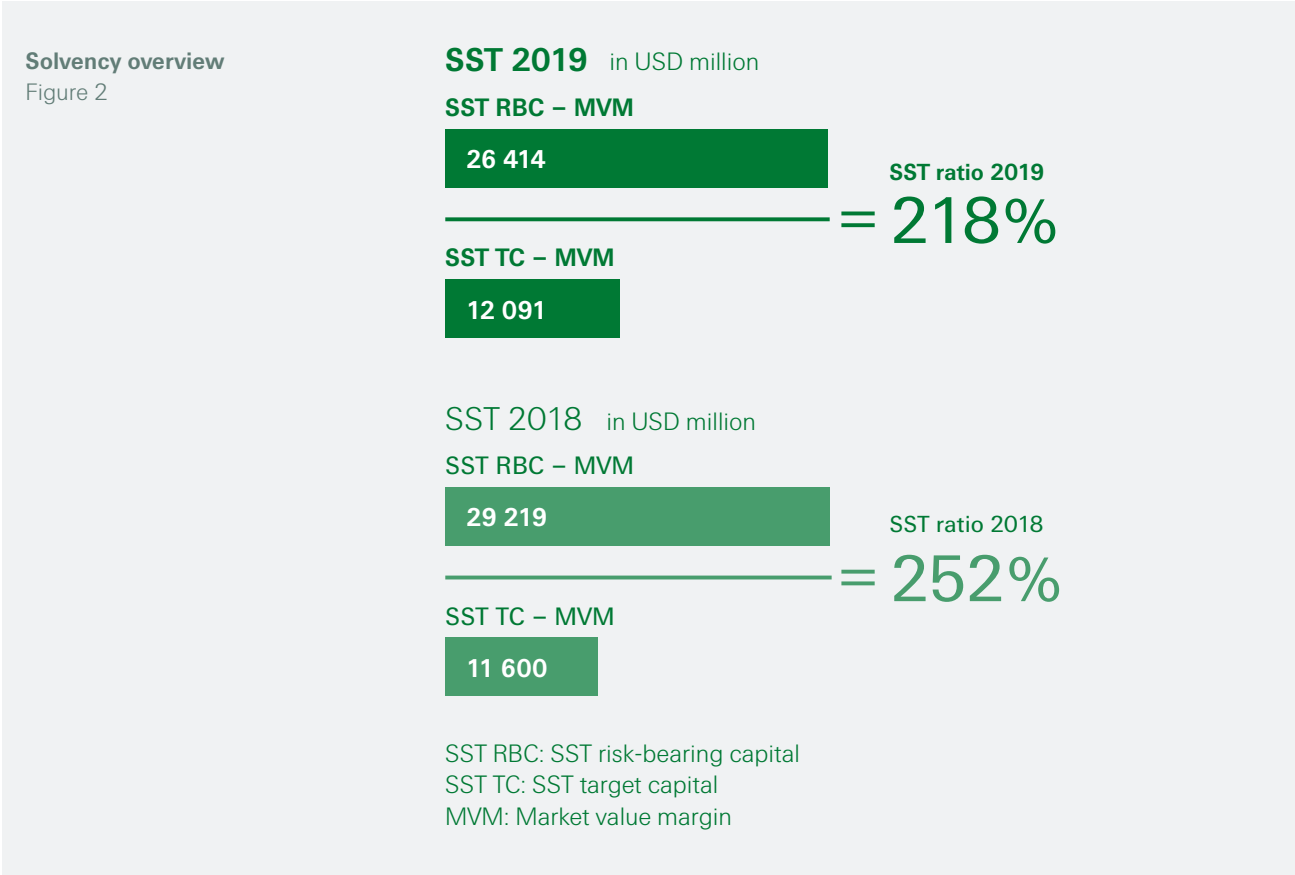
# Contents

<b>Introduction</b>	<b>1</b>
About this report	1
<b>Swiss Reinsurance Company Ltd</b>	<b>4</b>
Business activities	6
Performance	10
Governance and risk management	15
Risk profile	16
Valuation	18
Capital management	23
Solvency	24
<b>Appendix</b>	<b>27</b>
Methodology and valuation	28
Cautionary note	34
Note on risk factors	36

# Swiss Reinsurance Company Ltd

## Management summary

In SST 2019, the solvency of Swiss Reinsurance Company Ltd (SRZ) remains at a strong level of 218%. Despite a challenging year with large losses SRZ was able to generate a positive underwriting contribution. This is also reflected in a relative increase in insurance risk and a higher market value margin. The dividend payment to the Group, the redemption of a subordinated instrument and depressed financial markets resulting in significantly lower contribution from investments ultimately lead to a decrease in the overall SST ratio.



This Report provides qualitative and quantitative information about the financial condition of SRZ. This Report includes financial information already published in SRZ's 2018 Annual Report (available on [www.swissre.com](http://www.swissre.com) ).

**Business activities**

In this section, we provide information about the business model, the strategy and significant events. > [Read more](#)

**Performance**

We present the performance of the year under review based on the Swiss statutory income statement. > [Read more](#)

**Governance and risk management**

This section provides an overview of the system of governance, key governing bodies, risk management systems and policies. > [Read more](#)

**Risk profile**

The main components of the total risk calculated under SST are discussed in this section. > [Read more](#)

**Valuation**

In this section, we provide the SST balance sheet and additional quantitative and qualitative explanations on differences to SRZ's audited statutory financial statements. > [Read more](#)

**Capital management**

SRZ's capital management strategy and key changes in 2018 are discussed in this section. > [Read more](#)

**Solvency**

This section presents SRZ's SST calculation and includes explanation of changes relative to the prior year. > [Read more](#)

## Business activities

### Reinsurance strategy and priorities

SRZ's near-term priorities focus on achieving growth in targeted areas and sustaining the risk knowledge that underpins the capital allocation overall.

Large and tailored transactions in Reinsurance provide an attractive growth opportunity. They reinforce differentiation through tailored offerings, leveraging the strong risk knowledge base. SRZ is responding to the expanding need for health protection driven by ageing societies and will apply its risk knowledge experience to help reduce the protection gap in all regions.

SRZ intends to maintain its leading position in high-growth markets, establishing a strong presence. These regions continue to remain a key element of the strategy, even when they are temporarily challenged.

### Property & Casualty Reinsurance business

#### Market environment

The global non-life reinsurance industry has experienced slight growth in 2018, driven by the emerging markets. Growth in advanced markets is attributable to strong economic momentum, especially in North America, and more favourable general market conditions, especially in natural catastrophes and casualty lines. Non-life premium development is expected to be stable across the global, advanced and emerging markets over the next two years. With the stabilisation of rates in 2019, the underwriting result for the global non-life sector is expected to remain slightly positive. Overall profitability of the global property/casualty insurance remains at moderate levels, also driven by continuing low investment returns.

#### Outlook

SRZ has benefitted from an improved non-life reinsurance market environment, with price increases and increasing interest rates impacting positively our long tail lines of business.

In the context of these favourable market conditions, SRZ is applying its selective growth strategy, specifically focused on portfolios with long-term profitability. Additionally, a differentiation approach is continuously applied and clients' needs are addressed through the development of innovative, structured transactions. Further, SRZ is diversifying its access to various risk pools through the contribution of its three main pillars (core, transactions and solutions).

### Life & Health Reinsurance business

#### Market environment

The life reinsurance industry registered a 2% increase in 2018. Underlying reinsurance premium growth in traditional reinsurance areas such as mortality and morbidity risk has again remained relatively subdued, but also other kinds of reinsurance transactions were sluggish this year. In mature markets, slow increases in the US were contrasted by healthy growth in Europe and Asia.

Against this background, life reinsurers have sought to increase revenues through large, individual risk transfer transactions that help primary insurers stabilise income and/or bolster their balance sheets. The introduction of risk-based capital regimes has prompted much of this activity. Another area of growth for reinsurers has been longevity risk transfer.

Continued recovery in primary insurance should support growth in life reinsurance revenues, including a recovery in traditional renewable business. Premium growth will nonetheless likely remain modest, especially in the large advanced markets. In real terms, global life reinsurance premiums are forecast to increase by around 2% in 2019 and 2020. Premiums in the advanced markets are projected to expand by

below 1% annually, driven by developments in the US where cession rates continue their long-term down trend and growth in the primary market remains weak. In Western Europe, where cession rates are usually lower, reinsurance premiums are forecast to grow by about 1%. The strongest contribution to real growth in the advanced markets will likely come from developed markets in Asia.

## Outlook

SRZ has experienced material growth of its life reinsurance portfolio, mostly reflecting the increasing diversification of its sources of earnings, through a larger mix of products lines and markets.

SRZ is diversifying its access to various risk pools through the contribution of its three main pillars (core, transactions and solutions). With this differentiation strategy, SRZ is aiming to deliver sustainable profitability.

## Investments

### Strategy and priorities

Financial investments are managed in accordance with Swiss Re's Targeted Standard on Asset Management and SRZ's investment guidelines, which are intended to ensure compliance with regulatory requirements. The general principle governing investment management in SRZ is the creation of economic value on the basis of returns relative to the liability benchmark, while adhering to the investment guidelines and the general prudence principle. The liability benchmark is determined by approximating an investable benchmark from projected liability cash flows. A cash benchmark is used for the economic surplus.

## Outlook

Global economic growth has peaked and is expected to slow in 2019, particularly in advanced markets. In the US and Euro area, tighter financial conditions, the waning US fiscal stimulus and lingering political concerns are likely to weigh on growth. Economic growth in emerging Asia will slow moderately, but remains the strongest region globally, while Latin America is expected to see a modest growth recovery, albeit from a low base. In contrast to last year's outlook, the balance of risks is seen as skewed to the downside, amid increasing protectionism (eg US-China trade conflict), ongoing monetary-policy tightening, late-cycle concerns (especially in the US) and uncertain (geo)politics (eg Brexit, European Parliament elections and elections in India, South Africa and Argentina).



## Reinsurance and sub-holding company

SRZ, domiciled in Zurich, Switzerland, performs a dual role within the Swiss Re Group as both a reinsurance company and a sub-holding company for the Reinsurance Business Unit. SRZ is a wholly-owned subsidiary of Swiss Re Ltd, the ultimate parent company domiciled in Zurich, Switzerland.

### Claims on and obligations towards affiliated companies

CHF millions	2017	2018
Loans	8 025	8 321
Funds held by ceding companies	15 051	8 126
Premiums and other receivables from reinsurance	6 798	5 606
Other receivables	21	36
Other assets	1 908 <sup>1</sup>	2 807 <sup>1</sup>
Debt	4 629 <sup>2</sup>	4 317 <sup>2</sup>
Liabilities from derivative financial instruments	149	109
Funds held under reinsurance treaties	7 913	6 757
Reinsurance balances payable	5 335	5 578
Other liabilities	4 604 <sup>3</sup>	4 911 <sup>3</sup>
Subordinated liabilities	4	424 <sup>4</sup>

<sup>1</sup> Thereof at the 2018 balance sheet date CHF 75 million (2017: CHF 2 million) were towards the parent company Swiss Re Ltd.

<sup>2</sup> Thereof at the 2018 balance sheet date CHF 3 273 million (2017: CHF 2 720 million) were towards the parent company Swiss Re Ltd.

<sup>3</sup> Thereof at the 2018 balance sheet date CHF 323 million (2017: CHF 733 million) were towards the parent company Swiss Re Ltd.

<sup>4</sup> Thereof at the 2018 balance sheet date CHF 424 million (2017: none) were towards the parent company Swiss Re Ltd.

### Share capital and major shareholder

The share capital of SRZ amounted to CHF 34 million. It is divided into 344 052 565 registered shares, each with a nominal value of CHF 0.10. The shares were fully paid-in and held directly by Swiss Re Ltd. As of 31 December 2018 and 2017, SRZ was a wholly-owned subsidiary of Swiss Re Ltd.

### List of major branch offices

- Swiss Reinsurance Company Ltd, Australia Branch
- Swiss Reinsurance Company Ltd, Beijing Branch
- Swiss Reinsurance Company Ltd, Canada Branch
- Swiss Reinsurance Company Ltd, Hong Kong Branch
- Swiss Reinsurance Company Ltd, India Branch
- Swiss Reinsurance Company Ltd, Israel Branch
- Swiss Reinsurance Company Ltd, Japan Branch
- Swiss Reinsurance Company Ltd, Korea Branch
- Swiss Reinsurance Company Ltd, Kuala Lumpur Branch

### Variable interest entities

SRZ and its subsidiaries enter into arrangements with variable interest entities (VIEs). For more information, please see Note 15 of SRZ's consolidated 2018 Annual Report (available on [www.swissre.com](http://www.swissre.com) .

### Significant events

The financial year 2018 was characterised by large intercompany transactions impacting both SRZ's income statement and balance sheet. To further align the legal entity structure with the management view, SRZ sold the assets and liabilities of its Singapore branch to Swiss Re Asia Pte. Ltd. With this sale SRZ transferred related rights and obligations of the branch, including the entire reinsurance business as well as the employees employed by the branch. Following the sale, a new retrocession agreement for the life and health business transferred was set up from Swiss Re Asia Pte. Ltd., with a negative day-one impact on SRZ's Life & Health Reinsurance result of CHF 297 million.

Further, SRZ sold its wholly-owned direct subsidiary Swiss Re Australia Ltd to Swiss Re Asia Holding Pte. Ltd. domiciled in Singapore, generating a one-off realised gain of CHF 545 million. In order to finance the sale, SRZ provided a capital

contribution to Swiss Re Asia Holding Pte. Ltd. of CHF 1 236 million. This contribution increased the book value of SRZ's direct subsidiary Swiss Re Reinsurance Holding Company Ltd in the same amount.

As a consequence of the new tax regime in the US, effective as of 31 December 2017, SRZ restructured its assumed intra-group retrocession agreements with the affiliated companies Swiss Reinsurance America Corporation and Swiss Re Life & Health America Inc. In 2018, these restructurings led to a one-off net gain of CHF 643 million in the Life & Health Reinsurance result.

In the last quarter of 2018, SRZ restructured its intra-group retrocession agreement with Swiss Re Life Capital Reinsurance Ltd for the Canadian life and health business, moving from a full funds withheld structure to a partial funds withheld and new securities lending agreements structure.

In order to further align the legal entity structure with the management view, SRZ is going to sell the assets and liabilities of its Korea branch to Swiss Re Asia Pte. Ltd., Korea branch, effective 1 January 2019. With this sale SRZ will transfer related rights and obligations of the branch to Swiss Re Asia Pte. Ltd., Korea branch, including the entire reinsurance business as well as the employees, employed by the branch of SRZ. Furthermore, SRZ plans to sell its remaining Asian branches to Swiss Re Asia Pte. Ltd. in the upcoming years.

Following the new tax regime in the US, effective as of 31 December 2017, SRZ will further restructure its intra-group retrocession agreements with the affiliated companies through a taxable presence in the US.

#### Report of the statutory auditors

PricewaterhouseCoopers Ltd is the auditor of SRZ. For more information, please see the Report of the statutory auditor in SRZ's 2018 Annual Report (available on [www.swissre.com](http://www.swissre.com) .

## Performance

CHF millions	Total		Life		Accident, health		Motor		Marine, aviation, transport		Property		Casualty		Miscellaneous	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Premiums written gross	22 529	18 277	4 431	4 238	2 925	3 172	3 702	2 646	714	651	6 769	5 289	2 626	1 521	1 362	760
Premiums written retroceded	-3 822	-4 041	-810	-826	-436	-372	-639	-548	-120	-161	-1 573	-1 812	-103	-165	-141	-157
Premiums written net	18 707	14 236	3 621	3 412	2 489	2 800	3 063	2 098	594	490	5 196	3 477	2 523	1 356	1 221	603
Change in unearned premiums gross	-918	1 602	-3	-4	10	19	-94	389	-15	75	-936	564	119	345	1	214
Change in unearned premiums retroceded	-368	-40	1	-1	-9	-13	-216	-16	-17	1	-91	-47	-45	27	9	9
Premiums earned	17 421	15 798	3 619	3 407	2 490	2 806	2 753	2 471	562	566	4 169	3 994	2 597	1 728	1 231	826
Other reinsurance revenues	1 439	1 933	1 172	1 656	192	119	23	25	2	2	-20	31	42	59	28	41
<b>Total revenues from reinsurance business</b>	<b>18 860</b>	<b>17 731</b>	<b>4 791</b>	<b>5 063</b>	<b>2 682</b>	<b>2 925</b>	<b>2 776</b>	<b>2 496</b>	<b>564</b>	<b>568</b>	<b>4 149</b>	<b>4 025</b>	<b>2 639</b>	<b>1 787</b>	<b>1 259</b>	<b>867</b>
Claims paid and claim adjustment expenses gross	-10 547	-18 009	-2 983	-6 488	-1 732	-2 069	-1 667	-2 378	-350	-562	-1 968	-4 543	-1 370	-1 552	-477	-417
Claims paid and claim adjustment expenses retroceded	-2 189	3 350	-3 460	856	-639	359	573	418	146	106	998	1 438	125	120	68	53
Change in unpaid claims and life and health benefits gross	-5 374	2 192	-1 028	2 845	-111	-754	-1 074	316	-236	145	-2 140	-290	-459	135	-326	-205
Change in unpaid claims and life and health benefits retroceded	5 012	678	3 975	34	873	-48	-151	-134	-16	26	368	813	-65	-44	28	31
Change in unpaid claims for unit-linked life insurance																
<b>Claims incurred</b>	<b>-13 098</b>	<b>-11 789</b>	<b>-3 496</b>	<b>-2 753</b>	<b>-1 609</b>	<b>-2 512</b>	<b>-2 319</b>	<b>-1 778</b>	<b>-456</b>	<b>-285</b>	<b>-2 742</b>	<b>-2 582</b>	<b>-1 769</b>	<b>-1 341</b>	<b>-707</b>	<b>-538</b>
Acquisition and operating costs gross	-6 128	-5 378	-1 051	-865	-856	-862	-1 240	-1 157	-169	-190	-1 494	-1 377	-884	-624	-434	-303

CHF millions	Total		Life		Accident, health		Motor		Marine, aviation, transport		Property		Casualty		Miscellaneous	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Acquisition and operating costs retroceded	1 088	995	84	98	103	112	436	283	48	48	321	357	55	51	41	46
Acquisition and operating costs net	-5 040	-4 383	-967	-767	-753	-750	-804	-874	-121	-142	-1 173	-1 020	-829	-573	-393	-257
Other reinsurance expenses	-878	-1 545	-735	-1 320	-120	-200	-5	-5	-2		-15	-21	-1	1		
<b>Total expenses from reinsurance business</b>	<b>-19 016</b>	<b>-17 717</b>	<b>-5 198</b>	<b>-4 840</b>	<b>-2 482</b>	<b>-3 462</b>	<b>-3 128</b>	<b>-2 657</b>	<b>-579</b>	<b>-427</b>	<b>-3 930</b>	<b>-3 623</b>	<b>-2 599</b>	<b>-1 913</b>	<b>-1 100</b>	<b>-795</b>
Investment income	3 246	2 777														
Investment expenses	-317	-466														
<b>Investment result</b>	<b>2 929</b>	<b>2 311</b>														
Investment result from unit-linked life insurance																
Other financial income	2 300	1 356														
Other financial expenses	-2 559	-1 539														
<b>Operating result</b>	<b>2 514</b>	<b>2 142</b>														
Interest expenses on debt and subordinated liabilities	-408	-421														
Other income	73	82														
Other expenses	-552	-416														
Extraordinary income and expenses	-226															
<b>Income before income tax expense</b>	<b>1 401</b>	<b>1 387</b>														
Income tax expense	-192	-156														
<b>Net income</b>	<b>1 209</b>	<b>1 231</b>														

## Reinsurance result

The Property & Casualty Reinsurance result increased in 2018. The current year experienced a modest Property & Casualty Reinsurance result impacted by several new large natural-catastrophe losses in Asia and the Americas and by man-made losses compared to an exceptionally large loss burden in 2017. The Life & Health Reinsurance result deteriorated, mainly due to day-one impacts originating from several new large transactions as well as unfavourable reserves development, predominantly in Israel. In addition, the Life & Health Reinsurance result was affected by restructurings of intra-group retrocession agreements with Swiss Re Life & Health America Inc, leading to a net gain of CHF 643 million and with Swiss Re Asia Pte. Ltd. generating a loss of CHF 297 million.

Premiums earned decreased from CHF 17 421 million in 2017 to CHF 15 798 million in 2018. The decrease was primarily driven by the restructuring of several intra-group retrocession agreements with US-affiliated companies. In addition, the decrease was driven by the non-renewal of a large quota share treaty with an external US client in property and casualty, partly offset by higher assumed life and health Canadian business, new Life Capital business as well as continued growth in Asia.

Other reinsurance revenues increased from CHF 1 439 million in 2017 to CHF 1 933 million in 2018, mainly driven by the gain from the recapture of the Swiss Re Life & Health America Inc intra-group retrocession agreements.

Claims incurred decreased from CHF 13 098 million in 2017 to CHF 11 789 million in 2018, mostly reflecting the large natural catastrophes in 2017. The comparison of the individual claims line items is affected by large intra-group restructurings as well as new large life and health transactions, creating substantial changes year-over-year. In aggregate, these various movements fully offset each other.

Property and casualty claims paid and claims adjustment expenses net increased from CHF 3 922 million in 2017 to CHF 7 317 million in 2018, reflecting the new intra-group retrocession agreement with Swiss Re Asia Pte. Ltd. established in 2017, fully offset in change in unpaid claims. Property and casualty change in unpaid claims net decreased from an expense of CHF 5 393 million in 2017 to an income of CHF 793 million in 2018 due to the quota share reduction of the intra-group retrocession agreement with Swiss Re America Corporation and the settlement of outstanding claims to Swiss Re Asia Pte. Ltd. related to 2017 intra-group retrocession agreements as well as the settlement of large losses reported in 2017.

While as a consequence of property and casualty losses in 2017, driven by the large natural-catastrophe events, the equalisation provision was reduced by CHF 1 323 million, no release was necessary in 2018.

Life and health claims paid and claims adjustment expenses net and change in unpaid claims net decreased from CHF 8 598 million in 2017 to CHF 6 818 million in 2018, driven by several intra-group retrocession agreement restructurings, in 2018 the recapture from Swiss Re Life & Health America Inc and in 2017 the new agreement with Swiss Re Life Capital Reinsurance Ltd, as well as by large transactions in both years. These aforementioned restructurings and large transactions impacts were fully offset in life and health benefits net. Furthermore, claims paid and claims adjustment expenses net and change in unpaid claims net movements were mainly driven by Swiss Re Life Capital Reinsurance Ltd intra-group retrocession agreements for the Canadian business, as well as for the new Life Capital business.

Life and health benefits net decreased from a gain of CHF 3 492 million in 2017 to a gain of CHF 1 554 million in 2018, mainly driven by several intra-group retrocession restructurings, in 2018 the recapture with Swiss Re Life & Health America Inc and in 2017 the new agreement with Swiss Re Life Capital Reinsurance Ltd, as well as large

transactions in both years. These aforementioned restructurings and large transactions impacts were fully offset in life and health claims paid and claims adjustment expenses net and change in unpaid claims net. In addition, 2018 was negatively impacted in line with the volume update and new business in Asia, mainly in Japan, as well as reserve strengthening in Israel.

Acquisition costs net decreased from CHF 4 333 million in 2017 to CHF 3 664 million in 2018, mainly in property and casualty, in line with the premium development. This was driven by the quota share reduction of the intra-group retrocession agreement from Swiss Reinsurance America Corporation and the non-renewal of a large quota share treaty with an external US client, partly offset by the new volume from the intra-group retrocession agreement with Swiss Re Asia Pte. Ltd.

Other reinsurance expenses increased from CHF 878 million in 2017 to CHF 1 545 million in 2018, reflecting the day-one losses from the new life and health intra-group retrocession from Swiss Re Asia Pte. Ltd. and from large transactions retroceded from Swiss Re Life & Health Australia Limited.

## Investment result

Investment income decreased from CHF 3 246 million in 2017 to CHF 2 777 million in 2018. The decrease was driven by lower distributions from investment funds of CHF 153 million and lower realised gains on equity securities of CHF 120 million compared to the prior year. Furthermore, the introduction of the new accounting policy to account fixed-income securities at amortised cost resulted in a one-off value readjustment in 2017 of CHF 227 million.

In 2018, SRZ received less income from subsidiaries and affiliated companies by CHF 536 million. This decrease was offset by a one-off realised gain on investments in subsidiaries and affiliated companies of CHF 563 million, mostly related to the sale of Swiss Re Australia Ltd.

Investment expenses increased from CHF 317 million in 2017 to CHF 466 million in 2018. The increase was mainly related to higher value adjustments on equity securities and shares in investment funds, driven by market deteriorations in 2018.

## Investment result

CHF millions	Income	Value readjustments	Realised gains	2018 total
<b>Investment income</b>				
Investments in subsidiaries and affiliated companies	441		563	1 004
Fixed-income securities	521		208	729
Loans	278			278
Mortgages	5			5
Equity securities	28	4	53	85
<i>Shares in investment funds</i>	420		42	462
<i>Short-term investments</i>	20			20
<i>Alternative investments</i>	51	10	2	63
Other investments	491	10	44	545
Income from investment services	131			131
<b>Investment income</b>	<b>1 895</b>	<b>14</b>	<b>868</b>	<b>2 777</b>

CHF millions	Expenses	Value adjustments	Realised losses	2018 total
<b>Investment expenses</b>				
Investments in subsidiaries and affiliated companies		-41		-41
Fixed-income securities		-6	-50	-56
Loans				0
Equity securities		-110	-12	-122
<i>Shares in investment funds</i>		-36	-14	-50
<i>Short-term investments</i>			-1	-1
<i>Alternative investments</i>		-22		-22
Other investments		-58	-15	-73
Investment management expenses	-174			-174
<b>Investment expenses</b>	<b>-174</b>	<b>-215</b>	<b>-77</b>	<b>-466</b>
<b>Allocated investment return</b>				<b>-397</b>
<b>Investment result</b>				<b>1 914</b>

CHF millions	Income	Value readjustments	Realised gains	2017 total
<b>Investment income</b>				
Investments in subsidiaries and affiliated companies	978			978
Fixed-income securities	515	226	162	903
Loans	216			216
Mortgages	5			5
Equity securities	20	9	173	202
<i>Shares in investment funds</i>	573	63	88	724
<i>Short-term investments</i>	18			18
<i>Alternative investments</i>	39	19		58
Other investments	630	82	88	800
Income from investment services	142			142
<b>Investment income</b>	<b>2 506</b>	<b>317</b>	<b>423</b>	<b>3 246</b>

CHF millions	Expenses	Value adjustments	Realised losses	2017 total
<b>Investment expenses</b>				
Investments in subsidiaries and affiliated companies				0
Fixed-income securities			-66	-66
Loans		-7		-7
Equity securities		-19	-9	-28
<i>Shares in investment funds</i>		-7		-7
<i>Short-term investments</i>			-2	-2
<i>Alternative investments</i>		-11		-11
Other investments		-18	-2	-20
Investment management expenses	-196			-196
<b>Investment expenses</b>	<b>-196</b>	<b>-44</b>	<b>-77</b>	<b>-317</b>
<b>Allocated investment return</b>				<b>-383</b>
<b>Investment result</b>				<b>2 546</b>

## Governance and risk management

### Board of Directors and Executive Management

#### Board of Directors

- Walter B. Kielholz, Chairman
- Renato Fassbind, Vice Chairman
- Raymond K. F. Ch'ien, Member of the Board of Directors
- Karen Gavan, Member of the Board of Directors
- Trevor Manuel, Member of the Board of Directors
- Jay Ralph, Member of the Board of Directors
- Joerg Reinhardt, Member of the Board of Directors
- Eileen Rominger, Member of the Board of Directors
- Philip K. Ryan, Member of the Board of Directors
- Sir Paul Tucker, Member of the Board of Directors
- Jacques de Vaucleroy, Member of the Board of Directors
- Susan L. Wagner, Member of the Board of Directors
- Larry Zimpleman, Member of the Board of Directors

#### Changes in 2018

- Karen Gavan, Eileen Rominger and Larry Zimpleman were elected as new members of the Board of Directors.
- Mary Francis, Rajna Gibson Brandon and C. Robert Henrikson did not stand for re-election.

#### Executive Management

- Moses Ojeisekhoba, Chief Executive Officer
- Russell Higginbotham, Member of the Executive Committee
- Jonathan Isherwood, Member of the Executive Committee
- Gerhard Lohmann, Member of the Executive Committee
- Mike Mitchell, Member of the Executive Committee
- Nicola Parton, Member of the Executive Committee
- Jayne Plunkett, Member of the Executive Committee
- Jason Richards, Member of the Executive Committee
- James Shepherd, Member of the Executive Committee
- John Eric Smith, Member of the Executive Committee
- Torben Thomsen, Chief Risk Officer
- Philip Long, Appointed Actuary

#### Changes in 2018

- Torben Thomsen has been appointed Chief Risk Officer and is not a member of the Executive Committee.
- Philip Long has been appointed Appointed Actuary and is not a member of the Executive Committee.
- Jean-Jacques Henchoz decided to step down as member of the Executive Committee.
- Peter Grewal decided to step down as Chief Risk Officer. He was not a member of the Executive Committee.
- Michael Eves decided to step down from his position as Appointed Actuary. He was not a member of the Executive Committee.

### Governance and risk management

As a Business Unit top-level entity, SRZ is subject to enhanced governance requirements, which apply to all Level I classified legal entities. All risk-related activities of SRZ and its subsidiaries are subject to Swiss Re's risk management framework.

Swiss Re's 2018 Financial Report describes the governance and risk management structure as it applies to SRZ. For more information, please refer to the [> Group governance and risk management](#) section.



## Risk profile

SRZ is exposed to insurance and financial risks that are calculated in its internal risk model, as well as other risks that are not explicitly part of the economic capital requirement but are actively monitored and controlled due to their significance for the entity. These include operational, liquidity, model, valuation, regulatory, political, strategic and sustainability risks (see Swiss Re's risk landscape [☞](#), 2018 Financial Report, page 88).

Property and casualty risk is mainly driven by underlying risks inherent in the business SRZ underwrites, in particular non-life claims inflation and Atlantic hurricane, as well as costing and reserving risk. The main drivers of life and health insurance risk are lethal pandemic, mortality trend, lapse and critical illness risk.

The financial risk of SRZ derives from both financial market and credit risk. Key drivers of financial market risk are credit spread and equity risk. Credit risk is mainly driven by default risk of capital market products and credit and surety business.

## Total risk

Total risk is based on 99% tail VaR and represents the average unexpected loss that occurs with a frequency of less than once in 100 years over a one-year time horizon.

USD millions	SST 2018	SST 2019	Change since SST 2018
Property and casualty	8 735	9 221	486
Life and health	7 693	8 530	837
Financial market	7 190	7 398	208
Credit	2 021	2 235	214
<i>Diversification</i>	<i>-10 903</i>	<i>-11 770</i>	<i>-867</i>
<b>Total risk</b>	<b>14 736</b>	<b>15 614</b>	<b>878</b>

Total risk increased by USD 878 million to USD 15.6 billion, driven by both higher insurance risks and higher financial market and credit risk. This is partly offset by a reduction in risk due to the weakening of major currencies against the US dollar.

- The increase in property and casualty risk is driven by the growth in property business, which increases both natural-catastrophe and terrorism exposure. Costing and reserving risk decreases, reflecting claims payment and reserve releases.
- The increase in life and health risk is mainly driven by higher critical illness and mortality trend risks mainly due to business growth and the introduction of the new health model. Mortality trend risk also increases reflecting an update on external retrocession cash flow.
- Financial market risk increases mainly due to higher equity and real estate risk. The higher equity risk is driven by repositioning of equity derivatives along with additional investments more than offsetting market value losses. Real estate risk increases following additional investments.
- Credit risk increases due to higher credit and surety risk reflecting new business as well as renewals of in-force business.

## Operational risk

SRZ uses a Group-wide risk matrix methodology and Swiss Re's Global Risk Register to capture operational risks. The matrix in particular focuses on risks exceeding risk tolerance as they require management actions. Adherence to risk tolerance is monitored and reported at least on a quarterly basis. The overall control environment within SRZ remains adequate.

While Swiss Re's security programme is considered adequate for addressing current cyber threats, new detective and responsive security controls are required in order to strengthen preparedness for potential future threats. Several initiatives are underway to strengthen cyber security controls and return the risk below tolerance.

### Other significant risks

For details on other significant risks, including liquidity, model, valuation, regulatory, political, strategic and sustainability risks, see the Group's 2018 Financial Report sections on Liquidity management [☞](#) on page 80, Swiss Re's risk landscape [☞](#) on pages 88 and 89, and Management of other significant risks [☞](#) on pages 94–97.

### Risk concentration

SRZ uses 99% tail VaR to measure its risk concentrations. Additionally, risk concentrations can also be measured via value at risk calculations for major natural-catastrophe scenarios with a 200-year return period, stress calculations for credit default, as well as sensitivities to key financial market parameters.

SRZ assesses potential annualised losses from insurance peak scenarios (Atlantic hurricane, Californian earthquake, European windstorm, Japanese earthquake, lethal pandemic) with a return period of 200 years as well as the annualised potential loss from a credit default event. The impacts of financial risk sensitivities (interest rates  $\pm$  50 bps, credit spreads  $\pm$  50 bps, equity values  $\pm$  25%, real estate values  $\pm$  25%) are assessed in terms of impact on the SST ratio.

SRZ's largest potential annualised loss from an insurance peak scenario or a credit default event in SST 2019 derives from the Atlantic hurricane scenario.

Among the financial market sensitivities mentioned above, SRZ's SST ratio is most sensitive to a 50-bps decrease in interest rates.

### Risk mitigation

SRZ manages and controls its risks through an extended limit framework. Insurance risks are also mitigated through retrocession, insurance risk swaps or transferring risk to capital markets. SRZ uses financial market derivative instruments as well as financial market securities to hedge financial market and credit risk arising from investments and insurance liabilities.

## Valuation

### SST balance sheet

The SST balance sheet is prepared based on the same market-consistent valuation principles as applied in Swiss Re's internal EVM framework. EVM is therefore used as a basis for preparing the SST balance sheet and valuation adjustments to EVM mainly affect capital costs and deferred taxes. The difference between assets and liabilities is defined as the SST net asset value, which is the basis for the calculation of the SST RBC.

The SST valuation methodology is further described in the [Appendix](#) of this Report.

USD millions	Notes	SST 2018	SST 2019	Change since SST 2018
<b>Real estate</b>				
Investments in subsidiaries and affiliated companies		15 476	15 145	-331
Fixed-income securities	1	18 004	16 459	-1 545
Loans	2	9 450	10 085	635
Mortgages		670	804	134
Equity securities		1 631	1 135	-496
<b>Other investments:</b>				
Shares in investment funds		12 957	12 467	-490
Alternative investments		743	788	45
Other investments	3	907	2 174	1 267
<b>Investments for unit-linked and with-profit business</b>				
Derivative financial instruments assets		162	222	60
<b>Total market value of investments</b>		<b>60 000</b>	<b>59 279</b>	<b>-721</b>
Cash and cash equivalents	4	1 350	2 191	841
Funds held by ceding companies and other receivables from reinsurance		23 037	23 030	-7
Other receivables		1 520	829	-691
Other assets	5	6 714	4 197	-2 517
<b>Total other assets</b>		<b>32 621</b>	<b>30 247</b>	<b>-2 374</b>
<b>Total assets</b>		<b>92 621</b>	<b>89 526</b>	<b>-3 095</b>
<b>Best estimate value of insurance liabilities before retrocessions:</b>				
<b>Direct insurance:</b>				
Life insurance (excluding unit-linked business)				
Non-life insurance				
Health insurance				
Unit-linked life insurance				
Other business				
<b>Active reinsurance:</b>				
Life insurance (excluding unit-linked business)		10 589	10 102	-487
Non-life insurance		34 558	38 016	3 458
Health insurance				
Unit-linked life insurance				
Other business				
<b>Total best estimate value of insurance liabilities before retrocessions</b>		<b>45 147</b>	<b>48 117</b>	<b>2 970</b>
<b>Retrocessions:</b>				
<b>Direct insurance:</b>				
Life insurance (excluding unit-linked business)				
Non-life insurance				
Health insurance				

USD millions	Notes	SST 2018	SST 2019	Change since SST 2018
Unit-linked life insurance				
Other business				
Active reinsurance:				
Life insurance (excluding unit-linked business)		-6 151	-6 311	-160
Non-life insurance		-4 758	-5 793	-1 035
Health insurance				
Unit-linked life insurance				
Other business				
<b>Total retrocessions</b>		<b>-10 909</b>	<b>-12 104</b>	<b>-1 195</b>
Non-technical provisions		878	1 121	243
Debt	6	9 615	8 642	-973
Derivative financial instruments liabilities		294	283	-11
Funds held under reinsurance treaties	7	5 374	3 191	-2 183
Reinsurance balances payable		4 403	4 595	192
Other liabilities		7 378	7 034	-344
<b>Total other liabilities</b>		<b>27 942</b>	<b>24 866</b>	<b>-3 076</b>
<b>Total liabilities</b>		<b>62 180</b>	<b>60 879</b>	<b>-1 301</b>
<b>SST net asset value</b>		<b>30 441</b>	<b>28 647</b>	<b>-1 794</b>

## Notes

1. The decrease in fixed-income securities is driven by the restructure of the Canadian intra-group retrocession (IGR) agreement with Swiss Re Life Capital Reinsurance Ltd, the transfer of the Singapore branch to Swiss Re Asia Ltd, increase in yields and the weakening of major currencies against the US dollar.
2. The increase in loans is mainly related to the set-up of additional cross-segmental loans between Property & Casualty and Life & Health Reinsurance, increase in loans in connection with the US tax reform and new external infrastructure loans.
3. The increase in other investments is driven by the purchase of short-term investments due to reinvested proceeds from the Canada IGR restructuring, from the sale of exchange-traded funds and from cash pooling.
4. The increase in cash and cash equivalents is mainly related to an increase in NZ dollars to finance a large transaction and other asset management activities.
5. The decrease in other assets is mainly due to a reduction of securities lending activities.
6. The decrease in debt is driven by redemptions and maturities and the weakening of major currencies against the US dollar.
7. The decrease of funds held under reinsurance treaties is mainly due to the restructuring of the intra-group retrocession agreement with Swiss Re Life Capital Reinsurance Ltd for the Canadian business and a change in the reserving basis on the Canadian business.

## SST balance sheet comparison with Swiss statutory

The SST balance sheet comparison with the audited financial statements provides insights into the main valuation and scope differences.

An overview of the main valuation and scope differences and the definition of the aggregated line items is included in the > [Appendix](#) of this Report.

## Assets

USD millions	Swiss Statutory	SST	Difference
Real estate			
Investments in subsidiaries and affiliated companies	15 549	15 145	-404
Fixed-income securities	16 631	16 459	-172
Loans	8 760	10 085	1 326
Mortgages	825	804	-21
Equity securities	941	1 135	194
Other investments	15 580	15 428	-152
Investments for unit-linked and with-profit business			
Cash and cash equivalents	879	2 191	1 313

USD millions	Swiss Statutory	SST	Difference
Funds held by ceding companies and other receivables from reinsurance	26 863	23 030	-3 833
Other assets	21 840	5 248	-16 592
<b>Total assets</b>	<b>107 869</b>	<b>89 526</b>	<b>-18 343</b>

#### Investments in subsidiaries and affiliated companies

Differences in scope: In SST, some subsidiaries of SRZ are sub-consolidated and, therefore, their assets and liabilities are reported within the respective line items. In statutory reporting, there is no sub-consolidation. Hence, the values of all subsidiaries are reported in investments in subsidiaries and affiliated companies.

Differences in valuation: SST reports investments in subsidiaries and affiliated companies at market-consistent value. In statutory reporting, participations are carried at cost, less necessary and legally permissible depreciation, fixed at historic FX rates.

#### Fixed-income securities

Differences in valuation: SST carries fixed-income securities at market value. In statutory reporting, fixed-income securities are valued at their amortised cost less necessary depreciation to address other-than-temporary market value decreases.

#### Loans

Differences in valuation: In SST, policy loans and intra-group loans are valued by discounting future estimated cash flows at risk-free rates, while under statutory reporting those loans are carried at nominal value. Value adjustments are recorded where the expected recovery value is lower than the nominal value. Infrastructure loans are carried at their amortised cost less necessary depreciation to address other-than-temporary market value decreases.

#### Mortgages

Differences in scope: In SST some parts of mortgage loans are carried under other assets in accordance with US GAAP mortgage accounting standards. In statutory reporting all mortgage loans are shown in mortgages.

#### Equity securities

Differences in scope: In SST, Swiss Re shares are not valued, whereas they are part of equity securities for statutory reporting. For SST, some shares in public equity investment funds are included in equity securities. Under statutory reporting, those shares are part of other investments.

Differences in valuation: SST values equity securities at market value. In statutory reporting, equity securities are carried at cost or lower market value.

#### Other investments

Differences in scope: In SST, short-term investments are defined on the basis of the remaining duration at time of purchase. Statutory reporting classifies short-term investments between cash and cash equivalents and other investments on the basis of initial duration. In SST, some public equity investment funds are classified as part of the equity securities. In statutory reporting, shares in investment funds are classified as other investments.

Differences in valuation: SST reports other investments such as investment funds, private equity or hedge funds at market value. In statutory reporting, these investments are generally valued at cost or lower market value.

**Cash and cash equivalents**

Differences in scope: in SST, short-term investments are defined based on the remaining duration at time of purchase, while statutory reporting classifies these investments based on the initial duration into short-term or cash and cash equivalents.

**Funds held by ceding companies and other receivables from reinsurance**

Differences in valuation: In SST, funds withheld for which a fixed interest is credited are valued by discounting future estimated cash flows at risk-free rates. Under statutory reporting, those are generally measured at the consideration received or at market value of the underlying assets.

**Other assets**

Differences in scope: In SST, reinsurance recoverables are part of re/insurance liabilities, whereas they are disclosed in other assets in statutory reporting. Some parts of mortgage loans are carried in other assets under SST. In statutory reporting these are part of mortgages.

Differences in valuation: In SST, other assets are measured at fair value. In statutory reporting, other assets are generally carried at nominal value. Deferred acquisition costs are not valued for SST.

**Liabilities**

USD millions	Swiss Statutory	SST	Difference
Re/insurance liabilities	66 807	36 014	-30 793
Unit-linked and with-profit liabilities			
Debt	8 313	8 642	330
Funds held under reinsurance treaties	6 968	3 191	-3 777
Other liabilities	15 437	13 032	-2 405
<b>Total liabilities</b>	<b>97 525</b>	<b>60 879</b>	<b>-36 645</b>

**Re/insurance liabilities**

Differences in scope: In SST, reinsurance recoverables are shown in re/insurance liabilities. In statutory reporting, reinsurance recoverables are disclosed within other assets.

Differences in valuation: SST uses best estimates to value the re/insurance liabilities without specific margin for prudence. Statutory reporting values reinsurance liabilities at best estimates and for life and health business requires provisions for adverse deviations (PADs). For the property and casualty business, statutory reporting allows for an equalisation provision. Other valuation differences arise from the discounting of the liability cash flows. In SST, liabilities are generally discounted using current risk-free rates. Under statutory reporting, there is generally no discounting for non-life and discounting at yields of the backing assets for life and health technical provisions. For more details on the general differences in valuation of re/insurance liabilities, please refer to the table in the methodology section of this report.

**Debt**

Differences in valuation: In SST, senior debt and intra-group loans are discounted at risk-free rates. SST supplementary capital instruments are carried at fair value. In statutory reporting, debt is carried at redemption value.

**Funds held under reinsurance treaties** Differences in valuation: In SST, the valuation is based on best estimates of the underlying cash flows. Under statutory reporting, funds held under reinsurance treaties are carried at consideration received or market value of the underlying assets.

**Other liabilities** Differences in valuation: In SST, no specific provision is made for currency fluctuations. In statutory reporting, a provision for currency fluctuation comprises the net effect of foreign exchange gains and losses arising from the revaluation of the opening balance sheet and the translation adjustment of the income statement from average to closing exchange rates at year-end. Derivative financial instruments are measured at fair value under SST. In statutory reporting, derivatives are generally carried at cost, less necessary and legally permissible depreciation. Back-to-back derivatives are carried at fair value.

## Capital management

SRZ is the holding entity of Swiss Re's Reinsurance Business Unit. It plans, assesses and steers its own risk and solvency position in combination with the risk and solvency positions of its subsidiaries.

For the Group and its Swiss-regulated Business Unit holding companies, SRZ and Swiss Re Corporate Solutions Ltd, the Group Risk Policy sets SST capitalisation targets on a consolidated basis, which define the capitalisation objective for executive management in normal operating circumstances. Target capital is used as a basis to coordinate capital planning and capital management actions. Any deviation from the target capitalisation must be restored as soon as practical, and in any event over the applicable three-year plan. Surplus capital is expected to be made available to the Group holding company.

### Change in shareholder's equity

CHF millions	Share capital	Legal capital reserves	Legal profit reserves	Voluntary profit reserves	Retained earnings brought forward	Net income for the financial year	Total shareholder's equity
Shareholder's equity 1.1.2017	34	6 778	650	3 839	26	875	12 202
Allocations relating to the dividend paid				850	25	-875	0
Dividend for the financial year 2016				-2 590			-2 590
Net income for the financial year						1 209	1 209
<b>Shareholder's equity 31.12.2017</b>	<b>34</b>	<b>6 778</b>	<b>650</b>	<b>2 099</b>	<b>51</b>	<b>1 209</b>	<b>10 821</b>
Shareholder's equity 1.1.2018	34	6 778	650	2 099	51	1 209	10 821
Allocations relating to the dividend paid				1 200	9	-1 209	0
Dividend for the financial year 2017				-1 860			-1 860
Net income for the financial year						1 231	1 231
<b>Shareholder's equity 31.12.2018</b>	<b>34</b>	<b>6 778</b>	<b>650</b>	<b>1 439</b>	<b>60</b>	<b>1 231</b>	<b>10 192</b>



## Solvency

SRZ uses an internal risk model to determine the economic capital required to support the risks on SRZ's books, as well as to allocate risk-taking capacity to the different lines of business. The model also provides the basis for capital cost allocation in Swiss Re's EVM framework, which is used for pricing, profitability evaluation and compensation decisions. In addition to these internal purposes, the model is used to determine regulatory capital requirements under economic solvency frameworks such as the SST and Solvency II.

In 2017, FINMA approved Swiss Re's internal model and its components for use of SST reporting purposes under their revised model review process. In 2018, FINMA conducted a material review of Swiss Re's credit risk model, which was approved for use of SST 2019 though it will require minor adjustments for later reporting periods.

Since SST 2018, two major model changes have been implemented and were approved by FINMA in October 2018:

- Financial market risks – The change in calibration approach had no impact on required capital when it was introduced. The prospective impact is contingent on financial markets developments.
- Critical illness, income protection and hospital cash risk – The introduction of the new health model resulted in an increase in required capital.

## Solvency

In SST 2019, SRZ's solvency remains at a strong level of 218%. Despite a challenging year with large losses SRZ was able to generate a positive underwriting contribution. This is also reflected in a relative increase in insurance risk and a higher market value margin. The dividend payment to the Group, the redemption of a subordinated instrument and depressed financial markets resulting in significantly lower contribution from investments ultimately lead to a decrease in the overall SST ratio.

Based on current SST rules introduced in 2017, the ratio is calculated as SST risk-bearing capital (SST RBC) minus the market value margin (MVM), divided by SST target capital (TC) minus the MVM.

## Solvency overview

Figure 2

**SST 2019** in USD million**SST RBC – MVM**

26 414

SST ratio 2019

= 218%

**SST TC – MVM**

12 091

## SST 2018 in USD million

**SST RBC – MVM**

29 219

SST ratio 2018

= 252%

**SST TC – MVM**

11 600

SST RBC: SST risk-bearing capital

SST TC: SST target capital

MVM: Market value margin

**SST risk-bearing capital**

The SST RBC is derived from the SST net asset value (NAV), which represents the difference between the market-consistent value of assets and liabilities, according to the valuation methodology prescribed under SST. For this purpose, the SST NAV is adjusted for the items shown in the table below.

USD millions	SST 2018	SST 2019	Change since SST 2018
<b>SST net asset value</b>	<b>30 441</b>	<b>28 647</b>	<b>-1 794</b>
Deductions	-2 299	-2 040	259
<b>SST core capital</b>	<b>28 142</b>	<b>26 607</b>	<b>-1 535</b>
Supplementary capital	4 059	3 468	-591
<b>SST risk-bearing capital (SST RBC)</b>	<b>32 201</b>	<b>30 074</b>	<b>-2 127</b>
Market value margin (MVM)	2 982	3 660	678
<b>SST RBC – MVM</b>	<b>29 219</b>	<b>26 414</b>	<b>-2 805</b>

The decrease in SST NAV reflects the dividend paid in 2018, negative foreign exchange movements and current year taxes, partly offset by positive underwriting and investment contributions.

Drivers for the underwriting contribution are the following:

- The Property & Casualty Reinsurance contribution to the SST NAV is mainly driven by a net favourable development in expected claims payout patterns and ultimate claims estimates. The positive impacts are partly offset by adverse large-loss experience from natural-catastrophe and man-made losses, including typhoons Jebi and Trami in Japan, hurricanes Florence and Michael and the California wildfires in the US.
- The Life & Health Reinsurance underwriting contribution is driven by transactional business in New Zealand and Japan and improved core business profitability in the US, partly offset by adverse experience, valuation and assumption updates mainly in the US and EMEA.

The investment contribution reflects positive risk-free investment return, partly offset by the impact of spread widening as well as losses from equities.

Unfavourable foreign exchange movements are mainly due to the weakening of the other major currencies against the US dollar.

Deductions mainly reflect projected dividends to the Group (to be paid in 2019) as well as deferred taxes on real estate. These items decrease by USD 259 million compared to SST 2018.

Supplementary capital is recognised as risk-bearing under SST. The decrease in SST supplementary capital of USD 591 million reflects the redemption of a subordinated instrument; this is partly offset by a new internal loan from the Group classified as supplementary capital.

A description of the change in MVM, which represents the capital costs for the run-off period, is provided together with the SST TC comments below.

## SST target capital

In order to derive SST TC, total risk is adjusted for the line item "Other impacts" as shown in the table below.

USD millions	SST 2018	SST 2019	Change since SST 2018
<b>Total risk</b>	<b>14 736</b>	<b>15 614</b>	<b>878</b>
Other impacts	-154	137	291
<b>SST target capital (TC)</b>	<b>14 582</b>	<b>15 751</b>	<b>1 169</b>
Market value margin (MVM)	2 982	3 660	678
<b>SST target capital – MVM</b>	<b>11 600</b>	<b>12 091</b>	<b>491</b>

SST TC is USD 1.2 billion higher at USD 15.8 billion, due to an increase in total risk (see > [Risk profile](#) for details) and higher other impacts.

Other impacts mainly reflect run-off capital costs (MVM), the impact from business development over the forecasting period as well as requirements from FINMA that are not included in total risk as they are not consistent with Swiss Re's own risk view.

The increase in MVM is mainly driven by actual and projected growth in Asian critical illness business and model improvements. These effects are partly offset by a depreciation of major currencies against the US dollar and slightly higher interest rates.

# Appendix

This appendix provides further information on the SST methodology and the valuation for solvency purposes. The scope, the legal basis and the components of the SST calculation are explained. The main valuation and scope differences between the SST balance sheet and the audited financial statements are summarised.

## Methodology and valuation

### Introduction

The SST is the solvency regime applicable to re/insurance entities and groups domiciled in Switzerland. The key principles of the SST are defined in the Insurance Supervision Ordinance (ISO) and in the FINMA circular 2017/03 on SST.

Swiss Re Group and its Swiss-regulated entities submit their SST report to FINMA. The published SST ratio is subject to FINMA's review and approval. Swiss Re applies an internal model to calculate the SST ratio, which is also subject to FINMA's approval.

The calculation of the SST ratio includes forward-looking elements. For factors that could affect the SST ratio, see > [Note on risk factors](#) and > [Cautionary note on forward-looking statements](#).

### Key principles

The SST is a market-consistent and risk-based approach to determine available and required capital. An entity is solvent under SST if the available capital (the SST risk-bearing capital) is higher than the required capital (the SST target capital).

The SST ratio determines the solvency position of an entity:

$$\frac{\text{SST risk-bearing capital} - \text{market value margin}}{\text{SST target capital} - \text{market value margin}}$$

The market value margin (ie the run-off capital costs) is a reserve for capital costs included in the SST target capital. FINMA circular 2017/03 on SST requires that the market value margin is subtracted from the SST risk-bearing capital and the SST target capital, aligning the definition of the SST ratio more closely with Solvency II.

### SST risk-bearing capital

The SST risk-bearing capital is the amount of capital that is available to protect the policyholders of an entity in case of a large and unexpected adverse event.

The SST risk-bearing capital is derived as follows:

$$\begin{aligned} & \text{SST net asset value} \\ & - \text{Deductions} \\ & + \text{Supplementary capital} \\ & = \text{SST risk-bearing capital} \end{aligned}$$

The SST net asset value is the value of an entity's assets minus the value of its liabilities. All traded assets and liabilities are marked to market, based on quoted prices in active markets or observable inputs. Non-traded assets and liabilities are valued on a market-consistent basis. Insurance liabilities are valued on a market-consistent basis by replicating future best-estimate expected cash flows with liquid financial market instruments. As the majority of the insurance liabilities do not contain embedded financial market risks other than interest-rate risk, the market-consistent value of liabilities is determined by discounting estimated future cash flows using prevailing risk-free interest rates. If insurance liabilities include embedded options or guarantees (eg variable annuities or interest sensitive life business), they are valued on a market-consistent basis using stochastic models and other appropriate valuation techniques. Own debt not qualified as SST supplementary capital is valued using risk-free discounting, whereas debt qualified as supplementary capital is fair valued.

Other assets are valued based on market-consistent valuations or using US GAAP valuations where appropriate. Other liabilities mainly consists of securities sold under agreement to repurchase, securities sold short, payables for securities in transit and other creditors. Since other liabilities are not in the focus of re/insurance activities, as a simplification their valuation is aligned with US GAAP. Hence, securities sold short are valued based on market-consistent valuations, other creditors are valued based on the nominal, and lastly securities sold under agreement to repurchase and payables for securities in transit are valued based on amortised cost. Deferred tax assets and liabilities are not valued under SST. The value of a participation is based on its SST net asset value including the market value margin.

The deductions from SST net asset value consist of dividends for the upcoming one-year period and deferred tax on real estate. No deductions are made for own shares and intangible assets, as these items are not valued in Swiss Re's SST balance sheet.

The supplementary capital consists of additional risk-absorbing capital instruments, such as hybrid debt. The eligibility of debt instruments as supplementary capital is defined in the ISO and subject to FINMA's approval.

### SST target capital

The SST target capital represents the capital required to cover the risks assumed by the company. It is based on the company's total risk. In order to derive SST target capital, the total risk is adjusted for various items summarised under other impacts.

- An entity's total risk is measured in terms of 99% shortfall, ie the average unexpected loss at entity level that occurs with a frequency of less than once in 100 years over a one-year time horizon. All losses are a combination of insurance, financial market and credit losses, and accumulation as well as diversification between individual risks is taken into account.
- Other impacts include the minimum cost of holding capital after the one-year SST period until the end of a potential run-off period (market value margin) as requested by the Swiss Solvency Test, the impact from business development over the forecasting period, as well as requirements from FINMA that are not included in total risk as they are not consistent with Swiss Re's own risk view.

### Market value margin

The SST target capital includes the minimum cost of holding capital after the one-year SST period until the end of a potential run-off period. Known as the MVM at the end of the risk assessment period, this represents the amount required to compensate a third party for the capital costs associated with running-off the insurance and reinsurance portfolio following a shortfall event. For a solo legal entity, only business assumed on the own book (including intra-group transactions) is considered; however, the consolidated view of Swiss Re Group also takes into account the business assumed through all its subsidiaries.

The MVM is calculated using the 99% shortfall on projected insurance and reinsurance exposure from the end of the solvency assessment period onwards, discounted back to the beginning of the period with US dollar rates, as most of the long-tail business is written in that currency. The sum of the calculated present values is then multiplied by the 6% capital cost rate specified by FINMA.

### SST balance sheet

This report includes a comparison of the SST balance sheet with audited financial statements. The consolidated financial statements of the Group are prepared in accordance with US GAAP. The statutory financial statements of Swiss Reinsurance Company Ltd, Swiss Re Corporate Solutions Ltd, Swiss Re Life Capital Reinsurance Ltd and Swiss Re International SE, Luxembourg, Zurich branch are based on Swiss law.

**Valuation and scope differences  
with audited financial statements**

	SST	US GAAP	Statutory
<b>Actuarial assumptions</b>	Best estimate	Non-life business: reinsurance contracts are accrued when insured events occur and are based on the estimated ultimate cost of settling the claims. Unearned premium reserves are calculated based on a "pro-rata" share of the estimated premium written, taking into account seasonality of risk when necessary Life and health business: assumptions are generally set when the contract is issued or purchased, making allowance for possible adverse deviation (PAD)	Non-life business: reinsurance contracts are accrued when insured events occur and are based on the estimated ultimate cost of settling the claims; Unearned premium reserves are calculated based on a "pro-rata" share of the estimated premium written, taking into account seasonality of risk when necessary; allowance for equalisation reserves Life and health business: best estimate with additional provisions for possible adverse deviations (PAD)
<b>Liability cash-flows</b>	Discounted using risk-free rates; market-consistent valuation of options and guarantees	Non-life business: generally no discounting Life and health business: generally discounted based on book yields, with a PAD applied; generally no market-consistent valuation of embedded options and guarantees; for some derivative instruments (eg, variable annuities) a full stochastic valuation is carried out	Non-life business: generally no discounting Life and health business: generally discounted at historical yields of assets backing liabilities, with a PAD applied; generally no market-consistent valuation of embedded options and guarantees; for some derivative instruments (eg, variable annuities) a full stochastic valuation is carried out
<b>Capital generation from new business</b>	Recognised upfront for all business	Deferred over time (unearned premium reserve)	Deferred over time for positive expectation (unearned premium reserve), immediately for negative expectation
<b>Explicit margin for risk</b>	MVM is part of SST target capital. Valuation of subsidiaries on the balance sheet include MVM	No	No
<b>Investment assets</b>	Market values	Mostly market values, with some exceptions such as real estate and real estate for own use which are held at depreciated cost	Fixed-income securities and short-term investment at amortised value, shares in investment funds at cost or lower market value, loans at nominal value
<b>Goodwill and intangibles</b>	Not recognised	Recognised, goodwill subject to impairment test, intangibles subject to amortisation	Normally no goodwill recognition; intangibles and potential goodwill amortised/depreciated on a straight line basis
<b>Senior debt, subordinated debt and convertible instruments</b>	Valuation at fair value excluding own credit risk, except for supplementary capital instruments which are valued at fair value with no adjustment <sup>1</sup>	Generally valued at amortised cost; for convertible instruments classification depends on the instrument's characteristics. It is either classified as debt at amortised cost or as equity	Generally valued at redemption value; all debt positions recognised as liabilities
<b>Deferred taxes</b>	No	Yes	No
<b>Contract boundaries</b>	Contracts inception until 31 December 2018 as well as business shifts as of 1 January 2019	Contracts inception until 31 December 2018	Contracts inception until 31 December 2018
<b>Minority interest</b>	SST recognises minority interests in the proportional consolidation of assets and liabilities	Minority interest are recognised as part of the statement of shareholders' equity	No minority interests on standalone financial statement
<b>Sub-consolidation principles for solo view</b>	Some entities are sub-consolidated for SST reporting	Not applicable	No sub-consolidation applied for statutory reporting

<sup>1</sup> For the purpose of the balance sheet comparison, SST may recognise subordinated debt and convertibles as supplementary capital for solvency assessment upon FINMA approval.

**Comparison with audited financial statements**

The balance sheet comparison included in this Report is provided on an aggregated basis, which is explained in the following table (empty cells denote items that are not reflected in the respective view):

Account for comparison	SST accounts (as published)	US GAAP accounts (as published)	Statutory accounts (as published)
<b>Assets:</b>			
<b>Real estate</b>	<ul style="list-style-type: none"> <li>▪ Real estate</li> </ul>	<ul style="list-style-type: none"> <li>▪ Investment real estate</li> </ul>	
<b>Investments in subsidiaries and affiliated companies</b>	<ul style="list-style-type: none"> <li>▪ Investments in subsidiaries and affiliated companies</li> </ul>		<ul style="list-style-type: none"> <li>▪ Investments in subsidiaries and affiliated companies</li> </ul>
<b>Fixed-income securities</b>	<ul style="list-style-type: none"> <li>▪ Fixed-income securities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Available-for-sale, at fair value</li> <li>▪ Trading</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fixed-income securities</li> </ul>
<b>Loans</b>	<ul style="list-style-type: none"> <li>▪ Loans</li> </ul>	<ul style="list-style-type: none"> <li>▪ Policy loans, mortgages and other loans<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Loans</li> </ul>
<b>Mortgages</b>	<ul style="list-style-type: none"> <li>▪ Mortgages</li> </ul>		<ul style="list-style-type: none"> <li>▪ Mortgages</li> </ul>
<b>Equity securities</b>	<ul style="list-style-type: none"> <li>▪ Equity securities</li> </ul>	<ul style="list-style-type: none"> <li>▪ At fair value through earnings</li> </ul>	<ul style="list-style-type: none"> <li>▪ Equity securities</li> </ul>
<b>Other investments</b>	<ul style="list-style-type: none"> <li>▪ Shares in investment funds</li> <li>▪ Alternative investments</li> <li>▪ Other investments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short-term investments, at fair value</li> <li>▪ Other invested assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Shares in investment funds</li> <li>▪ Short-term investments</li> <li>▪ Alternative investments</li> </ul>
<b>Investments for unit-linked and with-profit business</b>	<ul style="list-style-type: none"> <li>▪ Investments for unit-linked and with-profit business</li> </ul>	<ul style="list-style-type: none"> <li>▪ Investments for unit-linked and with-profit business</li> </ul>	
<b>Cash and cash equivalents</b>	<ul style="list-style-type: none"> <li>▪ Cash and cash equivalents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cash and cash equivalents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cash and cash equivalents</li> </ul>
<b>Funds held by ceding companies and other receivables from reinsurance</b>	<ul style="list-style-type: none"> <li>▪ Funds held by ceding companies and other receivables from reinsurance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Premiums and other receivables</li> <li>▪ Funds held by ceding companies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Funds held by ceding companies</li> <li>▪ Premiums and other receivables from reinsurance</li> </ul>
<b>Other assets</b>	<ul style="list-style-type: none"> <li>▪ Derivative financial instruments assets</li> <li>▪ Other receivables</li> <li>▪ Other assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accrued investment income</li> <li>▪ Reinsurance recoverable on unpaid claims and policy benefits</li> <li>▪ Deferred acquisition costs</li> <li>▪ Acquired present value of future profits</li> <li>▪ Goodwill</li> <li>▪ Income taxes recoverable</li> <li>▪ Deferred tax assets</li> <li>▪ Other assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assets in derivative financial instruments</li> <li>▪ Reinsurance recoverable from unpaid claims</li> <li>▪ Reinsurance recoverable from liabilities life and health</li> <li>▪ Reinsurance recoverable from unearned premiums</li> <li>▪ Reinsurance recoverable from provision for profit commissions</li> <li>▪ Tangible assets</li> <li>▪ Deferred acquisition costs</li> </ul>



- Intangible assets
- Other receivables
- Other assets
- Accrued income

---

**Liabilities:**

<b>Reinsurance liabilities</b>	<ul style="list-style-type: none"> <li>▪ Total best estimate value of insurance liabilities before retrocessions<sup>3</sup></li> <li>▪ Total retrocessions<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Unpaid claims and claim adjustment expenses</li> <li>▪ Liabilities for life and health policy benefits</li> <li>▪ Unearned premiums</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unpaid claims</li> <li>▪ Liabilities for life and health policy benefits</li> <li>▪ Unearned premiums</li> <li>▪ Provisions for profit commissions</li> <li>▪ Equalisation provision</li> </ul>
<b>Unit-linked and with profit liabilities</b>	<ul style="list-style-type: none"> <li>▪ Unit-linked life insurance<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Policyholder account balances<sup>6</sup></li> </ul>	
<b>Debt</b>	<ul style="list-style-type: none"> <li>▪ Debt</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short-term debt</li> <li>▪ Long-term debt</li> </ul>	<ul style="list-style-type: none"> <li>▪ Debt</li> <li>▪ Subordinated liabilities</li> </ul>
<b>Funds held under reinsurance treaties</b>	<ul style="list-style-type: none"> <li>▪ Funds held under reinsurance treaties</li> </ul>	<ul style="list-style-type: none"> <li>▪ Funds held under reinsurance treaties</li> </ul>	<ul style="list-style-type: none"> <li>▪ Funds held under reinsurance treaties</li> </ul>
<b>Other liabilities</b>	<ul style="list-style-type: none"> <li>▪ Non-technical provisions</li> <li>▪ Derivative financial instruments liabilities</li> <li>▪ Reinsurance balances payable</li> <li>▪ Other liabilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reinsurance balances payable</li> <li>▪ Income taxes payable</li> <li>▪ Deferred and other non-current tax liabilities</li> <li>▪ Accrued expenses and other liabilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tax provisions</li> <li>▪ Provision for currency fluctuation</li> <li>▪ Other provisions</li> <li>▪ Liabilities from derivative financial instruments</li> <li>▪ Reinsurance balances payable</li> <li>▪ Other liabilities</li> <li>▪ Accrued expenses</li> </ul>

<sup>2</sup> This information is not disclosed separately under US GAAP. However, for the comparison, loan and mortgage figures are separated in order to align with the granularity of the SST accounts.

<sup>3</sup> Excluding unit-linked life insurance.

<sup>4</sup> Excluding unit-linked life insurance.

<sup>5</sup> Before and after retrocession for direct insurance and active reinsurance.

<sup>6</sup> Policyholder account balances also includes some non-linked, non-participating universal life type contracts.

**Drivers of change in SST net asset value**

The change in SST net asset value presented in this report is attributed to the following drivers:

- Underwriting contribution: consists of new business impacts based on best estimate cash flow projections and risk-free discounting, and impacts on in-force business from experience variances, assumption changes and reserve releases.
- Investment contribution: is derived from mark-to-market return on investments less the minimum risk benchmark return. The latter is the return on the theoretical investment portfolio that would minimise the financial market risk exposure of the entity.
- Market value margin of subsidiaries.
- Other contributions: consists particularly of other assets and liabilities and current taxes.
- Capital movements: consists of dividends paid and capital repatriation.
- Other, such as impact of foreign exchange movements.

The drivers of change in SST net asset value are prepared on a best-effort basis to support the analysis of the SST net asset value. The calculation of the SST net asset value is based on the EVM balance sheet and not the drivers identified above.

## Cautionary note

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”, “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 the Group’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:

- the frequency, severity and development of insured claim events, particularly natural catastrophes, man-made disasters, pandemics, acts of terrorism and acts of war;
- mortality, morbidity and longevity experience;
- the cyclical nature of the insurance and reinsurance sectors;
- instability affecting the global financial system;
- deterioration in global economic conditions;
- 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 the Group’s investment assets;
- changes in the Group’s investment result as a result of changes in the Group’s investment policy or the changed composition of the Group’s investment assets, and the impact of the timing of any such changes relative to changes in market conditions;
- the Group’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 the Group’s financial strength or otherwise;
- any inability to realise amounts on sales of securities on the Group’s balance sheet equivalent to their values recorded for accounting purposes;
- changes in legislation and regulation, and the interpretations thereof by regulators and courts, affecting us or the Group’s ceding companies, including as a result of shifts away from multilateral approaches to regulation of global operations;
- the outcome of tax audits, the ability to realise tax loss carryforwards, 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, and the overall impact of changes in tax regimes on business models;
- failure of the Group’s hedging arrangements to be effective;
- the lowering or loss of one of the financial strength or other ratings of one or more Swiss Re Group companies, and developments adversely affecting the Group’s ability to achieve improved ratings;
- uncertainties in estimating reserves;
- policy renewal and lapse rates;
- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes and certain large man-made losses, 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;
- extraordinary events affecting the Group’s clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- 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, lower-than-expected benefits, or other issues experienced in connection with any such transactions;
- changing levels of competition, including from new entrants into the market; and
- operational factors, including the efficacy of risk management and other internal procedures in managing the foregoing risks and the ability to manage cyber security risks.

These factors are not exhaustive. The Group 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.

## Note on risk factors

### General impact of adverse market conditions

The operations of Swiss Re Ltd (“Swiss Re”) and its subsidiaries (collectively, the “Group”) as well as its investment returns are subject to market volatility and macro-economic factors, which are outside of the Group’s control and are often inter-related. Financial, credit and foreign exchange markets are experiencing continued periods of volatility reflecting a range of political, economic and other uncertainties, some of the more significant of which are inter-related.

These include the planned withdrawal of the United Kingdom from the European Union and significant uncertainty regarding the basis of that withdrawal and the future relationship between the United Kingdom and the European Union; the possible emergence of trade barriers and other protection policies across a range of economies, including a sustained trade war between the United States and China; geopolitical tensions more broadly; a prolonged slowdown in one or more of the principal global economies, particularly in China, and possible recession; continued challenges faced by the Eurozone; the tightening of monetary policy; sustained challenges to multilateral institutions and frameworks; the domestic political situation in the United States, various member states of the European Union and potentially other countries; and heightened scrutiny of technology companies.

Further adverse developments or the continuation of adverse trends that, in turn, have a negative impact on financial markets and economic conditions could limit the Group’s ability to access the capital markets and bank funding markets, could adversely affect the ability of counterparties to meet their obligations to the Group and could adversely affect the confidence of the ultimate buyers of insurance and reinsurance.

Any of the foregoing factors, developments and trends could have an adverse effect on the Group’s investment results, which in the current low interest rate environment and soft insurance cycle could have a material adverse effect on the Group’s overall results, make it difficult to determine the value of certain assets in the Group’s portfolio, make it more difficult to acquire suitable investments to meet its risk and return criteria and otherwise have a material adverse effect on its business and operations.

### Regulatory changes

Swiss Re and its subsidiaries operate in a highly regulated environment. The regulatory regimes to which members of the Group are subject have changed significantly in recent years and are expected to continue to evolve. During this period, there has been a noticeable trend to extend the scope of reforms and oversight, which initially targeted banks, beyond such institutions to cover insurance and reinsurance operations.

While some regulation is national in scope, the global nature of the Group’s business means that its operations are subject in effect to a patchwork of global, national and regional standards. Swiss Re and its subsidiaries are subject to group supervision and Swiss Re’s subsidiaries are also subject to applicable regulation in each of the jurisdictions in which they conduct business, particularly Switzerland, the United States, the United Kingdom, Luxembourg and Germany. The Group is subject to the Swiss Solvency Test and, through its legal entities organised in the EEA, Solvency II.

While certain regulatory processes are designed in part to foster convergence and achieve recognition of group supervisory schemes, the Group continues to face risks of extra-territorial application of regulations, particularly as to group supervision and group solvency requirements. In addition, regulators in jurisdictions beyond those where the Group has core operations increasingly are playing a far greater oversight role, requiring more localised resources and, despite a predominantly local focus, also raise issues of a cross-border nature. Furthermore, evolving regulatory schemes and

requirements may be inconsistent or may conflict with each other, thereby subjecting the Group, particularly in light of the increasing focus on legal entities in isolation, to higher compliance and legal costs, as well as the possibility of higher operational, capital and liquidity costs. The effect of these trends could be exacerbated to the extent that the current political environment results in a return to more bilateral, and less harmonised, cross-border regulatory efforts.

While in recent years there has been an evolving focus on classifying certain insurance companies as systemically important, it is unclear whether and, if so, in what form reforms will be enacted. The Group could be designated as a global systemically important financial institution ("SIFI") under the framework for SIFIs developed by the Financial Stability Board, or as a systemically important insurer by the Financial Stability Oversight Council ("FSOC") in the United States. The International Association of Insurance Supervisors, an international body that represents insurance regulators and supervisors, has published and since refined its methodology for identifying global systemically important insurers ("G-SIIs"). Were the Group to be designated as a G-SII, it could be subject to one or both of the resulting regimes, including capital standards (the basic capital requirement for G-SIIs), which would have various implications for the Group, including additional compliance costs, reporting obligations and capital costs (in the form of capital charges or high loss absorption capacity), as well as heightened regulatory scrutiny in various jurisdictions. In addition, the Group ultimately will be subject to oversight of its Swiss regulator in respect of recovery and resolution planning.

The Group cannot predict which legislative and/or regulatory initiatives will be enacted or promulgated, what the scope and content of these initiatives ultimately will be, when they will be effective and what the implications will be for the industry, in general, and for the Group, in particular. The Group may be subject to changes in views of its regulators in respect of the models that the Group uses for capital and solvency purposes, and could be adversely affected if, for example, it is required to use standard models rather than internal models. Generally, legal and regulatory changes could have a material impact on the Group's business. Uncertainty regarding the future relationship between the UK and the EU could also impact the legislative and/or regulatory regimes to which the Group is subject, both in the United Kingdom and in the European Union.

In addition, regulatory changes could occur in areas of broader application, such as competition policy and tax laws. Changes in tax laws, for example, could increase the taxes the Group pays, the attractiveness of products offered by the Group, the Group's investment activities and the value of deferred tax assets. Any number of these changes could apply to the Group and its operations. Changes to the US tax regime enacted in early 2018 prompted us to modify our operating model for our US business. These changes, or inconsistencies between the various regimes that apply to the Group, could increase the costs of doing business (including due to increased capital requirements), reduce access to liquidity, limit the scope of current or future business or affect the competitive balance, or could make reinsurance less attractive to primary insurers.

### Market risk

Volatility and disruption in the global financial markets could expose the Group to significant financial and capital markets risk, including changes in interest rates, credit spreads, equity prices and foreign currency exchange rates, which may adversely impact the Group's financial condition, results of operations, liquidity and capital position. The Group's exposure to interest rate risk is primarily related to the market price and cash flow variability associated with changes in interest rates. In general, a low interest rate environment, such as the one experienced in recent years, poses significant challenges to the insurance and reinsurance industries, with earnings capacity under stress unless lower investment returns from fixed income assets can be offset by lower combined ratios or higher returns from other asset classes. Exposure to credit spreads primarily relates to market price and cash flow

variability associated with changes in credit spreads. When credit spreads widen, the net unrealised loss position of the Group's investment portfolio can increase, as could other-than-temporary impairments.

The Group is exposed to changes in the level and volatility of equity prices, as they affect the value of equity securities themselves as well as the value of securities or instruments that derive their value from a particular equity security, a basket of equity securities or a stock index. The Group is also subject to equity price risk to the extent that the values of life-related benefits under certain products and life contracts, most notably variable annuity business, are tied to financial market values; to the extent market values fall, the financial exposure on guarantees related to these contracts would increase to the extent this exposure is not hedged. While the Group has an extensive hedging programme covering its existing variable annuity business that it believes is sufficient, certain risks cannot be hedged, including actuarial, basis and correlation risks. Exposure to foreign exchange risk arises from exposures to changes in spot prices and forward prices as well as to volatile movements in exchange rates.

These risks can have a significant effect on investment returns and market values of securities positions, which in turn may affect both the Group's results of operations and financial condition. The Group continues to focus on asset-liability management for its investment portfolio, but pursuing even this strategy has its risks – including possible mismatch – that in turn can lead to reinvestment risk. The Group seeks to manage the risks inherent in its investment portfolio by repositioning the portfolio from time to time, as needed, and to reduce risk and fluctuations through the use of hedges and other risk management tools.

#### **Credit risk**

If the credit markets were again to deteriorate and further asset classes were to be impacted, the Group could experience losses. Changes in the market value of the underlying securities and other factors impacting their price could give rise to market value losses. If the credit markets were to deteriorate again, the Group could also face write-downs in other areas of its portfolio, including other structured instruments, and the Group and its counterparties could face difficulties in valuing credit-related instruments. Differences in opinion with respect to valuations of credit-related instruments could result in legal disputes among the Group and its counterparties as to their respective obligations, the outcomes of which are difficult to predict and could be material.

The Group is also subject to credit and other risks in its credit business, including reliance on banks that underwrite and monitor facilities in which the Group participates and potential default by borrowers under those facilities.

#### **Liquidity risks**

The Group's business requires, and its clients expect, that it has sufficient capital and sufficient liquidity to meet its re/insurance obligations, and that this would continue to be the case following the occurrence of any foreseeable event or series of events, including extreme catastrophes, that would trigger insurance or reinsurance coverage obligations. The Group's uses of funds include obligations arising in its insurance and reinsurance businesses (including claims and other payments as well as insurance provision repayments due to portfolio transfers, securitisations and commutations), which may include large and unpredictable claims (including catastrophe claims), funding of capital requirements and operating costs, payment of principal and interest on outstanding indebtedness and funding of acquisitions. The Group also has unfunded capital commitments in its private equity and hedge fund investments, which could result in funding obligations at a time when it is subject to liquidity constraints. In addition, the Group has potential collateral requirements in connection with a number of reinsurance arrangements, the amounts of which may be material and the meeting of which could require the Group to liquidate cash equivalents or other securities.

The Group manages liquidity and funding risks by focusing on the liquidity stress that is likely to result from extreme capital markets scenarios or from extreme loss events or combinations of the two. Generally, the ability to meet liquidity needs could be adversely impacted by factors that the Group cannot control, such as market dislocations or interruptions, adverse economic conditions, severe disruption in the financial and worldwide credit markets and the related increased constraints on the availability of credit; changes in interest rates, foreign exchange rates and credit spreads; or by perceptions among market participants of the extent of the Group's liquidity needs.

Unexpected liquidity needs (including to meet collateral calls) could require the Group to incur indebtedness or liquidate investments or other assets. The Group may not be able to secure new sources of liquidity or funding, should projected or actual liquidity fall below levels it requires. The ability to meet liquidity needs through asset sales may be constrained by market conditions and the related stress on valuations, and through third-party funding may be limited by constraints on the general availability of credit and willingness of lenders to lend. In addition, the Group's ability to meet liquidity needs may also be constrained by regulatory requirements that require regulated entities to maintain or increase regulatory capital, or that restrict intra-group transactions, the timing of dividend payments from subsidiaries or the fact that certain assets may be encumbered or otherwise non-tradable. Failure to meet covenants in lending arrangements could give rise to collateral-posting or defaults, and further constrain access to liquidity. Finally, any adverse ratings action could trigger a need for further liquidity (for example, by triggering termination provisions or collateral delivery requirements in contracts to which the Group is a party) at a time when the Group's ability to obtain liquidity from external sources is limited by such ratings action.

### Counterparty risks

The Group is exposed to the risk of defaults, or concerns about defaults, by its counterparties. Securities trading counterparties, counterparties under swaps and other derivative contracts, and financial intermediaries may default on their obligations due to bankruptcy, insolvency, lack of liquidity, adverse economic conditions, operational failure, fraud or other reasons, which could have a material adverse effect on the Group.

The Group could also be adversely affected by the insolvency of, or other credit constraints affecting, counterparties in its insurance and reinsurance operations. Moreover, the Group could be adversely affected by liquidity issues at ceding companies or at third parties to whom the Group has retroceded risk, and such risk could be exacerbated to the extent any such exposures are concentrated.

### Risks relating to credit rating downgrades

Ratings are an important factor in establishing the competitive position of reinsurance companies. Third-party rating agencies assess and rate the financial strength of reinsurers and insurers. These ratings are intended to measure a company's ability to repay its obligations and are based upon criteria established by the rating agencies. Ratings may be revised downward or revoked at the sole discretion of the rating agencies.

The Group's ratings reflect the current opinion of the relevant rating agencies. One or more of its ratings could be downgraded or withdrawn in the future, and market conditions could increase the risk of downgrade. Rating agencies may increase the frequency and scope of ratings reviews, revise their criteria or take other actions that may negatively impact the Group's ratings. In addition, changes to the process or methodology of issuing ratings, or the occurrence of events or developments affecting the Group, could make it more difficult for the Group to achieve improved ratings which it would otherwise have expected.



As claims paying and financial strength ratings are key factors in establishing the competitive position of reinsurers, a decline in ratings alone could make reinsurance provided by the Group less attractive to clients relative to reinsurance from competitors with similar or stronger ratings. A decline in ratings could also cause the loss of clients who are required by policy or regulation to purchase reinsurance only from reinsurers with certain ratings. Certain larger reinsurance contracts contain terms that would allow the ceding companies to cancel the contract if the Group's ratings or those of its subsidiaries are downgraded beyond a certain threshold. Moreover, a decline in ratings could impact the availability and terms of unsecured financing and obligate the Group to provide collateral or other guarantees in the course of its business or trigger early termination of funding arrangements, potentially resulting in a need for additional liquidity. As a ratings decline could also have a material adverse impact on the Group's costs of borrowing or ability to access the capital markets, the adverse implications of a downgrade could be more severe. These same factors could also impact the Group's insurance business.

### Legal and regulatory risks

In the ordinary course of business, the Group is involved in lawsuits, arbitrations and other formal and informal dispute resolution procedures, the outcomes of which determine rights and obligations under insurance, reinsurance and other contractual agreements. From time to time, the Group may institute, or be named as a defendant in, legal proceedings, and the Group may be a claimant or respondent in arbitration proceedings. These proceedings could involve coverage or other disputes with ceding companies, disputes with parties to which the Group transfers risk under reinsurance arrangements, disputes with other counterparties or other matters. The Group cannot predict the outcome of any of the foregoing, which could be material for the Group.

The Group is also involved, from time to time, in investigations and regulatory proceedings, which could result in adverse judgments, settlements, fines and other outcomes. The number of these investigations and proceedings involving the financial services industry has increased in recent years, and the potential scope of these investigations and proceedings has also increased, not only in respect of matters covered by the Group's direct regulators, but also in respect of compliance with broader business conduct rules, including those in respect of market abuse, bribery, money laundering, trade sanctions and data protection and privacy. The Group also is subject to audits and challenges from time to time by tax authorities, which could result in increases in tax costs, changes to internal structures and interest and penalties. Tax authorities may also actively pursue additional taxes based on retroactive changes to tax laws. The Group could be subject to risks arising from alleged, or actual, violations of any of the foregoing, and could also be subject to risks arising from potential employee misconduct, including non-compliance with internal policies and procedures and malfeasance, such as undertaking or facilitating cyber attacks on internal systems. Substantial legal liability could materially adversely affect the Group's business, financial condition or results of operations or could cause significant reputational harm, which could seriously affect its business.

### Insurance, operational and other risks

As part of the Group's ordinary course operations, the Group is subject to a variety of risks, including risks that reserves may not adequately cover future claims and benefits; risks that catastrophic events (including hurricanes, windstorms, floods, earthquakes, acts of terrorism, man-made disasters such as industrial accidents, explosions, and fires, and pandemics) may expose the Group to unexpected large losses (and related uncertainties in estimating future claims in respect of such events); changes in the insurance industry that affect ceding companies, particularly those that further increase their sensitivity to counterparty risk; competitive conditions (including as a result of consolidation and the availability of significant levels of alternative capacity); cyclicity of the industry; risks related to emerging claims and coverage issues; macro developments giving rise to emerging risks, such as climate change and technological developments (including greater exposure to cyber risks, which could have a range of consequences from operational disruption, to loss of proprietary or customer data, to greater regulatory burdens and potential

liability); risks arising from the Group's dependence on policies, procedures and expertise of ceding companies; risks related to investments in emerging markets; and risks related to the failure of, or attacks directed at, the Group's operational systems and infrastructure, including its information technology networks and systems. Any of the foregoing, as well as the occurrence of future risks that the Group's risk management procedures fail to identify or anticipate, could have a material adverse effect on the Group, and could also give rise to reputational risk.

#### **Use of models; accounting matters**

The Group is subject to risks relating to the preparation of estimates and assumptions that management uses, including as part of its risk models as well as those that affect the reported amounts of assets, liabilities, revenues and expenses in the Group's financial statements, including assumed and ceded business. For example, the Group estimates premiums pending receipt of actual data from ceding companies, which actual data could deviate from the estimates. In addition, particularly with respect to large natural catastrophes, it may be difficult to estimate losses, and preliminary estimates may be subject to a high degree of uncertainty and change as new information becomes available. Deterioration in market conditions could have an adverse impact on assumptions used for financial reporting purposes, which could affect possible impairment of present value of future profits, fair value of assets and liabilities, deferred acquisition costs or goodwill. Moreover, regulators could require the use of standard models instead of permitting the use of internal models. To the extent that management's estimates or assumptions prove to be incorrect, it could have a material impact on underwriting results (in the case of risk models) or on reported financial condition or results of operations, and such impact could be material.

The Group's results may be impacted by changes in accounting standards, or changes in the interpretation of accounting standards. Changes in accounting standards could impact future reported results or require restatement of past reported results. The Group's results may also be impacted if regulatory authorities take issue with any conclusions the Group may reach in respect of accounting matters.

The Group uses non-GAAP financial measures in its external financial reporting, including in this report. These measures are not prepared in accordance with US GAAP or any other comprehensive set of accounting rules or principles, and should not be viewed as substitutes for measures prepared in accordance with US GAAP. Moreover, these may be different from, or otherwise inconsistent with, non-GAAP financial measures used by other companies. These measures have inherent limitations, are not required to be uniformly applied and are not audited.

The Group includes in its annual report a section in respect of its results, including financial statements, prepared in accordance with the Group's proprietary economic value management ("EVM") principles ("EVM report"). Financial information included in the EVM report contains non-GAAP financial measures. The EVM principles differ significantly from US GAAP and, accordingly, the Group's results prepared in accordance with US GAAP will differ from its EVM results, and those differences could be material. The Group's annual EVM results can be more volatile than the US GAAP results because, among other things, assets and liabilities are measured on a market-consistent basis, profit recognition on new contracts is recognised at inception rather than over the life time of the contract, and life and health actuarial assumptions are on a best estimate basis as opposed to generally being locked-in. The Group's EVM financial statements should not be viewed as a substitute for the Group's US GAAP financial statements.

### **Risks related to the Swiss Re corporate structure**

Swiss Re is a holding company, a legal entity separate and distinct from its subsidiaries, including Swiss Reinsurance Company Ltd. As a holding company with no operations of its own, Swiss Re is dependent upon dividends and other payments from Swiss Reinsurance Company Ltd and its other principal operating subsidiaries. The Group expects that, over time, its structure will continue to evolve. In the future it may, for example, elect again (having accepted an equity investment within its Life Capital Business Unit from a third party) to partner with minority investors in or within one or more of the Group's Business Units or sub-groups within its Business Units, which could alter historical approaches taken in respect of capital, liquidity, funding and/or dividends, as well as other governance matters, including strategy for such Business Unit or sub-group, or may elect otherwise to dispose of interests in Group businesses or portions thereof, or to grow through acquisitions. To the extent it undertakes acquisitions, it is subject to the risks inherent in acquiring and integrating new operations.

Swiss Re Ltd  
Mythenquai 50/60  
P.O. Box  
8022 Zurich  
Switzerland

Telephone +41 43 285 2121  
Fax +41 43 285 2999  
[www.swissre.com](http://www.swissre.com)