Zurich Reinsurance Company Ltd

ZURICH®

Financial Condition Report 2019

Zurich Reinsurance Company Ltd

Contents

The information published in this report is consistent with the information in the Annual Report 2019 of Zurich Reinsurance Company Ltd and the regulatory reporting of Zurich Reinsurance Company Ltd, including the regulatory reporting to the Swiss Financial Market Supervisory Authority (FINMA) on the Swiss Solvency Test, in accordance with art. 25 ISA and art. 53 ISO. While the financial statements and the information therein were subject to audit by the statutory auditor of Zurich Reinsurance Company Ltd, PricewaterhouseCoopers AG (see Annual Report 2019), there was no external audit or review of this report. Please further note that this report was not reviewed by FINMA.

Overview

Business profile

Zurich Reinsurance Company Ltd (ZRe) is a reinsurance company domiciled in Zurich, Switzerland. The company is a standalone legal entity that has both a reinsurance and a direct non-life insurance license issued by FINMA. The company belongs to the Zurich Insurance Group (Group). ZRe's focus is on providing reinsurance solutions to affiliated companies of the Group, primarily to branches of Zurich Insurance Company Ltd (ZIC). ZRe's direct book is in run-off.

System of governance

Good corporate governance enables ZRe to create sustainable value for its shareholder, customers, employees and other stakeholders.

ZRe's enterprise risk management (ERM) framework supports achievement of the Group's strategy and helps protect capital, liquidity, earnings and reputation.

Risk profile

Taking risk is inherent to the insurance business, but such risk-taking needs to be made in an informed and disciplined way. This is the primary objective of ZRe's risk management. The main risks identified are premium and reserve risk, credit risk and market risk.

The Total Risk Profiling™ process is used to evaluate both external and internal risks to ZRe's strategy and financial plan. Among the risks identified in 2019 are dependency on counterparty, pricing and reserving adequacy as well as regulatory compliance.

The significant risks for ZRe, as measured by capital metrics, are premium and reserve risks.

Financial condition

ZRe reported a net income after taxes of CHF 44 million for 2019, compared to CHF 34 million for 2018. The results in 2019 were driven by strong performance of some of the assumed reinsurance business.

Net income after taxes 2019

CHF 44m

Shareholder's equity

CHF 706m

Swiss Solvency Test ratio as of December 31, 2019

371%[1]

[1] Number was updated on June 10, 2020.

Acronyms

ARC	Audit and Risk Committee of the ZRe Board
AER	administration expense ratio
AFR	Available Financial Resources
AG	Aktiengesellschaft
AGM	annual general meeting
ALV	Arbeitslosenversicherung (Swiss unemployment insurance)
BEL	best estimate liabilities
Board	Board of Directors
CAD	Canadian Doller
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHF	Swiss franc
CO	Swiss Code of Obligations
CRO	Chief Risk Officer
DF	discount factor
EMEA	Europe, Middle East, Africa
ERM	enterprise risk management
FCR	financial condition report
FINMA	Financial Market Supervisory Authority
FOMC	U.S. Federal Open Markets Committee
GA	Group Audit
Group	Zurich Insurance Group Ltd and its subsidiaries
GWP	gross written premiums and policy fees
HKD	Hong Kong Dollar
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Auditors
ISA	Swiss Insurance Supervision Act
ISO	Insurance Supervision Ordinance
m	million
MCBS	market-consistent balance sheet
nat cat	natural catastrophe
LAE	loss adjustment expenses
ORSA	own risk and solvency assessment
PwC	PricewaterhouseCoopers AG
Q	quarter
RBC	Risk Based Capital
SFCR	Solvency and Financial Condition Report
SST	Swiss Solvency Test
TRP	Total Risk Profiling
UPR	unearned premium reserves
U.S.	United State of America
USD	U.S. dollar
ZIC	Zurich Insurance Company Ltd
ZIG	Zurich Insurance Group Ltd (holding company)
ZRe	Zurich Reinsurance Company Ltd
Zurich	Zurich Insurance Group Ltd and its subsidiaries

Introduction

0. How to read the report

Zurich Reinsurance Company Ltd ("ZRe" or "the company")'s financial condition report is prepared in compliance with the Swiss Insurance Supervision Act (ISA) article 26, the Insurance Supervision Ordinance (ISO) article 111a and FINMA's Circular 2016/2 'Disclosure – insurers'. The report focuses on the 2019 financial year and should be read in conjunction with ZRe's annual report 2019 (available on www.zurich.com/en/investor-relations/ results-and-reports/other-statutory-filings). Wherever applicable, this report refers to the Group's financial condition report or the Group's Annual Report for more information.

The report presents information following the structure provided in FINMA's circular. It covers ZRe's business activities, performance, corporate governance and risk management, risk profile, valuation, capital management and solvency. Quantitative information refers to different frameworks applicable or mandatory to the company:

- 'Business activities'-related and 'Performance' results are presented based on the Swiss statutory reporting standards applicable to ZRe (Swiss Code of Obligations (CO) and relevant insurance supervisory law).
- The 'Risk profile' section presents based on the Swiss statutory reporting standards for insurance risk, and a net economic asset value-based analysis of the market and credit risk.
- 'Valuation' presents the market-consistent balance sheet (MCBS) of ZRe following the Swiss Solvency Test (SST) principles. The SST MCBS is compared with the balance sheet based on the Swiss statutory reporting standards of ZRe as of December 31, 2019.
- The 'Solvency' section shows the regulatory capital adequacy of the company based on SST.

Risk and capital are managed at ZRe according to the Group's risk and capital management framework. The principles of the Group's enterprise risk management described in the 'Corporate governance and risk management section' and in the 'Risk profile' section are applicable to ZRe. There is no material difference between how risk and capital are managed at the Group and ZRe.

FINMA mandates the disclosure of quantitative templates for insurance entities that are included in Appendix 1.

All amounts, unless otherwise stated, are shown in CHF, rounded to the nearest million, with the consequence that the rounded amounts may not add up to the rounded total in all cases. All variances are calculated using the actual figures rather than the rounded amounts.

Introduction *continued*

1. Executive summary

Business activities

ZRe is a reinsurance company domiciled in Zurich, Switzerland. It was licensed in Switzerland on December 15, 2016. ZRe's focus is on providing reinsurance solutions to affiliated companies of the Group, primarily to branches of Zurich Insurance Company Ltd (ZIC). In addition, ZRe is running off a legacy book of direct insurance.

Company results

ZRe reported a net income after taxes of CHF 44 million for 2019, compared to CHF 34 million for 2018. The results in 2019 as well as in 2018 were driven by strong performance of some of the assumed reinsurance.

Corporate governance and risk management

ZRe is a member of the Zurich Insurance Group ('Zurich' or 'the Group'). The Group is committed to effective corporate governance for the benefit of its shareholder, customers, employees and other stakeholders based on the principles of fairness, transparency and accountability. Structures, rules and processes are designed to provide proper organization and conduct of business within Zurich and to define the powers and responsibilities of its corporate bodies and employees. These principles are also applied to ZRe.

Taking risk is inherent to the insurance business, but such risk-taking needs to be made in an informed and disciplined way, and within a pre-determined risk appetite and tolerance. This is the primary objective of ZRe's risk management.

Risk profile

ZRe uses the Total Risk Profiling™ process to monitor both external and internal risks to its strategy and financial plan. Among the risks identified in 2019 were dependency on counterparties, adequacy of assumed reinsurance pricing and established reserves and regulatory compliance.

In 2019, ZRe produced an own risk and solvency assessment (ORSA), as required by the Swiss regulator FINMA.

Valuation

ZRe's market-consistent assets and liabilities are derived and valued in accordance with FINMA guidelines and are then matched to calculate the Available Financial Resources (AFR) in ZRe's market-consistent balance sheet (MCBS).

Solvency

ZRe assesses its solvency under the Swiss Solvency Test (SST), which is a principle-based, risk-sensitive supervision framework. ZRe's SST ratio as of December 31, 2019, was 371 percent[1].

2. Approval of the Financial Condition Report

This report was reviewed and signed off by the Board of Directors (Board) of Zurich Reinsurance Company Ltd on April 21, 2020. The Financial Condition Report was updated on June 10, 2020 to reflect revised numbers, of which the Board has taken note off.

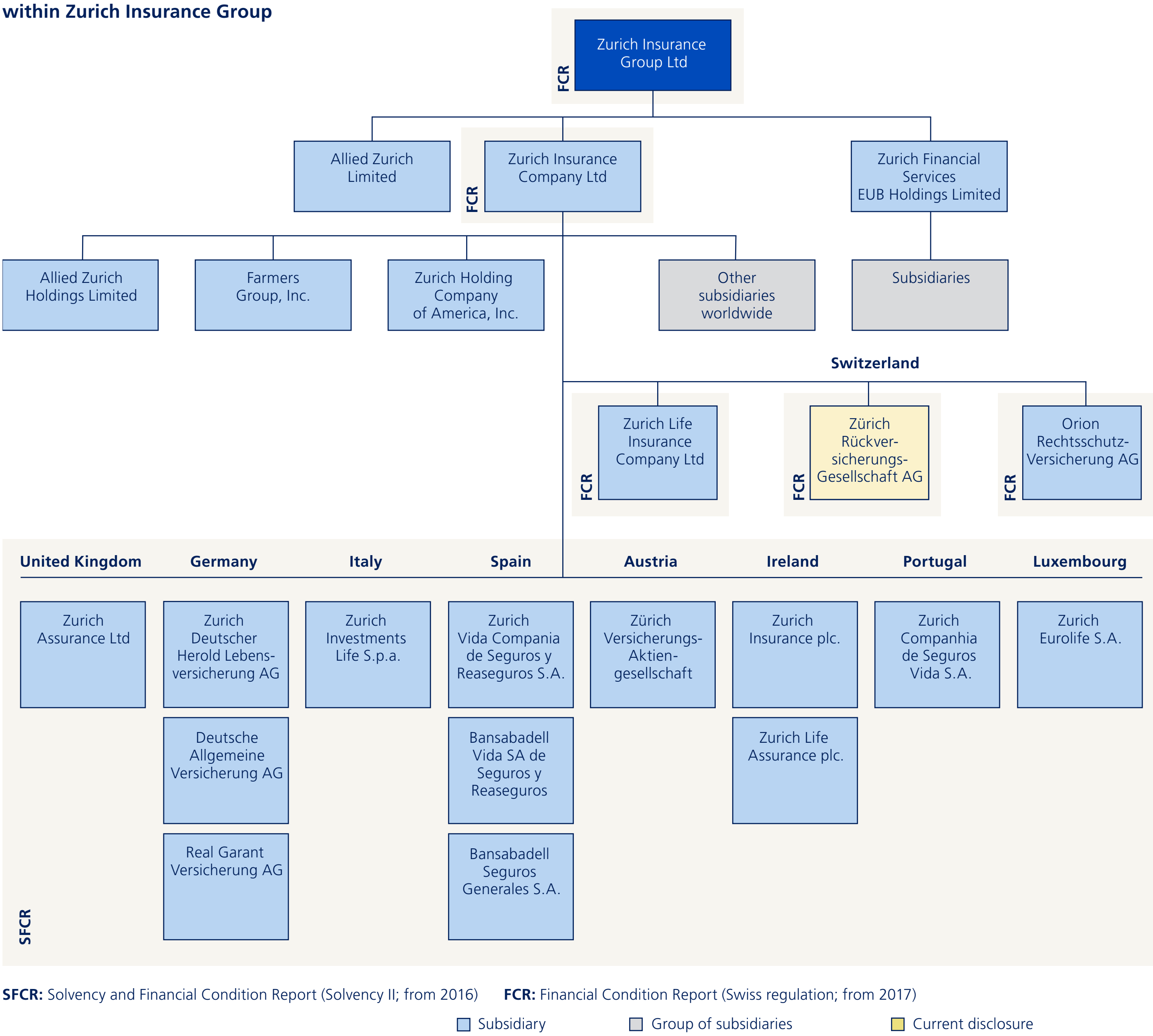
[1] Number was updated on June 10, 2020.

A. Business activities

A.1 Legal structure and major subsidiaries and branches

ZRe is part of the Zurich Insurance Group (Group), a leading multi-line insurer that serves its customers in global and local markets.

Public reporting on solvency and financial condition within Zurich Insurance Group



SFCR: Solvency and Financial Condition Report (Solvency II; from 2016) **FCR:** Financial Condition Report (Swiss regulation; from 2017)

Note: The purpose of the chart above is to provide a simplified overview of the Group's major subsidiaries (as of December 31, 2019), with special focus on the public reporting of their solvency and financial condition. Please note that this is a simplified representation showing entities that must publish such a report and therefore it may not comprehensively reflect the detailed legal ownership structure of the entities included in the overview. The ordering of the legal entities under each country is not indicative of ownership; these are independent legal entities.

A. Business activities *continued*

ZRe is a 100 percent subsidiary of ZIC, which in turn is fully owned by Zurich Insurance Group Ltd, the ultimate holding company of the Group.

A.2 Information about the company's strategy, objectives and key business segments

ZRe's strategy is to actively facilitate an optimal capital and risk management strategy through intra-Group reinsurance. It aims to provide capacity for customers while protecting the balance sheet, managing earnings volatility and achieving capital efficiency.

ZRe's main activity is assuming property and casualty risks from affiliated companies of the Group. ZRe retains a certain number of treaties.

ZRe's strategy is tailored to customers and product propositions as follows:

- Provides risk and solvency relief to Zurich branches and subsidiaries by way of treaty reinsurance.
- Supports the Group's international program business by assuming reinsurance from mostly local Zurich branch offices issuing local policies and retroceding such business to the Zurich 'producing company' or to a central Zurich balance sheet (the 'clearing house').
- Participates in Group's insurance programs
- Manages the run-off of a clearly identified book of businesses that is no longer written by ZRe.

Outsourcing of services

As of December 15, 2016, ZRe and ZIC entered into an employment services agreement ('Personalleihvertrag'), under which ZIC committed to provide defined services. The key roles and responsibilities that are subject to this employment services agreement are the members of the ZRe Management Board, the Appointed Actuary, the heads of Risk Management and Compliance. ZRe draws on ZIC and other affiliated Zurich companies to provide all other services not subject to the employment services agreement based on outsourcing agreements between ZRe, ZIC and ZIC affiliates.

A.3 Information about the company's external auditors as per article 28 ISA 8

PricewaterhouseCoopers AG (PwC), Birchstrasse 160, in 8050 Zurich, is ZRe's external auditor.

PwC assumes all auditing functions, which are required by law and by the ZRe's articles of association. The external auditors are appointed by the shareholder of ZRe annually. At ZRe's Annual General Meeting on April 12, 2019, PwC was re-elected by the shareholder of ZRe.

A.4 Significant unusual events

There have been no significant unusual events in 2019 and 2018, respectively.

B. Performance

ZRe reported a net income after taxes of CHF 44 million for 2019 and CHF 34 million for 2018. The results are in line with management's expectations.

The investment income result was driven by a combination of third-party invested assets and Group-internal loans and developed in line with expectations.

B.1 Underwriting performance

Business stemmed primarily from three sources:

- Reinsurance of the Group's entities in Asia Pacific, mainly business assumed from ZIC's Japan branch, which primarily originated from quota share reinsurance for the personal accident and motor business. In 2019, personal accident portfolio business assumed from ZIC's Japan branch was restructured. As of September 30, 2019, the Japan personal accident quota share treaty was commuted and renewed on different terms. The reinsurance was previously a multi-year treaty reinsurance at a 90 percent quota share and is now a single- year treaty reinsurance at a 60 percent quota share (the assumed premium volume remains stable as the protected personal accident business in the new treaty contains more sub-lines, e.g. kid's personal accident). The revenues from the commutation of the multi-year treaty were offset by a reduction of the capitalized renewal rights on ZRe's balance sheet.
- International program business, through which ZRe supports the Group's international program business propositions for its corporate and commercial clients. This insurance risk is retroceded to ZIC and not retained in ZRe.
- The run-off business continued to be managed carefully and had a minimal impact on the overall underwriting performance.

Key markets

Gross written premiums and policy fees totaled CHF 960 million. 90 percent of these premiums came from three primary lines of business written: personal accident (reinsurance for ZIC's Japan branch); property (primarily international program business and reinsuring Asia Pacific entities) and motor (reinsurance for ZIC's Japan branch). As ZRe's direct business is all in run-off, the gross written premiums and policy fees are related to assumed business solely.

B.2 Investment performance

Investment income by category

in CHF millions, for the years ended December 31	Current income		Realized capital gains		Write-ups		Totals	
	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
Investments in subsidiaries and associates	–	–	–	–	–	–	–	–
Debt securities	6	7	–	3	–	–	7	10
Other loans	4	3	–	–	–	–	4	3
Other investments	–	–	–	–	–	–	–	–
Investment income	**10**	**11**	**–**	**3**	**–**	**–**	**11**	**14**

Investment expenses by category

in CHF millions, for the years ended December 31	Realized capital losses		Write-downs		Totals	
	2018	**2019**	2018	**2019**	2018	**2019**
Investments in subsidiaries and associates	–	–	–	–	–	–
Debt securities	(12)	(1)	–	–	(12)	(1)
Other loans	–	–	–	–	–	–
Other investments	–	–	–	–	–	–
Other investment expenses	n.a.	n.a.	n.a.	n.a.	–	–
Investment expenses	**(12)**	**(1)**	**–**	**–**	**(12)**	**(1)**

B. Performance *continued*

ZRe's net investment income for the period January 1, 2019, to December 31, 2019, was CHF 12.9 million. The result is the aggregation of three portfolios of assets denominated in Canadian Dollar (CAD), U.S. Dollar (USD) and Hong Kong Dollar (HKD). For the U.S. portfolio, the result was underpinned by a decline in U.S. interest rates. At the short end of the curve, a series of three interest rate cuts by the U.S. Federal Open Markets Committee (FOMC) pushed short end rates lower by circa 75 basis points. At the longer end of the curve, the 30-year duration also declined but to a lesser extent as the FOMC focused providing liquidity to the shorter end. U.S. credit spreads tightened over the year despite the extended age of the credit cycle. Within the CAD portfolio, interest rate dynamics on the sovereign curve were similar to that of the U.S. in that yields tightened, however, the Bank of Canada made no changes to their 1.75 percent overnight lending rate in 2019. In some contrast to the U.S., the Canadian yield curve ended the year extremely flat at approximately 1.7 percent across the 2 to 30 year spectrum while the U.S. was steeper on the long end. For the HKD portfolio, despite the stress of civil unrest and U.S./China trade negotiations, the reference yield (HK swap curve) was relatively flat when comparing start of 2019 to year end. The curve did experience some widening on the very short duration and tightening on the long end, but ultimately the rate across the curve hovered around the 2.0 percent level.

In an aggregate sense, realized capital losses amounted to CHF 0.7 million. As in prior years, the management of the invested assets remained outsourced to external asset managers.

B.3 Intra-Group events and transactions

Transactions in 2019

There were no material intra-Group events or transactions not mentioned otherwise in this report in 2019 or 2018.

C. Corporate governance and risk management

C.1 Corporate governance

The Zurich Insurance Group consisting of Zurich Insurance Group Ltd and its subsidiaries including ZRe is committed to effective corporate governance for the benefit of all its shareholders, customers, employees and other stakeholders based on the principles of fairness, transparency and accountability. Structures, rules and processes are designed to provide proper organization and conduct of business by the powers and responsibilities of its corporate bodies and employees.

The Group uses the three-lines-of-defense model in its approach to governance and enterprise risk management. The three-lines-of-defense approach runs through the Group's governance structure, so that risks are clearly identified, assessed, owned, managed and monitored. For further information, please see Zurich Insurance Group's Annual Report 2019, page 124.

At ZRe, various governance and control functions help to ensure that risks are identified and appropriately managed. Internal controls are in place and operating effectively. Although each governance and control function maintain its distinct mandate and responsibilities, the functions are closely aligned and co-operate with each other through a regular exchange of information, planning and other activities. This approach supports management in its responsibilities and provides confidence that risks are appropriately addressed and that adequate mitigation actions are implemented.

The Board, under the leadership of the Chairman, is responsible for determining the overall strategy of ZRe and the supervision of management. It holds the ultimate decision-making authority for ZRe, except for decisions on matters reserved to the shareholder. On March 24, 2020, the Board resolved to create an Audit and Risk Committee (ARC), which will be taking on its duties as of 1st January 2020.

Management is responsible for preparing ZRe's financial statements, managing risk, developing and maintaining internal controls and ensuring appropriate governance processes. The ARC serves as a focal point for discussion and for the communication of matters related to financial reporting oversight, internal control compliance and risk management, and reports on these matters to the Board. For this purpose, the ARC receives regular information about important audit findings, including adverse opinions, mitigation actions and management concerns. Internal audit, risk management and compliance functions as well as ZRe's management ensure that issues affecting ZRe's operations are brought to ARC's attention, and that action is taken as necessary.

The members of the Board are elected by the annual general meeting (AGM) in accordance with CO article 698. The Board constitutes itself in its first meeting after the AGM.

Board of Directors (as of December 31, 2019)

Board of Directors	Expiration of current term of office
Juan José Beer, Chairman	2020
Christian Felderer	2020
Christian Carl	2020
Andrea Stürmer	2020

Andres Christen, Secretary of the Board of Directors

Management	Position held
Felix R. Kuhn	Chief Executive Officer
Elena Kuratli	Chief Financial Officer
Roger Oberholzer	Chief Underwriting Officer

Andrea Stürmer was elected to the Board of Directors on November 5, 2019.

C. Corporate governance and risk management *continued*

C.2 Risk management

C.2.1 Risk management framework

Taking and managing risk is inherent to the insurance business. ZRe manages and takes risks in an informed and disciplined manner, and within a pre-determined risk appetite and tolerance.

ZRe's major risk management objectives are to:

- Support achievement to ZRe's strategy and protect capital, liquidity, earnings and reputation by monitoring that risks are taken within ZRe's risk tolerance.
- Enhance value creation by embedding disciplined risk taking in the ZRe culture and contributing to an optimal risk-return profile whereby risk reward trade-offs are transparent, understood, and risks are appropriately rewarded.
- Efficiently and effectively diversify risk and mitigate unrewarded risks.
- Encourage openness and transparency to enable effective risk management.
- Support decision-making processes by providing consistent, reliable and timely risk information.
- Protect Zurich's reputation and brand by promoting a sound culture of risk awareness and disciplined and informed risk-taking.

The risk management framework is based on a governance process that sets forth clear responsibilities for taking, managing, monitoring and reporting risks.

The Zurich Risk Policy is the Group's main risk governance document and therefore it fully applies to ZRe. It sets standards for effective risk management throughout the Group. The policy describes Zurich's risk management framework, identifies Zurich's principal risk types and defines Zurich's appetite for risks at Group level. Risk-specific policy manuals provide guidelines and procedures to implement the principles in the Zurich Risk Policy. Ongoing assessments verify that requirements are met.

ZRe regularly reports on its risk profile. ZRe has procedures in place to refer risk issues to management and the ARC in a timely way. To foster transparency about risk, ZRe's ARC receives quarterly risk reports and risk updates.

ZRe identifies, assesses, manages, monitors and reports risks that have an impact on the achievement of its strategic objectives by applying its proprietary Total Risk Profiling™ (TRP) methodology. The methodology allows ZRe to assess risks in terms of severity and probability and supports the definition and implementation of mitigating actions. At ZRe, this is an annual process, followed by regular reviews and updates by management.

ZRe has a defined risk appetite. The risk appetite sets the limits for capital and non-financial indicators as well as an overall tolerance based on the TRP methodology. Monitoring and escalation procedures are outlined in the risk appetite statement. The risk appetite statement for ZRe is reviewed by management and signed off by the Board at least on an annual basis and adjusted if deemed necessary. As part of the ERM, the risk management function evaluates actual and potential breaches; the overall responsibility lies with management.

C.2.2 Risk management organization

The ZRe Chief Risk Officer (CRO) leads the risk management function, which provides risk governance guidance to assess and manage risks effectively and efficiently with clear accountabilities, roles and responsibilities that enable disciplined risk-taking. The CRO is responsible for the risk oversight and regular reporting on risk matters to the CEO, management and the ARC.

The ZRe risk management team is part of the Group's risk management organization. The risk function is independent of the business by being a vertically integrated function where all risk employees globally directly report into the Group CRO, unless otherwise required by local laws or regulations. Risk officers are embedded in the business, positioning them to support and advise, and independently challenge business decisions from a risk perspective. As business advisers on risk matters, the risk officers, equipped with technical risk skills as well as business skills, help foster a risk-aware culture in the business.

C.3 Internal control system

ZRe considers internal controls to be key for managing operational risk. The Board, assisted by its ARC, has overall responsibility for ZRe's risk management and internal control frameworks. The objectives of the ZRe's internal control system are to provide reasonable assurance that ZRe's financial statements and disclosures are materially correct, support reliable operations, and to ensure legal and regulatory compliance. The internal control system is designed to mitigate rather than eliminate the material risk that business objectives might not be met. Key controls are assessed for their design and operating effectiveness.

ZRe promotes risk awareness and encourages understanding of controls through communication and training. Risk management and internal control systems are designed at Group level and implemented Group-wide. Management, as the first-line-of-defense, is responsible for identifying, evaluating and addressing significant risks, and designing, implementing and maintaining internal controls. Key processes and controls in the organization are subject to reviews and challenge by management, Group Risk Management, Group Compliance, and Group Audit. Significant risks and associated mitigation actions are reported regularly to management, the ARC and the Board.

Internal control system certification audits are conducted regularly. Significant controls are assessed for their design and operating effectiveness. Issues identified are communicated to the ARC. ZRe risk management has assessed the effectiveness of the risk management framework and system of controls over the financial reporting for the calendar year 2019 and has presented its report to the Board.

The internal and external auditors also regularly report conclusions, observations and recommendations that arise as a result of their independent reviews and testing of internal controls over financial reporting and operations.

C.4 Compliance

ZRe is committed to complying with all applicable laws, regulations, internal requirements, professional and industry standards, and its stated corporate values.

Compliance is a second-line control function independent from the business (first line) and its operational controls. Compliance provides a framework to manage compliance risks and is responsible for:

1. Enabling the business to manage its compliance risks
2. Being a trusted advisor
3. Providing independent challenge, monitoring and assurance
4. Assisting management to promote a culture of compliance and ethical behaviors.

ZRe's compliance function is led by the appointed ZRe Compliance Officer. The ZRe Compliance Officer has a direct line to the Chairman of the Board of Directors of ZRe.

ZRe's compliance function performs its activities according to the annual compliance plan and reports on progress measured against the plan, compliance assurance outcomes and insights to management, the ARC of the Board and Regional /Group Compliance by way of the compliance reporting process.

The annual compliance plan is a risk-based plan and must be prepared based on an independent forward-looking compliance risk assessment, considering key risk drivers in both the internal and external environments.

ZRe's compliance function provides an independent compliance view on the key compliance risks to the business and performs independent risk-based monitoring and assurance activities, while challenging the business as necessary. In addition, the function provides compliance risk insight through relevant and targeted reporting.

The Group Chief Compliance Officer defines and issues compliance policies relevant to the Group and establishes appropriate processes and guidance. ZRe's compliance function implements such Group compliance policies and issues additional compliance policies for ZRe if required. ZRe compliance function supports a strong compliance culture within ZRe through training and awareness initiatives in line with Zurich's code of conduct, while keeping in mind changes in the regulatory environment.

C. Corporate governance and risk management *continued*

Zurich encourages its employees to speak up and report improper conduct that they believe is illegal, unethical, or violates Zurich's code of conduct, Group and local policies or other internal requirements. Employees are free to report their concerns to management, human resources, the legal department, its compliance function, or through the Zurich Ethics Line (or similar service provided locally), a phone and web-based service run by an external specialist provider. Zurich does not tolerate retaliation against any employee who reports such concerns in good faith.

C.5 Internal audit function

The Group's internal audit function (GA) is responsible for providing independent and objective assurance to ZRe's ARC, Board, CEO and management, on the adequacy and effectiveness of the risk management, internal control and governance processes.

This is accomplished by developing a risk-based plan, which is updated on an ongoing basis, as the risks faced by the business change. The plan is based on the full spectrum of business risks including concerns and issues raised by the ARC of the Board, management and other stakeholders. The ARC approves the annual plan and any changes to it.

GA executes the plan in accordance with defined operating standards, which incorporate and comply with the International Standards for the Professional Practice of Internal Auditing, issued by the Institute of Internal Auditors (IIA).

GA is authorized to review all areas and has full, free and unrestricted access to all activities, accounts, records, property and personnel necessary to fulfill its duties. In the course of its work, GA takes into consideration the work of other assurance functions. In particular, GA coordinates its activities with the external auditors, sharing risk assessments, work plans, audit reports and updates on audit actions.

GA is responsible for ensuring that issues which it identifies that could impact ZRe's operations are communicated to the responsible management, CEO and the ARC. GA issues periodic reports to management and the ARC, summarizing audit findings, the status of corrective actions and the status of plan execution. A member of GA attends each Board meeting.

Audit staff are expected to be independent and objective in all assignments and to do nothing that might prejudice or be perceived as prejudicing independence or objectivity. GA has no operational responsibilities over the areas it reviews and, to ensure independence, all GA staff report (via audit managers) to the Head of Group Audit.

The ARC assesses the independence of GA and reviews its activities, plans and organization, the quality of its work and its cooperation with the external auditors. As required by the IIA International Standards, an independent qualified assessor reviews the quality of GA at least every five years. This review was conducted most recently in 2016 and 2017, and the findings of the review were reported to the Zurich Insurance Group Audit Committee in February 2017. The results confirmed that GA's practices conform to all IIA Standards.

D. Risk profile

Risk and capital are managed at ZRe according to the Group's framework. The principles of the Zurich's enterprise risk management described in this chapter are equally applicable to ZRe.

The significant risks for ZRe, as measured by the SST target capital, are premium and reserve, market and credit risk. ZRe's risk profile is largely a function of the risks written by the assumed business from other Group entities. The reinsurance credit risk is mainly related to the retrocession to ZIC.

D.1 Insurance risk

Insurance risk is the inherent uncertainty regarding the occurrence, amount or timing of insurance liabilities. The profitability of insurance business is also susceptible to business risk in the form of unexpected changes in expenses, policyholders' behavior, and fluctuations in new business volumes. As part of the underwriting process of affiliated companies, part of the exposure is transferred to ZRe. ZRe actively seeks to write those risks it understands and that provide a reasonable opportunity to earn an acceptable profit. ZRe manages the customer risks it assumes, and minimizes unintended underwriting risks, through such means as:

- Establishing limits for underwriting authority
- Requiring specific approvals for transactions above established limits or new products
- Using a variety of reserving and modeling methods
- Ceding insurance risk through external proportional or non-proportional reinsurance treaties and facultative single-risk placement. The Group centrally manages reinsurance treaties.

ZRe writes property and casualty business only. Property and casualty insurance risk comprises premium and reserve risk and business risk. Premium and reserve risk covers uncertainties in the frequency of the occurrence of the insured events as well as in the severity of the resulting claims. Business risk for property and casualty insurance predominantly relates to unexpected increases in the expenses relating to claims handling, underwriting and administration. The following provides an overview of the ZRe's main lines of business:

- Motor includes automobile physical damage, loss of the insured vehicle and automobile third-party liability insurance.
- Property includes fire risks (e.g., fire, explosion and business interruption), natural perils (e.g., earthquake, windstorm and flood), engineering lines (e.g., boiler explosion, machinery breakdown and construction) and marine (e.g., cargo and hull).
- Liability includes general/public and product liability, excess and umbrella liability, professional liability including medical malpractice, and errors and omissions liability.
- Special lines include directors and officers, credit and surety, crime and fidelity, accident and health, workers' compensation and employer's liability.

ZRe's underwriting strategy aims to take advantage of the diversification of property and casualty insurance risks across lines of business and geographic regions.

Underwriting discipline is a fundamental part of managing insurance risk. ZRe sets limits on underwriting capacity, and delegates authority to individuals based on their specific expertise.

Actual losses on claims provisions may be higher or lower than anticipated. Property and casualty insurance reserves are therefore regularly estimated, reviewed and monitored. The total loss and loss adjustment expense reserves are based on work performed by qualified and experienced actuaries.

To arrive at their reserve estimates, the actuaries take into consideration, among other things, the latest available facts, historical trends and patterns of loss payments, exposure growth, court decisions, economic conditions, inflation, and public attitudes that may affect the ultimate cost of claim settlement.

To ensure a common understanding among the functions for financial, underwriting and pricing decisions, ZRe has established continuous cross-functional collaboration between underwriting, actuarial (pricing and reserving), finance and risk management, underpinned by quarterly meetings.

D. Risk profile *continued*

In most cases, these actuarial analyses are conducted at least twice a year for on-going business and annually for business in run-off according to agreed timetables. Analyses are performed by treaty types and terms, ceding countries, lines of business and year of occurrence. As with any projection, claim reserve estimates are inherently uncertain since the ultimate liability for claims will be affected by trends as yet unknown, including future changes in the likelihood of claimants bringing suit, the size of court awards, and claimants' attitudes toward settlement of their claims.

In addition to the specific risks insured, ZRe is exposed to losses that could arise from natural and man-made catastrophes. The main concentrations of risks arising from such potential catastrophes are regularly reported to management, ARC and the Board. For ZRe the most important peril region on a net basis is Japan, mainly related to personal accident and motor business.

The table shows ZRe's concentration of risk by region and line of business based on assumed written premiums for the year 2019, before retrocession. Retroceded premiums amounted to CHF 379.5 million for the same period.

Concentration of risk

in CHF millions, for the year ended December 31, 2019	Accident	Property	Motor	Liability	Other Lines	Total
Japan	222.8	24.5	255.5	2.8	5.2	510.8
Rest of Asia	43.7	90.9	9.1	85.0	22.3	250.9
USA/Canada	0.0	61.8	0.1	12.5	3.7	78.1
Others	0.0	107.9	1.2	6.9	3.8	119.8
Total	**266.5**	**285.1**	**265.9**	**107.2**	**34.9**	**959.5**

D.2 Market risk including investment credit risk

Market risk is the risk associated with ZRe's balance sheet positions where the value or cash flow depends on financial markets.

Risk factors include:

- Interest-rate risk
- Credit and swap spread changes
- Issuer defaults
- Currency exchange rates

ZRe has outsourced investment management to ZIC, which manages the market risk of assets relative to liabilities on an economic total balance sheet basis. This is done to achieve the maximum risk-adjusted excess return on assets relative to the liability benchmark, while considering ZRe's risk appetite and tolerance and local regulatory constraints.

ZRe's Asset/Liability Management Investment Committee reviews and monitors ZRe's strategic asset allocation and tactical boundaries, and monitors asset/liability exposure. The economic effect of potential extreme market moves is regularly examined and considered when setting the asset allocation.

Risk from interest rates and credit spreads

Interest-rate risk is the risk of an adverse economic impact resulting from changes in interest rates, including changes in the shape of yield curves when valuing interest rate sensitive investments and derivatives relative to fair value of insurance liabilities. ZRe is exposed to interest-rate risk including from debt securities, reserves for insurance contracts and loans and receivables.

ZRe has limits on deviations of asset interest rate sensitivities from liability interest rate sensitivities. The Group also manages credit-spread risk, which describes the sensitivity of the values of assets and liabilities due to changes in the level or the volatility of credit spreads over risk-free interest rate yield curves. Movements of credit spreads are driven by supply and demand considerations, expected probability of default, expected losses in cases of issuer defaults, the uncertainty of default probabilities and losses, as well as actual defaults of issuers.

D.2.1 Analysis of market risk sensitivities for interest rate, equity and credit spread risks

Basis of presentation

The basis of the presentation for the following tables is an economic valuation represented by the fair value for investments. IFRS insurance liabilities are discounted at risk-free market rates to reflect the present value of insurance liability cash flows and other liabilities; assets are also reported on an IFRS basis.

The tables show the estimated economic market risk sensitivities of the net impact for ZRe. Positive values represent an increase in the balance, and values in parentheses represent a decrease. Mismatches in changes in value of assets relative to liabilities represent an economic risk to ZRe. The net impact – the difference between the impact on investments and liabilities – represents the economic risk that ZRe faces related to changes in market risk factors. In determining sensitivities, investments and liabilities are fully re-valued in given scenarios. Each instrument is re-valued separately, taking the relevant product features into account. Non-linear effects, where they exist, are reflected in the model. Sensitivities are shown gross of tax.

Analysis of economic sensitivities for interest rate risk

The following table shows the estimated impact of a 100-basis point increase/decrease in yield curves after consideration of hedges in place, as of December 31, 2019 and 2018.

Economic interest rate sensitivities

in USD millions as of December 31	2018	**2019**
100 basis point increase in the interest rate yield curves		
Property and casualty business		
Net impact before tax	(3.3)	(3.1)
100 basis point decrease in the interest rate yield curves		
Property and casualty business		
Net impact before tax	2.3	3.0

Analysis of economic sensitivities for equity risk

Not applicable as there is no equity exposure.

Analysis of economic sensitivities for credit spread risk

The following table shows the estimated impacts from a 100 basis points increase in corporate credit spreads, as of December 31, 2019 and 2018. The sensitivities apply to all fixed income instruments, excluding government, supranational and similar debt securities.

Economic credit spread sensitivities

in USD millions as of December 31	2018	**2019**
100 basis point increase in credit spread		
Property and casualty business		
Net impact before tax	(5.4)	(6.7)

D. Risk profile *continued*

D.2.2 Risk from defaults of counterparties

Debt securities

ZRe is exposed to credit risk from third-party counterparties where the company holds securities issued by those entities.

Debt securities by rating of issuer

as of December 31	2018		**2019**	
	CHF millions	% of total	CHF millions	% of total
Rating				
AA- and higher	261	74%	253	70%
A- up to including A+	81	23%	95	27%
BBB+ and lower	10	3%	10	3%
Unrated	–	–	–	–
Total	**352**	**100%**	**358**	**100%**

The table shows the credit risk exposure of debt securities, by issuer credit rating. As of December 31, 2019, 100 percent of the ZRe's debt securities were investment grade with 32 percent rated 'AAA'.

The risk-weighted average issuer credit rating of ZRe's debt securities portfolio was 'AA' at December 31, 2019, and 'A' at December 31, 2018.

As of December 31, 2019, the largest concentration in the ZRe's debt securities portfolio was in governments, government agencies and supranationals (48 percent) and U.S. government treasuries (16 percent). As of December 31, 2018, the largest concentration in the ZRe's debt securities portfolio was in governments, government agencies and supranationals (55 percent) and U.S. government treasuries (18 percent).

Cash and cash equivalents

To reduce concentration, settlement and operational risks, ZRe limits the amount of cash that can be deposited with a single counterparty. ZRe applies the authorized list of acceptable cash counterparties maintained by the Group.

Cash and cash equivalents amounted to CHF 747.5 million as of December 31, 2019, and CHF 572.2 million as of December 31, 2018.

Mortgage loans

Not applicable.

D.2.3 Risk from currency exchange rates

Currency risk is the risk of loss resulting from changes in exchange rates. Management deems that the risk from currency exchange rates is low based on the following:

- ZRe aims to have matching assets to liabilities with respect to currencies.
- ZRe's retrocession arrangements are for the most part aligned with the currency of the business assumed.
- ZRe mitigates foreign exchange risk by hedging material foreign exchange risks using forward contracts with ZIC.

The foreign exchange risk management policy for ZRe is consistent with the policies in all other Group subsidiaries and follows a standardized process aimed at mitigating and managing the foreign currency exposures at Group level and the legal entity level.

The Group, as outlined in its risk policy manual, defines clear responsibilities, rules, limits and reporting requirements for managing foreign exchange risk. ZRe is a Swiss legal entity regulated in Switzerland and reports in CHF to FINMA. ZRe is part of the Zurich Insurance Group, which reports its consolidated results according to IFRS in USD.

ZRe measures its foreign exchange exposures in accordance to the following principles:

- All assets and liabilities are valued in the balance sheet at their IFRS accounting values – attributed to their transaction currency.
- ZRe only hedges foreign exchange risk with ZIC.
- All internal hedges are performed back to the currency of the underlying unit.

D.3 Other credit risk

Credit risk is the risk associated with a loss or potential loss from counterparties failing to fulfill their financial obligations. ZRe's exposure to other credit risk is derived from the following main categories of assets:

- Reinsurance assets
- Receivables

ZRe's objective in managing credit risk exposures is to maintain these exposures within parameters that reflect the Group's strategic objectives, risk appetite and tolerance. Credit risk sources are assessed and monitored.

ZRe's primary reinsurer is its parent company ZIC, which has a Standard & Poor's rating of AA-.

ZRe has minimal third-party reinsurance and the majority of such reinsurance is with well-capitalized global reinsurers.

ZRe has no history of having material impairment issues related to reinsurance assets and receivables. Management reviews all third-party balances for impairment on a quarterly basis, and a credit impairment allowance has been booked accordingly.

ZRe had no off-balance sheet positions as of December 31, 2019.

D.4 Operational risk

Operational risk is the risk of financial loss or gain, adverse reputational, legal or regulatory impact, resulting from inadequate or failed processes, people, systems or from external events including external fraud, catastrophes or failure in outsourcing arrangements.

The Group has a framework with a common approach to identify, assess, quantify, mitigate, monitor and report operational risks within the Group. Within this framework, ZRe:

- Documents and reviews operational events exceeding a threshold determined by the Zurich's Rsk Policy Manual. Remedial action is taken to avoid a recurrence of such operational loss events.
- Conducts risk assessments where operational risks are identified for key business areas. Risks identified and assessed above a certain threshold must be mitigated. Risk mitigation plans are documented and tracked on an ongoing basis. In the assessments, ZRe uses such sources of information as the Total Risk Profiling™ process, internal control assessments, audit findings as well as scenario modeling and loss event data.

The Group has specific processes and systems in place to focus on high-priority operational matters such as managing information security and operational resilience as well as combating fraud.

Preventing, detecting and responding to fraud are embedded in the Group's business. Both claims and non-claims fraud are included in the framework for assessing and managing operational risks.

ZRe management has identified six operational risk, including one high risk related to operational counterparty dependency. The management actively managed this high risk.

The internal and external auditors also regularly report conclusions, observations and recommendations that arise as a result of their independent reviews and testing of internal controls over financial reporting and operations.

D. Risk profile *continued*

D.5 Liquidity risk

Liquidity risk is the risk that ZRe may not have sufficient liquid financial resources to meet its obligations when they fall due or would have to incur excessive costs to do so. ZRe's policy is to maintain adequate liquidity and contingent liquidity to meet its liquidity needs under normal conditions and in times of stress. To achieve this, ZRe assesses, monitors and manages its liquidity needs on an ongoing basis.

ZRe has material cash pooling balances with ZIC that can be drawn upon immediately to meet liquidity needs. Additionally, ZRe's investment portfolios are primarily invested in highly liquid securities.

D.6 Other material risks

D.6.1 Strategic risk

Strategic risk corresponds to the risk that ZRe is unable to achieve strategic targets. Strategic risks can arise from:

- Inadequate risk-reward assessment of strategic plans
- Inadequate execution of strategic plans
- Unexpected changes to assumptions underlying strategic plans

ZRe defines the strategy as the long-term plan of action designed to allow it to achieve its goals and aspirations.

ZRe works to reduce unintended risks of strategic business decisions through its risk assessment processes and tools, including the Total Risk Profiling™ (TRP) process. As part of the regular TRP process in 2019, the management assessed the key strategic risk scenarios, looking at 2020 and beyond. The ZRe TRP identified and assessed risks from both external and internal factors. Key strategic risks are counterparty dependency, adequate pricing, sufficient reserving and regulatory compliance.

D.6.2 Risk to ZRe's reputation

Risks include acts or omissions by ZRe or any of its employees that could damage ZRe's reputation or lead to a loss of trust among its stakeholders. Every risk type has potential consequences for ZRe's reputation. Effectively managing each type supports preventing adverse reputation outcomes.

ZRe aims to preserve its reputation by adhering to applicable laws and regulations, and by following the core values and principles of the Group's code of conduct, which promotes integrity and good business practice. Potential risks to ZRe's reputation are included in its risk assessment processes and tools, including the TRP process.

E. Valuation

E.1 Overarching market-consistent valuation principle

As an overarching principle, for SST purposes, all assets and liabilities are valued in accordance with economic principles in a market-consistent manner and their valuation is presented in the MCBS. In general, unless stated otherwise, the MCBS applies the same fair value measurement and hierarchy as the Group IFRS consolidated annual financial statements. In such cases, fair value is determined on a best estimate valuation using assumptions and parameters as defined by FINMA or based on management's judgment.

In summary, the following valuation applies for assets:

i. Mark-to-market: for third-party assets
ii. Mark-to-model: in case mark-to-market cannot be applied
iii. IFRS carrying value

FINMA stipulates that the SST MCBS value of all insurance and non-insurance liabilities shall be determined under the assumption that ZRe will fulfill its obligation in full, thus, own credit risk is not considered.

E.2 Market-consistent balance sheet following SST principles

Asset valuation MCBS vs local Swiss stat

In CHF millions, as of December 31	2018 (SST)	**2019 (SST)**	Difference to 2018 (SST)	**2019 (local Swiss stat)**	Difference SST to local Swiss stat (2019)
Market-consistent value of investments					
Shareholdings	–	–	–	–	–
Fixed income securities	347.6	359.8	12.2	357.7	2.1
Loans	88.7	79.6	(9.1)	79.6	–
Mortgages	–	–	–	–	–
Equities	–	–	–	–	–
Other investments	–	–	–	–	–
Collective investment schemes	–	–	–	–	–
Alternative investments	–	–	–	–	–
Other investments	–	–	–	–	–
Total investments	**436.3**	**439.4**	**3.1**	**437.3**	**2.1**
Receivables from derivative financial instruments	1.3	0.8	(0.4)	0.8	–
Market-consistent value of other assets					
Cash and cash equivalents	572.2	747.5	175.3	747.5	–
Receivables from insurance business	111.3	183.7	72.4	182.9	0.7
Other receivables	17.7	12.2	(5.5)	12.2	–
Other assets	12.1	58.8	46.7	174.9	(116.1)
Total other assets	**713.3**	**1,002.1**	**288.9**	**1,117.5**	**(115.3)**
Total market-consistent value of assets	1,150.8	1,442.4	291.5	1,555.6	(113.2)

E. Valuation *continued*

Best estimate liabilities and other liabilities MCBS vs. local Swiss stat

In CHF millions, as of December 31	2018 (SST)	**2019 (SST)**	Difference to 2018 (SST)	**2019 (local Swiss stat)**	Difference SST to local Swiss stat (2019)
Best estimate liabilities (BEL)					
Best estimate of insurance liabilities	**1,076.2**	**1,097.3**	**21.1**	**1,273.1**	**(175.8)**
Direct insurance: life insurance business (excluding ALV)	–	–	–	–	–
Direct insurance: non-life insurance business	47.2	48.7	1.5	69.3	(20.6)
Direct insurance: health insurance business	–	–	–	–	–
Direct insurance: unit-linked life insurance business	–	–	–	–	–
Direct insurance: other business	–	–	–	–	–
Outward reinsurance: life insurance business (excluding ALV)	–	–	–	–	–
Outward reinsurance: non-life insurance business	1,029.0	1,048.6	19.6	1,203.8	(155.2)
Outward reinsurance: health insurance business	–	–	–	–	–
Outward reinsurance: unit-linked life insurance business	–	–	–	–	–
Outward reinsurance: other business	–	–	–	–	–
Reinsurers' share of best estimate of insurance liabilities	**(639.2)**	**(629.1)**	**10.1**	**(710.7)**	**81.6**
Direct insurance: life insurance business (excluding ALV)	–	–	–	–	–
Direct insurance: non-life insurance business	(15.6)	(16.2)	(0.6)	(19.8)	3.6
Direct insurance: health insurance business	–	–	–	–	–
Direct insurance: unit-linked life insurance business	–	–	–	–	–
Direct insurance: other business	–	–	–	–	–
Outward reinsurance: life insurance business (excluding ALV)	–	–	–	–	–
Outward reinsurance: non-life insurance business	(623.6)	(612.8)	10.7	(690.8)	78.0
Outward reinsurance: health insurance business	–	–	–	–	–
Outward reinsurance: unit-linked life insurance business	–	–	–	–	–
Outward reinsurance: other business	–	–	–	–	–
Market-consistent value of other liabilities	267.7	287.1	19.3	287.1	–
Non-technical provisions	3.6	3.6	(0.1)	3.6	–
Interest-bearing liabilities	205.8	199.0	(6.8)	199.0	–
Liabilities from derivative financial instruments	1.6	0.2	(1.4)	0.2	–
Deposits retained on ceded reinsurance	0.3	–	(0.2)	–	–
Liabilities from insurance business	30.7	75.5	44.8	75.5	–
Other liabilities	25.9	8.8	(17.1)	8.8	–
Total BEL plus market-consistent value of other liabilities	704.7	755.4	50.6	849.5	(94.2)
Market-consistent value of assets minus total BEL plus market-consistent value of other liabilities	**446.2**	**687.0**	**240.8**	**706.0**	**(19.0)**

E.2.1 Market-consistent value of assets

Market-consistent value of investments

Debt securities are carried at amortized cost using the effective interest rate method under Swiss local statutory accounting principles. The carrying value as of December 31, 2019, amounted to CHF 357.7 million. As of December 31, 2018, ZRe held debt securities in the amount of CHF 352.0 million.

Loans in ZRe amounted to CHF 79.6 million as of December 31, 2019, and CHF 88.7 million as of December 31, 2018, under Swiss local statutory accounting principles and consist only of loans with other Group companies. Loans are carried at nominal value less impairments as necessary.

Under MCBS, the value of investments reflects fair value determined in accordance with the overarching valuation principles outlined in section E.1.

Market-consistent value of other assets

Derivative financial instruments are measured at fair value under both Swiss local statutory accounting principles and MCBS.

Cash and cash equivalents are presented at Swiss local statutory carrying value because such balances are current and solely held for the purpose of meeting short-term (operational) cash commitments.

Receivables from insurance business and other receivables are valued at Swiss local statutory carrying value, provided this is a reasonable proxy for fair value (i.e., the balances are subject to only insignificant risk of changes in value and settlement is expected to occur generally within three months and no more than twelve months). In this case, the carrying value is reported net of credit impairment allowance. Otherwise, the value is based on fair value (including credit risk).

Under Swiss local statutory accounting principles, other assets include deferred acquisition costs (DAC) and intangible assets related to renewal rights, which are both valued at zero in the MCBS.

Accrued assets related primarily to interest income accruals, other accrued income and other prepaid expenses are presented at Swiss local statutory carrying value because the balances are expected to be subject to insignificant risk of changes in value and are settled within a relatively short period.

E.2.2 Market-consistent value of liabilities

Best-estimate of insurance liabilities

Best estimate of unearned premium reserves

Under Swiss local statutory accounting principles, the unearned premium reserve (UPR) represents the portion of the premiums written related to the unexpired coverage period. This reserve covers expected future losses, loss adjustment and policy administration expenses as well as underwriting profits for contracts in force. ZRe recognizes unearned premium reserve (UPR) upon start of the coverage period. To arrive at the MCBS value for UPR, the following adjustments are made:

- Expected future losses (including loss adjustment expenses) are discounted;
- Underwriting profits are not included, as these do not represent future cash flows; and
- Future administration expenses only encompass the estimated costs to administer and maintain the insurance policy over the remaining coverage period. Consequently, any deferred or non-deferred acquisition-related costs (such as commissions, sales and distribution management, underwriting, risk engineering, and marketing costs) are excluded. Further, claims settlements costs are not included in administration expenses as such costs are typically part of future losses. Similarly, amortization of DAC and intangible assets is not included because DAC and intangible assets are set to zero in MCBS.

E. Valuation *continued*

Best estimates of loss reserves
Reserves for losses under Swiss local statutory accounting principles represent estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Such reserves are not discounted, except reserves for claims with payment patterns that are fixed and reasonably determinable. Reserves are held at best estimate including recoverable for salvage and subrogation, supplemented by a regulatory equalization provision.
In order to derive a market-consistent value, best estimate loss reserves are discounted using a risk-free rate whereby the cash-flow pattern (i.e., timing of the estimated future cash flows) is adequately considered. In cases where the reserves are already presented on a discounted basis under Swiss local statutory accounting principles, the discounting is reversed and re-performed using the risk-free rate.

Best estimates of loss reserves
Reserves for losses (i.e., case reserve, actuarial IBNR, management IBNR, reserve strength IBNR as well as allocated/unallocated loss adjustment expenses) are held at best estimate under IFRS. Such best estimate includes recoverables for salvage and subrogation. However, most of these reserves are not discounted. The valuation for Swiss local statutory accounting principles is the same, and requested regulatory equalization provisions are held additionally.

The MCBS value for loss and loss expense reserves is discounted using swap rates by currency balances.

Other reserves (e.g. unearned premium reserves)
Under IFRS, ZRe recognizes unearned premium reserve (UPR) upon start of the coverage period. Typically, this includes one year of premiums invoiced (i.e., also for multi-year policies generally only the first year premium is recognized and not the entire contractual future premium volume due in future reporting periods). The valuation for Swiss local statutory accounting principles is the same.

The MCBS value for UPR reflects the discounted costs of insurance (using swap rates by currency balances). Costs of insurance includes expected future loss reserves (including loss adjustment expenses) and administration expenses that can arise from the unexpired risk.

Reinsurers' share of best-estimate of insurance liabilities
Ceded/retroceded reinsurance balances

For SST MCBS, the calculation of the best estimate for reinsurance assets and insurance liabilities is performed on a gross basis (i.e., no offsetting of assets with liabilities). The MCBS valuation is based on the actuarial discounted best estimate of future cash flows, considering the expected credit losses. The calculation of the expected credit loss allowance considers the rating of the reinsurance counterparty, the expected timing of future recoveries and the expected value of any collateral held.

Evolution since December 31, 2018
The undiscounted booked insurance reserves for Swiss local statutory accounting principles on a gross basis increased from CHF 1,267.4 million to CHF 1,273.1 million overall. This increase is driven by the retained Asian proportional business assumed from other Group entities.

Ceded undiscounted reserves decreased from CHF 742.2 million to CHF 710.7 million. This reduction in ceded technical reserves in 2019 (CHF 31.5 million) is driven by the fronted business assumed from and ceded to other Group entities.

This leads to an increase in the overall net technical provisions.

Market-consistent value of other liabilities
Under Swiss local statutory accounting principles, non-technical provisions include provisions for disputable claims and unrealized foreign exchange gains that were not included in the company's income statements.

Interest-bearing liabilities are all due in less than twelve months and carried at Swiss local statutory carrying value under MCBS.

Derivatives financial instruments are measured at fair value under both Swiss local statutory accounting principles and MCBS.

Liabilities from insurance business are valued at Swiss local statutory carrying value as the balances are expected to be subject to only insignificant risk of changes in value and settled within a relatively short time frame (generally, within three months and under no circumstances exceeding twelve months).

The market-consistent value of other liabilities is generally determined using Swiss local statutory carrying value in accordance with the overarching valuation principles outlined in section E.1.

E.2.3 Other information

In accordance with industry practice, the Group's internal valuation models use swap rates for liability discounting. Swap curves are also used in the SST MCBS and target capital as the risk-free rates for Zurich in line with the possibility of using 'own yield curves' in the SST according to paragraph 46 of SST circular 2017/03.

Methodology for ZRe's curves derivation

The tables below give an overview of the yield curve methodology used in Zurich's SST internal model for both available financial resources and the target capital. These yield curves are consistently used in the Z-ECM.

Zurich risk-free yield curve methodology for January 1, 2020 SST and Z-ECM

Currency	Entry point to extrapolation (years)	Market data	Method of interpolation	Method of extrapolation	Ultimate forward rate (annually compounded)	Smith Wilson alpha
JPY	30	Raw market mid swap rates from Bloomberg	Smith Wilson giving smooth forward and spot curves passing exactly through market data		0.43% (30 year market spot rate)	0.2
USD	50				1.98% (50 year market spot rate)	0.2
GBP	50				1.03% (50 year market spot rate)	0.2
EUR	50				0.53% (50 year market spot rate)	0.2
CHF	30				0.21% (30 year market spot rate)	0.2

F. Capital management

Objectives of capital management

ZRe's capital management and planning approach is embedded in the overall Group's capital management policy. The policy is defined to maximize long-term shareholder value by optimizing capital allocation while managing the balance sheet in accordance with regulatory and solvency requirements. This includes the management and monitoring of local statutory capital adequacy.

As a legal entity, ZRe is obliged to plan the development of its regulatory solvency position as part of its business plans, considering planned dividends and cash remittances to ZIC, including possible risks to its ability to pay these amounts. The capital planning horizon is set in line with the overall Group planning cycle.

ZRe must monitor that it remains within the solvency and capital requirement targets set in accordance to ZRe's risk appetite statement and ensure adherence to local laws and applicable regulatory requirements. In particular, ZRe must ensure compliance with regulatory capital reporting standards.

ZRe is subject to FINMA's SST and tied assets regulations. Both are considered when planning capital or cash repatriations to the Group. Internal target ratios and/or thresholds are considered when assessing and defining the potential to repatriate cash or capital to the Group.

Tied asset requirements are calculated and tracked according to FINMA guidelines and their development is analyzed on a monthly basis. ZRe's Board will be informed whenever any transaction will cause ZRe's tied assets ratio to fall below defined thresholds.

The valuation of ZRe's shareholder's equity follows the Swiss local statutory accounting principles described in Chapter E – Valuation.

The following table shows the composition of ZRe's shareholder's equity as of December 31, 2019, before appropriation of available earnings:

Shareholder's equity

in CHF millions, as of December 31	2018	**2019**	Change
Share capital	12	12	–
Capital contribution reserve	616	616	–
Organizational fund	14	11	(3)
Retained earnings:			
Beginning of period	*83*	*59*	*(24)*
Dividend paid	*(58)*	*(36)*	*22*
Net income after taxes	*34*	*44*	*10*
Retained earnings, end of period	*59*	*68*	*8*
Total shareholder's equity	**701**	**706**	**5**

Despite the charge of the organizational costs of CHF 3.2 million and CHF 2.9 million in 2019 and 2018, respectively, there have been no changes in ZRe's shareholder's equity other than the ordinary dividend payment and the net income after taxes in 2019 and 2018.

Appropriation of available earnings

in CHF, as of December 31	2018 (Approved)	**2019 (Proposed)**
Appropriation of available earnings as proposed by the Board of Directors		
Balance brought forward	25,496,112	23,351,274
Net income after taxes	33,855,162	44,191,865
Available earnings	**59,351,274**	**67,543,139**
Dividend	(36,000,000)	(38,000,000)
Balance carried forward	**23,351,274**	**29,543,139**

The Board proposed to its shareholder at the Annual General Meeting on March 24, 2020, to pay a dividend of CHF 38.0 million and to carry forward available earnings of CHF 29.5 million as shown in the table above.

Regulatory capital adequacy

ZRe manages its capital so that it meets local regulatory capital requirements at all times.

Regulatory requirements in Switzerland

Under the Swiss Solvency Test (SST), insurance companies and insurance groups can apply for the use of company-specific internal models to calculate risk-bearing and target capital, as well as the SST ratio. The SST ratio must be calculated as per January 1 and must be submitted to FINMA. Internal models must be approved by FINMA. For January 1, 2020, ZRe has been given permission by FINMA to use a transitional internal model.

Comparison between SST market-consistent net values and Swiss Statutory net assets

The market-consistent value of assets minus BEL and other liabilities of CHF 687.0 million is lower than Swiss Statutory total shareholder's equity of CHF 706.0 million. The most important drivers are: Net deferred acquisition costs (CHF 91.7 million) and intangible assets related to renewal rights (CHF 24.3 million) – both have zero value for MCBS. Furthermore, the discount of best estimates of liabilities (CHF 94.2 million) under MCBS and different asset valuation basis need to be considered.

G. Solvency

Swiss Solvency Test

The Swiss Solvency Test (SST) is a principle-based, risk sensitive supervision framework reflecting:

- An economic "market-consistent" valuation of the financial resources available to meet policyholder obligations – referred to as risk-bearing capital or RBC.
- An economic view of the impact of the potential risks inherent in the regulated business – described as target capital and defined as the expected shortfall at a 99 percent confidence level over a one-year time horizon.

The SST compares risk-bearing capital with target capital through calculation of a ratio ('SST ratio'). This test indicates whether the level of risk-bearing capital is sufficient to reduce the probability of policyholder impairment to a level consistent with regulatory requirements.

ZRe applies an Internal Model for the Swiss Solvency Test (SST).

For the calculation of the SST ratio as of January 1, 2020, FINMA approved the use of a transitional model that is aligned with the Group and includes a 25 percent add-on to the target capital (20 percent add-on as of January 1, 2019).

ZRe's SST ratio as filed with FINMA is 371 percent[1] as of January 1, 2020, and 279 percent[2] as of January 1, 2019, an increase of 92 percentage points. This includes a change in the target capital add-on to 25 percent as of January 1, 2020, from 20 percent as of January 1, 2019.

As of January 1, 2020, ZRe's risk bearing capital and target capital were USD 670.2 million and USD 195.2 million[3], respectively. As of January 1, 2019, ZRe's risk bearing capital and target capital were USD 416.9 million and USD 157.4 million, respectively (as filed with FINMA end of April 2019).

Solvency[4]

in USD millions, for the years ended December 31	**2018**	Adjustments previous year	2019	Change
Derivation of risk-bearing capital				
Assets	1,819.3		2,139.0	319.8
Liabilities	(1,365.8)		(1,429.6)	(63.8)
Deductions (proposed dividends)	(36.6)		(39.2)	(2.7)
Core capital	**416.9**		**670.2**	**253.3**
Supplementary capital (eligible subordinated debt)	–		–	–
Risk-bearing capital	**416.9**		**670.2**	**253.3**
Derivation of target capital				
Insurance risk	87.9		113.2	25.3
Market risk	74.2		59.5	(14.7)
Diversification effects	(28.1)		(26.8)	1.3
Credit risk	12.3		11.8	(0.5)
Risk margin and other effects on target capital[5]	11.1		37.5	26.4
Target capital	**157.4**		**195.2**	**37.8**
SST ratio[6]	**279%**		**371%**	**92%**

[1] January 1, 2020, SST results refer to those that will be filed with FINMA at June 10, 2020.
[2] January 1, 2019, SST results refer to those filed with FINMA at the end of April 2019.
[3] Number was update on June 10, 2020.
[4] Table was update on June 10, 2020.
[5] Risk margin was USD 19.8m as of December 31, 2019, and USD 12.8m as of December 31, 2018, other effects includes FINMA add-on of 25 percent for 2019 and 20 percent for 2018.
[6] SST Ratio is defined in the SST Circular 2017/3 as the following ratio: = (Risk bearing capital – Risk margin)/(Target Capital – Risk margin).

Risk margin and other effects on target capital includes:

- Expected P&C result: The SST framework allows for recognition of the economic profit (expected property and casualty results) a company expects in one year's time.
- Risk margin: The risk margin methodology follows the cost of capital approach, in accordance with the FINMA Circular 2017/3. It reflects the cost of all future capital requirements needed to support the current insurance portfolio in case the company would stop writing any new business and go into a run-off. These future capital requirements are discounted consistently with the MCBS liabilities.
- Credit risk associated with affiliate transactions: ZRe's largest counterparty is ZIC, the parent company of ZRe. The remote risk of ZIC's default is therefore incorporated into ZRe's target capital.
- Diversification between credit risk and aggregated market and insurance risk.
- A capital add-on of 25 percent of the target capital as required by FINMA in order to use the transitional internal model.

Solvency – Insurance risk[1]

in USD millions, for the years ended December 31	**2018**	Adjustments previous year	2019	Change
Insurance risk derivation of target capital				
Premium and reserve risk (including UPR risk)	86.6		111.0	24.4
Nat cat	4.0		4.7	0.7
Business risk	–		–	–
Diversification	(2.7)		(2.5)	0.2
Total of insurance risk target capital	**87.9**		**113.2**	**25.3**

ZRe's largest component of the target capital is premium and reserve risk. Reserve risk arises due to adverse changes in reserve development resulting from fluctuations in the timing and amount of claims settlement. Premium risk assesses the risk that the losses related to new business earned over one-year are higher than what was expected. The natural catastrophe (nat cat) risk exposure within ZRe is minimal given ZRe retains business that is net of insuring nat cat reinsurance protections.

Solvency – Market risk

in USD millions, for the years ended December 31	2018	Adjustments previous year	**2019**	Change
Market risk derivation of target capital				
Equity risk	–		–	–
Interest rate risk	32.7		32.6	(0.1)
Exchange rate risk	78.0		61.5	(16.5)
Credit spread risk	3.8		4.5	0.7
Other	13.2		13.5	0.3
Diversification	(53.1)		(51.8)	1.2
Total of market risk target capital (including investment credit risk)	**74.7**		**60.3**	**(14.4)**
thereof:				
Market risk (excluding credit risk)	74.2		59.5	(14.7)
Investment credit risk	8.8		9.4	0.7

Market risk is the second-largest contributor to ZRe's target capital. It measures interest rate mismatches between assets and liabilities, fixed income risk, corporate rate spread risk and foreign exchange risk. Credit default risk of the investment assets is shown under the sub-section investment credit risk.

[1] Table was update on June 10, 2020.

Appendix 1: Quantitative templates

Performance

in CHF millions, for the years ended December 31		Total		Direct Swiss business							
				Personal Accident		Motor		Property		Financial Lines	
		2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
1	Gross written premiums and policy fees	862	960	–	–	–	–	–	–	–	–
2	Premiums ceded to reinsurers	(284)	(379)	–	–	–	–	–	–	–	–
3	Net written premiums and policy fees (1 + 2)	578	580	–	–	–	–	–	–	–	–
4	Change in reserves for unearned premiums, gross	(60)	(29)	–	–	–	–	–	–	–	–
5	Change in reserves for unearned premiums, ceded	(33)	(3)	–	–	–	–	–	–	–	–
6	Net earned premiums and policy fees (3 + 4 + 5)	486	548	–	–	–	–	–	–	–	–
7	Other income	–	–	–	–	–	–	–	–	–	–
8	**Total technical income (6 + 7)**	**486**	**549**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
9	Claims paid, annuities and loss adjustment expenses, gross	(335)	(424)	–	–	–	–	–	–	–	–
10	Claims paid, annuities and loss adjustment expenses, ceded	208	198	–	–	–	–	–	–	–	–
11	Change in insurance reserves, gross	(131)	8	–	–	–	–	–	–	–	–
12	Change in insurance reserves, ceded	29	(19)	–	–	–	–	–	–	–	–
13	Change in actuarial provisions for unit-linked contracts	–	–	–	–	–	–	–	–	–	–
14	**Insurance benefits and losses, net of reinsurance (9 + 10 + 11 + 12 + 13)**	**(229)**	**(237)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
15	Underwriting & policy acquisition costs, gross	(267)	(307)	–	–	–	–	–	–	–	–
16	Underwriting & policy acquisition costs, ceded	56	51	–	–	–	–	–	–	–	–
17	Underwriting & policy acquisition costs, net of reinsurance (15 + 16)	(211)	(255)	–	–	–	–	–	–	–	–
18	Administrative and other expense	(4)	(17)	–	–	–	–	–	–	–	–
19	**Total technical expense (14 + 17 + 18) (non-life insurance only)**	**(444)**	**(510)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
20	Investment income	11	14	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21	Investment expenses	(12)	(1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	**Net investment result (20 + 21)**	**(1)**	**13**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
23	Net investment result on unit-linked investments	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24	Other financial income	9	12	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	Other financial expense	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26	**Operating result (8 + 14 + 17 + 18 + 22 + 23 + 24 + 25)**	**50**	**63**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
27	Interest expense on debt and other interest expense	(6)	(6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28	Other income	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
29	Other expense	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
30	Extraordinary income/expense	–	–	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
31	**Net income before taxes (26 + 27 + 28 + 29 + 30)**	**44**	**57**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
32	Direct tax expense	(10)	(13)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
33	**Net income after taxes (31 + 32)**	**34**	**44**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**

Line items 7, 18: LoB allocated according to GWP

						Indirect business													
General Liability		Other		Direct non-Swiss business		Accident		Health		Motor		Marine, aviation, transport		Property		Casualty		Miscellaneous	
2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
–	–	–	–	–	–	264	267	5	4	254	266	14	12	257	285	45	107	24	18
–	–	–	–	–	–	12	(6)	2	–	–	(3)	(10)	(10)	(230)	(249)	(35)	(94)	(23)	(18)
–	–	–	–	–	–	276	260	8	4	254	263	4	3	27	36	10	14	1	–
–	–	–	–	–	–	(3)	(9)	–	–	(53)	(10)	–	(1)	(11)	(19)	10	7	(2)	3
–	–	–	–	–	–	(21)	–	(2)	–	(3)	–	(1)	–	(1)	9	(4)	(9)	–	(2)
–	–	–	–	–	–	251	252	5	4	197	253	3	2	15	25	15	11	(1)	1
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	**–**	**–**	**–**	**–**	**–**	**251**	**252**	**5**	**4**	**197**	**253**	**3**	**2**	**15**	**26**	**15**	**11**	**(1)**	**1**
(2)	(1)	–	–	–	–	(82)	(69)	(3)	(3)	(90)	(146)	(12)	(12)	(103)	(136)	(35)	(52)	(8)	(5)
–	–	–	–	–	–	29	–	1	–	9	1	15	11	106	130	39	49	10	5
9	1	–	–	–	–	1	(12)	–	–	(37)	(6)	(4)	9	(101)	(9)	2	22	(1)	2
(4)	–	–	–	–	–	(31)	–	(1)	–	(6)	(1)	–	(10)	92	4	(20)	(10)	(1)	(3)
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	**–**	**–**	**–**	**–**	**–**	**(84)**	**(80)**	**(3)**	**(3)**	**(124)**	**(152)**	**(2)**	**(1)**	**(6)**	**(10)**	**(14)**	**9**	**–**	**–**
–	–	–	–	–	–	(129)	(141)	(3)	(2)	(69)	(94)	(4)	(2)	(41)	(43)	(14)	(18)	(7)	(6)
–	–	–	–	–	–	1	–	–	–	–	–	3	2	34	31	11	12	7	6
–	–	–	–	–	–	(128)	(141)	(3)	(2)	(68)	(94)	(1)	(1)	(7)	(11)	(4)	(6)	–	–
–	–	–	–	–	–	(1)	(5)	–	–	(1)	(5)	–	–	(1)	(5)	–	(2)	–	–
4	**–**	**–**	**–**	**–**	**–**	**(213)**	**(226)**	**(6)**	**(5)**	**(194)**	**(250)**	**(3)**	**(2)**	**(14)**	**(26)**	**(18)**	**1**	**–**	**(1)**
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**

Appendix 1: Quantitative templates *continued*

Market-consistent Balance Sheet

in CHF millions, for the years ended December 31	2018	Adjustments previous period	2019
Market-consistent value of investments			
Real estate	–	–	–
Shareholdings	–	–	–
Fixed-income securities	348	–	360
Loans	89	–	80
Mortgages	–	–	–
Equities	–	–	–
Other investments	–	–	–
Collective investment schemes	–	–	–
Alternative investments	–	–	–
Other capital investments	–	–	–
Total investments	**436**	**–**	**439**
Financial investments from unit-linked life insurance	–	–	–
Receivables from derivative financial instruments	1	–	1
Market-consistent value of other assets			
Cash and cash equivalents	572	–	747
Receivables from insurance business	111	–	184
Other receivables	18	–	12
Other assets	12	–	59
Total other assets	**713**	**–**	**1,002**
Total market-consistent value of assets	**1,151**	**–**	**1,442**
Best estimate liabilities (BEL)			
Best estimate of insurance liabilities	**1,076**	**–**	**1,097**
Direct insurance: life insurance business (excluding ALV)	–	–	–
Direct insurance: non-life insurance business	47	–	49
Direct insurance: health insurance business	–	–	–
Direct insurance: unit-linked life insurance business	–	–	–
Direct insurance: other business	–		–
Outward reinsurance: life insurance business (excluding ALV)	–		–
Outward reinsurance: non-life insurance business	1,029	–	1,049
Outward reinsurance: health insurance business	–	–	–
Outward reinsurance: unit-linked life insurance business	–	–	–
Outward reinsurance: other business	–	–	–
Reinsurers' share of best estimate for insurance liabilities	**(639)**	**–**	**(629)**
Direct insurance: life insurance business (excluding ALV)	–	–	–
Direct insurance: non-life insurance business	(16)	–	(16)
Direct insurance: health insurance business	–	–	–
Direct insurance: unit-linked life insurance business	–	–	–
Direct insurance: other business	–	–	–
Outward reinsurance: life insurance business (excluding ALV)	–	–	–
Outward reinsurance: non-life insurance business	(624)	–	(613)
Outward reinsurance: health insurance business	–	–	–
Outward reinsurance: unit-linked life insurance business	–	–	–
Outward reinsurance: other business	–	–	–
Market-consistent value of other liabilities	**268**	**–**	**287**
Non-technical provisions	4	–	4
Interest-bearing liabilities similar to debt capital	206	–	199
Liabilities from derivative financial instruments	2	–	–
Deposits retained on ceded reinsurance	–	–	–
Liabilities from insurance business	31	–	75
Other liabilities	26	–	9
Total BEL plus market-consistent value of other liabilities	**705**	**–**	**755**
Difference between market-consistent assets and market-consistent debt capital	**446**	**–**	**687**

Solvency

in USD millions, for the years ended December 31	2018	Adjustments previous year	2019	Change
Derivation of risk-bearing capital				
Assets	1,819.3		2,139.0	319.8
Liabilities	(1,365.8)		(1,429.6)	(63.8)
Deductions (proposed dividends)	(36.6)		(39.2)	(2.7)
Core capital	**416.9**		**670.2**	**253.3**
Supplementary capital (eligible subordinated debt)	–		–	–
Risk-bearing capital	**416.9**		**670.2**	**253.3**
Derivation of target capital				
Underwriting risk	87.9		113.2	25.3
Market risk	74.2		59.5	(14.7)
Diversification effects	(28.1)		(26.8)	1.3
Credit risk	12.3		11.8	(0.5)
Risk margin and other effects on target capital	11.1		37.5	26.4
Target capital	**157.4**		**195.2**	**37.8**
SST ratio				
SST ratio (based on risk margin included in liabilities)	**279%**		**371%**	**92%**

Appendix 2: Report of the statutory auditor on the ZRe financial statements

The Financial Condition Report is not audited.

The financial statements of Zurich Reinsurance Company Ltd, which comprise the income statement, balance sheet and notes to the financial statements for the year ended December 31, 2019, are audited. Please refer to the report of the auditor in the Zurich Reinsurance Company Ltd Annual Report 2019, page 14.

https://www.zurich.com/en/investor-relations/results-and-reports/ other-statutory-filings.

Disclaimer and cautionary statement

Certain statements in this document are forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives of Zurich Reinsurance Company Ltd. Forward-looking statements include statements regarding Zurich Reinsurance Company Ltd's targeted profit, return on equity targets, expenses, pricing conditions, dividend policy and underwriting and claims results, as well as statements regarding Zurich Reinsurance Company Ltd's understanding of general economic, financial and insurance market conditions and expected developments. Undue reliance should not be placed on such statements because, by their nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results and plans and objectives of Zurich Reinsurance Company Ltd to differ materially from those expressed or implied in the forward-looking statements (or from past results). Factors such as (i) general economic conditions and competitive factors, particularly in key markets; (ii) the risk of a global economic downturn; (iii) performance of financial markets; (iv) levels of interest rates and currency exchange rates; (v) frequency, severity and development of insured claims events; (vi) mortality and morbidity experience; (vii) policy renewal and lapse rates; and (viii) changes in laws and regulations and in the policies of regulators may have a direct bearing on the results of operations of Zurich Reinsurance Company Ltd and on whether the targets will be achieved. Zurich Reinsurance Company Ltd undertakes no obligation to publicly update or revise any of these forward-looking statements, whether to reflect new information, future events or circumstances or otherwise.

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