

Financial Condition Report 2021

Zurich Reinsurance Company Ltd

Contents

Acronyms	4	D. Risk profile	15
Introduction	5	D.1 Insurance risk	15
A. Business activities	7	D.2 Market risk including investment credit risk	16
A.1 Legal structure and major subsidiaries and branches	7	D.3 Other credit risk	19
A.2 Information about the company's strategy, objectives and key business segments	8	D.4 Operational risk	19
A.3 Information about the company's external auditors as per Article 28 ISA 8	8	D.5 Liquidity risk	19
A.4 Significant unusual events	8	D.6 Other material risks	20
B. Performance	9	E. Valuation	21
B.1 Underwriting performance	9	E.1 Overarching market-consistent valuation principle	21
B.2 Investment performance	9	E.2 Market-consistent balance sheet following SST principles	21
B.3 Intra-Group events and transactions	10	F. Capital management	25
C. Corporate governance and risk management	11	G. Solvency	27
C.1 Corporate governance	11	Appendix 1: Quantitative templates	30
C.2 Risk management	12	Appendix 2: Report of the statutory auditor on the ZRe financial statements	34
C.3 Internal control system	13		
C.4 Compliance	13		
C.5 Internal audit	14		

The information published in this report is consistent with the information in the Annual Report 2021 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, Ernst & Young AG (see Appendix 2), there was no external audit or review of this report. Please further note that while this report has been filed with FINMA, FINMA has not reviewed this report.

Overview

Business profile

Zurich Reinsurance Company Ltd (ZRe or the company) 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 primarily to affiliated companies of the Group, in particular to branches of Zurich Insurance Company Ltd (ZIC).

ZRe has a direct book, which has been in run-off for over 30 years.

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

ZRe is fully integrated into Zurich's Group-wide risk process. For more information on ZRe's approach to risk management, please refer to the risk review section in the Zurich Insurance Group Annual Report 2021, which describes the Group's risk management framework and risk governance.

ZRe uses two sources for the identification and assessment of risks. One is the risk and capital model as required by Swiss Solvency Test (SST). This model quantifies financial risks which threaten the capital of the company over a one-year time horizon. The significant risks for ZRe, as measured by capital metrics, are premium and reserve risk, credit risk and market risk. The other source is the Total Risk Profiling™ process (TRP), which identifies all risks that threaten capital, earnings, and reputation over a three-year planning horizon. The TRP process is applied to identify, evaluate, control, and monitor these risks. Mitigation actions are defined for key risks. The TRP is completed annually with management's participation. Critical key risks identified and assessed during the TRP conducted in 2021 included: regulatory scrutiny and upcoming regulatory changes, dependency on counterparties, adequacy of assumed reserves and currency risk.

An Own Risk and Solvency Assessment (ORSA) for ZRe is completed annually. The ZRe ORSA was submitted to FINMA at the beginning of 2022. To ensure the Board is adequately involved in the ORSA process, ZRe's Chief Risk Officer provides regular update, thus allowing the Board to challenge findings and consider its views in its decision-making process.

Financial condition

ZRe reported a net profit after taxes of CHF 23 million for 2021, compared to a net loss after taxes of CHF 6 million for 2020. The profit in 2021 was mainly driven by the net FX-gains in 2021 following the stronger U.S. dollar exchange rate in 2021 compared to 2020, whereas the loss in 2020 was mainly driven by net FX-losses following the strong depreciation of the U.S. dollar exchange rates in 2020. Besides that, the underwriting results were driven by a strong performance of some of the assumed reinsurance business in 2021 as well as in 2020.

Net income after taxes 2021

CHF 23m

Shareholder's equity

CHF 642m

Swiss Solvency Test ratio as of January 1, 2022

469%

Acronyms

ARC	Audit and Risk Committee of the ZRe Board
AER	administration expense ratio
AFR	Available Financial Resources
AG	Aktiengesellschaft (stock company)
AGM	annual general meeting
ALV	Arbeitslosenversicherung (Swiss unemployment insurance)
BEL	best estimate liabilities
Board	Board of Directors
CAD	Canadian Dollar
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHF	Swiss franc
CO	Swiss Code of Obligations
company	Zurich Reinsurance Company Ltd
CRO	Chief Risk Officer
DAC	deferred acquisition costs
DF	discount factor
EMEA	Europe, Middle East & Africa
ERM	enterprise risk management
EY	Ernst & Young AG
FCR	financial condition report
FINMA	Swiss Financial Market Supervisory Authority FINMA
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
Q	quarter
RBC	Risk-Bearing Capital
SFCR	Solvency and Financial Condition Report
SST	Swiss Solvency Test
TRP	Total Risk Profiling™
UPR	unearned premium reserves
U.S.	United States 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

1. 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 25, the Insurance Supervision Ordinance (ISO) Article 111a and FINMA's Circular 2016/2 'Disclosure – insurers'. The report focuses on the 2021 financial year and should be read in conjunction with ZRe's annual report 2021 (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, 2021.
- 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)

2. Executive summary

Business activities

Zurich Reinsurance Company Ltd is a reinsurance company domiciled in Zurich, Switzerland. The company was licensed in Switzerland on December 15, 2016. 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 primarily to affiliated companies of the Group, in particular to branches of Zurich Insurance Company Ltd (ZIC). To date, the retained business is predominantly from ZIC's operations in Asia Pacific. ZRe has a direct book, which has been in run-off for over 30 years.

Company results

ZRe reported a net profit after taxes of CHF 23 million for the twelve months to December 31, 2021. The gain is mainly driven by net FX-gains of CHF 15 million following the stronger U.S. dollar exchange rate in 2021 compared to 2020. Besides that, the underwriting results were driven by a 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 2021 were regulatory scrutiny and upcoming regulatory changes, dependency on counterparties, adequacy of assumed reserves and currency risk.

In 2021, ZRe produced an own risk and solvency assessment (ORSA), as required by the Swiss regulator FINMA submitted at the beginning of 2022.

Valuation

ZRe's market-consistent assets and liabilities are derived and valued in accordance with FINMA guidelines and are then matched to calculate the risk-bearing capital from ZRe's market-consistent balance sheet (MCBS).

Solvency

The Swiss Solvency Test (SST) adopts a risk-based and total balance sheet approach. Insurance companies are required to provide a market-consistent assessment of the value of their assets and liabilities. Possible changes to these balance sheet positions are modelled over a one-year period to arrive at the total required capital.

Under SST, insurance companies and insurance groups can apply to use 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 submitted to the Swiss Financial Market Supervisory Authority (FINMA).

For 2021 SST calculation, ZRe uses an internal model approved by FINMA following an internal model approval process (IMAP) in 2020. There are no model changes for the 2021 SST run.

The SST ratio as of January 1, 2022, stands at 469 percent (unaudited). It is filed with FINMA at the end of April 2022 and is subject to review by FINMA. ZRe met the regulatory solvency requirements in Switzerland throughout 2021.

3. Approval of the Financial Condition Report

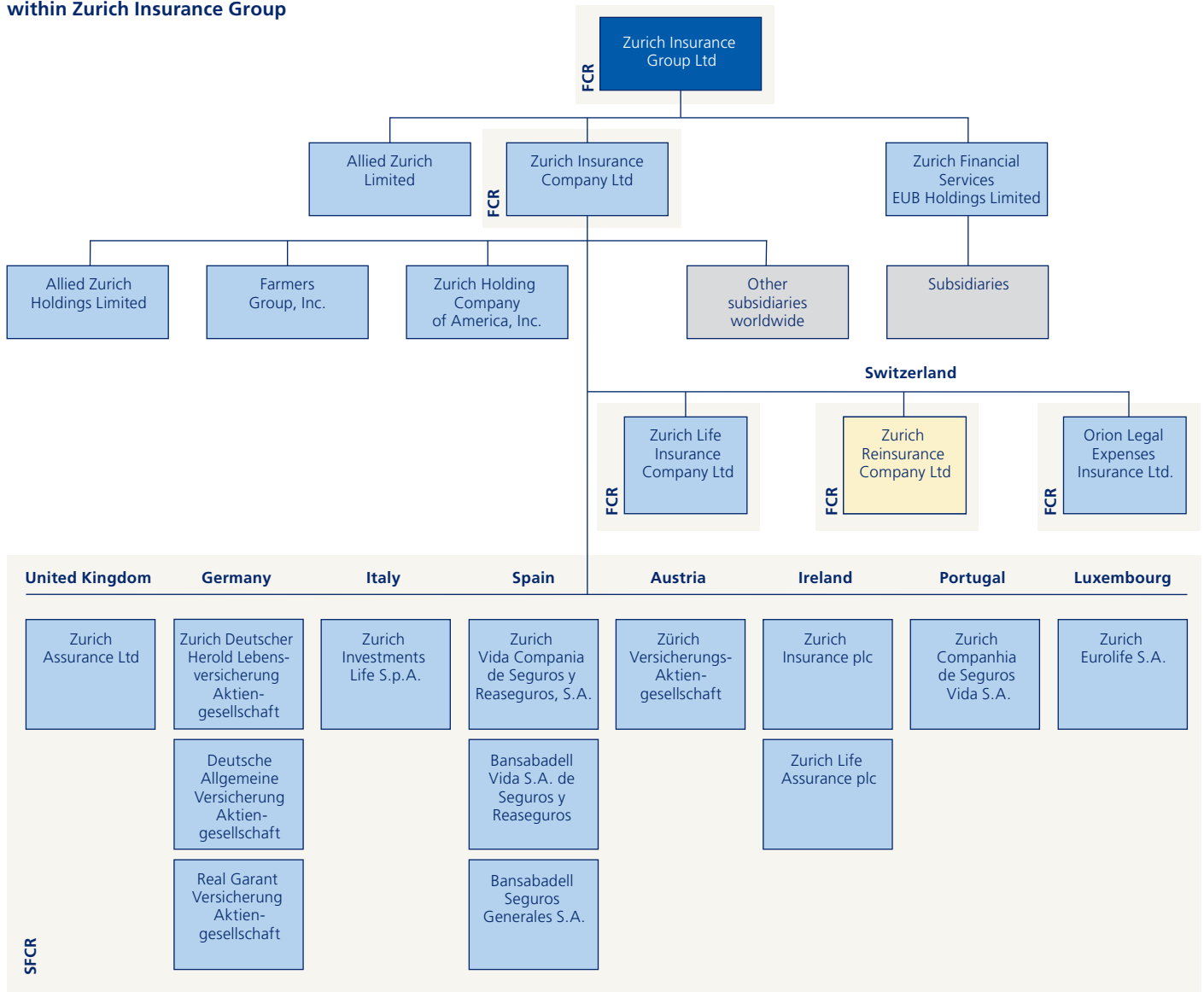
This report was reviewed and signed off by the Board of Directors (Board) of Zurich Reinsurance Company Ltd on April 27, 2022.

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)

■ Subsidiary ■ Group of subsidiaries ■ Current disclosure

Note: The purpose of the chart above is to provide a simplified overview of the Group's major subsidiaries (as of December 31, 2021), 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

Ernst & Young Ltd (EY), Maagplatz 1, in 8005 Zurich, is ZRe's external auditor. EY replaced PricewaterhouseCoopers AG. This rotation is in accordance with the Group's updated policy on the rotation of the external audit mandate which adopts best practices from the European Union and requires a tender of the mandate every ten years going forward.

EY assumes all auditing functions which are required by law and the Articles of Association. EY is responsible for auditing ZRe's financial statements and for auditing its compliance with specific regulatory requirements. The external auditors are appointed by the shareholder of ZRe annually.

A.4 Significant unusual events

There have been no significant unusual events in 2020 and 2021. COVID-19 has not been considered an unusual event as its impact on ZRe's net book is immaterial.

The aggression of the Russian government on Ukraine and the resulting war has the potential to impact the valuation of assets and liabilities presented in this FCR. The company's direct exposure to Russia and Ukraine through its P&C operations and investment portfolio is immaterial. However, ZRe is closely monitoring the indirect effects of this situation due to increased volatility in the financial markets and the impact it may have on the company's operations and financial results.

B. Performance

ZRe reported a net gain after taxes of CHF 23 million for 2021 and a net loss after taxes of CHF 6 million for 2020. Besides the positive FX-impact in 2021 and the negative FX-impact in 2020, 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

From an underwriting perspective, the active business, despite the still ongoing COVID-19 situation, performed well in the twelve months to December 31, 2021. The run-off business continues to be managed carefully consistent with previous years. During 2021, the company, based on updated market information, decided to strengthen its reserves for this portfolio. Overall, it evolves as expected.

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 motor and personal accident business.
- 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 1,092 million. Asia Pacific region accounting for 71 percent of the company's gross written premiums and policy fees and the rest of the world accounting for 29 percent of the gross written premiums and policy fees. Both regions' gross written premiums and policy fees are generated through international program business (IPZ) (41 percent) and non-IPZ business (59 percent), whereby the IPZ assumed business from ZIC branches is being retroceded to ZIC and the non-IPZ assumed business (mainly comprised of quota share reinsurance from ZIC branches in Japan (motor and personal accident (PA) business) and in Hong Kong (whole account quota share) is mostly retained by ZRe.

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	
	2020	2021	2020	2021	2020	2021	2020	2021
Debt securities	7	7	2	2	–	–	9	8
Other loans	3	3	–	–	–	–	3	3
Investment income	10	9	2	2	–	–	12	11

Investment expenses by category	in CHF millions, for the years ended December 31					
	Realized capital losses		Write-downs		Total	
	2020	2021	2020	2021	2020	2021
Debt securities	(3)	(1)	–	–	(3)	(1)
Other loans	–	–	–	–	–	–
Subtotal investment expenses	(3)	(1)	–	–	(3)	(1)
Investment general expenses	n.a.	n.a.	n.a.	n.a.	–	–
Investment expenses	(3)	(1)	–	–	(3)	(1)

B. Performance (continued)

ZRe's net investment income for the period January 1, 2021, to December 31, 2021, was CHF 9.8 million and it developed in line with management's expectations. 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 the increase in U.S. interest rates, albeit from very low levels as demonstrated by the 10-year bond rising approximately 60 basis points from 0.9 percent at the start of 2021 to 1.5 percent at the end. Within the CAD portfolio, interest rate dynamics on the sovereign curve were similar to that of the U.S. in that yields also rising to a similar degree with the 10-year bond increasing from 0.7 percent at the start of 2021 to 1.4 percent at the end. For the HKD portfolio, the reference yield (HK sovereign curve) a rise of an equivalent degree was also observed with the 10-year bond increasing from 0.7 percent in the beginning of the year to a yield of 1.4 percent at the end.

In the aggregate, realized capital losses amounted to CHF 1.2 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 2021

There were no material intra-Group events and transactions not mentioned otherwise in this report in 2021 or 2020.

C. Corporate governance and risk management

C.1 Corporate governance

The Group 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 2021, page 76.

At ZRe, various governance and control functions help to ensure that risks are identified and appropriately managed being covered by adequate internal controls. Although each governance and control function maintains 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.

Management is responsible for preparing ZRe's financial statements, managing risk, developing and maintaining internal controls and ensuring appropriate governance processes. The Audit and Risk Committee (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, 2021)

Board of Directors	Expiration of current term of office
Juan José Beer, Chairman	2022
Christian Felderer	2022
Christian Carl	2022
Andrea Stürmer	2022

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

C. Corporate governance and risk management (continued)

C.2 Risk management

C.2.1 Risk management framework

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

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 pre-defined 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 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 key-principles for defining Zurich's appetite for risks at Group level. Risk-specific policy manuals, supported by local Governance Documents, 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 which 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 operational events; 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 ZRe CRO is responsible for the risk oversight and regular reporting on risk matters to the CEO, management, the ARC and BoD.

The ZRe risk management function 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 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. Corporate governance and risk management (continued)

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 being adopted to legal entity necessities.

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 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 2021 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.

ZRe Compliance is a second-line control function independent from the business (first line) and its operational controls. The function provides assurance to management that risks within its mandate are appropriately identified and managed. Compliance 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 compliance culture and ethics.

ZRe Compliance is led by the appointed ZRe Compliance Officer. The ZRe Compliance Officer has access to the Chairman of the Board of Directors of ZRe.

ZRe Compliance performs its activities according to the risk-based annual compliance plan, prepared based on an independent forward-looking compliance risk assessment, considering both the internal and external environments key risk drivers.

ZRe Compliance also provides compliance risks insights through relevant and targeted reporting on insights into key compliance trends, issues and risks as well on progress measured against the plan, compliance assurance outcomes and insights to management and the ARC of the Board.

The Group Chief Compliance Officer defines and issues compliance policies relevant to the Group and establishes appropriate processes and guidance. ZRe Compliance implements such Group compliance policies and issues additional compliance policies for ZRe if required. ZRe Compliance supports a strong compliance culture within ZRe through training and awareness initiatives and concerns reporting mechanism.

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. Corporate governance and risk management (continued)

C.5 Internal audit

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.

GA develops and delivers an annual risk-based audit plan, which is updated as risks change. The audit plan takes into account the full spectrum of business risks, including concerns and issues raised by the ARC, management and other stakeholders. The ARC is responsible for approving 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).

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 GA.

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.

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 2021. The results confirmed that GA's practices comply with 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 (see chapter G). 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. Impact of COVID-19 on ZRe's net book is immaterial as most of the underlying direct portfolio grants marginal coverage and in addition, during 2021 the assumed treaty wording and clauses have been adapted to further minimize potential exposures. Therefore, COVID-19 is not a key risk for ZRe.

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.

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.

D. Risk profile (continued)

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 2021, before retrocession. Retroceded premiums amounted to CHF 530.1 million for the same period.

Concentration of risk	in CHF millions, for the year ended December 31, 2021					
	Accident	Property	Motor	Liability	Other Lines	Total
Japan	208.3	22.9	250.5	5.7	2.0	489.4
Rest of Asia	38.7	146.0	12.6	42.7	13.5	253.6
USA/Canada	0.1	188.9	8.3	108.1	3.7	309.2
Others	0.2	27.4	0.8	10.4	1.4	40.2
Total	247.3	385.2	272.3	166.9	20.6	1,092.3

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. Risk profile (continued)

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, 2021 and 2020.

Economic interest rate sensitivities	in USD millions as of December 31	
	2020	2021
100 basis point increase in the interest rate yield curves		
Property and casualty business		
Net impact before tax	(3.1)	(0.7)
100 basis point decrease in the interest rate yield curves		
Property and casualty business		
Net impact before tax	3.0	(1.4)

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, 2021 and 2020. The sensitivities apply to all fixed income instruments, excluding go supranational and similar debt securities.

Economic credit spread sensitivities	in USD millions as of December 31	
	2020	2021
100 basis point increase in credit spread		
Property and casualty business		
Net impact before tax	(7.6)	(9.6)

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, 2020		2021	
	CHF millions	% of total	CHF millions	% of total
Rating				
AA- and higher	237	70%	343	71%
A- up to including A+	90	27%	124	26%
BBB+ and lower	11	3%	17	4%
Unrated	–	–	–	–
Total	338	100%	484	100%

The table shows the credit risk exposure of debt securities, by issuer credit rating. As of December 31, 2021, 100 percent of the ZRe's debt securities were investment grade with 39.5 percent rated 'AAA'.

The risk-weighted average issuer credit rating of ZRe's debt securities portfolio was 'AA-' on December 31, 2021, and 'AA-' on December 31, 2020.

As of December 31, 2021, the largest concentration in the ZRe's debt securities portfolio, on a market value basis, was in governments, government agencies and supranationals (50 percent) and U.S. government treasuries (13 percent). As of December 31, 2020, also on a market value basis, the largest concentration in the ZRe's debt securities portfolio was in governments, government agencies and supranationals (49 percent) and U.S. government treasuries (14 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 789.1 million as of December 31, 2021, and CHF 782.8 million as of December 31, 2020.

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 moderate 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 with the following Group principles:

- All assets and liabilities are valued in the balance sheet at their IFRS accounting values – attributed to their transaction currency. That means that the Swiss local statutory balance sheet and the SST MCBS are not actively hedged, which can lead to an FX-risk.
- ZRe only hedges foreign exchange risk with ZIC as a counterparty.
- All internal hedges are performed back to the currency of the underlying reporting unit.

D. Risk profile (continued)

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 ZIC which maintains a strong capital position. As of December 31, 2021, the rating of ZIC was 'AA/Stable' by S&P Global Ratings (as of March 15, 2021, the rating was upgraded from AA-/Positive to AA/Stable and has not changed since then).

ZRe has minimal third-party reinsurance, the majority of which is placed 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, 2021.

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 internal policies. 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.

In 2021, ZRe management identified key risks like dependency on counterparty, underwriting and reserving adequacy as well as regulatory scrutiny. The management actively manages these risks.

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. Risk profile (continued)

D.6 Other material risks

D.6.1 Strategic risk

ZRe defines the strategy as the long-term plan of action designed to allow it to achieve its goals and aspirations. 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
- Improper execution of strategic plans
- Unexpected changes to underlying assumptions, including on the external environment

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 2021, the management assessed the key strategic risk scenarios, looking at 2021 and beyond. The ZRe TRP identified and assessed risks from both external and internal factors.

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/Swiss local statutory accounting principles 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 Swiss local stat	In CHF millions, as of December 31		Evolution	2021 (local	Difference SST
	2020 (SST)	2021 (SST)	2020-2021 (SST)	Swiss stat)	to local Swiss stat (2021)
Market-consistent value of investments					
Real estate	-	-	-	-	-
Participations	-	-	-	-	-
Fixed-income securities	352.7	486.5	133.8	483.8	2.6
Loans	66.0	60.4	(5.6)	60.4	0.0
Mortgages	-	-	-	-	-
Equities	-	-	-	-	-
Other investments	-	-	-	-	-
Collective investment schemes	-	-	-	-	-
Alternative investments	-	-	-	-	-
Structured products	-	-	-	-	-
Other investments	-	-	-	-	-
Total investments	418.7	546.9	128.2	544.3	2.7
Market-consistent value of other assets					
Receivables from derivative financial instruments	1.5	0.2	(1.2)	0.2	-
Deposits made under assumed reinsurance contracts	38.4	175.3	136.9	175.3	-
Cash and cash equivalents	782.8	789.1	6.3	789.1	-
Reinsurers' share of best estimate of provisions for insurance liabilities	621.7	659.1	37.4	758.0	(99.0)
Direct insurance: non-life insurance business.	16.2	23.4	7.2	26.9	(3.4)
Direct insurance: health insurance business	-	-	-	-	-
Reinsurance: non-life insurance business	605.5	635.6	30.2	731.2	(95.5)
Direct insurance: other business.	-	-	-	-	-
Reinsurance: other business	-	-	-	-	-
Fixed assets	-	-	-	-	-
Deferred acquisition costs	-	-	-	86.4	(86.4)
Intangible assets	-	-	-	16.3	(16.3)
Receivables from insurance business	104.9	103.5	(1.4)	102.9	0.6
Other receivables	12.7	15.2	2.5	15.2	-
Other assets	-	-	-	-	-
Unpaid share capital	-	-	-	-	-
Accrued assets	5.6	10.5	4.9	10.5	-
Total other assets	1,567.5	1,752.8	185.3	1,954.0	(201.2)
Total market-consistent value of assets	1,986.3	2,299.8	313.5	2,498.3	(198.5)

E. Valuation (continued)

MCBS vs Swiss local stat – best estimate liabilities and risk- bearing capital	In CHF millions, as of December 31		Evolution		Difference SST
	2020 (SST)	2021 (SST)	2020–2021 (SST)	2021 (local Swiss stat)	to local Swiss stat (2021)
BEL: Best estimate liabilities					
Best estimate of provisions for insurance					
liabilities	1,102.3	1,177.0	74.7	1,366.5	(189.5)
Direct insurance: non-life insurance business	48.8	61.9	13.1	82.1	(20.2)
Reinsurance: non-life insurance business	1,053.6	1,115.1	61.5	1,284.4	(169.3)
Direct insurance: other business	–	–	–	–	–
Reinsurance: other business	–	–	–	–	–
Market-consistent value of other liabilities					
Non-technical provisions	3.3	–	(3.3)	–	–
Interest-bearing liabilities	186.6	336.4	149.8	336.7	(0.3)
Liabilities from derivative financial instruments	0.3	0.3	(0.0)	0.3	–
Deposits retained on ceded reinsurance	–	96.5	96.5	96.5	–
Liabilities from insurance business	28.5	46.1	17.6	46.1	–
Other liabilities	3.3	1.9	(1.4)	1.9	–
Accrued liabilities	3.6	7.8	4.2	7.8	–
Subordinated debts	–	–	–	–	–
Total BEL plus market-consistent value of other liabilities	1,327.9	1,666.0	338.1	1,855.9	(189.9)
Market-consistent value of assets minus total from BEL plus market-consistent value of other liabilities					
	658.3	633.8	(24.5)	642.4	(8.6)

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, 2021, amounted to CHF 483.8 million. As of December 31, 2020, ZRe held debt securities in the amount of CHF 338.1 million.

Loans in ZRe amounted to CHF 60.4 million as of December 31, 2021, and CHF 66.0 million as of December 31, 2020, 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 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. Valuation (continued)

E.2.2 Market-consistent value of liabilities

Best-estimate of insurance liabilities

For the calculation of the best-estimate values of the insurance liabilities, ZRe is using common actuarial practices as they are defined in the Zurich Risk Policy (ZRP).

The reserves cover expected future losses, loss adjustment and policy administration expenses as well as underwriting profits for contracts in force. ZRe recognizes unearned premium reserves (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.

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.

Other reserves (e.g., unearned premium reserves)

Under IFRS and Swiss local statutory accounting principles, ZRe recognizes unearned premium reserves (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. 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, 2020

The best estimate insurance liabilities increased by CHF 74.7 million from CHF 1,102.3 million as of December 31, 2020, to CHF 1,177.0 million as of December 31, 2021. The reinsurers' share of best estimate of insurance liabilities increased by CHF 37.4 million from CHF 621.7 million as of December 31, 2020, to CHF 659.1 million as of December 31, 2021.

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.

E. Valuation (continued)

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 2021, ZRe uses risk-free yield curves stipulated by FINMA for the four currencies EUR, GBP, USD and CHF and swap rates for all other currencies according to paragraph 47 of FINMA Circular 2017/3.

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 with 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, 2021, before appropriation of available earnings:

Shareholder's equity	in CHF millions, as of December 31			
	2020	2021	Change	
Share capital	12	12	–	
Capital contribution reserve:				
<i>Beginning of year</i>	616	616	–	
<i>Dividend paid</i>	–	(40)	(40)	
Capital contribution reserve, end of year	616	576	(40)	
Organizational fund	8	–	(8)	
Retained earnings:				
<i>Beginning of year</i>	68	24	(44)	
<i>Transfer of organizational fund into retained earnings</i>	–	8	8	
<i>Dividend paid</i>	(38)	–	38	
<i>Net income after taxes</i>	(6)	23	29	
Retained earnings, end of year	24	55	31	
Total shareholder's equity	659	642	(17)	

The organizational fund, which was set up in 2016 amounting to CHF 20 million, was totally released and transferred into retained earnings in 2021. There have been no changes in ZRe's shareholder's equity other than the ordinary dividend payment and the net income after taxes in 2021.

F. Capital management (continued)

Appropriation of available earnings and capital contribution reserve

in CHF	available earnings
Proposed appropriation of available earnings and capital contribution reserve	
As of January 1, 2021	23,644,580
Transfer of organizational fund into available earnings	8,110,000
Net income after taxes	23,136,997
Available earnings as of December 31, 2021	54,891,577
Appropriation of available earnings	
As of January 1, 2022	54,891,577
Balance carried forward	54,891,577
Appropriation of capital contribution reserve	
As of January 1, 2022	575,807,652
Dividend payment out of capital contribution reserve	(25,000,000)
Balance carried forward	550,807,652

On April 12, 2022, the Board proposed and the Annual General Meeting resolved to appropriate the available earnings and to carry forward available earnings of CHF 54,891,577 as set out in the table above.

Further, the Board proposed and the Annual General Meeting resolved to appropriate a part of the capital contribution reserve and to pay a dividend of CHF 25,000,000 from the capital contribution reserve as set out in the table above.

Regulatory capital adequacy

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

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 633.8 million is slightly lower than Swiss local statutory total shareholder's equity of CHF 642.4 million. The most important drivers are: Net deferred acquisition costs (CHF 86.4 million) and intangible assets related to renewal rights (CHF 16.3 million) – both have zero value for MCBS. Furthermore, the discount of best estimates of net provisions for insurance liabilities (CHF 90.6 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 the SST ratio. This solvency 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 is part of the Zurich Insurance Group which maintains a strong capital position. As of March 15, 2021, the rating of ZIC was upgraded to ‘AA/Stable’ from ‘AA-/Positive’ by S&P Global Ratings.

In 2020, ZRe concluded its internal model approval process (“IMAP”) with FINMA and has received approval for the internal model. The model used is in accordance with the FINMA supervisory letter of October 29, 2021, stipulating the model to be used for the SST 2022 run.

For the calculation of the SST ratio as of January 1, 2022, ZRe uses the approved internal model.

ZRe’s SST ratio is 469 percent as of January 1, 2022. It increased by 81 percentage points compared to the SST ratio as of January 1, 2021 (388 percent) As of January 1, 2022 ZRe’s risk-bearing capital and target capital were USD 667.7 million (USD 698.9 million on January 1, 2021) and USD 168.3 million (USD 222.8 million on January 1, 2021), respectively.

Solvency

in USD millions, for the years ended December 31

	2020	Adjustments previous year	2021	Change
Derivation of risk-bearing capital				
Assets	2,245.2		2,522.5	277.3
Liabilities	(1,501.1)		(1,827.4)	(326.3)
Deductions (proposed dividends)	(45.2)		(27.4)	17.8
Core capital	698.9		667.7	(31.2)
Supplementary capital (eligible subordinated debt)				
Risk-bearing capital	698.9		667.7	(31.2)
Derivation of target capital				
Insurance risk	131.1		106.7	(24.5)
Market risk	49.1		44.5	(4.7)
Diversification effects	(29.7)		(24.6)	5.1
Credit risk	11.9		14.6	2.7
Risk margin and other effects on target capital	60.3		27.1	(33.2)
Target capital	222.8		168.3	(54.6)
SST ratio				
SST ratio (based on risk margin included in liabilities)	388%		469%	81%

– January 1, 2022, SST results refer to those that will be filed with FINMA on April 29, 2022.

– Risk margin is USD 32.8m as of December 31, 2021, and USD 57.3m as of December 31, 2020. Other effects: includes diversification effects between credit risk and other risk types, and other risk models.

– SST Ratio is defined in the SST Circular 2017/3 as the following ratio: (Risk-bearing capital – Risk margin)/(Target Capital – Risk margin).

G. Solvency (continued)

Risk margin and other effects on target capital includes:

- 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 stops writing any new business and goes 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 other risk types.
- 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.

Solvency – Insurance risk

in USD millions, for the years ended December 31		Adjustments		
	2020	previous year	2021	Change
Insurance risk derivation of target capital				
Premium and reserve risk (including UPR risk)	129.6		104.8	(24.9)
Nat cat	6.3		5.9	(0.4)
Business risk	–		–	–
Diversification	(4.7)		(4.0)	0.8
Total of insurance risk target capital	131.1		106.7	(24.5)

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 reporting period are higher than expected. The natural catastrophe (nat cat) risk exposure within ZRe is minimal given ZRe retains business that is net of inuring nat cat reinsurance protections.

Solvency – Market risk

in USD millions, for the years ended December 31		Adjustments		
	2020	previous year	2021	Change
Market risk derivation of target capital				
Equity risk	0.0		0.0	(0.0)
Interest rate risk	14.5		16.7	2.2
Exchange rate risk	49.3		49.4	0.1
Credit spread risk	8.5		10.0	1.5
Other	13.8		17.0	3.2
Diversification	(34.3)		(41.9)	(7.5)
Total of market risk target capital (including investment credit risk)	51.8		51.3	(0.5)
thereof:				
Market risk (excluding credit risk)	49.1		44.5	(4.7)
Investment credit risk	10.8		13.2	2.3

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.

THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK

Appendix 1: Quantitative templates

Performance

in CHF millions, for the years ended December 31

		Total		Direct Swiss business							
				Personal Accident		Motor		Property		Financial Lines	
		2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
1	Gross written premiums and policy fees	947	1,092	-	-	-	-	-	-	-	-
2	Premiums ceded to reinsurers	(385)	(530)	-	-	-	-	-	-	-	-
3	Net written premiums and policy fees (1 + 2)	562	562	-	-	-	-	-	-	-	-
4	Change in reserves for unearned premiums, gross	(55)	(40)	-	-	-	-	-	-	-	-
5	Change in reserves for unearned premiums, ceded	45	28	-	-	-	-	-	-	-	-
6	Net earned premiums and policy fees (3 + 4 + 5)	552	550	-	-	-	-	-	-	-	-
7	Other income	2	5	-	-	-	-	-	-	-	-
8	Total technical income (6 + 7)	554	555	-	-	-	-	-	-	-	-
9	Claims paid, annuities and loss adjustment expenses, gross	(384)	(356)	-	-	-	-	-	-	-	-
10	Claims paid, annuities and loss adjustment expenses, ceded	159	126	-	-	-	-	-	-	-	-
11	Change in insurance reserves, gross	(17)	(75)	-	-	-	-	-	-	-	-
12	Change in insurance reserves, ceded	(13)	28	-	-	-	-	-	-	-	-
13	Change in actuarial provisions for unit-linked contracts	-	-	-	-	-	-	-	-	-	-
14	Insurance benefits and losses, net of reinsurance (9 + 10 + 11 + 12 + 13)	(254)	(276)	-	-	-	-	-	-	-	-
15	Underwriting & policy acquisition costs, gross	(318)	(355)	-	-	-	-	-	-	-	-
16	Underwriting & policy acquisition costs, ceded	52	94	-	-	-	-	-	-	-	-
17	Underwriting & policy acquisition costs, net of reinsurance (15 + 16)	(265)	(261)	-	-	-	-	-	-	-	-
18	Administrative and other expense	(50)	2	-	-	-	-	-	-	-	-
19	Total technical expense (14 + 17 + 18) (non-life insurance only)	(569)	(535)	-	-	-	-	-	-	-	-
20	Investment income	12	11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21	Investment expenses	(3)	(1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
22	Net investment result (20 + 21)	9	10	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	1	(0)	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)	(5)	30	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	(1)	(1)	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)	(6)	29	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
32	Direct tax expense	0	(6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
33	Net income after taxes (31 + 32)	(6)	23	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

Appendix 1: Quantitative templates (continued)

Market-consistent Balance Sheet	in CHF millions, as of December 31		2021
	2020	Adjustments previous period	
Market-consistent value of investments			
Real estate	–	–	–
Shareholdings	–	–	–
Fixed-income securities	353	–	486
Loans	66	–	60
Mortgages	–	–	–
Equities	–	–	–
Other investments	–	–	–
Collective investment schemes	–	–	–
Alternative investments	–	–	–
Other capital investments	–	–	–
Total investments	419	–	547
Receivables from derivative financial instruments	1	–	0
Deposits made under assumed reinsurance contracts	38	–	175
Reinsurers' share of best estimate for insurance liabilities	622	–	659
Direct insurance: life insurance business (excluding ALV)	–	–	–
Direct insurance: non-life insurance business	16	–	23
Direct insurance: health insurance business	–	–	–
Direct insurance: other business	–	–	–
Outward reinsurance: life insurance business (excluding ALV)	–	–	–
Outward reinsurance: non-life insurance business	605	–	636
Outward reinsurance: health insurance business	–	–	–
Outward reinsurance: other business	–	–	–
Market-consistent value of other assets			
Cash and cash equivalents	783	–	789
Receivables from insurance business	105	–	103
Other receivables	13	–	15
Other assets	–	–	–
Unpaid share capital	–	–	–
Accrued assets	6	–	11
Total other assets	1,568	–	1,753
Total market-consistent value of assets	1,986	–	2,300
Best estimate liabilities (BEL)			
Best estimate of insurance liabilities	1,102	–	1,177
Direct insurance: life insurance business (excluding ALV)	–	–	–
Direct insurance: non-life insurance business	49	–	62
Direct insurance: health insurance business	–	–	–
Direct insurance: other business	–	–	–
Outward reinsurance: life insurance business (excluding ALV)	–	–	–
Outward reinsurance: non-life insurance business	1,054	–	1,115
Outward reinsurance: health insurance business	–	–	–
Outward reinsurance: other business	–	–	–
Market-consistent value of other liabilities			
Non-technical provisions	3	–	–
Interest-bearing liabilities similar to debt capital	187	–	336
Liabilities from derivative financial instruments	–	–	–
Deposits retained on ceded reinsurance	–	–	97
Liabilities from insurance business	29	–	46
Other liabilities	7	–	10
Total BEL plus market-consistent value of other liabilities	1,328	–	1,666
Market-consistent value of assets minus total from BEL plus market-consistent value of other liabilities	658	–	634

Appendix 1: Quantitative templates (continued)

Solvency

in USD millions, for the years ended December 31

	2020	Adjustments previous year	2021	Change
Derivation of risk-bearing capital				
Assets	2,245.2		2,522.5	277.3
Liabilities	(1,501.1)		(1,827.4)	(326.3)
Deductions (proposed dividends)	(45.2)		(27.4)	17.8
Core capital	698.9		667.7	(31.2)
Supplementary capital (eligible subordinated debt)				
Risk-bearing capital	698.9		667.7	(31.2)
Derivation of target capital				
Underwriting risk	131.1		106.7	(24.5)
Market risk	49.1		44.5	(4.7)
Diversification effects	(29.7)		(24.6)	5.1
Credit risk	11.9		14.6	2.7
Risk margin and other effects on target capital	60.3		27.1	(33.2)
Target capital	222.8		168.3	(54.6)
SST ratio				
SST ratio (based on risk margin included in liabilities)	388%		469%	81%

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, 2021, are audited. Please refer to the report of the auditor in the Zurich Reinsurance Company Ltd Annual Report 2021, 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 the 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 the 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, in the financial services industries in particular; (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; (viii) increased litigation activity and regulatory actions; and (ix) 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 on whether the targets will be achieved. Specifically in relation with the COVID-19 related statements, such statements were made on the basis of circumstances prevailing at a certain time and on the basis of specific terms and conditions (in particular applicable exclusions) of insurance policies as written and interpreted by Zurich Reinsurance Company Ltd and may be subject to regulatory, legislative, governmental and litigation-related developments affecting the extent of potential losses covered by a member of Zurich Reinsurance Company Ltd or potentially exposing Zurich Reinsurance Company Ltd to additional losses if terms or conditions are retroactively amended by way of legislative or regulatory action. 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.

It should be noted that past performance is not a guide to future performance.

Persons requiring advice should consult an independent adviser.

This communication does not constitute an offer or an invitation for the sale or purchase of securities in any jurisdiction.

THIS COMMUNICATION DOES NOT CONTAIN AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES; SECURITIES MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES ABSENT REGISTRATION OR EXEMPTION FROM REGISTRATION, AND ANY PUBLIC OFFERING OF SECURITIES TO BE MADE IN THE UNITED STATES WILL BE MADE BY MEANS OF A PROSPECTUS THAT MAY BE OBTAINED FROM THE ISSUER AND THAT WILL CONTAIN DETAILED INFORMATION ABOUT THE COMPANY AND MANAGEMENT, AS WELL AS FINANCIAL STATEMENTS.

Zurich Reinsurance Company Ltd
Mythenquai 2
8002 Zurich
Switzerland
www.zurich.com

