Zurich Insurance Company Ltd

Financial Condition Report 2019

Zurich Insurance Company Ltd

Contents

The information published in this report is consistent with the information published in the Annual Reports 2019 of Zurich Insurance Group and Zurich Insurance Company Group, as well as the regulatory reporting of the Zurich Insurance Company Ltd for the year 2019, including the regulatory reporting to the Swiss Financial Market Supervisory Authority FINMA (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 Insurance Company Ltd, PricewaterhouseCoopers 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 the report.

Overview

Business profile

Zurich Insurance Company Group which includes Zurich Insurance Company Ltd (ZIC Ltd) and its subsidiaries is the main operating carrier of Zurich Insurance Group. Zurich Insurance Group is a leading multi-line insurer that services its customers in global and local markets. With about 55,000 employees, it provides a wide range of property and casualty, and life insurance products and services in more than 215 countries and territories. ZIC Ltd writes direct property and casualty insurance business mainly in Switzerland, Canada, Hong Kong and Japan.

Total gross written premiums and policy fees

CHF 14.3bn

Net income after taxes

CHF 3.7bn

Net investment result

CHF 4.8bn

System of governance and enterprise risk management

Good corporate governance enables ZIC Ltd to create sustainable value for all its stakeholders.

Zurich Insurance Group's enterprise risk management framework (ERM) supports achievement of the Group's strategy and helps protect capital, liquidity, earnings and reputation across all of its entities, including ZIC Ltd.

Risk profile

Zurich Insurance Group (Zurich or the Group) 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 TRP methodology supports the Group in delivering oversight and risk insights and enhances Zurich's capabilities in managing risks.

The Group's commitment to sustainability, including managing the risks posed by climate change, continues to be an integral part of Zurich's risk management approach. The Group assesses risks in cyber, information technology, data security and risks arising from emerging technologies and innovation to ensure our business remains resilient in the future.

Financial condition

ZIC Ltd maintained its strong rating level in 2019. As of December 31, 2019, the Insurance Financial Strength Rating of ZIC Ltd was revised from stable to positive; 'AA–/Positive' by S&P Global Ratings, 'Aa3/Stable' by Moody's, and 'A+(Superior)/Stable by A.M. Best.

Shareholders' equity

CHF 25.9bn

Swiss Solvency Test ratio as of January 1, 2020

SST 241%

Standard & Poor's financial strength rating as of December 31, 2019

AA–/Positive

Acronyms

AC	Audit Committee
AFR	available financial resources
AG	Aktiengesellschaft (stock company)
AGM	Annual General Meeting
Board	Board of Directors
BEL	best estimate liability
bn	billion
BRL	Brazilian real
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHF	Swiss franc
CRO	Chief Risk Officer
EMEA	Europe, Middle East & Africa
ERM	Enterprise Risk Management
EUR	euro
ExCo	Executive Committee
FCR	Financial Condition Report
FINMA	Swiss Financial Market Supervisory Authority
GBP	Great Britain pound
Group	Zurich Insurance Group
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Auditors
ISA	Swiss Insurance Supervision Act
ISDA	Swiss International Swaps and Derivatives Association
ISO	Insurance Supervision Ordinance
M&A	mergers and acquisitions
MCBS	market consistent balance sheet
P&C	Property and Casualty
PwC	PricewaterhouseCoopers AG
Q	quarter
SFCR	Solvency and Financial Condition Report
SST	Swiss Solvency Test
TRP	Total Risk Profiling™
UK	United Kingdom
UPR	unearrned premium reserves
USD	U.S. dollar
Z-ECM	Zurich Economic Capital Model
ZIC Group	ZIC Ltd and its subsidiaries
ZIC Ltd	Zurich Insurance Company Ltd
Zurich	Zurich Insurance Group

Introduction

How to read the report

Zurich Insurance Company Ltd ('ZIC Ltd' or 'the Company')'s financial condition report is prepared in compliance with Art. 26 ISO and FINMA's Circular 2016/2 'Disclosure – insurers'. The report focuses on the 2019 financial year, and should be read in conjunction with the Company's Annual Report 2019 (available on www.zurich.com/en/investor-relations/results-and-reports/other-statutory-filings). Wherever applicable, this report makes reference to the Zurich Insurance Group's Financial Condition Report or the Zurich Insurance Group's Annual Report for more information.

We prepared this report on a consolidated basis, using a look-through approach that captures the entire Zurich Insurance Company Group (Zurich Insurance Company Ltd and its subsidiaries, or ZIC Group). With this approach:

- ZIC Ltd evaluates assets and liabilities of subsidiaries and participations by 'looking through' to their balance sheets. This view is possible as subsidiaries are wholly owned and deliver detailed information about the risk profile and valuation of these assets and liabilities (e.g., an equity exposure held in the balance sheet of a subsidiary is presented in the 'equity line' in the consolidated ZIC Group balance sheet, and therefore subsidiaries are not presented under 'investments in subsidiaries'),
- ZIC Ltd aggregates assets and liabilities by type or line items, to create a consolidated view.

The consolidated, look-through approach results, in particular under the Swiss Solvency Test (SST), in an equivalent level of protection of policyholders and equivalent prudential outcome. Only the presentation differs, as it focuses on a ZIC Group view, rather than a ZIC Ltd view. This approach is consistent with our regulatory SST submissions to FINMA. See section E.2 for more information.

The report presents information following the structure provided in FINMA's circular. It covers ZIC Ltd'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' information is presented on a ZIC Group consolidated IFRS basis.
- Performance results are presented with Swiss statutory reporting standards as the basis for ZIC Ltd results. The disclosure is complemented with information in the quantitative reporting templates (see Appendix 1) based on the Swiss statutory reporting standards applicable to ZIC Ltd.
- The 'risk profile' section presents information for the ZIC Group under IFRS for insurance and credit risk, and a net economic asset value-based analysis of the market risk.
- 'Valuation' presents the market-consistent balance sheet (MCBS) of the ZIC Group following the Swiss Solvency Test (SST) principles. The SST MCBS is compared with the IFRS balance sheet of the ZIC Group as of December 31, 2019.
- Finally, the 'solvency' section shows the regulatory capital adequacy of the Company based on SST.

Risk and capital are managed at the ZIC Group, region and business unit level according to Zurich Insurance Group's risk and capital management framework. The principles of the Zurich Insurance Group's enterprise risk management described in the section C. Governance and risk management and in the section D. Risk profile are equally applicable to ZIC Group. There is no material difference between how risk and capital are managed at the Zurich Insurance Group and the ZIC Group.

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

Introduction *continued*

1 Executive summary

Business activities
ZIC Group is the main operating carrier of Zurich Insurance Group (Zurich or the Group). Zurich is a leading multi-line insurer that serves its customers in global and local markets. With about 55,000 employees, it provides a wide range of property and casualty, and life insurance products and services in more than 215 countries and territories. Zurich's customers include individuals, small businesses, and mid-sized and large companies, as well as multinational corporations.

Performance: ZIC Ltd's financial results overview in 2019
ZIC Ltd reported a net income after taxes of CHF 3.7 billion in 2019, a 11 percent increase compared to 2018. This increase was mainly driven by a higher net investment result of CHF 1.0 billion, partially offset by a lower net underwriting result of CHF 600 million due to changes in the reinsurance structure.

Total gross written premiums and policy fees increased by CHF 186 million or 1 percent to CHF 14.3 billion for the year ended December 31, 2019. Direct gross written premiums and policy fees increased by CHF 261 million to CHF 4.4 billion mainly due to growth in Canada, Japan and Switzerland. Assumed gross written premiums and policy fees decreased by CHF 75 million to CHF 9.9 billion.

Corporate governance and risk management
Zurich Insurance Group, consisting of Zurich Insurance Group Ltd and its subsidiaries, is committed to effective corporate governance for the benefit of its shareholders, customers, employees and other stakeholders based on the principles of fairness, transparency and accountability. Structures, rules and processes are designed to enable proper conduct of business by defining the powers and responsibilities of its corporate bodies and employees. These principles are applicable as well to ZIC Group.

Taking and managing risk is an integral part of the insurance business. Zurich Insurance Group manages and takes risks in an informed and disciplined manner and within a pre-determined risk appetite and tolerance.

Risk profile
The Group works to reduce unintended risks of strategic business decisions through its risk assessment processes and tools, including the Total Risk Profiling™ process. As part of the annual assessment of strategic risks, the Executive Committee (ExCo) assessed potential risks from both external and internal factors, looking at 2020 and beyond. These include: macro-economic risks such as financial stress due to geopolitical uncertainties and monetary policy with impacts primarily on insurance and market risk; adoption to the post-Brexit legal and regulatory regime; adequately transforming propositions and approaches for new customer segments and other changes affecting competitiveness in markets where Zurich is active; and information security including cyber and business resilience risks. The ExCo has defined actions to respond as appropriate and reviews changes to the key risks and their status of actions at least quarterly.

ZIC Group's key risks, as measured by the Swiss Solvency Test (SST) target capital, are market risk, premium and reserve risk, and natural catastrophe risk. ZIC Group's risk profile is largely a function of the risks written by its subsidiaries. Premium and reserve risk followed by market risk are the major risk drivers of the business directly written in Switzerland by ZIC. See section G. 'Solvency', pages 52 – 53 for additional information.

Valuation
ZIC Group's market-consistent balance sheet (MCBS) values assets and liabilities in accordance with the SST principles. The difference between the value of the assets and the liabilities forms the basis for the calculation of the risk-bearing capital.

The main movements in the MCBS include:

- The market value of investments increased by USD 10.5 billion from USD 185.5 billion as of 2018 to USD 196.0 billion as of 2019.
- The market-consistent value of total other assets decreased by USD 0.8 billion from USD 179.8 billion as of 2018 to USD 179.0 billion as of 2019.
- The market value best estimate of provisions for insurance liabilities increased by USD 8.3 billion from USD 162.8 billion as of 2018 to USD 171.1 billion as of 2019.

- Best estimate of provisions for unit-linked life insurance liabilities decreased by USD 6.8 from USD 129.5 billion in 2018 to USD 122.7 billion in 2019.
- The market-consistent value of other liabilities has increased by USD 4.2 billion from USD 37.4 billion as of 2018 to USD 41.6 billion as of 2019.

See section E. Valuation for a presentation of ZIC Group's market-consistent balance sheet and analysis of change.

Capital management

Zurich Insurance Group manages capital to maximize long-term shareholder value while maintaining financial strength within its 'AA' target range, and meeting regulatory, solvency and rating agency requirements. As of December 31, 2019 the Group's shareholders' equity of USD 35.0 billion, subordinated debt of USD 6.9 billion and senior financial debt of USD 3.2 billion, excluding net newly issued senior debt since the second quarter of 2018, were part of the capital available in the Group's economic framework. Further adjustments usually include items such as intangible assets, deferred tax assets and liabilities, allowing for discounting of liabilities and the value of in-force business, or inclusion of market value margin and expected profit over the next 12 months.

ZIC Ltd maintained its strong rating level in 2019. As of December 31, 2019, the Insurance Financial Strength Rating of ZIC Ltd was revised from stable to positive; 'AA–/Positive' by S&P Global Ratings, 'Aa3/Stable' by Moody's, and 'A+(Superior)/Stable by A.M. Best.

Solvency

FINMA has established the Swiss Solvency Test (SST) to assess risk quantitatively. Zurich reports the SST ratio annually to FINMA. The risk categories follow FINMA guidelines and focus on insurance, market and credit risk.

The Group uses an adaptation of its internal Zurich Economic Capital Model (Z-ECM) to comply with the SST requirements.

In 2019, Zurich continued to enhance its internal model, advanced the approval process with FINMA, and has received approval for specific enhancements of the model.

Based on the enhanced SST internal model the SST ratio as of January 1, 2020 stands at 241 percent, 16 percentage points higher compared to the SST ratio as of January 1, 2019. Following the favorable model change impact, the SST ratio increased further, as the strong operational capital generation from the businesses and a favorable impact through affiliated credit default risk is only partially offset by negative financial market movements during the year and the accrual of dividends.

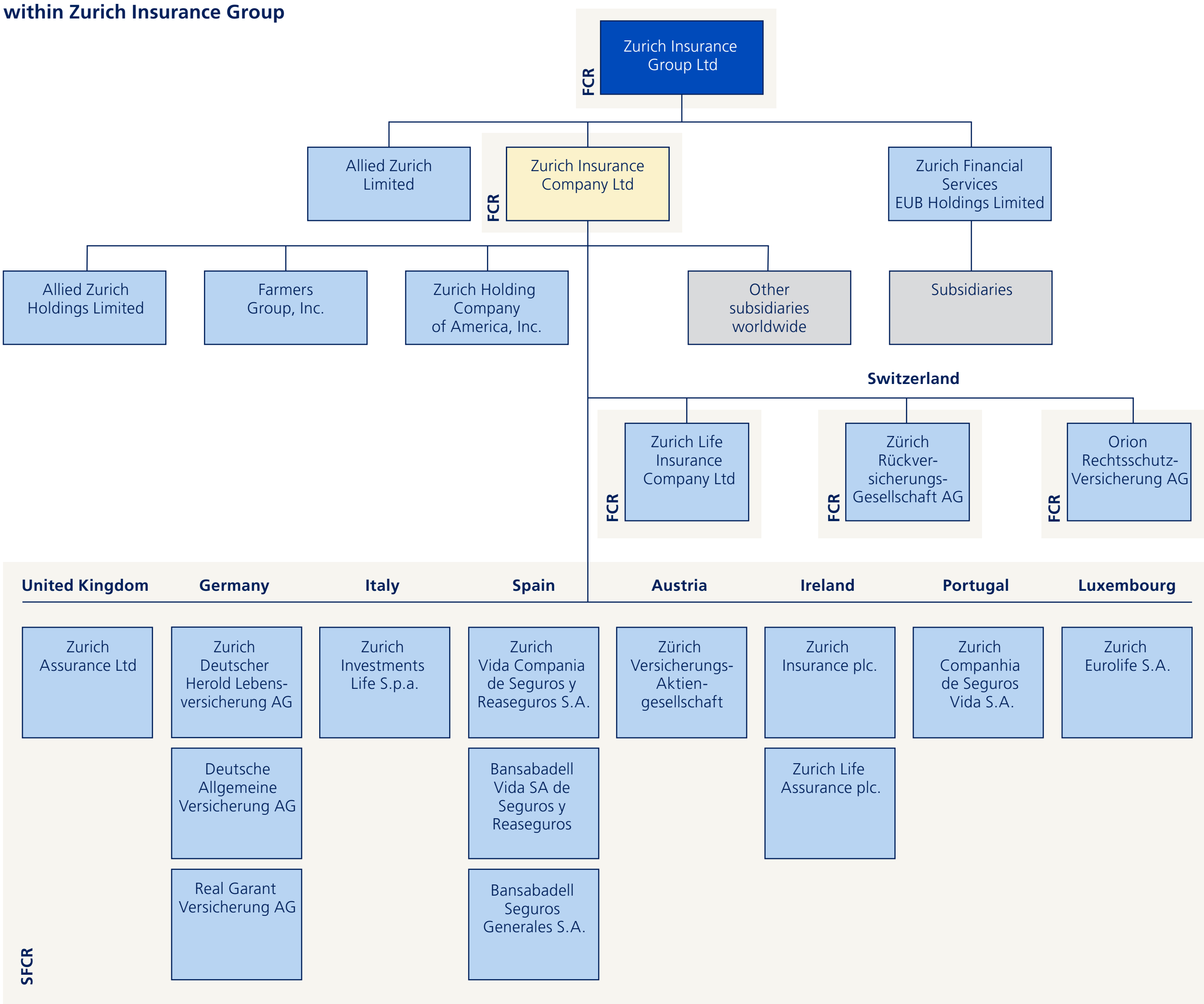
2 Approval of the Financial Condition Report

This Report was reviewed and signed-off by the Board of Directors of Zurich Insurance Company Ltd on May 13, 2020.

A. Business activities

A.1 Company structure and major subsidiaries

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, 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.

ZIC Ltd is a corporation domiciled in Zurich, Switzerland and is the principal operating insurance company of the Zurich Insurance Group (ZIG or the Group). With about 55,000 employees, Zurich provides a wide range of property and casualty, and life insurance products and services in more than 215 countries and territories. Zurich's customers include individuals, small businesses, and mid-sized and large companies, as well as multinational corporations. The Group is headquartered in Zurich, Switzerland.

As well as being an insurance company, ZIC Ltd also acts as the holding company for the subsidiaries of the Group, except for the Group's property loans and banking activities. ZIC Ltd pools internal reinsurance and ensures pooling of capital within Zurich. In addition, it is Zurich's main issuer of debt. It also carries the cost of the Corporate Center. Its main subsidiaries include Allied Zurich Holdings Limited, Farmers Group, Inc., Zurich Assurance plc (UK), Zurich Insurance plc (Ireland), Zurich Holding Company of America, Inc. (North America), and Zurich Life Insurance Company Ltd (Switzerland).

The ZIC Ltd subsidiaries regulated in Switzerland produce their own Financial Condition Reports:

- Zurich Life Insurance Company Ltd
- Zurich Reinsurance Company Ltd
- Orion Rechtsschutz-Versicherung AG.

The ZIC Ltd subsidiaries based in the European Union produce their own Solvency and Financial Condition Reports under Solvency II regulation. All reports are available on Zurich's website: https://www.zurich.com/en/investor-relations/results-and-reports/other-statutory-filings.

Transactions in 2019

Acquisitions

OnePath

On December 11, 2017, the Group announced that it had entered into an agreement to acquire 100 percent of the Australian life and consumer credit insurance business (OnePath Life and OnePath General Insurance, hereafter OnePath) of Australia and New Zealand Banking Group Limited (ANZ). In order to gain early exposure to a portion of OnePath's earnings, the Group entered into a quota share agreement to reinsure the existing death, disability and critical illness business of OnePath as of May 1, 2018 for an upfront commission payment of USD 754 million. On May 31, 2019, the Group completed its acquisition of OnePath for USD 1.4 billion, subject to purchase price adjustments. As part of the transaction, Zurich will enter into a 20-year strategic alliance agreement with ANZ in Australia to distribute life insurance products through its bank channels.

Adira Insurance

On September 27, 2018, Zurich Insurance Group entered into agreements to acquire 80 percent of PT Asuransi Adira Dinamika (Adira Insurance), a General Insurance provider, from PT Bank Danamon Indonesia (Bank Danamon) and a minority investor for approximately USD 465 million, including potential future incremental payments based on business performance. The agreement includes a 20-year distribution agreement. On November 27, 2019, Zurich Insurance Group completed the acquisition. Based on the purchase price, the preliminary value of intangible assets, mainly comprising goodwill and distribution agreements, are estimated at USD 340 million, including the 20 percent portion relating to non-controlling interest.

Divestments

Held for sale

On November 19, 2019, Zurich Financial Services (UKISA) Limited and Allied Zurich Holdings Limited (AZH) entered into an agreement with Embark Group Limited (Embark) to sell the UK Retail Wealth business, which includes an Investment and Retail Wealth Platform business, Sterling ISA Managers Limited (SIML), and an Investment Management business, Zurich Investment Services (UK) Limited (ZISUK). The sale is expected to be completed in Q2 2020, subject to regulatory approval. The Group has recorded a pre-tax loss of USD 123 million in the statement of income, including an impairment of assets of USD 209 million. As of December 31, 2019, assets and liabilities reclassified to held for sale were USD 57 million and USD 7 million, respectively.

A. Business activities *continued*

On September 15, 2019, Zurich Insurance plc entered into an agreement to transfer the German Architects & Engineers portfolio to Darag Group. As of December 31, 2019, assets reclassified to held for sale were USD 177 million and liabilities reclassified to held for sale were USD 177 million.

On December 14, 2018, Zurich Insurance plc entered into an agreement with Catalina Holdings (Bermuda) Ltd and certain of its subsidiaries to transfer a portfolio of pre-2007 United Kingdom legacy employers' liability policies to Catalina London Limited, subject to regulatory and court approvals. The transfer is expected to be completed in 2020. As of December 31, 2019, assets reclassified to held for sale were USD 1.8 billion and liabilities reclassified to held for sale were USD 1.8 billion.

As of December 31, 2019, due to the completion of the sale of the UK workplace pensions and savings business by Zurich Assurance Ltd in the UK (see note below), the total assets and liabilities reclassified to held for sale decreased by USD 22 billion and USD 23.5 billion, to USD 2.1 billion and USD 2 billion, respectively.

UK workplace pensions and savings business
On October 12, 2017 the Group announced a strategic deal under which Lloyds Banking (LBG) would acquire the UK workplace pension and savings business. On April 3, 2018, Sterling ISA Managers Limited completed the sale of its Corporate Savings Platform together with the associated infrastructure, assets and business to LBG subsidiary, Scottish Widows Administration Services Limited. On July 1, 2019, the remaining insurance business was transferred by Zurich Assurance Ltd to Scottish Widows Limited by a UK court process under Part VII of the Financial Services and Markets Act 2000. In 2019, the Group has recorded a pre-tax gain of USD 24 million in the statement of income upon completion of the sale.

Venezuelan Operations
On May 24, 2019, the Group completed the sale of its 69 percent participation in Zurich Seguros, S.A. The Group has recorded a pre-tax loss of USD 260 million, of which USD 258 million results from negative currency translation adjustments, in the statement of income upon completion of the sale.

ADAC Autoversicherung AG and Bonnfinanz AG
On January 1, 2019, the Group completed the sale of its 51 percent participation in ADAC Autoversicherung AG and on April 2, 2019, the Group completed the sale of Bonnfinanz AG, with pre-tax gains of USD 19 million and USD 39 million, respectively, recorded within net gains/(losses) on divestment of businesses.

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

ZIC Group's business is focused on providing best-in-class insurance products and services to individuals, small businesses, mid-sized and large companies. ZIC Group's strategy:

- Focuses on customers by improving customer satisfaction and encouraging a transformation into a truly customer led company,
- Simplifies by creating a more agile and responsive organization,
- Innovates by providing better products, services and customer care.

ZIC Group's strategy is to deliver long-term competitive advantage focuses on continuing to increase profitability and consolidating the Group's position as a leading global underwriter for property and casualty (P&C) and life insurance. ZIC Group will continue to expand customer relationships and simplify the business. At the operating level, ZIC Group will continue to reduce complexity and improve accountability. ZIC Group will enhance technical excellence and strengthen its go-to-market-approach for commercial customers. It will also seek to enhance its offerings to individuals by monitoring and aiming to increase customer satisfaction and retention. See the Zurich Insurance Group's Annual Report 2019, pages 8 to 17 for more information.

ZIC Ltd includes the direct P&C business in Switzerland and its branches mainly located in Canada, Japan and Hong Kong as well as assumed reinsurance business from its subsidiaries and the Farmers Exchanges[1]. It includes the Corporate Center as well as most of the debt financing of Zurich Insurance Group.

Group structure

ZIC Group consists of ZIC Ltd and its subsidiaries.

The operational group structure reflects both, ZIC Group's businesses and geographical regions. ZIC Group pursues a customer-centric strategy, with the P&C and Life businesses which are managed through a regional structure. For details on the activities of the various businesses refer to note 27 of the audited consolidated financial statements.

ZIC Group further divides its P&C business into Retail and Commercial customer units.

ZIC Group has identified the following 13 reportable and operating segments.

Group structure

Businesses	Property & Casualty (P&C)	Life	Farmers	Non-Core Businesses	Group Functions and Operations
Reportable segments	Europe, Middle East & Africa (EMEA) North America Asia Pacific Latin America Group Reinsurance	Europe, Middle East & Africa (EMEA) North America Asia Pacific Latin America Group Reinsurance	Farmers	Non-Core Businesses	Group Functions and Operations
Customer units	Commercial Retail				

[1] The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc, a wholly-owned subsidiary of the Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

A. Business activities *continued*

Operating insurance branches of ZIC Ltd

as of December 31, 2019		Segment
Bahrain		
Zurich Insurance Company Ltd (Bahrain Branch)	Bahrain	Property & Casualty
Bermuda		
Zurich Insurance Company Ltd, Bermuda Branch	Bermuda	Property & Casualty
Canada		
Zurich Insurance Company Ltd, Canadian Branch	Canada	Property & Casualty
Hong Kong		
Zurich Insurance Company Ltd, Hong Kong Branch	Hong Kong	Property & Casualty
Israel		
Zurich Insurance Company Ltd, Israel Branch	Israel	Property & Casualty
Italy		
Zurich Insurance Company Limited – Rappresentanza Generale per l'Italia	Italy	Property & Casualty
Japan		
Zurich Insurance Company Limited	Japan	Property & Casualty
Malaysia		
Zurich Insurance Company Ltd, Labuan Branch	Malaysia	Property & Casualty
Qatar		
Zurich Insurance Company Ltd. QFC Branch	Qatar	Property & Casualty
Singapore		
Zurich Insurance Company Ltd Singapore Branch	Singapore	Property & Casualty
Switzerland		
Zürich Versicherungs-Gesellschaft AG, Regionalsitz Zürich	Switzerland	Property & Casualty
Zürich Versicherungs-Gesellschaft AG, Regionalsitz Bern/Mittelland	Switzerland	Property & Casualty
Zürich Versicherungs-Gesellschaft AG, Regionalsitz Zentral- und Nordwestschweiz	Switzerland	Property & Casualty
Zürich Versicherungs-Gesellschaft AG, Regionalsitz Ostschweiz	Switzerland	Property & Casualty
Zurigo Compagnia di Assicurazioni SA, Sede regionale per il Ticino	Switzerland	Property & Casualty
Zurich Compagnie d'Assurances SA, siège régional pour la Suisse romande	Switzerland	Property & Casualty
United Arab Emirates		
Zurich Insurance Company Ltd. (DIFC Branch)	United Arab Emirates	Property & Casualty

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

Pricewaterhouse CoopersAG (PwC), Birchstrasse 160, in 8050 Zurich, is ZIC Ltd's external auditor.

A.4 Significant unusual events

For significant events during 2019 and thereafter until March 6, 2020, please refer to the Annual Report 2019 for Zurich Insurance Company Group and Zurich Insurance Group, respectively, as well as to the news releases available at https://www.zurich.com/en/media/news-releases.

Additionally, it should be noted that the global response to COVID-19 is evolving and has the potential to impact the valuation of assets and liabilities presented in this FCR. Zurich Insurance Company Group and Zurich Insurance Group are closely monitoring the impact of COVID-19 on their operations and financial results. As of May 14, 2020 market impacts have had an adverse impact to the reported SST ratio.

Finally, going forward ZIC Ltd will apply the standard yield curves as allowed by the Swiss Financial Market Supervisory Authority (FINMA) for the calculation of the SST. As at March 31, 2020 and applying these yield curves ZIC Ltd the SST ratio to be at 184 percent.

B. Performance

B.1 Most important markets

In 2019, the most important markets for ZIC Ltd according to premium income (direct business, excluding subsidiaries) were Switzerland, Japan and Canada.

B.2 Performance overview of ZIC Ltd

As complementary to the consolidated, look-through perspective presented for ZIC Group, FINMA and the Swiss Statutory Accounting Principle mandate the disclosure of statutory stand-alone information prepared under the ZIC Ltd perspective, under local reporting requirements (Swiss Code of Obligations and relevant supervisory law) and in Swiss francs. Based on this perspective, ZIC Group presents performance information, differentiating between the direct Property & Casualty business written by ZIC Ltd in Switzerland and its branches located mainly in Canada, Japan and Hong Kong as well as assumed reinsurance business, reflecting primarily business assumed from ZIC Ltd's subsidiaries. Zurich provides this information in Appendix 1. A discussion of the main factors affecting performance is outlined in the text below.

ZIC Ltd reported a net income after taxes of CHF 3.7 billion in 2019, a 11 percent increase compared to 2018. This increase was mainly driven by a higher net investment result of CHF 1.0 billion, partially offset by a lower net underwriting result of CHF 600 million.

Total gross written premiums and policy fees increased by CHF 186 million or 1 percent to CHF 14.3 billion for the year ended December 31, 2019. In local currency, gross written premiums and policy fees increased by 2 percent or CHF 278 million. Direct gross written premiums and policy fees increased by CHF 261 million to CHF 4.4 billion mainly due to growth in Canada, Japan and Switzerland. Assumed gross written premiums and policy fees decreased by CHF 75 million to CHF 9.9 billion mainly due to the non-renewal of a Group internal reinsurance contract with Zurich American Life Insurance Company, partially offset by additional reinsurance treaties.

The net insurance reserves decreased by CHF 2.3 billion compared with the year ended December 31, 2018, mainly reflecting the termination of the Whole Account Quota Share (WAQS) reinsurance treaty with Zurich American Insurance Company in 2018, which is now in run-off, as well as the commutation of a reinsured legacy portfolio with Zurich Insurance plc.

The net investment result increased by CHF 1.0 billion to CHF 4.8 billion, mainly due to the overall improvement in the equity securities markets during 2019. This was partially offset by lower income from investments in subsidiaries and associates.

Direct Swiss Business

The underwriting result increased by CHF 92 million to CHF 454 million in 2019, mainly as a result of improved growth and loss experience in Accident and lower insurance benefits and losses in Motor insurance.

B. Performance *continued*

Direct Non-Swiss Business

The net underwriting result decreased by CHF 107 million to a loss of CHF 133 million in 2019, as net earned premiums and policy fees and net technical expenses decreased. The different branches contributed to this result as follows:

Japan

Technical income grew by CHF 59 million with the major portfolios of Accident & Health and Motor continuing to perform well. The underwriting result declined from CHF 57 million in 2018 to a loss of CHF 58 million in 2019 as Underwriting & Acquisition and Administration and other costs increased following the commutation of the Personal Accident Quota Share treaty with Zurich Rückversicherungs-Gesellschaft AG.

Canada

Technical income increased from CHF 214 million in 2018 to CHF 231 million in 2019, with growth in earned premium and other income. The underwriting result improved as well from a loss of CHF 70 million in 2018 to a loss of CHF 34 million in 2019 following lower Insurance Benefits and Losses, net of reinsurance, owing to underwriting improvement actions.

Hong Kong

Net earned premium in 2019 decreased by CHF 43 million following establishment of an internal loss portfolio transfer treaty. Overall, the underwriting result declined by CHF 10 million as a result of increased insurance benefits and losses in Financial and Engineering lines.

Bermuda

All the direct business in the Company's Bermuda branch is in run-off an in 2019, the underwriting result improved from a loss of CHF 23 million to a loss of CHF 14 million. In 2018, the underwriting result reflected an increase of reserves for prior year claims in the energy business.

Other branches and businesses

The other foreign branches with direct business – Italy and Singapore – each showed deterioration in their underwriting result compared to 2018. In Italy, the underwriting result decreased CHF 8 million compared with 2018 due to higher net insurance benefits and losses mainly due to increased frequency in Motor and higher Administrative & Other expenses. In Singapore, the underwriting result decreased by CHF 4 million compared to 2018 also owing to higher net insurance benefits and losses resulting from higher retention of business. Liechtenstein shows an underwriting loss of CHF 15 million for 2019, however, 2019 is the first year that Liechtenstein is reported as a separate business; previously it had been reported as part of Switzerland.

Indirect Business

ZIC Ltd acts as an internal reinsurer to the other subsidiaries of Zurich Insurance Group. Reinsurance programs are structured to support and enable the Group's risk management, capital management, underwriting and customer strategy. In the Indirect business, the underwriting result declined by CHF 585 billion in 2019, resulting in a loss of CHF 648 million. This is primarily due to an increase in loss experience in the Casualty line of business and lower levels of recoveries. .

Net investment result

Total investment income increased by CHF 316 million or 7 percent to CHF 5.2 billion in 2019. The increase in write-ups on equity securities was mainly driven by an overall improvement in equity securities markets during 2019 as well as a rise in the value of the single investor funds compared to 2018. Dividend income from subsidiaries and associates decreased by CHF 301 million to CHF 3.0 billion in 2019, mainly due lower dividend payments from Zurich Life Insurance Company Ltd and from Zürich Beteiligungs-Aktiengesellschaft (Deutschland), partially offset by higher dividend income from Farmers Group, Inc.

Total investment expenses decreased by CHF 700 million or 67 percent to CHF 340 million in 2019, mainly due to lower write-downs on equity securities following an overall improvement in equity securities markets during 2019. The write-downs on investments in subsidiaries and associates of CHF 10 million in 2019 included an impairment of Bright Box HK Limited. The impairments in 2018 were mainly related to Zurich Minas Brasil Seguros S.A. as well as to the entity holding the Company's business in Venezuela.

Other financial income and expense

Net other financial income and expense improved by CHF 44 million to a net loss of CHF 13 million in 2019 due to net gains on certain derivative instruments as well as lower losses on swaps that more than offset write-downs on derivatives.

Interest expense on debt and other interest expense

Total interest expense on debt and other interest expense increased by CHF 45 million or 8 percent to CHF 610 million in 2019, mainly due to a deferral of interest expense on debt in 2018.

Shareholder’s equity

Shareholder’s equity increased by CHF 964 million to CHF 25.9 billion for the year ended December 31, 2019, from CHF 25.0 billion for the year ended December 31, 2018. This increase reflects the net income after taxes of CHF 3.7 billion, partially offset by the dividend payment to Zurich Insurance Group Ltd of CHF 2.8 billion in 2019, which was approved at the Annual General Meeting on April 3, 2019.

C. Corporate governance and risk management

C.1 Corporate governance

ZIC Group's and ZIC Ltd's corporate governance follows the principles of Zurich Insurance Group. The disclosure below highlights areas of the Group's corporate governance, in particular where they are specific to ZIC Ltd. It should be read in conjunction with the Zurich Insurance Group's Financial Condition Report 2019, section C.1 Corporate governance.

The Board of Directors (the Board), under the leadership of the Chairman, is responsible for determining the overall strategy of the Group , including a strong commitment to sustainability and supervising senior management. It holds the ultimate decision-making authority for ZIC Ltd and ZIC Group. For further information about the Zurich Insurance Group Board's responsibilities, see Zurich Insurance Group's Annual Report 2019, page 57.

The members of the Board are elected by the shareholders at the Annual General Meeting (AGM). The Board constitutes itself in its first meeting after the AGM.

All Directors of Zurich Insurance Group Ltd are also members of the ZIC Ltd Board of Directors. Mr. Liès serves as Chairman of that Board since the Annual General Meeting (AGM) of April 4, 2018.

ZIC Ltd's corporate bodies include:

- the Chairman
- the Board Governance, Nominations & Sustainability Committee
- the Board Remuneration Committee
- the Board Audit Committee
- the Board Risk and Investment Committee
- the Chief Executive Officer
- the Executive Committee (ExCo).

Board of Directors, as of December 31, 2019

Board of Directors	Expiration of term of office
Michel M. Liès, Chairman	2020
Christoph Franz, Vice Chairman	2020
Joan Amble	2020
Catherine Bessant	2020
Dame Alison Carnwath	2020
Michael Halbherr	2020
Jeffrey Hayman	2020
Monica Mächler	2020
Kishore Mahbubani	2020
Jasmin Staiblin	2020
Barry Stowe	2020
Claudia Biedermann, Company Secretary	

David Nish did not stand for re-election at the AGM on April 3, 2019. All other Board members were re-elected for another one-year term. Michael Halbherr, Jasmin Staiblin and Barry Stowe were newly elected as members of the Board. The Board constituted itself at its first meeting following the AGM. In this meeting the Chairman, the Vice-Chairman, the Committee Chairpersons and the Committee members are appointed among and by the Board members.

The Board proposed to shareholders that they re-elect at the AGM 2020 as follows:

as members: Michel M. Liès, Joan Amble, Catherine Bessant, Dame Alison Carnwath, Christoph Franz, Michael Halbherr, Jeffrey Hayman, Monica Mächler, Kishore Mahbubani, Jasmin Staiblin and Barry Stowe.

All members of the Board were re-elected by the shareholders, as proposed by the Board, at the AGM 2020 which took place on April 1, 2020.

After the AGM 2020, the Board Committees are as follows:

- **Governance, Nominations & Sustainability Committee:** Michel M. Liès (Chair), Dame Alison Carnwath, Christoph Franz, Jeffrey Hayman, Monica Mächler
- **Remuneration Committee:** Christoph Franz (Chair), Catherine Bessant, Michel M. Liès, Kishore Mahbubani, Jasmin Staiblin
- **Audit Committee:** Dame Alison Carnwath (Chair), Catherine Bessant, Jeffrey Hayman, Monica Mächler, Barry Stowe
- **Risk and Investment Committee:** Jeffrey Hayman (Chair), Joan Amble, Dame Alison Carnwath, Michael Halbherr, Kishore Mahbubani

The ZIC Ltd Executive Committee (ExCo) is headed by Mario Greco who also serves as Group CEO for Zurich Insurance Group Ltd. The ZIC Ltd ExCo composition is equivalent to Zurich Insurance Group ExCo. Amanda Blanc, former CEO EMEA and Bank Distribution, decided to step down from her role as of July 2, 2019, and Alison Martin took over the role as CEO EMEA and Bank Distribution effective July 9, 2019, while continuing as Group Chief Risk Officer (Group CRO) until September 30, 2019. On October 1, 2019, Peter Giger assumed the role of Group CRO and became a member of the ExCo.

Executive Committee, as of December 31, 2019

Member	Position held
Mario Greco	Group Chief Executive Officer
Urban Angehrn	Group Chief Investment Officer
Jeff Dailey	CEO of Farmers Group, Inc.
Claudia Dill	CEO Latin America
Peter Giger	Group Chief Risk Officer
Jack Howell	CEO Asia Pacific
Alison Martin	CEO EMEA (Europe, Middle East & Africa) and Bank Distribution
George Quinn	Group Chief Financial Officer
Kathleen Savio	CEO North America
James Shea	CEO Commercial Insurance
Kristof Terryn	Group Chief Operating Officer

C. Corporate governance and risk management *continued*

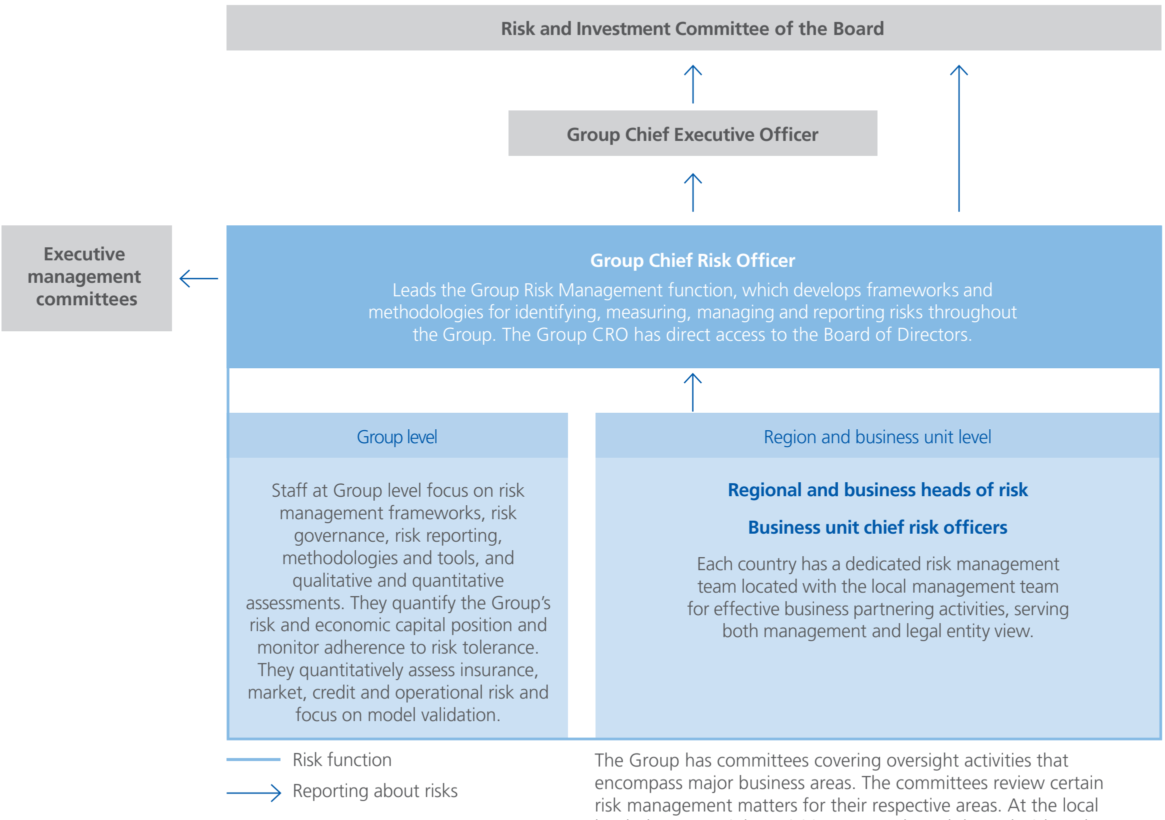
C.2 Risk management

Risks and capital are managed at Group, regional and business unit level according to the Zurich's risk and capital management framework. The principles of enterprise and risk management are equally applicable to the ZIC Group.

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

The risk function is independent of the business by being a vertically integrated function where global risk employees report directly into the Zurich Insurance 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.

The Zurich Risk Policy is Zurich Insurance Group's main risk governance document. It sets standards for effective risk management throughout the Zurich Insurance Group. The policy describes the Zurich Insurance Group's risk management framework, provides a standardized set of risk types, and defines the Zurich Insurance Group's appetite for risks at Zurich Insurance 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.



The Group has committees covering oversight activities that encompass major business areas. The committees review certain risk management matters for their respective areas. At the local level, these oversight activities are conducted through risk and control committees.

Zurich Insurance Group regularly reports on its risk profile at local and Zurich Insurance Group levels. The Zurich Insurance Group has procedures to refer risk topics to senior management and the Board of Directors in a timely way. To foster transparency about risk, the Board receives quarterly risk reports and risk updates. In 2019, reporting was supplemented with in-depth risk insights into topics such as information security management, accumulation risk, long-tail Life risk, credit risk and country risk.

Zurich Insurance Group 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 Zurich Insurance Group to assess risks in terms of severity and probability and supports the definition and implementation of mitigating actions. At Zurich Insurance Group level, this is an annual process, followed by regular reviews and updates by management.

Zurich Insurance Group's risk appetite and tolerance reflects Zurich Insurance Group's willingness and capacity to take risks in pursuit of value and sets boundaries within which the businesses act. By monitoring that risks are taken within agreed risk appetite levels and tolerance limits, Zurich Insurance Group protects its capital, liquidity, earnings and reputation. Zurich Insurance Group regularly assesses and, as far as possible, quantifies material risks to which it is exposed.

Zurich Insurance Group's goal is to maintain capital consistent with a 'AA' financial strength rating for Zurich Insurance Group. Zurich Insurance Group translates that goal into a quantified risk tolerance. The primary metric used to steer business is the Zurich Economic Capital Model (Z-ECM) which provides a key input into Zurich Insurance Group's planning process as an assessment of Zurich Insurance Group's risk profile against Zurich Insurance Group's risk tolerance. The Z-ECM forms the basis for optimizing Zurich Insurance Group's risk-return profile by providing consistent risk measurement across Zurich Insurance Group.

C.3 Internal control system

Risk management and internal controls

At ZIC Group, various governance and control functions help to ensure that risks are identified, and appropriately managed and internal controls are in place and operating effectively. The Board is ultimately responsible for the supervision of these activities. 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. Zurich uses the three-lines-of-defense model in its approach to governance and enterprise risk management. Zurich's three-lines-of defense approach runs through Zurich'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 74.

ZIC Group considers internal control to be key for managing operational risk. The Board has overall responsibility for the ZIC Group's risk management and internal control frameworks. The objectives of the ZIC Group's internal control system are to provide reasonable assurance that ZIC Group'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 risk that business objectives might not be met. Key controls are assessed for their design and operating effectiveness.

The Group promotes risk awareness and understanding of controls through communication and training. Risk management and internal control systems are designed at Group level and implemented Group-wide and are applicable to ZIC Group.

Management, as the first line of defense, is responsible for identifying, evaluating and managing risk, and designing, implementing and maintaining internal control. Key processes and controls in the organization are subject to review and challenge by management, Group Risk Management, Group Compliance and Group Audit. Control issues of Group-level significance and associated mitigation actions are reported regularly to the Audit Committee of the Board. The Risk and Investment Committee of the Board reviews the effectiveness of the Group's risk management system, including the Group's risk tolerance and enterprise-wide risk governance framework, in accordance with the charter for each committee.

The Group's Disclosure Committee, chaired by the Head of Group Financial Accounting and Reporting, assesses the content, accuracy and integrity of the disclosures and the effectiveness of the internal controls over financial reporting. The conclusions result in a recommendation to the Group Chief Financial Officer to release the financial disclosures to the Audit Committee of the Board, who may then challenge further. The Board reviews and approves the announcement of the results and the annual report before they are made public.

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. Corporate governance and risk management *continued*

C.4 Compliance

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

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

- Enabling the business to manage its compliance risks
- Being a trusted advisor
- Providing independent challenges, monitoring and assurance
- Assisting management to promote a culture of compliance and ethical behaviors.

Group Compliance is vertically integrated to support a global framework and it is led by the Chief Compliance Officer. The frameworks, controls and approach to management of compliance risk employed by Group Compliance are equally applicable to ZIC Ltd and its subsidiaries.

Group Compliance performs its activities according to the Group's annual compliance plan and reports on progress measured against the plan, compliance assurance outcomes and insights, to management, the Audit Committee of the Board of Directors of ZIC Ltd and to the regional and local equivalent bodies by way of the Quarterly Compliance Review process (QCR).

The Group's annual compliance plan is a risk-based plan and must be prepared on the basis of an independent forward-looking compliance risk assessment, taking into account key risk drivers in both the internal and external environments.

ZIC Group Compliance 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, it provides compliance risk insight through relevant and targeted reporting.

The Chief Compliance Officer defines and issues compliance policies based on Group requirements relevant to the Zurich Insurance Company and establishes appropriate processes and guidance.

Group Compliance supports a strong compliance culture and ethics across the Group in a changing regulatory environment through training and awareness initiatives in line with our Code of Conduct.

The Chief Compliance Officer has direct access to the ZIC Ltd CEO and the Chairman of the ZIC Ltd Board Audit Committee and to the ZIC Chairman of the Board.

ZIC Group encourages its employees to speak up and report improper conduct that they believe is illegal, unethical, or violates Zurich's Code of Conduct or the ZIC Group's policies. Employees are free to report their concerns to management, human resources, ZIC Group's 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

Zurich Insurance Group's internal audit function (Group Audit) is tasked with providing independent and objective assurance to ZIC Ltd's Board, Audit Committee, CEO and management, on the adequacy and effectiveness of the ZIC Group's 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 Audit Committee, management and other stakeholders. The Audit Committee approves the annual plan and any changes to it.

Group Audit 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).

Group Audit 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, Group Audit takes into consideration the work of other assurance functions. In particular, Group Audit coordinates its activities with the external auditors, sharing risk assessments, work plans, audit reports and updates on audit actions.

Group Audit is responsible for ensuring that issues which it identifies that could affect ZIC Group's operations are communicated to the responsible management, CEO and the Audit Committee. Group Audit issues periodic reports to management and the Audit Committee, summarizing audit findings, the status of corrective actions and the status of plan execution. A member of Group Audit attends each Audit Committee 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. Group Audit has no operational responsibilities over the areas it reviews and, to ensure independence, all Group Audit staff report (via audit managers) to the Head of Group Audit.

The Audit Committee assesses the independence of Group Audit 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 Group Audit 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 Audit Committee in February 2017. The results confirmed that Group Audit's practices conform to all IIA Standards.

D. Risk profile

Risk and capital are managed at the Zurich Insurance Group, regional, and business unit level according to Zurich Insurance Group's risk and capital management framework. The principles of the Zurich Insurance Group's enterprise risk management described in this chapter are equally applicable to the ZIC Group. The figures presented are prepared on a ZIC Group basis.

The significant risks for ZIC Ltd, as measured by the SST target capital, are market risk, premium and reserve risk, and natural catastrophe risk.

D.1 Insurance risk

Insurance risk is the inherent uncertainty regarding the occurrence, amount or timing of insurance cash flows. 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. Zurich Insurance Group manages insurance risk through:

- Specific underwriting and claims standards and controls
- Robust reserving processes
- External reinsurance

D.1.1 Property and casualty insurance risk

Property and casualty insurance risk arises from coverage provided for motor, property, liability, special lines and worker injury. It comprises premium and reserve risk, catastrophe 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. Catastrophe risk predominantly relates to uncertainty around natural catastrophes. Business risk for P&C predominantly relates to unexpected increases in the expenses relating to claims handling, underwriting, and administration.

D.1.2 Management of Property and Casualty business insurance risk

Zurich Insurance Group's underwriting strategy takes advantage of the diversification of P&C risks across lines of business and geographic regions. Zurich Insurance Group's underwriting governance is applicable throughout Zurich Insurance Group. Underwriting discipline is a fundamental part of managing insurance risk. Zurich Insurance Group sets limits on underwriting capacity and delegates authority to individuals based on their specific expertise, and sets appropriate underwriting and pricing guidelines. Technical reviews assure that underwriters perform within authorities and adhere to underwriting philosophies and policies.

P&C insurance reserves are regularly estimated, reviewed and monitored by qualified and experienced actuaries at local, regional and Zurich Insurance Group levels. To arrive at their reserve estimates, the actuaries take into consideration, among other things, the latest available facts, trends and patterns of loss payments. Inflation is monitored with insights feeding into actuarial reserving models and Zurich Insurance Group's underwriting processes and pricing.

To ensure a common understanding of business insights and new trends for reserve analysis, financial plans, underwriting and pricing decisions, Zurich Insurance Group has established a culture of continuous cross-functional collaboration. For this, underwriting, actuarial (pricing and reserving), claims, finance, sales and distribution, risk engineering and risk management contribute to quarterly meetings on local and Zurich Insurance Group level.

Zurich Insurance Group has an emerging risk group, with cross-functional expertise from core insurance functions such as underwriting, claims and risk management, identifies, assesses and recommends actions for emerging risks.

Actions continue to rebalance the portfolio, reducing exposure to long tail lines. Governance is in place to ensure appropriate top-line targets and profitability. Reinsurance is deployed to help manage insurance risk. Group Risk Management also provides independent assurance through risk reviews.

Zurich Insurance Group 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 executive management. The most important peril regions and natural catastrophes (Nat Cat) continue to be U.S. and Caribbean windstorm, California earthquake and Europe windstorm.

Natural catastrophes
Zurich Insurance Group uses third-party models (adjusted to Zurich Insurance Group's view) to manage its underwriting, ensure accumulations stay within intended exposure limits and assess the capital requirement due to natural catastrophes. The same view Zurich Insurance Group has on natural catastrophe risk also underpins profitability assessment and strategic capacity allocation and guides the type and quantity of reinsurance Zurich Insurance Group buys.

To ensure global consistency, Nat Cat exposures are modeled centrally. Potential losses from property policies with material exposure in hazard-prone geographical areas and from worker injury policies with material exposure in U.S. seismic zones are probabilistically modeled. Losses for other lines of business are estimated based on adjustments to these modeled results. Risk modeling mainly addresses climate-induced perils such as windstorm, flood, tornado, and hail, and geologically-induced perils such as earthquake.

Zurich Insurance Group constantly reviews and expands the scope and sophistication of its modeling and strives to improve data quality. Catastrophe research and development is strengthened to increase the focus on the risks from a changing climate. It supplements internal know-how with external knowledge (e.g., the Advisory Council for Catastrophes). Zurich Insurance Group is a shareholder of catastrophe exposure and loss data aggregation and estimation firm PERILS AG, Switzerland and is a member of the open-source initiative Oasis Loss Modeling Framework.

Man-made catastrophes
Man-made catastrophes include events such as industrial accidents, terrorism and cyber attacks.

For terrorism, worker injury and property risk exposures are analyzed to identify areas with significant risk concentration. Other lines of business are assessed, although the potential exposure is not as significant. A vendor-provided catastrophe model is used to evaluate potential exposures in every major U.S. city and selected cities in Europe. Zurich Insurance Group's analysis for the P&C business has shown that its exposures outside of North America are lower, in a large part due to government-provided pools. Outside the modeled areas, exposure concentrations are identified in Zurich Insurance Group's Risk Exposure Data Store (REDS). Exposure concentrations for location-based man-made scenarios, other than terrorism, are also identified in REDS, for example, industrial explosions at global ports.

Zurich Insurance Group uses third-party models to manage its underwriting and accumulations for cyber and casualty catastrophe. Zurich Insurance Group actively monitors and manages its cyber exposure and continue to refine products to ensure their appropriateness. Improving modeling capabilities and data capture for cyber and casualty catastrophe risks are key focus areas.

D.1.3 Concentration of Property & Casualty business insurance risk
Zurich Insurance Group defines concentration risk in the P&C business as the risk of exposure to increased losses associated with inadequately diversified portfolios. Concentration risk for a property and casualty insurer may arise due to a concentration of business written within a geographical area or of underlying risks covered.

The next two tables show ZIC Group's concentration of risk within the P&C business by region and line of business based on direct written premiums before reinsurance. P&C premiums ceded to reinsurers (including retrocessions) amounted to USD 7.8 billion and USD 7.0 billion for the years ended December 31, 2019 and 2018, respectively. Reinsurance programs are managed on a global basis, and therefore, the net premium after reinsurance is monitored on an aggregated basis.

D. Risk profile *continued*

Property & Casualty business – Direct written premiums and policy fees by line of business – prior period

in USD millions, for the year ended December 31, 2018	Motor	Property	Liability	Special lines	Worker injury	Total
Europe, Middle East & Africa	4,546	4,118	1,962	1,986	343	12,955
North America	1,422	4,622	2,638	2,494	2,735	13,912
Other regions	1,595	1,402	356	1,769	150	5,272
Total	**7,563**	**10,142**	**4,957**	**6,249**	**3,228**	**32,139**

Property & Casualty business – Direct written premiums and policy fees by line of business – current period

in USD millions, for the year ended December 31, 2019	**Motor**	**Property**	**Liability**	**Special lines**	**Worker injury**	**Total**
Europe, Middle East & Africa	4,050	4,328	2,005	2,009	329	12,722
North America	1,499	5,126	2,719	2,361	2,684	14,389
Other regions	1,673	1,573	386	1,865	144	5,641
Total	**7,222**	**11,027**	**5,110**	**6,236**	**3,158**	**32,752**

Analysis of sensitivities for Property and Casualty business risks The following two tables show the sensitivity of net income before tax and the sensitivity of net assets, using the ZIC Group effective income tax rate, as a result of adverse development in the net loss ratio by one percentage point. The sensitivities do not indicate a probability of such an event and do not consider any non-linear effects of reinsurance. Based on the assumptions applied in the sensitivity analysis in tables below, each additional percentage point increase in the loss ratio would have a linear impact on net income before tax and net assets. ZIC Group also monitors insurance risk by evaluating extreme scenarios, taking into account the non-linear effects of reinsurance contracts.

Insurance risk sensitivity for the Property & Casualty business – prior period

in USD millions, for the year ended December 31, 2018	Europe, Middle East & Africa	North America	Asia Pacific	Latin America	Reinsurance	Total
+1% in net loss ratio						
Net income before tax	(121)	(100)	(23)	(21)	1	(264)
Net assets	(91)	(75)	(17)	(16)	–	(198)

Insurance risk sensitivity for the Property & Casualty business – current period

in USD millions, for the year ended December 31, 2019	**Europe, Middle East & Africa**	**North America**	**Asia Pacific**	**Latin America**	**Reinsurance**	**Total**
+1% in net loss ratio						
Net income before tax	(115)	(96)	(24)	(22)	–	(256)
Net assets	(87)	(72)	(19)	(16)	–	(194)

D.1.4 Life insurance risk

The risks associated with life insurance include:

Life liability risk

- Mortality risk – when on average, the death incidence among the policyholders is higher than expected
- Longevity risk – when on average, annuitants live longer than expected
- Morbidity risk – when on average, the incidence of sickness or disability among the policyholders is higher or recovery rates from disability are lower than expected

Life business risk

- Policyholder behavior risk – on average, the policyholders discontinue or reduce contributions or withdraw benefits prior to the maturity of contracts at a rate that is different from expected
- Expense risk – expenses incurred in acquiring and administering policies are higher than expected
- New business risk – volumes of new business are insufficient to cover fixed acquisition expenses

Market risk

- Market risk – the risk associated with Zurich Insurance Group's balance sheet positions where the value or cash flow depends on financial markets, which is analyzed in the 'market risk, including investment credit risk' section

Credit risk

- Credit risk – the risk associated with a loss or potential loss from counterparties failing to fulfill their financial obligations, which is analyzed in the 'market risk, including investment credit risk' and 'other credit risk' sections

A more diversified portfolio of risks is less likely than an undiversified portfolio to be affected across the board by a change in any subset of the risks. Diversification across regions and businesses (between unit-linked and other business including protection and life annuity products, as shown in the table on page 26) contributes to reducing the impacts of the risks associated with the Life business listed above.

D.1.5 Management of Life business insurance risk

Zurich Insurance Group has local product development committees and a Zurich Insurance Group-level committee to analyze potential new life products that could significantly increase or change the nature of its risks. Zurich Insurance Group regularly reviews the continued suitability and the potential risks of existing life products to ensure sustainability of the business.

Unit-linked products are designed to reduce much of the market and credit risk associated with Zurich Insurance Group's traditional business. Risks that are inherent in these products are largely passed on to the policyholder, although a portion of Zurich Insurance Group's management fees is linked to the value of funds under management, and hence is at risk if fund values decrease. To the extent that there are guarantees built into the product design, unit-linked products carry mortality/morbidity risk and market risk. Contracts may have minimum guaranteed death benefits where the sum at risk depends on the fair value of the underlying investments. For certain contracts, these risks are mitigated by mortality and morbidity charges.

Other life insurance liabilities include traditional life insurance products, such as protection and life annuity products. Protection products carry mortality, longevity and morbidity risk, as well as market and credit risk. Changes in medical treatments and lifestyle changes are among the most significant factors that could result in earlier or more claims than expected. Disability, defined in terms of the ability to perform an occupation, could be affected by adverse economic conditions. To reduce pricing cross-subsidies, where permitted, premiums are adjusted for factors such as age, gender and smoker status. Policy terms and conditions and disclosure requirements in insurance applications are designed to mitigate the risk arising from non-standard and unpredictable risks that could result in severe financial loss. In the life annuity business, medical advances and improved social conditions that lead to increased longevity are the most significant insurance risk. Annuitant (beneficiary) mortality assumptions include allowance for future mortality improvements.

Zurich Insurance Group is also exposed to risks posed by policyholder behavior and fluctuating expenses. Policyholder behavior risk is mitigated by designing products that, as closely as possible, match revenue and expenses associated with the contract. Expense risk is reduced by carefully controlling expenses, and through regular expense analysis and allocation exercises to ensure responsible and sustainable business practices.

ZIC Group is also exposed to investment and surrender risks related to bank-owned life insurance contracts sold in the U.S. These risks have reduced significantly in recent years as several have switched into less risky investment divisions. See heading 'other contracts' in note 7 of the ZIC Group consolidated financial statements for additional information.

Lower interest rates have led to an increase in both Life business risks and Life liability risks (especially Longevity risk).

Furthermore, interest rate guarantees (with concentration in traditional, guaranteed business in Germany and Switzerland and variable annuity business in the U.S. containing minimum guaranteed death benefits) expose Zurich Insurance Group to financial losses that may arise as a result of adverse movements in interest rates. These guarantees are managed through a combination of asset-liability management and hedging.

D. Risk profile *continued*

Zurich Insurance Group has a dynamic hedging strategy to reduce the investment risk associated with the closed book of variable annuities written by its U.S. subsidiary Zurich American Life Insurance Company. This exposure has fallen substantially as a result of several policy buy-back programs since 2015.

D.1.6 Concentration of Life business insurance risk

Zurich Insurance Group defines concentration risk in the life business as the risk of exposure to increased losses associated with inadequately diversified portfolios of assets or obligations. Concentration risk for a life insurer may arise with respect to investments in a geographical area, economic sector, or individual issuers, or due to a concentration of business written within a geographical area, of a policy type, or of underlying risks covered.

Observing best-estimate assumptions on cash flows related to benefits of insurance contracts gives some indication of the size of the exposure to risks and the extent of risk concentration. The table below shows the ZIC Group's concentration of risk within Life by region and line of business based on reserves for life insurance on a net of reinsurance basis. The life insurance reserves also include policyholder surplus reserves with a loss absorbing capacity[1], predominantly in Germany for an amount of USD 9.4 billion in 2019 (2018: USD 7.4 billion) and in the UK for an amount of USD 0.5 billion in 2019 (2018: USD 0.5 billion). The ZIC Group's exposure to life insurance risks varies significantly by geographic region and line of business and may change over time. See note 8 of the ZIC Group consolidated financial statements for additional information on reserves for insurance contracts.

[1] Policyholder surplus reserves with loss-absorbing capacity refer to funds allocated to the policyholders that can be used by the shareholders, which, under certain conditions, may require regulatory approval.

Reserves, net of reinsurance, by region

in USD millions, as of December 31	Unit-linked insurance contracts		Other life insurance liabilities		Total reserves	
	2018	**2019**	2018	**2019**	2018	**2019**
Life						
Europe, Middle East & Africa	41,229	46,919	77,756	81,372	118,985	128,291
of which:						
United Kingdom	15,323	16,371	3,271	3,786	18,594	20,157
Germany	15,976	19,001	36,980	38,511	52,956	57,512
Switzerland	634	776	17,294	17,456	17,928	18,232
Italy	1,568	2,709	4,521	5,348	6,089	8,057
Ireland	2,347	1,885	2,021	2,235	4,368	4,121
Spain	699	655	11,415	11,773	12,114	12,428
Zurich International	4,339	5,129	309	220	4,648	5,349
Rest of Europe, Middle East & Africa	342	392	1,946	2,043	2,288	2,435
North America	9,241	10,253	893	1,035	10,135	11,288
Asia Pacific	539	598	2,791	4,311	3,330	4,908
Latin America	13,159	15,093	5,385	5,826	18,544	20,919
Group Reinsurance	–	–	2	5	2	5
Eliminations	–	–	(13)	(12)	(13)	(12)
Subtotal	64,168	72,863	86,814	92,537	150,982	165,399
Other businesses	**4,598**	**4,821**	**9,474**	**9,940**	**14,072**	**14,761**
Total	**68,766**	**77,684**	**96,288**	**102,477**	**165,054**	**180,160**

Analysis of sensitivities for Life business insurance risk

Zurich Insurance Group uses market-consistent embedded value reporting principles, which allow Zurich Insurance Group to increase its understanding of, and report on, the risk profile of its life products, and how these risks would change under different market conditions. Embedded value is a measure that markets use to value life businesses. For more information, see the 'Embedded Value Report 2019' (unaudited but subject to assurance review) at www.zurich.com/investor-relations/results-and-reports.

D.1.7 Reinsurance for Property and Casualty and Life businesses

Zurich Insurance Group's objective in purchasing reinsurance is to provide market-leading capacity for customers while protecting the balance sheet, supporting earnings volatility management, and achieving capital efficiency. Zurich Insurance Group follows a centralized reinsurance purchasing strategy for both P&C and Life, and bundles programs, where appropriate, to benefit from diversification and economies of scale. In support of Zurich Insurance Group's empowerment-based management model and to align risk-bearing capacities between Zurich Insurance Group and individual country operations, the internal reinsurance vehicle applies to all externally reinsured lines of business. In addition, to actively manage and reduce potential claims-recovery risks on facultative cessions and to support the strategy on operational excellence, Zurich Insurance Group started to tailor specific facultative property and casualty reinsurance facilities.

Zurich Insurance Group structures and aligns its external reinsurance protection to its capital position to achieve an optimum risk-return ratio. This includes participation in the underlying risks through self-retentions. Zurich Insurance Group manages its central reinsurance purchasing according to these principles. The cession rate for P&C was 23.0 percent as of December 31, 2019 and 21.0 percent as of December 31, 2018. The cession rate for Life was 8.0 percent as of December 31, 2019 and 7.0 percent as of December 31, 2018.

Zurich Insurance Group uses traditional and collateralized reinsurance markets to protect itself against extreme single events, multiple event occurrences across regions, or increased frequency of events. Specifically, to protect Zurich Insurance Group against man-made and natural catastrophe scenarios, per event Zurich Insurance Group arranges an annual aggregate global cover as illustrated on the graph on the next page.

Zurich Insurance Group participates in the underlying risks through its retention and through its co-participation in excess layers. The natural catastrophe reinsurance covers are on a loss-occurrence basis except the global aggregate catastrophe cover, which operates on an annual aggregate basis. The in-force natural catastrophe covers renew annually, with the exception of the global catastrophe cover, which renewed on January 1, 2019, for a three-year term.

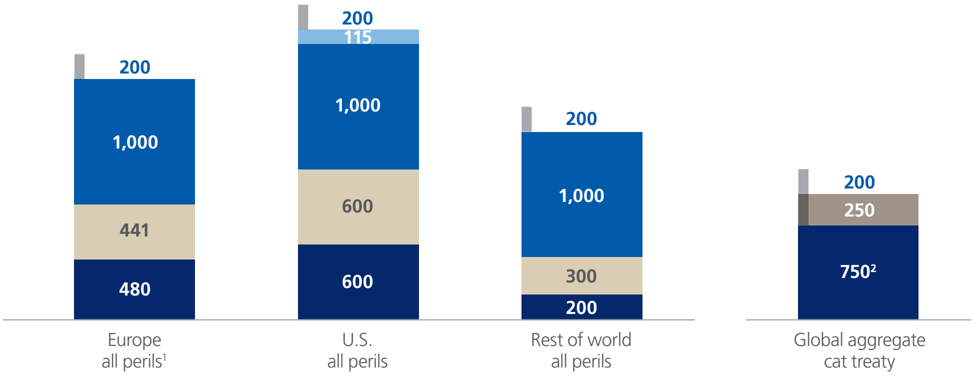
In addition to these covers, Zurich Insurance Group purchases several regional catastrophe covers, entertains a bilateral risk swap, and various line of business-specific risk treaties. These covers are reviewed continuously and are subject to change going forward.

Changes in 2019 include the expansion of Zurich Insurance Group's global catastrophe treaty limit to USD 1 billion (up from USD 750 million) and the transition from several regional surety treaties to one single global surety treaty to enhance coverage and generate efficiency.

To complement existing treaties, Zurich Insurance Group purchases catastrophe reinsurance specific to life insurance for its exposure to natural and man-made catastrophes.

D. Risk profile *continued*

2019 Group catastrophe reinsurance protection
in USD millions, as of December 31, 2019



- Retention
- Regional cat treaties
- Global cat treaties
- U.S. wind swap
- Combined global cat treaty[3]
- Global aggregate cat treaty
- 10% co-participation

[1] Europe cat treaty calculated with EUR/USD exchange rate as of July 31, 2019.
[2] Franchise deductible of USD 25 million, i.e. losses greater than USD 25 million count toward the erosion of the retention (annual aggregate deductible).
[3] This USD 200 million cover can be used only once, either for aggregated losses or for an individual occurrence or event. The attachment point for a U.S. Hurricane event is USD 2,315 million; for any other event USD 2,200 million.

D.2 Market risk, including investment credit risk

Market risk is the risk associated with Zurich Insurance Group's balance sheet positions where the value or cash flow depends on financial markets. Risk factors include:

- Equity market prices
- Real estate market prices
- Interest-rate risk
- Credit and swap spread changes
- Defaults of issuers
- Currency exchange rates

Zurich Insurance Group 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 taking into account Zurich Insurance Group's risk appetite and tolerance and local regulatory constraints.

Zurich Insurance Group has policies and limits to manage market risk and keep its strategic asset allocation in line with its risk capacity. Zurich Insurance Group centrally manages certain asset classes to control aggregation of risk and provides a consistent approach to constructing portfolios and selecting external asset managers. It diversifies portfolios, investments and asset managers, and regularly measures and manages market risk exposure. Zurich Insurance Group has set limits on concentration in investments in single issuers and certain asset classes, as well as by how much asset interest rate sensitivities can deviate from liability interest-rate sensitivities. Zurich Insurance Group regularly reviews its capacity to hold illiquid investments.

The Asset/Liability Management Investment Committee reviews and monitors Zurich Insurance Group strategic asset allocation and tactical boundaries, and monitors Zurich Insurance Group asset/liability exposure. Zurich Insurance Group oversees the activities of local asset/liability management investment committees and regularly assesses market risks at both Zurich Insurance Group and local business levels. The economic effect of potential extreme market moves is regularly examined and considered when setting the asset allocation.

Risk assessment reviews include the analysis of the management of interest-rate risk for each major maturity bucket and adherence to the aggregate positions with risk limits. Zurich Insurance Group applies processes to manage market risks and to analyze market risk hotspots. Actions to mitigate risk are taken if necessary to manage fluctuations affecting asset/liability mismatch and risk-based capital.

Zurich Insurance Group may use derivative financial instruments to mitigate market risks arising from changes in currency exchange rates, interest rates and equity prices, from credit quality of assets, and from commitments to third parties. Zurich Insurance Group enters into derivative financial instruments mostly for economic hedging purposes and, in limited circumstances, the instruments may also meet the definition of an effective hedge for accounting purposes.

In compliance with Swiss insurance regulation, Zurich Insurance Group's policy prohibits speculative trading in derivatives, meaning a pattern of so called in and out activity without reference to an underlying position. Zurich Insurance Group addresses the risks arising from derivatives through a stringent policy that requires approval of a derivative program before transactions are initiated, and by subsequent regular monitoring by Zurich Insurance Group Risk Management of open positions and annual reviews of derivative programs.

For more information on ZIC Group's investment result, including impairments and the treatment of selected financial instruments, see note 6 of the ZIC Group consolidated financial statements. For more information on derivative financial instruments and hedge accounting, see note 7 of the ZIC Group consolidated financial statements.

D. Risk profile *continued*

D.2.1 Risk from equity securities and real estate

Zurich Insurance Group is exposed to risks from price fluctuations on equity securities and real estate. These could affect Zurich Insurance Group's liquidity, reported income, economic surplus and regulatory capital position. Equity risk exposure includes common stocks, including equity unit trusts, private equity, common stock portfolios backing participating-with-profit policyholder contracts, and equities held for employee benefit plans. Exposure to real estate risk includes direct holdings in property and property company shares and funds. Returns on unit-linked contracts, whether classified as insurance or investment contracts, may be exposed to risks from equity and real estate, but these risks are borne by policyholders. However, Zurich Insurance Group is indirectly exposed to market movements from unit-linked contracts with respect to both earnings and economic capital. Market movements affect the amount of fee income earned when the fee income level is dependent on the valuation of the asset base. Therefore, the value of in-force business for unit-linked business can be negatively affected by adverse movements in equity and real estate markets.

Zurich Insurance Group manages its risks related to equity securities and real estate as part of the overall investment risk management process, and applies limits as expressed in policies and guidelines. Specifically, Zurich Insurance Group limits holdings in equities, real estate and alternative investments. To realize an optimal level of risk diversification, the strategy for equities is defined through a composite of market benchmark indices. Zurich Insurance Group has the capability and processes in place to change the exposure to key equity markets through the use of derivatives or purchase or sale of securities within a short time frame.

For additional information on equity securities and investment property, see note 6 of the ZIC Group consolidated financial statements.

D.2.2 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. It includes also other interest-rate sensitive balance sheet items such as liabilities investment contracts, debt issued by the Group, commercial and residential mortgages, employee benefit plans, and loans and receivables.

Zurich Insurance Group 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 the risk-free interest rate yield curves. Movements of credit spreads are driven by several factors including changes in expected default probability, default losses, risk premium, liquidity and other effects.

Returns on unit-linked contracts, whether classified as insurance or investment contracts, are at the risk of the policyholder; however, Zurich Insurance Group is exposed to fluctuations in interest rates and credit spreads in so far as they affect the amount of fee income earned if the fee income level is dependent on the valuation of the asset base.

D.2.3 Analysis of market risk sensitivities for interest rate, equity and credit-spread risks

Zurich Insurance Company Group investments sensitivities

The economic market risk sensitivities of the fair value for ZIC Group investments before tax as of 2019 was a negative USD 10.9 billion (negative USD 9.9 billion as of 2018) for a 100-basis-point increase in interest rate. For a 100-basis-point decrease in interest rate, the sensitivity was USD 12.7 billion in 2019 (USD 11.1 billion as of 2018). For a 10 percent decline in equity market, ZIC Group investments dropped in value by USD 1.3 billion in 2019 compared with USD 1.1 billion as of 2018. A 100-basis-point increase in credit spreads resulted in a decrease of USD 5.7 billion in 2019 compared with USD 5.2 billion as of 2018.

The following describes limitations of the ZIC Group investment sensitivities. The ZIC Group sensitivities show the effects of a change of certain risk factors, while other assumptions remain unchanged. The interest rate scenarios assume a parallel shift of all interest rates in the respective currencies. They do not take into account the possibility that interest rate changes might differ by rating class; these are disclosed separately as credit spread risk sensitivities. The sensitivity analysis is based on economic assets, and not on shareholders' equity or net income as set out in the consolidated financial statements. The sensitivities only cover the ZIC Group investments, not insurance or other liabilities. The equity market scenarios assume a concurrent movement of all stock markets. The sensitivity analysis does not take into account actions that might be taken to mitigate losses. Actions may involve changing the asset allocation, for example through selling and buying assets. The sensitivities do not indicate a probability of such events occurring in the future. They do not necessarily represent the ZIC Group's view of expected future market changes.

D.2.4 Risks from defaults of counterparties

Debt securities

The ZIC Group is exposed to credit risk from third-party counterparties where the ZIC Group holds securities issued by those entities. The default risk is controlled by the ZIC Group counterparty-concentration risk limits keeping the size of potential losses to an acceptable level.

Debt securities by rating of issuer

as of December 31	2018		2019	
	USD millions	% of total	**USD millions**	**% of total**
Rating				
AAA	35,283	25.2%	36,066	24.5%
AA	37,362	26.7%	37,062	25.1%
A	20,998	15.0%	22,812	15.5%
BBB	39,529	28.3%	44,918	30.5%
BB and below	5,341	3.8%	5,342	3.6%
Unrated	1,357	1.0%	1,308	0.9%
Total	**139,870**	**100.0%**	**147,507**	**100.0%**

The table above shows the credit-risk exposure of debt securities, by credit rating. As of December 31, 2019, 95.5 percent of the ZIC Group's debt securities was investment grade and 24.5 percent was rated 'AAA.' As of December 31, 2018, 95.2 percent of debt securities was investment grade and 25.2 percent was rated 'AAA.'

Exposure-level limits are in place and are based on default and recovery rates that tighten progressively for lower ratings. Where the ZIC Group identifies investments expected to trigger limit breaches, appropriate actions are implemented.

The risk-weighted average credit rating of the ZIC Group's debt securities portfolio is 'A–' in 2019, compared with 'A–' in 2018.

As of December 31, 2019, the largest concentration in the ZIC Group's debt securities portfolio was government-related at 49 percent of all debt securities. In all other categories, a total of USD 30.2 billion (41 percent) was secured. As of December 31, 2018, 49 percent of the ZIC Group's debt portfolio was invested in government-related securities. In all other categories, a total of USD 31.4 billion (44 percent) was secured.

The second-largest concentration in the ZIC Group's debt securities portfolio is securitized, including structured finance securities and covered bonds.

In addition to debt exposure, the ZIC Group had loan exposure of USD 4.1 billion and USD 4.4 billion to the German central government or the German federal states as of December 31, 2019 and 2018, respectively. For more information, see the 'mortgage loans and other loans' section.

Cash and cash equivalents

To reduce concentration, settlement and operational risks, Zurich Insurance Group limits the amount of cash that can be deposited with a single counterparty. Zurich Insurance Group also maintains an authorized list of acceptable cash counterparties.

For the ZIC Group, cash and cash equivalents amounted to USD 8.0 billion and USD 8.7 billion as of December 31, 2019 and December 31, 2018, respectively. The risk-weighted average rating of the overall cash portfolio was 'A' as of December 31, 2019 and 'A–' as of December 31, 2018. The ten largest bank exposures represented 74 percent of the total, whose risk-weighted average rating was 'A' as of December 31, 2019 and 'A+' as of December 31, 2018.

D. Risk profile *continued*

Mortgage loans and other loans

Mortgage loans amounted to USD 5.9 billion as of December 31, 2019 and USD 6.6 billion as of December 31, 2018. The ZIC Group's largest mortgage loan portfolios are held in Switzerland (USD 3.2 billion) and in Germany (USD 1.9 billion); these are predominantly secured against residential property but also include mortgages secured by commercial property. The ZIC Group invests in mortgages in the U.S. (USD 0.6 billion); these are mainly participations in large mortgage loans secured against commercial property.

The credit risk arising from other loans is assessed and monitored together with the debt securities portfolio. Out of the USD 8.3 billion reported loans as of December 31, 2019, 54 percent are government-related, of which 92 percent are to the German central government or the German federal states. As of December 31, 2019, USD 4.5 billion were rated as 'AAA' (55 percent) compared with 4.7 billion as of December 31, 2018; USD 1.6 billion as 'AA' (20 percent) compared with 0.7 billion as of December 31, 2018; USD 0.3 billion as 'A' (3 percent) compared with 0.3 billion as of December 31, 2018; USD 1.3 billion as 'BBB' and below (16 percent) compared with 1.2 billion as of December 31, 2018; and USD 0.5 billion as unrated (6 percent) compared with 0.7 billion as of December 31, 2018.

Derivatives

The replacement value of outstanding derivatives represents a credit risk to Zurich Insurance Group. These instruments include interest rate and cross-currency swaps, forward contracts and purchased options. A potential exposure could also arise from possible changes in replacement values. Zurich Insurance Group regularly monitors credit risk exposures arising from derivative transactions. Outstanding positions with external counterparties are managed through an approval process embedded in derivative programs.

To limit credit risk, derivative financial instruments are typically executed with counterparties rated 'A–' or better by an external rating agency, unless collateral is provided as per Zurich Insurance Group's risk policy manuals. Zurich Insurance Group's standard practice is to only transact derivatives with those counterparties for which the Zurich Insurance Group has in place an ISDA Master Agreement, with a Credit Support Annex. This mitigates credit exposures from over-the-counter transactions due to close-out netting and requires the counterparty to post collateral when the derivative position exceeds an agreed threshold. Zurich Insurance Group further mitigates credit exposures from derivative transactions by using exchange-traded or centrally cleared instruments whenever possible.

D.2.5 Risk from currency exchange rates

Currency risk is the risk of loss resulting from changes in exchange rates. Zurich Insurance Group operates internationally and therefore is exposed to the financial impact of changes in the exchange rates of various currencies. Zurich Insurance Group's presentation currency is the U.S. dollar, but its assets, liabilities, income and expenses are denominated in many currencies, with significant amounts in euro, Swiss franc and British pound, as well as the U.S. dollar.

On local balance sheets a currency mismatch may cause a balance sheet's net asset value to fluctuate, either through income or directly through equity. Zurich Insurance Group manages this risk by matching foreign currency positions on local balance sheets within prescribed limits. Residual local mismatches are reported centrally to make use of the netting effect across Zurich Insurance Group. Zurich Insurance Group hedges these residual local mismatches within an established limit through a central balance sheet. For information on net gains/losses on foreign currency transactions included in the consolidated income statements, see note 1 of the ZIC Group consolidated financial statements. The monetary currency risk exposure on local balance sheets is considered immaterial.

Differences arise when functional currencies are translated into Zurich Insurance Group's presentation currency, the U.S. dollar. Zurich Insurance Group applies net investment hedge accounting to protect against the impact that changes in certain exchange rates might have on selected net investments.

The table below shows the total IFRS equity's sensitivity to changes in exchange rates for the main functional currencies to which the ZIC Group is exposed. Positive values represent an increase in the value of the ZIC Group's total equity. See notes 1, 3 and 7 of the ZIC Group consolidated financial statements for additional information on foreign currency translation and transactions.

Sensitivity of the Group's total IFRS equity to exchange rate fluctuations

in USD millions, as of December 31	2018	**2019**
10% increase in		
EUR/USD rate	335	382
GBP/USD rate	203	257
CHF/USD rate[1]	476	519
BRL/USD rate	163	178
AUD/USD rate[2]	130	308
Other currencies/USD rates	439	510

[1] The 2018 figures have been updated.
[2] AUD/USD rate sensitivity has been included in 2019 due to the impact of the OnePath acquisition on the ZIC Group.

The sensitivities show the effects of a change of the exchange rates only, while other assumptions remain unchanged. The sensitivity analysis does not take into account management actions that might be taken to mitigate such changes. The sensitivities do not indicate a probability of such events occurring in the future. They do not necessarily represent ZIC Group's view of expected future market changes. While the table above shows the effect of a 10 percent increase
in currency exchange rates, a decrease of 10 percent would have the converse effect.

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. See section 'risks from defaults of counterparties' for market-risk-related asset categories. Zurich Insurance Group's exposure to other credit risk is derived from the following main categories of assets:

- Reinsurance assets
- Receivables

Zurich Insurance Group's objective in managing credit risk exposures is to maintain them within parameters that reflect Zurich Insurance Group's strategic objectives, and its risk appetite and tolerance. Sources of credit risk are assessed and monitored, and Zurich Insurance Group has policies to manage specific risks within various subcategories of credit risk. To assess counterparty credit risk, Zurich Insurance Group uses ratings assigned by external rating agencies, qualified third parties such as asset managers, and internal rating assessments. If external rating agencies' ratings differ, Zurich Insurance Group generally applies the lowest, unless other indicators justify an alternative, which may be an internal credit rating.

Zurich Insurance Group regularly tests and analyzes credit risk scenarios and prepares possible contingency measures that may be implemented if the credit risk environment worsens.

Zurich Insurance Group actively uses collateral to mitigate credit risks. Nevertheless, underlying credit risks are managed independently from the collateral. Zurich Insurance Group has limits and quality criteria to identify acceptable letter-of-credit providers. Letters of credit enable Zurich Insurance Group to limit the risks embedded in reinsurance, captives, deductibles, trade credit and surety.

Zurich Insurance Group has counterparty limits, which are regularly monitored. Exposure to counterparties' parent companies and subsidiaries is aggregated to include reinsurance assets, investments, derivatives, and certain insurance products. There was no unapproved material exposure in excess of Zurich Insurance Group's limits for counterparty aggregation as of December 31, 2019 nor December 31, 2018.

On-balance sheet exposures are the main source of credit risk. Off-balance sheet credit exposures are related primarily to certain insurance products, reinsurance and collateral used to protect underlying credit exposures on the balance sheet. The ZIC Group also has off-balance sheet exposures related to undrawn loan commitments of USD 1.5 million and USD 2.0 million as of December 31, 2019 and 2018, respectively. See note 22 of the ZIC Group consolidated financial statements for undrawn loan commitments.

D.3.1 Credit risk related to reinsurance assets

Zurich Insurance Group's Corporate Reinsurance Security Committee manages the credit quality of cessions and reinsurance assets. Zurich Insurance Group typically cedes new business to authorized reinsurers with a minimum rating of 'A–.' As of December 31, 2019 and 2018 respectively, 57 percent and 52 percent of the exposure ceded to reinsurers that are rated below 'A–' or are not rated, was collateralized. Of the exposure ceded to reinsurers that are rated below 'A–' or are not rated, 65 percent was ceded to captive insurance companies in 2019, and 50 percent in 2018.

Reinsurance assets included reinsurance recoverables (the reinsurers' share of reserves for insurance contracts) of USD 22.8 billion and USD 21.3 billion, and receivables arising from ceded reinsurance of USD 1.5 billion and USD 1.1 billion as of December 31, 2019 and 2018, respectively, gross of allowance for impairment. Reserves for potentially uncollectible reinsurance assets amounted to USD 119 million as of December 31, 2019 and USD 113 million as of December 31, 2018. The ZIC Group's policy on impairment charges takes into account both specific charges for known situations (e.g., financial distress or litigation) and a general, prudent provision for unanticipated impairments.

Reinsurance assets in the table below are shown before taking into account collateral such as cash or bank letters of credit and deposits received under ceded reinsurance contracts. Unsecured reinsurance assets shown are after deducting collateral. Except for an immaterial amount, letters of credit are from banks rated 'A–' or better. Collateral increased by USD 0.7 billion to USD 10.3 billion per December 31, 2019, compared with 2018.

The next table shows reinsurance assets and unsecured reinsurance assets split by rating.

Reinsurance assets and unsecured reinsurance assets by rating of reinsurer and captive

as of December 31	2018				2019			
	Reinsurance assets		Unsecured reinsurance assets		Reinsurance assets		Unsecured reinsurance assets	
	USD millions	% of total	USD millions	% of total	USD millions	% of total	USD millions	% of total
Rating								
AAA	9	0.0%	9	0.1%	6	0.0%	6	0.0%
AA	5,633	25.3%	5,173	40.8%	7,084	29.3%	6,309	45.7%
A	10,882	48.9%	4,740	37.4%	10,957	45.4%	4,871	35.3%
BBB	1,572	7.1%	983	7.8%	2,356	9.8%	1,095	7.9%
BB	447	2.0%	232	1.8%	335	1.4%	195	1.4%
B and below	645	2.9%	37	0.3%	256	1.1%	29	0.2%
Unrated	3,085	13.9%	1,510	11.9%	3,163	13.1%	1,308	9.5%
Total[1]	**22,273**	**100.0%**	**12,685**	**100.0%**	**24,157**	**100.0%**	**13,812**	**100.0%**

[1] The value of the collateral received amounts to USD 10.3 billion and USD 9.6 billion as of December 31, 2019 and 2018, respectively.

D.3.2 Credit risk related to receivables

The ZIC Group's largest credit-risk exposure to receivables is related to third-party agents, brokers and other intermediaries. It arises where premiums are collected from customers to be paid to the ZIC Group, or to pay claims to customers on behalf of the ZIC Group. Zurich Insurance Group has policies and standards to manage and monitor credit risk related to intermediaries. ZIC Group requires intermediaries to maintain segregated cash accounts for policyholder money. ZIC Group also requires that intermediaries satisfy minimum requirements of capitalization, reputation and experience, and provide short-dated business credit terms.

Receivables that are past due but not impaired should be regarded as unsecured, but some of these receivable positions may be offset by collateral. Zurich Insurance Group reports internally on Zurich Insurance Group past-due receivable balances and strives to keep the balance of past-due positions as low as possible, while taking into account customer satisfaction.

Receivables from ceded reinsurance are part of reinsurance assets and are managed accordingly. See notes 15 and 24 of the ZIC Group consolidated financial statements for additional information on receivables.

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. Zurich Insurance Group has a framework to identify, assess, manage, monitor, and report operational risk within Zurich Insurance Group. Within this framework, Zurich Insurance Group:

- Uses a scenario-based approach to assess, model and quantify the capital required for operational risk for business units under extreme circumstances. This approach allows information to be compared across Zurich Insurance Group and highlights the main scenarios contributing to the Z-ECM capital required.
- Documents and reviews operational events exceeding a threshold determined per Zurich Insurance Group's risk policy manuals. Remedial action is taken to avoid the recurrence of such operational events.
- Conducts risk assessments where operational risks are identified for key business areas. Risks identified and assessed above a certain threshold must have a risk response. Risk mitigation plans are documented and tracked on an ongoing basis. In the assessments, Zurich Insurance Group uses sources of information such as the Total Risk Profiling™ process, internal control assessments, and audit findings, as well as scenario modeling and operational event data.

Zurich Insurance Group has specific processes and systems in place to focus on high-priority operational matters such as managing information security and operational resilience (see sub-section digital and resilience risk, information security and operational resilience), as well as combating fraud.

D. Risk profile *continued*

Preventing, detecting and responding to fraud are embedded in Zurich Insurance Group's business processes. Both claims and non-claims fraud are included in the common framework for assessing and managing operational risks. For Z-ECM calculations, claims fraud is part of insurance risk and non-claims fraud is part of operational risk.

D.5 Liquidity risk

Liquidity risk is the risk that Zurich Insurance Group 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. Zurich Insurance Group'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, Zurich Insurance Group assesses, monitors and manages its liquidity needs on an ongoing basis.

Zurich Insurance Group-wide liquidity management policies and specific guidelines govern how local businesses plan, manage and report their local liquidity and include regular stress tests for all major legal entities and branches within Zurich Insurance Group. The stress tests use a standardized set of internally defined stress events, and are designed to provide an overview of the potential drain on liquidity if Zurich Insurance Group had to recapitalize local balance sheets. Similar guidelines apply at Zurich Insurance Group level, and detailed liquidity forecasts are regularly conducted, based on local businesses' input and Zurich Insurance Group's forecasts. As part of its liquidity management, Zurich Insurance Group maintains sufficient cash and cash equivalents and high-quality, liquid investment portfolios to meet outflows under expected and stressed conditions. Zurich Insurance Group also maintains internal liquidity sources that cover Zurich Insurance Group's potential liquidity needs, including those that might arise in times of stress. Zurich Insurance Group takes into account the amount, availability and speed at which these sources can be accessed. Zurich Insurance Group has access to diverse funding sources to cover contingencies, including asset sales, external debt issuance and making use of committed borrowing facilities or letters of credit. Zurich Insurance Group maintains a range of maturities for external debt securities. A potential source of liquidity risk is the effect of a downgrade of Zurich Insurance Group's credit rating. This could affect Zurich Insurance Group's commitments and guarantees, potentially increasing liquidity needs. This risk, and mitigating actions that might be employed, are assessed on an ongoing basis within Zurich Insurance Group's liquidity framework.

Zurich Insurance Group regularly analyzes the liquidity of the investment assets and ensures that the liquidity of assets stays in line with liquidity requirements. During 2019, Zurich Insurance Group was within its capacity to hold illiquid assets.

For more information on debt obligation maturities, see note 18 of the ZIC Group consolidated financial statements, and for information on commitments and guarantees, see note 22 of the ZIC Group consolidated financial statements.

Zurich Insurance Group's ongoing liquidity monitoring includes regular reporting to the executive management and quarterly reporting to the Risk and Investment Committee of the Board, covering aspects such as Zurich Insurance Group's actual and forecast liquidity, possible adverse scenarios that could affect Zurich Insurance Group's liquidity and possible liquidity needs from Zurich Insurance Group's main subsidiaries, including under conditions of stress.

For more information on ZIC Group's other financial liabilities, see note 16 of the ZIC Group consolidated financial statements. See note 6 of the ZIC Group consolidated financial statements for information on the maturity of debt securities.

Zurich Insurance Group has committed to contribute capital to subsidiaries and third parties that engage in making investments in direct private equity and private equity funds. Commitments may be called by the counterparty over the term of the investment (generally three to five years) and must be funded by Zurich Insurance Group on a timely basis. See note 22 of the ZIC Group consolidated financial statements.

D.6 Strategic risk and risks to the Zurich Insurance Group's reputation

D.6.1 Strategic risk

Strategic risk corresponds to the risk that Zurich Insurance Group is unable to achieve its strategic targets.

Strategic risks can arise from:

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

Zurich Insurance Group defines the strategy as the long-term plan of action designed to allow Zurich Insurance Group to achieve its goals and aspirations based on Zurich Insurance Group's purpose and values and strategic options.

Zurich Insurance Group 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 annual assessment of strategic risks, the Executive Committee (ExCo) assessed potential risks from both external and internal factors, looking at 2020 and beyond. These include: macro-economic risks such as financial stress due to geopolitical uncertainties and monetary policy with impacts primarily on insurance and market risk; adoption of post-Brexit legal and regulatory regime; adequately transform propositions and approaches for new customer segments and other changes affecting competitiveness in markets where Zurich Insurance Group is active; and information security including cyber and business resilience risks. The ExCo has defined actions to respond as appropriate and reviews changes to the key risks and their status of actions at least quarterly.

Zurich Insurance Group evaluates the risks of merger and acquisition (M&A) transactions both from a quantitative and a qualitative perspective. Zurich Insurance Group conducts risk assessments of M&A transactions to evaluate risks specifically related to integrating acquired businesses.

D.6.2 Risks to Zurich Insurance Group's reputation

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

Zurich Insurance Group aims to preserve its reputation by adhering to applicable laws and regulations, by following the core values and principles of Zurich Insurance Group's code of conduct that promote integrity and good business practice, and by living up to its sustainability commitments. Zurich Insurance Group centrally manages certain aspects of reputation risk, for example, communications, through functions with the appropriate expertise. Potential risks to Zurich Insurance Group's reputation are included in its risk assessment processes and tools, including the TRP process.

E. Valuation

E.1 Overarching market-consistent valuation principle

The following section presents the ZIC Group's market-consistent balance sheet (MCBS), i.e., the valuation of assets and liabilities in a market-consistent way, including the market-consistent discounting of insurance liabilities. Under the SST, the MCBS is essential in determining the ZIC Group's risk-bearing capital.

As an overarching principle, all assets and liabilities are valued in accordance with economic principles in a market-consistent manner. A market-consistent valuation is based on, and does not contradict to, the most recent information that can be obtained from trading in liquid and transparent financial markets.

FINMA stipulates that the SST market-consistent balance sheet value of all insurance and non-insurance liabilities (with the exception of instruments eligible for risk-bearing capital) shall be determined under the assumption that Zurich Insurance Group will fulfill its obligation in full; thus, own credit risk is not considered.

In summary, the following valuation methods apply:

MCBS valuation principles

Mark-to-market	Highest priority for third-party assets, IFRS equity instruments and eligible capital instruments	Fair value as defined in the consolidated IFRS financial statements.
Mark-to-model	If mark-to-market cannot be applied	Fair value as defined in the consolidated IFRS financial statements, or
		Best estimate valuation using parameter or assumptions explicitly stipulated by FINMA (e.g., liabilities valued at discounted cash flows using risk-free rate, thus, without consideration of own credit risk)..
IFRS carrying value		As a practical expedient, IFRS carrying value other than fair value is used as proxy to market-consistent valuation provided such measurement can be considered reasonable. For example, IFRS carrying value may be considered as a reasonable proxy based on the following considerations: - It represents current balances (e.g., cash accounts); or - It involves high-frequency turnover with daily settlements (e.g., operational clearing accounts); or - It is expected to be settled/realized within relatively short period after origination (generally, within three months and always less than twelve months) and is exposed to only insignificant risk of changes in value .

When applying the mark-to-model method, adequate and best-practice valuation models and methodologies are used and sufficiently documented.

For more information on fair value measurement, see notes, 6, 7 and 23 of the consolidated financial statements in the ZIC Group's Annual Report 2019, pages 62 to 64; 65 to 68; 107 to 114. The summary of accounting policies underlying IFRS valuations, as well as significant judgments and assumptions, are included in notes 3 and 4 of the consolidated financial statements in the ZIC Group's Annual Report 2019, pages 48 to 58.

E.2 Market-consistent balance sheet following SST principles

FINMA has established the Swiss Solvency Test to assess risk quantitatively. SST calculations are based on a market-consistent valuation of balance sheet positions. The following tables show the main drivers for the differences in valuation between MCBS (used for SST purposes) and the IFRS values, where certain IFRS amounts have been reclassified in order to comply with FINMA requirements.

Note that in 2019, Reinsurers' share of best estimate of insurance liabilities is reported as an asset whereas in 2018 it was reported as a liability. Prior year figures have been restated to reflect this change.

Asset valuation MCBS vs IFRS

In USD millions, as of December 31	2018 (SST)	**2019 (SST)**	Evolution 2018–2019 (SST)	**2019 (IFRS)**	Difference 2019 (IFRS – SST)
Market-consistent value of investments					
Real estate	12,351	13,261	910	13,261	0
Participations	36	39	3	39	0
Fixed-income securities	124,068	126,426	2,359	125,774	652
Loans	9,130	9,832	702	8,215	1,617
Mortgages	6,934	6,350	(584)	5,935	415
Equities	7,644	8,408	765	9,044	(635)
Other investments.	25,298	31,680	6,382	31,680	0
Collective investment schemes	3,682	4,620	938	4,620	0
Alternative investments	3,308	8,937	5,629	8,937	0
Structured products	0	0	0	0	0
Other investments	18,308	18,123	(185)	18,123	0
Total Investments	**185,461**	**195,996**	**10,535**	**193,948**	**2,049**
Market-consistent value of other assets					
Financial investments from unit-linked life insurance	133,047	126,591	(6,456)	126,591	–
Receivables from derivative financial instruments	899	1,226	328	1,226	0
Deposits made under assumed reinsurance contracts	965	783	(182)	726	57
Cash and cash equivalents	8,714	8,021	(694)	7,986	35
Reinsurers' share of best estimate of provisions for insurance liabilities	17,567	21,227	3,660	22,752	(1,525)
Direct insurance: life insurance business (excluding unit linked life insurance)	4,916	6,175	1,259	6,864	(689)
Reinsurance: life insurance business (excluding unit linked life insurance)	317	381	64	388	(7)
Direct insurance: non-life insurance business.	7,469	9,580	2,110	8,960	620
Direct insurance: health insurance business	0	0	0	0	0
Reinsurance: non-life insurance business	4,865	5,090	224	6,539	(1,449)
Reinsurance: health insurance business	0	0	0	0	0
Direct insurance: other business.	0	0	0	0	0
Reinsurance: other business	0	1	1	1	0
Direct insurance : unit-linked life insurance business.	–	–	0	0	–
Reinsurance: unit-linked life insurance business	0	0	0	0	0
Fixed assets	1,470	3,008	1,538	2,635	373
Deferred acquisition costs	0	0	0	19,200	(19,200)
Intangible assets	0	0	0	8,968	(8,968)
Receivables from insurance business	9,775	9,540	(234)	9,659	(119)
Other receivables	3,533	3,983	450	3,712	271
Other assets	654	1,285	631	3,735	(2,450)
Unpaid share capital	0	0	0	0	0
Accrued assets	3,171	3,297	126	4,444	(1,148)
Total other assets	**179,794**	**178,962**	**(832)**	**211,636**	**(32,675)**
Total market-consistent value of assets	**365,255**	**374,958**	**9,703**	**405,584**	**(30,626)**

E. Valuation *continued*

MCBS vs IFRS – best estimate liabilities and risk-bearing capital

In USD millions, as of December 31	2018 (SST)	**2019 (SST)**	Evolution 2018–2019 (SST)	**2019 (IFRS)**	Difference 2019 (IFRS – SST)
BEL: Best estimate liabilities (including unit linked life insurance)					
Best estimate of provisions for insurance liabilities	**(162,771)**	**(171,054)**	**(8,283)**	**(195,496)**	**24,442**
Direct insurance: life insurance business (excluding unit linked life insurance)	(94,743)	(101,913)	(7,170)	(115,926)	14,013
Reinsurance: life insurance business (excluding unit linked life insurance)	(694)	(2,045)	(1,351)	(2,102)	57
Direct insurance: non-life insurance business	(63,182)	(63,022)	160	(72,799)	9,777
Direct insurance: health insurance business	0	0	0	0	0
Reinsurance: non-life insurance business	(3,676)	(3,558)	118	(3,919)	361
Reinsurance: health insurance business	0	0	0	0	0
Direct insurance: other business	(470)	(508)	(38)	(742)	234
Reinsurance: other business	(6)	(7)	(2)	(7)	0
Best estimate of provisions for unit-linked life insurance liabilities	**(129,531)**	**(122,744)**	**6,788**	**(126,650)**	**3,906**
Direct insurance: unit-linked life insurance business	(129,532)	(122,744)	6,789	(126,650)	3,906
Reinsurance: unit-linked life insurance business	1	–	(1)	–	0
Market consistent value of other liabilities					
Non-technical provisions	(3,397)	(3,337)	59	(3,931)	593
Interest-bearing liabilities	(6,079)	(5,860)	218	(5,431)	(429)
Liabilities from derivative financial instruments	(325)	(365)	(40)	(365)	0
Deposits retained on ceded reinsurance	(432)	(911)	(480)	(994)	82
Liabilities from insurance business	(3,611)	(4,022)	(411)	(4,019)	(3)
Other liabilities	(9,813)	(12,534)	(2,721)	(13,646)	1,112
Accrued liabilities	(4,235)	(4,490)	(255)	(13,896)	9,406
Subordinated debts	(9,484)	(10,054)	(569)	(6,852)	(3,202)
Total BEL plus market-consistent value of other liabilities	(329,680)	(335,371)	(5,693)	(371,279)	35,908
Market-consistent value of assets minus total from BEL plus market-consistent value of other liabilities	**35,575**	**39,587**	**4,011**	**34,305**	**5,282**

E.2.1 Evolution of assets since 2018

Total investments

The market value of Total investments increased by USD 10.5 billion from USD 185.5 billion as of December 31, 2018 to USD 196.0 billion as of December 31, 2019.

The movement is primarily driven by an increase in **Total other investments** of USD 6.4 billion from USD 25.3 billion in December 31, 2018 to USD 31.7 billion in December 31, 2019 which reflects net purchases of USD 1.2 billion, positive market revaluation of USD 0.9 billion and a reclassification of USD 4.3 billion from fixed-income securities to Alternative investments with a net nil impact to the AFR. Collective investment schemes increased by USD 0.9 billion from USD 3.7 billion in December 31, 2018 to USD 4.6 billion in December 31, 2019 mostly due to the OnePath acquisition in Australia of USD 0.5 billion and market value increase in Switzerland of USD 0.2 billion. These increases were offset by a decrease in Other investments of USD 0.2 billion from USD 18.3 billion in December 31, 2018 to USD 18.1 billion in December 31, 2019 as a result of a shift in asset allocation following a decrease in net purchases and a decline in market value of USD 0.3 billion.

Fixed-income securities increased by USD 2.3 billion from USD 124.1 billion in December 31, 2018 to USD 126.4 billion in December 31, 2019 driven by rising market value of USD 4.2 billion, net purchases of USD 3.1 billion as offset by a re-classification of USD 4.3 billion to Other Investments with a net nil impact to the AFR and negative effects of currency translation of USD 0.4 billion. The increase in market value is the result of the dropping yields in the US and in Europe, tightening credit spreads in 2019 amid falling government yields in Germany of USD 1.7 billion, in the US of USD 1.0 billion, in Italy of USD 1.0 billion offset by a decrease in Argentina of USD 0.7 billion. Net purchases in Italy of USD 1.5 billion and in Australia of USD 1.0 billion, driven by the acquisition of OnePath, offset by net sales of USD 1.2 billion in the UK.

Real estate increased by USD 0.9 billion from USD 12.4 billion in December 31, 2018 to USD 13.3 billion in December 31, 2019 as a result of increases in fair value of USD 0.4 billion across many regions and net acquisitions of USD 0.5 billion.

Equities increased by USD 0.8 billion from USD 7.6 billion in December 31, 2018 to USD 8.4 billion in December 31, 2019. The increase is primarily due to strong equity market performance throughout 2019 which increased market values by USD 1.1 billion, offset by net sales of USD 0.3 billion mainly in Germany.

Loans increased by USD 0.7 billion from USD 9.1 billion in December 31, 2018 to USD 9.8 billion in December 31, 2019, resulting from the OnePath acquisition of USD 0.9 billion, net acquisition in the US of USD 0.1 billion and by positive change in fair values of USD 0.3 billion mainly in Germany. These increases were partially offset by unfavorable currency movements of USD 0.2 billion, maturities and net sales in Germany of USD 0.3 billion, Bermuda of USD 0.2 billion and in Spain of USD 0.1 billion.

Mortgages decreased by USD 0.6 billion from USD 6.9 billion in December 31, 2018 to USD 6.3 billion in December 31, 2019. The decrease is mainly due to maturities and net sale in Germany of USD 0.4 billion and in Switzerland of USD 0.3 billion, following a change in the asset allocation.

Total other assets

The market-consistent value of **total other assets** decreased by USD 0.8 billion from USD 179.8 billion as of December 31, 2018 to USD 179.0 billion as of December 31, 2019.

Financial investments from unit-linked life insurance decreased by USD 6.5 billion from USD 133.1 billion in December 31, 2018 to USD 126.6 billion in December 31, 2019. The decrease is mainly driven by the completion of the sale of the UK workplace pensions and savings business of USD 20.3 billion mostly offset by favorable market movements and new business in Ireland of USD 3.4 billion and strong fund performance in Germany of USD 3.0 billion and in Isle of Man of USD 1.8 billion. Additionally, new business growth in Brazil Santander of USD 1.9 billion, in Italy of USD 1.1 billion and positive market movements in the US of USD 1.0 billion.

E. Valuation *continued*

Cash and cash equivalents decreased by USD 0.7 billion from USD 8.7 billion as of December 31, 2018 to USD 8.0 billion as of December 31, 2019.

Receivables from insurance business decreased by USD 0.2 billion from USD 9.8 billion as of December 31, 2018 to USD 9.6 billion as of December 31, 2019 mainly in Zurich North America of USD 0.5 billion, partially offset by an increase of USD 0.2 billion due to the OnePath acquisition.

Deposits made under assumed reinsurance contracts decreased by USD 0.2 billion from USD 1.0 billion as of December 31, 2018 to USD 0.8 billion as of December 31, 2019 mainly due to changes in collateral in Bermuda.

These decreases have been partially offset by an increase in **Reinsurers' share of best estimate of provisions for insurance liabilities** by USD 3.7 billion from USD 17.6 billion in December 31, 2018 to USD 21.2 billion in December 31, 2019. The increase is mainly in the non-life business with an increase of USD 2.3 billion.

- Direct insurance: non-life insurance business increased by USD 2.1 billion from USD 7.5 billion in December 31, 2018 to USD 9.6 billion in December 31, 2019 of which USD 1.6 billion relates to the UK Employers Liability loss portfolio transfer and the Germany Architects & Engineers portfolios where 100% Quota Share reinsurance has been purchased from external reinsurers pending completion of the transfers. These reinsurance covers were not in place in 2018.
- Direct insurance: life insurance business (excluding unit linked life insurance) increased by USD 1.3 billion from USD 4.9 billion in December 31, 2018 to USD 6.2 billion in December 31, 2019 as a result of acquisition of OnePath of USD 1.1 billion and strengthening of reserve assumptions in Australia of USD 0.3 billion.
- Reinsurance: non-life insurance business increased by USD 0.2 billion from USD 4.9 billion in December 31, 2018 to USD 5.1 billion in December 31, 2019 mostly due to the purchase of reinsurance in the US for the Accident, Pollution and Health Hazard portfolio related to 1986 and prior years.

Fixed assets increased by USD 1.5 billion from USD 1.5 billion as of December 31, 2018 to USD 3 billion as of December 31, 2019. The increase is largely due to the establishment of a right-of-use asset upon the adoption of IFRS 16 which introduces new requirements for lease accounting for contracts where the Group acts as lessee and intermediate lessor.

Other assets increased by USD 0.6 billion from USD 0.7 billion as of December 31, 2018 to USD 1.3 billion as of December 31, 2019. The increase is mainly due to the acquisition Adira Insurance which transaction was completed in November 2019.

Other receivables increased by USD 0.5 billion from USD 3.5 billion as of December 31, 2018 to USD 4.0 billion as of December 31, 2019 mostly due to an increase of USD 0.2 billion in current income tax receivables and USD 0.2 billion in other receivables, partially offset by a decrease of USD 0.1 billion in amount due from investment brokers and exchanges.

Receivables from derivative financial instruments increased by USD 0.3 billion from USD 0.9 billion as of December 31, 2018 to USD 1.2 billion as of December 31, 2019, mainly driven by decreasing interest rates in Europe. The most notable impact is observed in Switzerland in the amount of USD 0.1 billion.

Accrued assets increased by USD 0.1 billion from USD 3.2 billion as of December 31, 2018 to USD 3.3 billion as of December 31, 2019 mainly due to increase in other prepaid expenses and in other accrued income.

E.2.2 Evolution of liabilities since 2018

Best estimate of insurance liabilities

The market value best estimate of provisions for insurance liabilities increased by USD 8.3 billion from USD 162.8 billion as of December 31, 2018 to USD 171.1 billion as of December 31, 2019.

Direct insurance: life insurance business (excluding unit linked life insurance) increased by USD 7.2 billion from USD 94.7 billion in December 31, 2018 to USD 101.9 billion in December 31, 2019. The increase is mainly due to:

- Italy (USD 2.1 billion), driven by lower Italian credit spreads, resulting in higher segregated fund projected returns, combined with new business volumes mainly on a new single premium product which offers a limited guarantee in case of lapse;

- Germany (USD 2.5 billion), mostly from increased reserves for Policyholder dividends due to unrealized capital gains;
- OnePath acquisition which resulted in an increase of USD 1.6 billion;
- Chile (USD 0.8 billion) and Switzerland (USD 0.6 billion), mainly due to the change in interest rates;and
- UK (USD 0.6 billion) from an assumptions review and change in interest rates.

These increases were partially offset by methodology changes as agreed with FINMA, which resulted in a decline of USD 1.9 billion. The exclusion of future discretionary benefits from insurance liabilities resulted in a decrease of USD 2.6 billion, mainly in Germany of USD 1.2 billion and in Switzerland of USD 1.1 billion. The adoption of the Standard Model approach for valuing Swiss BVG business resulted in USD 0.2 billion deduction, partially offset by USD 0.8 billion increase due to the exclusion of expected renewals from the valuation of SST liabilities for Corporate Life and Pensions business mainly in the UK of USD 0.4 billion and in Switzerland of USD 0.2 billion.

Reinsurance: life insurance business (excluding unit linked life insurance) increased by USD 1.3 billion from USD 0.7 billion in December 31, 2018 to USD 2.0 billion in December 31, 2019 mainly due to the acquisition of OnePath.

Direct insurance: non-life insurance business decreased by USD 0.2 billion from USD 63.2 billion in December 31, 2018 to USD 63.0 billion in December 31, 2019 where the main drivers are the following:

- An adjustment of USD 0.9 billion to reflect the net future cash flows for Japan Personal Accident multi-year business
- A decrease of the undiscounted reserves mainly in North America
- An increase of the discounted reserves due to falling yields.

Reinsurance: non-life insurance business decreased by USD 0.1 billion from USD 3.7 billion in December 31, 2018 to USD 3.6 billion in December 31, 2019 mainly due to the run-off of the assumed business from Farmers Exchanges[1].

Best estimate of provisions for unit-linked life insurance liabilities

Direct insurance: unit-linked life insurance business decreased by USD 6.8 from USD 129.5 billion in December 31, 2018 to USD 122.7 billion in December 31, 2019. The decrease is mainly driven by the completion of the sale of the UK workplace pensions and savings business of USD 20.4 billion partially offset by favorable market movements and new business in Ireland of USD 3.4 billion, strong fund performance in Germany of USD 3.0 billion and in Isle of Man of USD 1.8 billion. Additionally, new business growth in Brazil Santander of USD 1.9 billion, in Italy of USD 1.1 billion and market movements in the US of USD 1.0 billion.

Total other liabilities

The market-consistent value of other liabilities has increased by USD 4.2 billion from USD 37.4 billion as of December 31, 2018 to USD 41.6 billion as of December 31, 2019.

Other liabilities increased by USD 2.7 billion from USD 9.8 billion in December 31, 2018 to USD 12.5 billion in December 31, 2019. The adoption of IFRS 16 introduced new requirements for lease accounting, resulting in an increase of Lease liabilities of USD 2.0 billion. Additionally, there was a USD 0.4 billion increase in Collateral obligations from derivative trading. Non-controlling interests increased by USD 0.5 billion from USD 2.7 billion in December 31, 2018 to USD 3.2 billion in December 31, 2019 mainly in Brazil by USD 0.2 billion and in Mexico by USD 0.2 billion. The increases were partially offset with a decrease in Germany in the amount of USD 0.1 billion in relation to sale of ADAC and by a drop in Obligations to repurchase securities of USD 0.4 billion from USD 1.4 billion in 2018 to USD 1.0 billion in 2019 mainly in the UK.

Subordinated debts increased by USD 0.6 billion from USD 9.5 billion in December 31, 2018 to USD 10.1 billion in December 31, 2019 due to issuance of new debt of USD 0.7 billion in Switzerland.

Deposit retained on ceded reinsurance increased by USD 0.5 billion from USD 0.4 billion in December 31, 2018 to USD 0.9 billion in December 31, 2019 of which is mainly due to a new retroactive reinsurance agreement by Group Centre Holdings.

Liabilities from insurance business increased by USD 0.4 billion from USD 3.6 billion in December 31, 2018 to USD 4.0 billion in December 31, 2019 driven by the acquisition of OnePath.

These increases were offset by a decrease in Interest-bearing liabilities of USD 0.2 billion from USD 6.0 billion in 2018 to USD 5.8 billion in 2019 mainly due to a drop in overdraft.

[1] The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc, a wholly-owned subsidiary of the Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

E. Valuation *continued*

E.2.3 Changes in MCBS valuation methodology in 2019

The implementation of FINMA circular 2017/3, IAS 29 Financial Reporting in Hyperinflationary Economies and IFRS 16 Leases in Group IFRS financial statements resulted in the following changes to MCBS:

- For non-life multi-year contracts, the unearned premium reserve is adjusted to reflect discounted future cash flows from premiums not yet invoiced;
- The valuation of best estimate life investment and insurance liabilities for Corporate Life and Pension business covering Group Protection and Group savings/pensions (Group Life business) excludes future renewals. Further, the best estimate life investment and insurance liabilities excludes non-contractually guaranteed/ discretionary distributions expected to be awarded to policyholders in excess of those contractually specified or legally required;
- Real estate, equipment and vehicle leases where the Group acts as a lessee are recognized on balance sheet as right-of-use assets and lease liabilities measured using valuation principles further described below; and
- The carrying value of property, plant and equipment in Argentina is adjusted to reflect the effects of hyperinflation.

E.2.4 Market-consistent value of assets

Market-consistent value of investments

Under IFRS, investments are measured at fair value, amortized cost or using the equity method. In addition, IFRS requires fair value disclosures for financial assets that are not measured at fair value. The MCBS value of investments reflects fair value determined in accordance with the overarching valuation principles outlined in section E.1.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total IFRS value of investments		**193,948**
Fixed income securities	Bonds held-to-maturity measured at fair value in MCBS.	640
	The reclassification to held for sale is not applicable in MCBS.	12
Mortgages	Mortgage loans measured at fair value in MCBS.	415
Loans	Other loans measured at fair value in MCBS.	1,617
Other investments	Own shares are not recognised in SST.	(635)
Total market-consistent value of Investments (SST)		**195,996**

Market-consistent value of financial investments from unit-linked life insurance

The investments for unit-linked insurance are measured at fair value under both IFRS and MCBS. Therefore, no measurement difference arises in MCBS.

Market-consistent value of reinsurers' share of best estimate of provisions for insurance liabilities

Similar to IFRS, the calculation of the best estimate for reinsurance assets and insurance liabilities is performed on a gross basis in MCBS (i.e., no offsetting of assets with liabilities). However, the MCBS valuation is based on the actuarial discounted best estimate of future cash flows, taking into account the lifetime 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.

Reinsurers' share of best estimate unearned premium reserve

Under IFRS, the reinsurers' share of the unearned premium reserve (UPR) represents the portion of the ceded premiums related to the unexpired coverage period. Under MCBS, the ceded UPR shall only reflect a market-consistent value for future claims recoveries. The illustration below provides the breakdown of ceded UPR where ceded IFRS UPR reflects the premium paid (less commission received) for the remaining bound period and the adjustments performed to arrive at the MCBS value for ceded UPR.

Reinsurers' share of property and casualty loss reserves

Under IFRS, reinsurance assets for ceded loss reserves are already held at best estimate (i.e., sum of all expected future recoveries), but generally not discounted. To make these assets market-consistent, the future cash flows are discounted while taking into account the timing of these future cash flows and expected credit losses.

Reinsurers' share of life benefits

In order to determine the SST MCBS value of best estimate ceded reserves of life insurance and investment contracts, the following generally applies:

- The best estimate of future cash flows is based on the principles discussed in the 'best estimate of life investment and insurance liabilities' section;
- The SST MCBS value for ceded reserves only reflects the market-consistent value for future claims recoveries, i.e., only present value of future cash flows to be reimbursed by the reinsurer; and
- If the reinsurer's credit risk is not included in the best-estimate future cash flows, the expected credit loss allowance is considered.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total Best estimate of Reinsurers' share of best estimate of insurance liabilities (IFRS)		**22,752**
	Valuation differences.	(3,514)
	The reclassification to held for sale is not applicable in MCBS.	1,989
Total Best estimate of Reinsurers' share of best estimate of insurance liabilities (SST)		**21,227**

Market-consistent value of other assets

Under IFRS, other assets include deferred acquisition costs (DAC), deferred tax assets, goodwill and other intangible assets, which are valued at zero in the MCBS. Real estate held for own use is measured at cost less depreciation and impairment, whereas the MCBS value reflects fair value. Right-of-use assets are reported at IFRS carrying value (i.e. cost less depreciation and impairment) provided this is a reasonable proxy for fair value. Otherwise, if there is a major change in the market prices for comparable leases observed since inception, the MCBS value is determined considering current rental prices for comparable property and current interest rates for high-quality corporate bonds.

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

Deposits made under assumed reinsurance contracts, receivables from insurance business and other receivables are valued at the IFRS 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 IFRS carrying value is reported net of credit impairment allowance. Otherwise, the value is based on fair value (including credit risk) using the IFRS valuation principles.

Derivative financial instruments are measured at fair value under both IFRS and MCBS.

The reclassification of assets for USD 2.0 billion to the held for sale category under IFRS is not applicable in MCBS.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total IFRS value of other assets (excluding Financial investments from unit-linked life insurance & Reinsurers' share of best estimate of provisions for insurance liabilities)		**62,293**
Other assets	Deferred acquisition costs: Value set to zero in MCBS.	(19,200)
	Deferred origination costs: Value set to zero in MCBS.	(400)
	Deferred tax assets: Value set to zero in MCBS.	(1,151)
	Goodwill and other intangible assets: Value set to zero in MCBS.	(8,968)
	Valuation differences of Deposits made under assumed reins. Contracts	57
	Valuation differences of Receivables	152
	Property and equipment: Real estate held for own use is at fair value in MCBS.	373
	The reclassification to held for sale is not applicable in MCBS.	(2,001)
	Other	(10)
Total value of other assets (SST) (excluding Financial investments from unit-linked life insurance & Reinsurers' share of best estimate of provisions for insurance liabilities)		**31,144**

E. Valuation *continued*

E.2.5 Market-consistent value of liabilities

Best estimate of insurance liabilities

Best estimate of unearned premium reserves

Under IFRS, the unearned premium reserve (UPR) represents the portion of the premiums written related to the unexpired coverage period. The UPR typically relates to one year of premiums invoiced, which is also the case for multi-year contracts where only the first year is recognized and not the entire contractual future premium volume due in future periods. This reserve covers expected future losses, loss adjustment and policy administration expenses as well as underwriting profits for contracts in force. 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.

The illustration below provides the breakdown of the UPR where IFRS UPR reflects the unearned premium for the remaining bound period and the adjustments performed to arrive at the MCBS value for UPR.

Illustrative breakdown of Unearned Premium Reserve (UPR)

For multi-year contracts, the determination of the best estimate of UPR requires an additional adjustment to reflect the net present value of the future cash flows from the bound multi-year contracts. The adjustment is determined using as a volume metric all unearned premiums (invoiced and not invoiced) with the best estimate of cost of insurance discounted using a discount factor reflective of the expected cash flows over the duration of the underlying insurance contracts and the discounted future premium not yet invoiced less attributable future acquisition expenses included as an inflow.

Best estimate of loss reserves

Reserves for losses under IFRS 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 provision for model and parameter uncertainty under IFRS.

In order to derive a market-consistent value, best estimate loss reserves are discounted using a risk-free rates 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 IFRS (e.g., non-life annuities), the discounting is reversed and re-performed using the risk-free rates.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total Best estimate of non-Life insurance liabilities (IFRS)		**(76,718)**
Non-Life insurance liabilities	Valuation differences.	12,127
	The reclassification to held for sale is not applicable in MCBS.	(1,989)
Total Best estimate of non-Life insurance liabilities (SST)		**(66,580)**

Best estimate of life investment and insurance liabilities

Generally, the SST MCBS value of all unit-linked and non-unit-linked investments, as well as life insurance liabilities, is based on a bottom-up best estimate projection of future cash flows excluding any expected non-guaranteed surpluses or discretionary benefits. Any options and guarantees provided to the policyholder are valued on a market-consistent basis. Specifically, cash flow projections are made over the estimated contract period for the in-force portfolio (i.e., current policyholder base at valuation date) subject to the contractual contract boundary and in line with the principles for best estimate:

- Economic assumptions: expected asset return, discount rate, and inflation rate, stochastic economic simulations;
- Non-economic assumptions: demographic assumptions (mortality, morbidity), persistency, expense assumptions and dynamic bonus rates/profit sharing rates (where legally or contractually obligated).

Cash flow projections may vary, depending on the product. Contractually guaranteed benefits to be paid to policyholders – whether on surrender, maturity, death, morbidity or disability – increase the best estimate of life investment and insurance liabilities, as do taxes paid on behalf of policyholders, maintenance expenses and future commissions. Projected future premiums, fees and charges expected to be received from policyholders for existing business reduce the best estimate of life investment and insurance liabilities.

Best estimate of life insurance liabilities can be negative, for example, in protection business where projected regular premiums may often exceed expected death benefits and expenses on a best estimate basis. Because the own fulfilment value of an insurance or reinsurance obligation may be lower than the surrender values of the underlying contracts, no implicit or explicit surrender value floor is assumed for the market-consistent value.

Realistic assumptions about management's behavior are used, e.g., assuming management discretion when capital gains on invested assets are realized or changes in asset allocation are made. In cases where management actions, as considered in the scenario modelling, would be subject to regulatory approval (e.g., potential cancellation of policyholder dividends), the assumptions used when interpreting local supervisory guidance are verified by the local regulator or external audit.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total Best estimate of life insurance liabilities (IFRS)		**(244,678)**
Life insurance liabilities	Valuation differences.	14,070
Direct insurance: unit-linked life insurance business	Valuation differences.	3,906
Total Best estimate of life insurance liabilities (SST)		**(226,702)**

Best estimate of provisions for other business

The difference between IFRS and MCBS is explained by the liability reflecting the negative value of the insurance business acquired reported under IFRS which is valued at zero in the MCBS, similar to other intangible assets recognized as part of a business combination.

Market-consistent value of other liabilities

Interest-bearing liabilities are measured in the MCBS based on risk-free rates where the future cash flows are considered over the remaining period until the earliest contractual redemption date. In case where a quoted market price is available and used, the market price is adjusted to eliminate own credit spread. Accrued interests on interest bearing liabilities are reported as a separate position in the MCBS.

E. Valuation *continued*

Subordinated debt instruments eligible as supplementary capital under SST are measured at market-consistent value using the IFRS valuation principles. In case where a quoted market price is available and used, the market price is not adjusted to eliminate own credit spread. The accrued interest is not reported separately and is included in the MCBS carrying value.

Other liabilities include deferred front-end fees and deferred taxes (other than deferred tax on Swiss real estate transfers attributable to shareholders) that are valued at zero in the MCBS.

The market-consistent valuation of non-controlling interests is determined based on the MCBS of the underlying entities and presented separately as a liability position.

Non-technical provisions include liabilities for defined benefit pension plans measured using actuarial techniques under IFRS. Such liabilities are held at the IFRS carrying value in the MCBS.

Other non-technical provisions are held at best estimate under IFRS. To the extent such provisions are discounted, the market-consistent value is calculated by reversing the discounting effect and re-performing discounting using risk-free rates.

Lease liabilities are measured as the present value of future lease payments for the remaining lease term, discounted at risk-free rates without consideration of own credit risk.

Derivative financial instruments are measured at fair value under both IFRS and MCBS.

Obligation to repurchase securities, deposits retained on ceded reinsurance and liabilities from the insurance business are valued at IFRS 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). Otherwise, the MCBS value is based on fair value (excluding credit risk) using the IFRS principles.

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

The reclassification of liabilities for USD 2.0 billion as held for sale under IFRS is not applicable in MCBS.

SST – IFRS valuation difference

in USD millions, as of December 31, 2019

Total IFRS value of other liabilities		**(49,133)**
Interest bearing liabilities	Valuation differences	(429)
Deposit liabilities from ceded reinsurance	Valuation differences	82
Subordinated liabilities	Valuation differences	(3,202)
Other Liabilities	Non-contolling interest	(970)
	The reclassification to held for sale is not applicable in MCBS.	1,989
	Lease liabilities	120
Accrued liabilities	Deferred taxes (other than deferred tax on Swiss real estate transfers attributable to shareholders): Valued set to zero in MCBS.	4,049
	Deferred gains: Value set to zero in MCBS.	65
	Deferred front-end fees: Value set to zero in MCBS.	5,173
	Accrued interest	120
Non-technical provisions	Long-Term incentive plan is not recorded in ZIC SST, nor own shares	593
Other		(30)
Total market-consistent value of other liabilities (SST)		**(41,573)**

E.2.6 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 FINMA Circular 2017/3.

Methodology for Zurich'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
EUR	50	Raw market mid-swap rates from Bloomberg	Smith Wilson giving smooth forward and spot curves passing exactly through market data		0.53% (50-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
CHF	30				0.21% (30-year market spot rate)	0.2

F. Capital management

With regard to the enterprise risk management, the principles of Zurich Insurance Group's capital management are equally applicable to the Zurich Insurance Company Ltd and its consolidated subsidiaries (collectively the 'ZIC Group'). This section should therefore be read in conjunction with Zurich Insurance Group's Financial Condition Report, section F. 'Capital management', pages 67 to 72.

F.1 Capital management objectives

Zurich Insurance Group manages capital to maximize long-term shareholder value while maintaining financial strength within its 'AA' target range, and meeting regulatory, solvency and rating agency requirements.

As of December 31, 2019, shareholders' equity of USD 35.0 billion, subordinated debt of USD 6.9 billion and senior financial debt of USD 3.2 billion, excluding net new issued senior debt since the second quarter of 2018, were part of the capital available in the Zurich Insurance Group's economic framework. Further adjustments usually include items such as intangible assets, deferred tax assets and liabilities, allowing for discounting of liabilities and the value of in-force business, or inclusion of market value margin and expected profit over the next 12 months. For more information, see analysis of Zurich Insurance Group's Z-ECM available financial resources' (unaudited).

Zurich Insurance Group strives to simplify the Zurich Insurance Group's legal entity structure to reduce complexity and increase fungibility of capital.

F.2 Capital management framework

Zurich Insurance Group's capital management framework forms the basis for actively managing capital within Zurich Insurance Group. Zurich Insurance Group uses a number of different capital models, taking into account economic, regulatory, and rating agency constraints. Zurich Insurance Group's capital and solvency position is monitored and regularly reported to the Executive Committee (ExCo).

Zurich Insurance Group's policy is to allocate capital to businesses earning the highest risk-adjusted returns, and to pool risks and capital as much as possible to operationalize its risk diversification.

Zurich Insurance Group's executive management determines the capital management strategy and sets the principles, standards and policies to execute the strategy. Group Treasury and Capital Management executes the strategy.

F.3 Capital management program

Zurich Insurance Group's capital management program comprises various actions to optimize shareholders' total return and to meet capital needs, while enabling Zurich Insurance Group to take advantage of growth opportunities. Such actions include paying and receiving dividends, capital repayments, share buy-backs, issuance of shares, issuance of senior and hybrid debt, securitization and purchase of reinsurance.

Zurich Insurance Group seeks to maintain a balance between higher returns for shareholders on equity held, and the security a sound capital position provides. Dividends, share buy-backs, and issuances and redemption of debt have a significant influence on capital levels. In 2019, Zurich Insurance Group paid a dividend out of retained earnings, bought own shares to avoid dilution from share-based employee plans and cancelled shares bought back in 2018 through the public share buy-back program, issued senior debt to finance redemptions and investments in Zurich Insurance Group's development, and called hybrid debt that was re-financed during 2019.

The Swiss Code of Obligations stipulates that dividends may only be paid out of freely distributable reserves or retained earnings. Apart from what is specified by the Swiss Code of Obligations, Zurich Insurance Company Ltd (ZIC Ltd) faces no legal restrictions on dividends it may pay to its shareholders. As of December 31, 2019, the amount of the statutory general legal reserve was more than 30 times the paid-in share capital. The ability of ZIC Ltd's subsidiaries to pay dividends may be restricted or indirectly influenced by minimum capital and solvency requirements imposed by insurance and other regulators in the countries in which the subsidiaries operate. Other limitations or considerations include foreign exchange control restrictions in some countries, and rating agencies' methodologies.

For details on issuance and redemption of debt, see note 18 of the consolidated financial statements.

F.4 Insurance financial strength rating

Zurich Insurance Group has interactive relationships with three global rating agencies: S&P Global Ratings, Moody's, and AM Best. The insurance financial strength rating (IFSR) of the Group's main operating entity, ZIC Ltd, is an important element of Zurich's competitive position, particularly for the commercial customer segment. The Group's credit ratings derived from the financial strength ratings also affect the cost of capital.

On October 29, 2019, S&P Global Ratings revised to positive from stable the outlook of ZIC Ltd and its core subsidiaries and affirmed the 'AA–' long-term insurer financial strength and issuer credit ratings. This rating action is based on S&P Global Ratings increased confidence "in the strength and resilience of Zurich's profitability and business risk profile, relative to peers, and the sustainability of the Group's very strong capital adequacy."

As of December 31, 2019, the IFSR of ZIC Ltd, the main operating entity of the Group, was 'AA–/Positive' by S&P Global Ratings, 'Aa3/Stable' by Moody's, and 'A+ (Superior)/Stable' by A.M. Best.

F.5 Regulatory capital adequacy

Zurich Insurance Group endeavors to manage its capital so that its regulated entities meet local regulatory capital requirements. In each country in which the Group operates, the local regulator specifies the minimum amount and type of capital that each of the regulated entities must hold in addition to their liabilities. In addition to the minimum capital required to comply with the solvency requirements, the Group aims to hold an adequate buffer under local solvency requirements to ensure regulated subsidiaries can absorb volatility and meet local capital requirements.

Under the Swiss Solvency Test (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 has to be calculated as per January 1 and must be submitted to the Swiss Financial Market Supervisory Authority FINMA (FINMA).

In 2019, Zurich continued to enhance its internal model, completed the approval process with FINMA, and received approval for the outstanding modules of its internal model. Accordingly, the ZIC Ltd SST Internal Model is now fully approved.

G. Solvency

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

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

The SST compares risk-bearing capital with target capital by calculating of a ratio (the 'SST ratio'). The 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 objectives.

ZIC Group uses an adaptation of its internal Zurich Economic Capital Model (Z-ECM) to comply with the Swiss Solvency Test (SST) requirements and files results with FINMA annually. ZIC Group calculates its solvency figures on a legal entity view and takes into account risk types that are consistent with SST requirements as well as the affiliated credit default risk. Additionally, the cost of all future capital requirements needed to support the current insurance portfolio in case the firm would stop writing any new business and go into a run-off is accounted for as Risk Margin.

The model changes implemented in 2019 have a moderate impact on the SST ratio, resulting in an increase of 3 percentage points, compared to the SST ratio of 225 percent filed with FINMA as of January 1, 2019.

Based on the enhanced SST internal model the SST ratio as of January 1, 2020 stands at 241 percent. It increased by 16 percentage points compared to the SST ratio as of January 1, 2019. Following the model change impact, the strong operational capital generation from the businesses contributed 28 percentage points to the SST ratio and the impact through affiliated credit default risk contributed 47 percentage points to the SST ratio. However, negative market movements during the year reduced the ratio by 43 percentage points, largely due to a low interest rate environment. Dividend accrual reduced the ratio by a further 20 percentage points.

Solvency

in USD millions, for the years ended December 31	2018	Adjustments Previous year	**2019**
Derivation of risk-bearing capital			
Market-consistent value of assets minus total from best estimate liabilities plus market-consistent value of other liabilities	35,575		39,587
Deductions	(2,795)		(2,995)
Core capital	**32,780**		**36,592**
Supplementary capital	8,847		9,369
Risk-bearing capital	**41,628**		**45,961**
Derivation of target capital			
Underwriting risk	10,193		10,766
Market risk	10,101		12,263
Diversification effects	(3,918)		(3,923)
Credit risk[1]	6,493		6,958
Risk margin and other effects on target capital[2]	(589)		(1,378)
Target capital	**22,280**		**24,687**
SST ratio[3]	**225%**		**241%**

[1] Credit risk includes investment credit risk, reinsurance and receivables.
[2] Risk margin accounts for USD 9,568 million, other effects on target capital include diversification effects between credit risk and other risk types, and other risk models.
[3] SST ratio is defined in the SST Circular 2017/3 as a ratio of Risk Bearing Capital less Risk Margin to Target Capital less Risk Margin.

Target capital by risk type

in USD millions, for the years ended December 31	2018	Adjustments previous period	2019
Insurance risk derivation of target capital			
Premium and reserve risk (including UPR risk)	7,320		6,608
Nat Cat	3,822		3,944
Life insurance liabilities	2,641		3,954
Business risk	4,064		4,875
Diversification	(7,655)		(8,614)
Total	**10,193**		**10,766**
Market risk derivation of target capital			
Equity risk	3,727		3,947
Interest rate risk	4,965		7,277
Exchange rate risk	2,832		2,527
Credit spread risk	3,547		4,107
Other	11,030		11,671
Diversification	(11,936)		(13,610)
Total (including investment credit risk)	**14,165**		**15,919**
thereof			
Market risk (excluding investment credit risk)	10,101		12,263
Investment credit risk	6,296		6,785
Credit risk derivation of target capital			
Investment credit risk	6,296		6,785
Reinsurance credit risk & receivables	763		849
Diversification	(566)		(676)
Total	**6,493**		**6,958**

Appendix 1: Quantitative templates

Income Statement Zurich Insurance Company Ltd Total and Direct Swiss Business

In CHF millions, for the years ended December 31

		Total		Accident	
		2018	**2019**	2018	**2019**
1	Gross written premiums and policy fees	14,101	14,286	323	357
2	Premiums ceded to reinsurers	(3,484)	(3,839)	(7)	(7)
3	Net written premiums and policy fees (1 + 2)	10,616	10,448	316	350
4	Change in reserves for unearned premiums, gross	29	(246)	(1)	–
5	Change in reserves for unearned premiums, ceded	108	82	–	–
6	Net earned premiums and policy fees (3 + 4 + 5)	10,754	10,283	315	350
7	Other income[1]	1,069	1,117	25	29
8	**Total technical income (6+7)**	**11,823**	**11,400**	**339**	**378**
9	Claims paid, annuities and loss adjustment expenses, gross	(12,233)	(11,302)	(298)	(290)
10	Claims paid, annuities and loss adjustment expenses, ceded	1,983	2,210	5	4
11	Change in insurance reserves, gross	2,676	2,044	22	46
12	Change in insurance reserves, ceded	473	243	–	3
13	Change in actuarial provisions for unit-linked contracts				
14	**Insurance benefits and losses, net of reinsurance (9 + 10 + 11 + 12 + 13)**	**(7,101)**	**(6,804)**	**(271)**	**(237)**
15	Underwriting & policy acquisition costs, gross	(3,147)	(3,111)	(30)	(26)
16	Underwriting & policy acquisition costs, ceded	572	331	–	–
17	Underwriting & policy acquisition costs, net of reinsurance (15 + 16)	(2,575)	(2,780)	(30)	(26)
18	Administrative and other expense[1]	(1,873)	(2,142)	(43)	(55)
19	**Total technical expense (14 + 17 + 18) (non-life insurance only)**	**(11,550)**	**(11,727)**	**(344)**	**(318)**
20	Investment income	4,848	5,165		
21	Investment expenses	(1,040)	(340)		
22	**Net investment result (20 + 21)**	**3,808**	**4,825**		
23	Net investment result on unit-linked investments	–	–		
24	Other financial income	221	447		
25	Other financial expense	(278)	(460)		
26	**Operating result (8 + 14 + 17 + 18 + 22 + 23 + 24 + 25)**	**4,025**	**4,485**		
27	Interest expense on debt and other interest expense	(565)	(610)		
28	Other income	–	–		
29	Other expense	–	–		
30	Extraordinary income/expense	–	–		
31	**Net income before taxes (26 + 27 + 28 + 29 + 30)**	**3,459**	**3,875**		
32	Direct tax expenses	(101)	(161)		
33	**Net income after taxes (31 + 32)**	**3,358**	**3,714**		

[1] Line items 7 and 18: lines of business allocated according to the gross written premium.

											Direct Swiss business
	Illness		Motor vehicle		Transport		Fire, natural hazards, property damage		General third-party liability		Other branches
2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
315	330	1,022	1,016	26	26	330	331	312	282	99	122
–	–	(1)	(1)	(4)	(4)	(15)	(22)	(33)	(2)	(13)	(64)
315	330	1,020	1,015	22	22	315	309	280	280	86	57
–	–	2	(1)	–	–	2	–	(7)	(5)	(5)	(19)
–	–	–	–	–	–	3	–	6	(3)	(1)	17
316	330	1,023	1,014	22	22	320	309	278	272	81	56
24	26	77	80	2	2	25	26	24	23	8	10
339	**355**	**1,100**	**1,094**	**24**	**24**	**345**	**335**	**302**	**295**	**88**	**65**
(267)	(274)	(660)	(579)	(13)	(10)	(209)	(173)	(133)	(117)	(48)	(65)
–	–	1	1	1	2	6	(1)	1	2	4	6
(3)	(15)	112	95	2	1	3	7	(3)	–	10	13
(2)	–	(3)	–	(1)	(1)	2	(10)	(14)	(2)	(4)	(12)
(272)	**(289)**	**(550)**	**(483)**	**(11)**	**(8)**	**(198)**	**(177)**	**(150)**	**(117)**	**(38)**	**(57)**
(23)	(25)	(171)	(167)	(5)	(5)	(72)	(78)	(49)	(44)	(19)	(14)
–	–	–	–	1	1	1	2	1	2	2	3
(23)	(25)	(171)	(166)	(4)	(4)	(71)	(76)	(48)	(42)	(17)	(11)
(42)	(49)	(136)	(154)	(3)	(4)	(44)	(50)	(42)	(43)	(13)	(18)
(337)	**(363)**	**(857)**	**(803)**	**(18)**	**(16)**	**(313)**	**(303)**	**(240)**	**(203)**	**(68)**	**(86)**

Appendix 1: Quantitative templates *continued*

Income Statement Zurich Insurance Company Ltd Direct Foreign Business and Assumed Business

In CHF millions, for the years ended December 31

		Direct non-Swiss business, total	
		2018	**2019**
1	Gross written premiums and policy fees	1,740	1,964
2	Premiums ceded to reinsurers	(944)	(1,087)
3	Net written premiums and policy fees (1 + 2)	796	877
4	Change in reserves for unearned premiums, gross	(7)	(100)
5	Change in reserves for unearned premiums, ceded	22	64
6	Net earned premiums and policy fees (3 + 4 + 5)	811	842
7	Other income[1]	132	151
8	**Total technical income (6+7)**	**943**	**993**
9	Claims paid, annuities and loss adjustment expenses, gross	(1,294)	(1,129)
10	Claims paid, annuities and loss adjustment expenses, ceded	643	577
11	Change in insurance reserves, gross	(198)	16
12	Change in insurance reserves, ceded	251	34
13	Change in actuarial provisions for unit-linked contracts		
14	**Insurance benefits and losses, net of reinsurance (9 + 10 + 11 + 12 + 13)**	**(598)**	**(502)**
15	Underwriting & policy acquisition costs, gross	(438)	(476)
16	Underwriting & policy acquisition costs, ceded	298	142
17	Underwriting & policy acquisition costs, net of reinsurance (15 + 16)	(140)	(334)
18	Administrative and other expense[1]	(231)	(290)
19	**Total technical expense (14 + 17 + 18) (non-life insurance only)**	**(969)**	**(1,126)**
20	Investment income		
21	Investment expenses		
22	**Net investment result (20 + 21)**		
23	Net investment result on unit-linked investments		
24	Other financial income		
25	Other financial expense		
26	**Operating result (8 + 14 + 17 + 18 + 22 + 23 + 24 + 25)**		
27	Interest expense on debt and other interest expense		
28	Other income		
29	Other expense		
30	Extraordinary income/expense		
31	**Net income before taxes (26 + 27 + 28 + 29 + 30)**		
32	Direct tax expenses		
33	**Net income after taxes (31 + 32)**		

[1] Line items 7 and 18: lines of business allocated according to the gross written premium

													Indirect business
							Marine, aviation,						
	Personal accident		Health		Motor		transport		Property		Casualty		Miscellaneous
2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**
297	302	34	34	1,491	1,431	257	290	3,364	3,805	1,677	1,929	2,814	2,067
(5)	(6)	–	–	(37)	(26)	(84)	(88)	(1,507)	(1,663)	(350)	(459)	(484)	(410)
292	296	34	34	1,453	1,405	173	202	1,857	2,142	1,327	1,471	2,330	1,657
24	(3)	4	(1)	11	(12)	7	(18)	(17)	(106)	52	(66)	(36)	85
–	–	–	–	(1)	(3)	(4)	7	(3)	31	8	(22)	79	(8)
316	293	37	33	1,464	1,390	176	191	1,836	2,067	1,386	1,382	2,374	1,734
22	24	3	3	113	112	19	23	255	297	127	151	213	162
338	**317**	**40**	**36**	**1,577**	**1,502**	**195**	**213**	**2,091**	**2,365**	**1,513**	**1,533**	**2,587**	**1,895**
(593)	(442)	(122)	(36)	(1,531)	(1,312)	(283)	(185)	(2,430)	(2,031)	(2,378)	(2,728)	(1,975)	(1,932)
1	1	–	–	24	24	94	50	723	981	151	179	330	385
540	444	94	23	538	395	329	69	399	(181)	1,613	1,445	(781)	(314)
(3)	–	–	–	3	3	(211)	(12)	320	(85)	99	100	35	225
(55)	**3**	**(28)**	**(13)**	**(966)**	**(889)**	**(71)**	**(79)**	**(988)**	**(1,316)**	**(514)**	**(1,003)**	**(2,391)**	**(1,637)**
(97)	(94)	(13)	(8)	(493)	(466)	(62)	(61)	(671)	(712)	(430)	(436)	(573)	(501)
–	–	–	–	2	2	6	4	88	119	17	24	156	33
(97)	(94)	(13)	(8)	(492)	(464)	(57)	(56)	(583)	(593)	(413)	(412)	(417)	(467)
(39)	(45)	(4)	(5)	(198)	(215)	(34)	(44)	(447)	(571)	(223)	(289)	(374)	(310)
(191)	**(137)**	**(45)**	**(26)**	**(1,656)**	**(1,568)**	**(162)**	**(179)**	**(2,018)**	**(2,480)**	**(1,150)**	**(1,705)**	**(3,182)**	**(2,414)**

Appendix 1: Quantitative templates *continued*

Market-Consistent Balance Sheet

in USD millions, for the years ended December 31

	2018	Adjustments previous period	2019
Market-consistent value of investments			
Real estate	12,351		13,261
Participations	36		39
Fixed-income securities	124,068		126,426
Loans	9,130		9,832
Mortgages	6,934		6,350
Equities	7,644		8,408
Other investments.	25,298		31,680
Collective investment schemes	3,682		4,620
Alternative investments	3,308		8,937
Structured products	0		0
Other investments	18,308		18,123
Total Investments	**185,461**		**195,996**
Market-consistent value of other assets			
Financial investments from unit-linked life insurance	133,047		126,591
Receivables from derivative financial instruments	899		1,226
Deposits made under assumed reinsurance contracts	965		783
Cash and cash equivalents	8,714		8,021
Reinsurers' share of best estimate of provisions for insurance liabilities	17,567		21,227
Direct insurance: life insurance business (excluding unit linked life insurance)	4,916		6,175
Reinsurance: life insurance business (excluding unit linked life insurance)	317		381
Direct insurance: non-life insurance business.	7,469		9,580
Direct insurance: health insurance business	0		0
Reinsurance: non-life insurance business	4,865		5,090
Reinsurance: health insurance business	0		0
Direct insurance: other business.	0		0
Reinsurance: other business	0		1
Direct insurance : unit-linked life insurance business.	(0)		(0)
Reinsurance: unit-linked life insurance business	0		0
Fixed assets	1,470		3,008
Deferred acquisition costs	0		0
Intangible assets	0		0
Receivables from insurance business	9,775		9,540
Other receivables	3,533		3,983
Other assets	654		1,285
Unpaid share capital	0		0
Accrued assets	3,171		3,297
Total other assets	**179,794**		**178,962**
Total market-consistent value of assets	365,255		374,958

Market-Consistent Balance Sheet

in USD millions, for the years ended December 31	2018	Adjustments previous period	2019
Market-consistent value of investments			
BEL: Best estimate liabilities (including unit linked life insurance)			
Best estimate of provisions for insurance liabilities	**(162,771)**		**(171,054)**
Direct insurance: life insurance business (excluding unit linked life insurance)	(94,743)		(101,913)
Reinsurance: life insurance business (excluding unit linked life insurance)	(694)		(2,045)
Direct insurance: non-life insurance business	(63,182)		(63,022)
Direct insurance: health insurance business	0		0
Reinsurance: non-life insurance business	(3,676)		(3,558)
Reinsurance: health insurance business	0		0
Direct insurance: other business	(470)		(508)
Reinsurance: other business	(6)		(7)
Best estimate of provisions for unit-linked life insurance liabilities	**(129,531)**		**(122,744)**
Direct insurance: unit-linked life insurance business	(129,532)		(122,744)
Reinsurance: unit-linked life insurance business	1		(0)
Market consistent value of other liabilities			
Non-technical provisions	(3,397)		(3,337)
Interest-bearing liabilities	(6,079)		(5,860)
Liabilities from derivative financial instruments	(325)		(365)
Deposits retained on ceded reinsurance	(432)		(911)
Liabilities from insurance business	(3,611)		(4,022)
Other liabilities	(9,813)		(12,534)
Accrued liabilities	(4,235)		(4,490)
Subordinated debts	(9,484)		(10,054)
Total BEL plus market-consistent value of other liabilities	(329,680)		(335,371)
Market-consistent value of assets minus total from BEL plus market-consistent value of other liabilities	35,575		39,587

Appendix 2: Report of the statutory auditor on the Group consolidated financial statements 2019

The Financial Condition Report is not audited.

The consolidated financial statements of Zurich Insurance Company Ltd and its subsidiaries (the Group), which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of cash flows, consolidated statement of changes in equity and notes to the consolidated financial statements for the year ended December 31, 2019 (Zurich Insurance Company Group Annual Report 2019, page 142) are audited and the report from the statutory auditor of ZIC Group can be found at:

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 Insurance Group Ltd or the Zurich Insurance Group (the Group). Forward-looking statements include statements regarding the Group's targeted profit, return on equity targets, expenses, pricing conditions, dividend policy and underwriting and claims results, as well as statements regarding the Group'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 Insurance Group Ltd or the Group 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 Insurance Group Ltd and its Group and on whether the targets will be achieved. Zurich Insurance Group 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.

All references to 'Farmers Exchanges[1]' mean Farmers Insurance Exchange, Fire Insurance Exchange, Truck Insurance Exchange and their subsidiaries and affiliates. The three Exchanges are California domiciled interinsurance exchanges owned by their policyholders with governance oversight by their Boards of Governors. Farmers Group, Inc. and its subsidiaries are appointed as the attorneys-in-fact for the Farmers Exchanges[1] and in that capacity provide certain non-claims services and ancillary services to the Farmers Exchanges[1]. Neither Farmers Group, Inc., nor its parent companies, Zurich Insurance Company Ltd and Zurich Insurance Group Ltd, have any ownership interest in the Farmers Exchanges[1]. Financial information about the Farmers Exchanges[1] is proprietary to the Farmers Exchanges[1], but is provided to support an understanding of the performance of Farmers Group, Inc. and Farmers Reinsurance Company.

It should be noted that past performance is not a guide to future performance. Please also note that interim results are not necessarily indicative of full year results.

Persons requiring advice should consult an independent advisor.

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.

[1] The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc, a wholly-owned subsidiary of the Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

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