Zurich Insurance Company Group

Annual Report 2020

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About us

Zurich Insurance 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. The Group is headquartered in Zurich, Switzerland, where it was founded in 1872. The holding company, Zurich Insurance Group Ltd (ZURN), is listed on the SIX Swiss Exchange and has a level I American Depositary Receipt (ZURVY) program, which is traded over-the-counter on OTCQX.

Risk review

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Basis of presentation
The risk review is an integral part of the consolidated financial statements.

Risk and capital are managed at the Zurich Insurance Group, segment, region and business unit level according to the Zurich Insurance Group risk and capital management framework. The principles of the Zurich Insurance Group enterprise risk management described in the risk management and capital management sections are equally applicable to Zurich Insurance Company Ltd (ZIC) and its consolidated subsidiaries (collectively the ZIC Group).

The Zurich Insurance Group Ltd Board of Directors, Chief Executive Officer, and Chief Risk Officer equally serve as Board of Directors, Chief Executive Officer, and Chief Risk Officer for Zurich Insurance Company Ltd.

The figures presented are prepared on a ZIC Group basis.

Risk management

Objectives of risk management

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

The major risk management objectives at Zurich Insurance Group are to:

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

Risk management framework

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

The Zurich Risk Policy (ZRP) is Zurich Insurance Group's main risk governance document. It sets standards for effective risk management throughout Zurich Insurance Group. The policy describes Zurich Insurance Group's risk management framework, provides a standardized set of risk types and defines 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 ZRP. Ongoing assessments verify that requirements are met.

Zurich Insurance Group regularly reports on its risk profile at local and Zurich Insurance Group levels. Zurich Insurance Group has procedures to refer risk topics to senior management and the Board of Directors in a timely manner. To foster transparency about risk, the Board receives quarterly risk reports and risk updates. In 2020, additional dynamic reporting of COVID-19 risk scenarios took place.

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™ 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 creation and sets boundaries within which the businesses act. Zurich Insurance Group protects its capital, liquidity, earnings and reputation by monitoring that risks are taken within agreed risk appetite levels and tolerance limits. Zurich Insurance Group regularly assesses and, to the extent possible, quantifies material risks to which it is exposed.

Starting as of 2020, Zurich Insurance Group's solvency position will be disclosed on the basis of the Swiss Solvency Test (SST) ratio to be more aligned with reporting by Zurich Insurance Group's Swiss and European peers. The Zurich Insurance Group's SST internal model has been fully approved by the Swiss Financial Supervisory Authority (FINMA). Zurich Insurance Group's goal is to maintain capital consistent with a 'AA' financial strength rating for the Zurich Insurance Group, which translates into an SST ratio target of 160 percent or above.

Zurich Insurance Group continues to apply the Zurich Economic Capital Model (Z-ECM) as an internal metric. Z-ECM provides a key input into Zurich Insurance Group's planning process as an assessment of Zurich Insurance Group's economic risk profile.

Risk-based remuneration

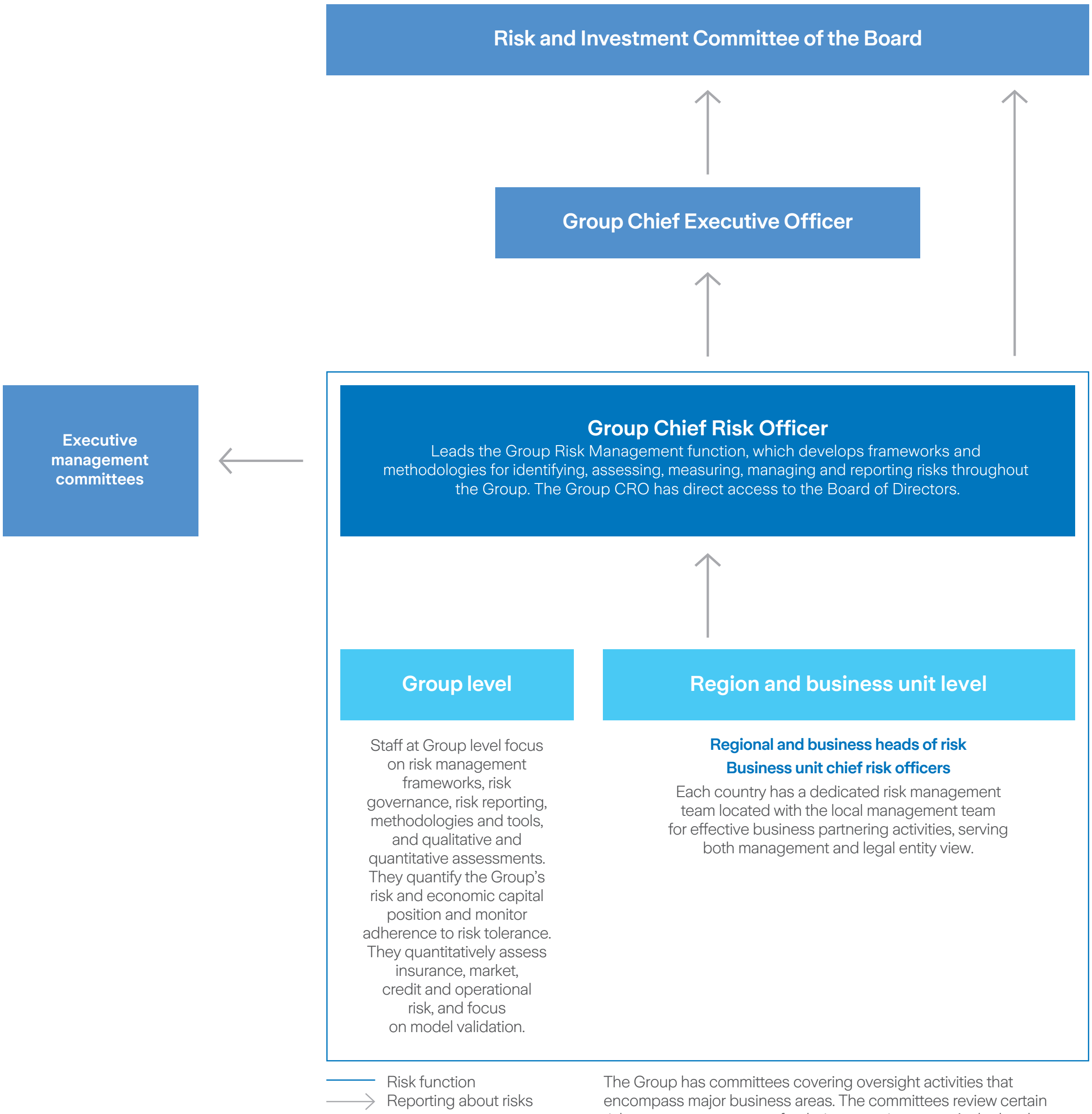
Based on Zurich Insurance Group's remuneration rules, the Board of Directors designs and structures remuneration arrangements that support the achievement of strategic and financial objectives and do not encourage inappropriate risk-taking. Group Risk Management's role in respect to remuneration and its interaction with Board committees is described in the remuneration report.

Risk review (continued)

Risk governance and risk management organization

Risk management organization

The Group Risk Management function is a global function, led by Zurich Insurance Group's Chief Risk Officer (CRO).



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.

The risk function is independent of the business by being a vertically integrated function where, unless otherwise required by local laws or regulations, global risk employees report directly into the Zurich Insurance Group CRO, except for Farmers' Chief Risk Officer who has a matrix reporting line to Zurich Insurance Group's CRO. Risk officers are embedded in the business, positioning them to support and advise on, 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.

Capital management

Objectives of capital management

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

As of December 31, 2020, the International Financial Reporting Standards (IFRS) for Zurich Insurance Company Group (ZIC Group) shareholders' equity amounted to USD 37.5 billion and subordinated debt of USD 8.3 billion.

ZIC Group strives to simplify its legal entity structure to reduce complexity and increase fungibility of capital.

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) and Board of Directors.

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.

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 that a sound capital position provides, also for our customers. Dividends, share buy-backs, and issuances and redemption of debt have a significant influence on capital levels. In 2020, Zurich Insurance Group paid a dividend out of retained earnings, issued shares out of contingent capital to fund vesting of shares in 2020, bought own shares to reduce future dilution from share-based employee plans and issued senior and hybrid debt to finance redemptions and investments in Zurich Insurance Group's development.

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) faces no legal restrictions on dividends it may pay to its shareholders. As of December 31, 2020, the amount of the statutory general legal reserve was more than 40 times the paid-in share capital. The ability of Zurich Insurance Group'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 issuances and redemptions of debt, see note 18 of the ZIC Group consolidated financial statements.

Risk review (continued)

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 Zurich Insurance Group's main operating entity, Zurich Insurance Company Ltd, is an important element of Zurich Insurance Group's competitive position, while Zurich Insurance Group's credit ratings also affect the cost of debt capital.

The insurance financial strength ratings remained unchanged in 2020 despite the impact of COVID-19 on earnings, balance sheet and capital. The three rating agencies affirmed Zurich Insurance Group's IFSR, with S&P maintaining its "positive" outlook on the rating, based on their view of Zurich Insurance Group's solid solvency position, strong competitive position, diversified sources of earnings and limited net underwriting losses related to COVID-19.

The planned acquisition by Zurich Insurance Group's subsidiary Farmers Group, Inc (FGI) and Farmers Exchanges of the U.S. Property & Casualty division of MetLife and its financing was seen as a credit positive for Zurich Insurance Group by Moody's and further supported Zurich Insurance Group's positive outlook by S&P. The agencies consider that the acquisition will increase the contribution of Farmers Management fees to the profits, while Zurich Insurance Group maintains a strong capitalization and high financial flexibility.

As of December 31, 2020, the IFSR of Zurich Insurance Company Ltd, the main operating entity of Zurich Insurance Group, was 'AA–/Positive' by S&P Global Ratings, 'Aa3/Stable' by Moody's, and 'A+ (Superior)/Stable' by AM Best.

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 Zurich Insurance 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, Zurich Insurance Group aims to hold an adequate buffer under local solvency requirements to ensure regulated subsidiaries can absorb a level of volatility and meet local capital requirements.

Regulatory solvency regimes

Regulatory requirements in Switzerland

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

Under SST, insurance companies and insurance groups can apply to use company-specific internal models to calculate risk-bearing and target capital, as well as the SST ratio. The SST ratio must be calculated as per January 1 and submitted to the Swiss Financial Market Supervisory Authority (FINMA).

Regulatory requirements in the European Economic Area (EEA)

The main regulatory framework governing Zurich Insurance Group's subsidiaries in the EEA is Solvency II. This is a risk-based capital framework which covers capital requirements (pillar 1), governance and risk management (pillar 2) and reporting (pillar 3). All EEA-based legal entities of Zurich Insurance Group use the Solvency II standard formula for their pillar 1 requirements with the exception of Zurich Insurance plc (Ireland) that applies an approved internal model.

Regulatory requirements in the UK

The United Kingdom left the EU and the EEA on January 31, 2020 and the transition period ended on December 31, 2020, meaning that UK regulations can diverge from Solvency II regulatory requirements.

Regulatory requirements in the U.S.

In the U.S., required capital is determined to be 'company action level risk-based capital' calculated using the National Association of Insurance Commissioners' risk-based capital model. This method, which builds on statutory accounts, measures the minimum amount of the capital for an insurance company to support its overall business operations by taking into account its size and risk profile.

Regulatory requirements in other jurisdictions

Every country has a capital standard for insurance companies. Several jurisdictions (e.g., Brazil and Mexico) have implemented approaches similar to Solvency II.

Risk review (continued)

Analysis by risk type

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

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 property and casualty predominantly relates to unexpected increases in the expenses relating to claims handling, underwriting, and administration.

Management of Property & Casualty business insurance risk

Zurich Insurance Group's underwriting strategy takes advantage of the diversification of Property & Casualty (P&C) risks across lines of business, customers and geographic regions. Zurich Insurance Group defines Group-wide governance for insurance risk including for new products. 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 policies.

Property & Casualty 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 at local and Zurich Insurance Group level.

Zurich Insurance Group's Emerging Risk Committee, with cross-functional expertise from core insurance functions such as underwriting, claims and risk management, identifies, assesses and recommends actions for emerging risks.

Governance is in place to ensure appropriate focus on 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 for natural catastrophes continue to be U.S. and Caribbean hurricane, California earthquake and Europe wind.

Risk review (continued)

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. Consistent with this view on natural catastrophes, Zurich Insurance Group performs profitability assessments and strategic capacity allocations, and chooses the type and quantity of reinsurance it buys.

To ensure global consistency, exposures to natural catastrophes are modeled in a dedicated Zurich Insurance Group function. 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 weather-induced perils such as wind, flood, tornado, and hail, and geological-induced perils such as earthquake.

Zurich Insurance Group regularly reviews and expands the scope and sophistication of its modeling and strives to improve data quality. Zurich Insurance Group has invested in expanding its catastrophe research and development capabilities to increase the focus on the risks from a changing climate, communicable diseases, and an increasing reliance on information and communications technology.

Zurich Insurance Group supplements internal know-how with external knowledge (e.g., the Advisory Council for Catastrophes) and is a shareholder of PERILS AG, Switzerland, a catastrophe exposure and loss data aggregation and estimation firm. Zurich Insurance Group is also a member of the open-source initiative Oasis Loss Modelling Framework.

COVID-19 pandemic

In 2020, scenario modeling capabilities for the COVID-19 pandemic were developed and refined based on claims data. The scope in terms of lines of business includes primarily property, travel, accident and health, and credit and surety. The scenario modeling helped to inform Zurich Insurance Group about the financial impact of COVID-19 and understand the main sensitivities. The data and risk insights gained from COVID-19 were used to build a model to better assess the risk in the P&C portfolio from pandemics.

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. 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 risks. Zurich Insurance Group actively monitors and manages its cyber exposure and continues to refine products to ensure their appropriateness. Improving modeling capabilities and data capture for cyber and casualty catastrophe risks are key focus areas.

Risk review (continued)

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.

Tables 1.a and 1.b show ZIC Group's concentration 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 8.6 billion and USD 7.8 billion for the years ended December 31, 2020 and 2019, respectively. Reinsurance programs are managed on a global basis, and therefore, the net premium after reinsurance is monitored on an aggregated basis.

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

Table 1.a

in USD millions, for the year ended December 31, 2020	Motor	Property	Liability	Special lines	Worker injury	Total
Europe, Middle East & Africa	4,162	4,842	2,278	2,154	344	13,781
North America	1,565	5,933	2,914	2,276	2,496	15,185
Other regions	1,683	1,462	420	1,256	141	4,961
Total	**7,409**	**12,237**	**5,612**	**5,686**	**2,981**	**33,926**

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

Table 1.b

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 & Casualty business risks

Tables 2.a and 2.b 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 2.a and 2.b, each additional percentage-point increase in the loss ratio would have a linear impact on net income before tax and net assets. The 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 – current period

Table 2.a

in USD millions, for the year ended December 31, 2020	Europe, Middle East & Africa	North America	Asia Pacific	Latin America	Total
+1% in net loss ratio					
Net income before tax	(123)	(98)	(24)	(18)	(264)
Net assets	(94)	(74)	(19)	(13)	(200)

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

Table 2.b

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

Risk review (continued)

Life insurance risk

The risks associated with life insurance include:

Life liability risk

- Mortality risk – when, on average, the death incidence among 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 policyholders is higher or recovery rates from disability are lower than expected

Life business risk

- Policyholder behavior risk – on average, 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

Management of Life business insurance risk

Zurich Insurance Group's Life underwriting results are based on the assumptions relating to life insurance risks. The actual experience may differ to that expected at the time of writing the business. For example, mortality could be either higher or lower than expected due to an unexpectedly harsh or benign flu season.

To understand the potential impact of experience differing from expected, Zurich Insurance Group uses models to perform sensitivity analyses. The impact of changing the assumptions is considered under different scenarios across the risk types and products. Changes relating to absolute level and trend development in assumptions are considered by product category. For example, Zurich Insurance Group looks at the impact of an increase or decrease in morbidity rates for protection products or changes in the level and trend of longevity for annuity products. These analyses assist in understanding how sensitive the business is to changes in various assumptions and where there are benefits of having a diversified portfolio of risks and products. Changes in the same assumption can have a positive impact on one product and a negative impact on another. For example, people living longer than expected may have a positive impact on policies that offer life cover, as claims are then paid later than expected, but could have a negative impact on annuity products as payments are made for longer than expected. At Zurich Insurance Group, the life liability risks are managed through established processes with minimum requirements described in Zurich Insurance Group policy manuals. Zurich Insurance Group's scenario modeling for COVID-19 also included assessment of the Life insurance risks.

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 the risks or introduce new risks. Zurich Insurance Group regularly reviews the continued suitability and the potential risks of existing life products open to new business to ensure sustainability of the business.

Product pricing involves setting assumptions relating to life insurance risks and policyholder behavior. Local teams have responsibility for the pricing of the products in line with the experience and emerging trends observed in each market. The emerging experience is regularly monitored and compared against expected. Where permitted, premiums are adjusted for factors such as age, gender and smoker status to reflect the corresponding risks. Policy terms and conditions and disclosure requirements are designed to mitigate the risk arising from non-standard and unpredictable risks that could result in severe financial loss.

The underwriting process forms an important part of risk management and risk selection for life insurance risks. This process is supported through setting minimum standards in Zurich Insurance Group policy manuals and providing support through additional underwriting guidelines.

Where required and appropriate, life insurance risks are also managed using reinsurance.

Risk review (continued)

Unit-linked products are designed to reduce much of the market and credit risk associated with Zurich Insurance Group's traditional business offerings. 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. Contracts may have minimum guaranteed death benefits where the sum at risk depends on the fair value of the underlying investments. Other life insurance liabilities include traditional life insurance products, such as protection and life annuity products.

Protection products (including disability products) provide benefits linked to policyholders' life and health and 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 or customers claiming for longer than expected. Disability, when defined in terms of the ability to perform an occupation, could also be affected by adverse economic conditions. This impact could come through, for example, an increase in claims relating to mental health conditions triggered by an economic downturn.

In the life annuity business, the benefits are often paid to the customer either for a selected number of years or, more often, until they die. Therefore, people living longer than expected can have material impact on these policies. Medical advances and improved social conditions that lead to increased longevity are a significant insurance risk for these products. Annuitant (beneficiary) mortality assumptions include allowance for future mortality improvements. The trends in mortality improvements are monitored to ensure that changes in experience are considered. The exposure to longevity risk at a Zurich Insurance Group level is measured regularly and compared against the limit set by Zurich Insurance Group.

Zurich Insurance Group is exposed to risks posed by policyholder behavior and fluctuating expenses. These are mitigated by designing products that, as closely as possible, match revenue and expenses associated with the contract.

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, Switzerland and Italy and variable annuity business in the U.S. containing minimum guaranteed death benefits) expose Zurich 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.

Zurich Insurance Group has a dynamic hedging strategy to reduce the investment risk associated with the closed book of variable annuitants 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.

Diversification across regions and businesses between unit-linked and other business, including protection and life annuity products, as shown in table 3 below, contributes to reducing the impacts of the risks associated with the Life business described above.

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. Table 3 shows 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 in the amount of USD 12.0 billion in 2020 (2019: USD 9.4 billion) and in the UK in the amount of USD 0.6 billion in 2020 (2019: 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.

Risk review (continued)

Reserves, net of reinsurance, by region

Table 3

in USD millions, as of December 31	Unit-linked insurance contracts		Other life insurance liabilities		Total reserves	
	2020	2019	**2020**	2019	**2020**	2019
Life						
Europe, Middle East & Africa	50,476	46,919	90,470	81,372	140,945	128,291
of which:						
United Kingdom	15,934	16,371	4,018	3,786	19,952	20,157
Germany	22,016	19,001	43,235	38,511	65,251	57,512
Switzerland	936	776	18,491	17,456	19,426	18,232
Italy	4,163	2,709	6,859	5,348	11,023	8,057
Ireland	1,315	1,885	2,451	2,235	3,766	4,121
Spain	676	655	12,802	11,773	13,478	12,428
Zurich International	4,982	5,129	352	220	5,334	5,349
Rest of Europe, Middle East & Africa	453	392	2,262	2,043	2,715	2,435
North America	10,983	10,253	1,235	1,035	12,218	11,288
Asia Pacific	697	598	4,740	4,311	5,437	4,908
Latin America	13,740	15,093	5,984	5,826	19,725	20,919
Group Reinsurance	–	–	11	5	11	5
Eliminations	–	–	(15)	(12)	(15)	(12)
Subtotal	75,896	72,863	102,425	92,537	178,321	165,399
Other businesses	**5,261**	**4,821**	**10,371**	**9,940**	**15,632**	**14,761**
Total	**81,157**	**77,684**	**112,796**	**102,477**	**193,953**	**180,160**

Reinsurance for Property & 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, internal reinsurance 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 optimal 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 24.2 percent (14.4 percent excluding captives, unaudited) as of December 31, 2020 and 23.0 percent (13.5 percent excluding captives, unaudited) as of December 31, 2019. The cession rate for Life was 8.8 percent as of December 31, 2020 and 8.0 percent as of December 31, 2019.

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 in the graph on the next page.

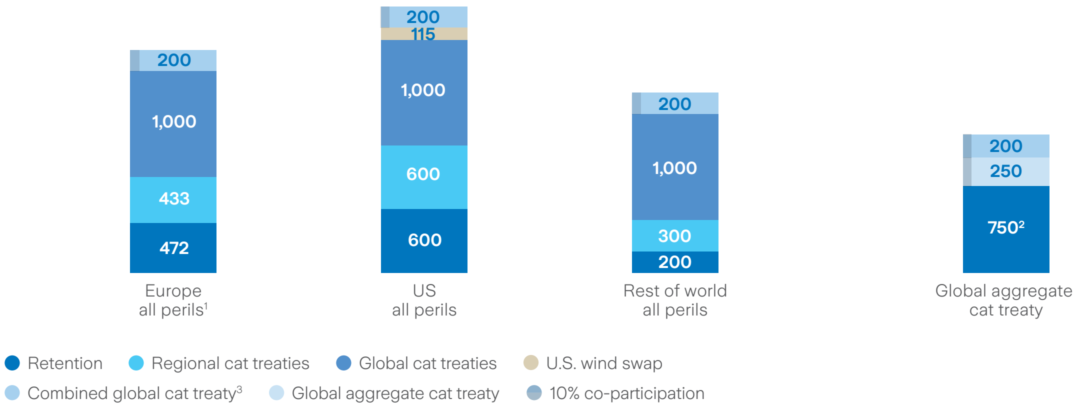
Zurich Insurance Group participates in the underlying risks through its retention and through its co-participation in excess layers. The natural catastrophe reinsurance covers are on a loss-occurrence basis except the global aggregate catastrophe cover, which operates on an annual aggregate basis. The 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.

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

Risk review (continued)

2020 Zurich Insurance Group catastrophe reinsurance protection
in USD millions, as of December 31, 2020



1 Europe cat treaty calculated with EUR/USD exchange rate as of July 31, 2020.
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.

Risk review (continued)

Market risk, including investment credit risk

Market risk is the expected loss of value due to changes in financial market conditions given a certain likelihood of these changes. 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 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 of 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 risks 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 trading' activity without any 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.

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.

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. Yield curve changes affect the value of interest rate sensitive investments and derivatives as well as the fair value of insurance liabilities. Other balance sheet items such as liability investment contracts, debt issued by Zurich Insurance Group, commercial and residential mortgages, employee benefit plans, loans and receivables are also affected.

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 insofar as they affect the amount of fee income earned if the fee income level is dependent on the valuation of the asset base.

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

ZIC Group investment sensitivities

The gross economic market risk sensitivities of the fair value of IFRS ZIC Group investments before tax as of 2020 was a negative USD 13.6 billion (negative USD 10.9 billion as of 2019) for a 100-basis-points (bps) increase in interest rate. For a 100 bps decrease in interest rate, the sensitivity was USD 16.9 billion in 2020 (USD 12.7 billion as of 2019). For a 10 percent decline in equity market, ZIC Group investments dropped in value by USD 1.3 billion in 2020 compared with USD 1.3 billion as of 2019. A 100 bps increase in credit spreads resulted in a decrease of USD 6.8 billion in 2020 compared with USD 5.7 billion as of 2019.

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 ZIC Group consolidated financial statements. The sensitivities only cover 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.

Risk review (continued)

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 ZIC Group counterparty-concentration risk limits, keeping the size of potential losses to an acceptable level.

Debt securities by rating of issuer

Table 4

as of December 31	2020		2019	
	USD millions	% of total	USD millions	% of total
Rating				
AAA	36,411	22.5%	36,066	24.5%
AA	42,240	26.1%	37,062	25.1%
A	25,084	15.5%	22,812	15.5%
BBB	51,636	31.9%	44,918	30.5%
BB and below	5,802	3.6%	5,342	3.6%
Unrated	536	0.3%	1,308	0.9%
Total	**161,710**	**100.0%**	**147,507**	**100.0%**

Table 4 shows the credit risk exposure of debt securities, by credit rating. As of December 31, 2020, 96.1 percent of the ZIC Group's debt securities was investment grade and 22.5 percent was rated 'AAA.' As of December 31, 2019, 95.5 percent of debt securities was investment grade and 24.5 percent was rated 'AAA.'

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

The risk-weighted average credit rating of the ZIC Group's debt securities portfolio is 'A–' in 2020, unchanged from 2019.

As of December 31, 2020, the largest concentration in the ZIC Group's debt securities portfolio was government related at 51 percent of all debt securities. In all other categories, a total of USD 29.5 billion (38 percent) was secured. As of December 31, 2019, 49 percent of the ZIC Group's debt portfolio was invested in government-related securities. In all other categories, a total of USD 30.2 billion (41 percent) was secured.

The second-largest concentration in the ZIC Group's debt securities portfolio is industrial, comprising investments mainly in consumer goods sectors, energy, transportation and capital goods.

In addition to debt exposure, the ZIC Group had loan exposures of USD 4.2 billion to the German central government or the German federal states as of December 31, 2020. The equivalent figure for December 31, 2020 was USD 4.1 billion. For more information, see the 'mortgage loans and other loans' section.

Cash and cash equivalents

To reduce credit 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 11.3 billion and USD 8.0 billion as of December 31, 2020 and December 31, 2019, respectively. The risk-weighted average rating of the overall cash portfolio was 'A' as of December 31, 2020 and 'A–' as of December 31, 2019. The ten largest bank exposures represented 76 percent of the total, whose risk-weighted average rating was 'AA–' as of December 31, 2020 and 'A' as of December 31, 2019.[1]

Mortgage loans and other loans

Mortgage loans amounted to USD 5.8 billion as of December 31, 2020 and USD 5.9 billion as of December 31, 2019. The ZIC Group's largest mortgage loan portfolios are held in Switzerland (USD 3.2 billion) and in Germany (USD 1.7 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 0.5 billion); these are mainly participations in large mortgage loans secured against commercial property.

1 From 2020 on the risk-weighted average ratings reflect exposure at counterparty level (formerly at counterparty group level). Prior year ratings have been updated accordingly.

Risk review (continued)

The credit risk arising from other loans is assessed and monitored together with the debt securities portfolio. Out of the USD 8.6 billion reported loans as of December 31, 2020, 57 percent are government related, of which 85 percent are to the German central government or the German federal states. As of December 31, 2020, USD 4.1 billion were rated as 'AAA' (48 percent) compared with 4.5 billion as of December 31, 2019; USD 1.8 billion as 'AA' (21 percent) compared with 1.6 billion as of December 31, 2019; USD 1.4 billion as 'A' (16 percent) compared with 0.3 billion as of December 31, 2019; USD 1.0 billion as 'BBB' and below (12 percent) compared with 1.3 billion as of December 31, 2019; and USD 0.3 billion as unrated (3 percent) compared with 0.5 billion as of December 31, 2019.

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 executed with counterparties rated 'BBB' or higher as per Zurich Insurance Group's risk policy manual requirements. Zurich Insurance Group's standard practice is to only transact derivatives with those counterparties for which 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.

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, and 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.

Table 5 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.

Table 5

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

in USD millions, as of December 31	**2020**	2019
10% increase in		
EUR/USD rate	363	382
GBP/USD rate	274	257
CHF/USD rate	562	519
BRL/USD rate	138	178
AUD/USD rate	355	308
Other currencies/USD rates	631	510

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 table 5 shows the effect of a 10 percent increase in currency exchange rates, a decrease of 10 percent would have the converse effect.

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 actively uses collateral to mitigate credit risks. 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, deductible programs, 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. Zurich Insurance Group aggregate concentration limits and relevant exception approvals are monitored in line with risk policy standards.

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 has no material amount of off-balance sheet exposures related to undrawn loan commitments as of December 31, 2020. See note 22 of the ZIC Group consolidated financial statements for undrawn loan commitments.

Credit risk related to reinsurance assets

Zurich Insurance Group's Corporate Reinsurance Security Committee oversees the credit quality of cessions and reinsurance assets. Zurich Insurance Group typically only cedes new business to authorized reinsurers with a minimum rating of 'A–.' Of ZIC Group's exposure ceded to reinsurers that are rated below 'A–' or are not rated, 54 percent and 57 percent were collateralized as of December 31, 2020 and 2019, respectively. Of ZIC Group's exposure ceded to reinsurers that are rated below 'A–' or are not rated, 62 percent was ceded to captive insurance companies in 2020, and 65 percent in 2019.

Reinsurance assets included reinsurance recoverables (the reinsurers' share of reserves for insurance contracts) of USD 25.6 billion and USD 22.8 billion, and receivables arising from ceded reinsurance of USD 1.5 billion and USD 1.5 billion as of December 31, 2020 and 2019, respectively, gross of allowance for impairment. Reserves for potentially uncollectible reinsurance assets amounted to USD 149 million as of December 31, 2020 and USD 119 million as of December 31, 2019. Zurich Insurance 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 table 6 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. Bank issuing letters of credit for the benefit of ZIC Group are on average 'A' rated. The value of the collateral received amounts to USD 10.8 billion and USD 10.3 billion as of December 31, 2020 and 2019, respectively.

Table 6 shows reinsurance assets and unsecured reinsurance assets split by rating.

Table 6

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

as of December 31	2020				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	37	0.1%	37	0.2%	6	–	6	–
AA	8,382	31.1%	7,445	45.9%	7,084	29.3%	6,309	45.7%
A	11,851	43.9%	5,644	34.8%	10,957	45.4%	4,871	35.3%
BBB	3,094	11.5%	1,385	8.5%	2,356	9.8%	1,095	7.9%
BB	411	1.5%	192	1.2%	335	1.4%	195	1.4%
B and below	204	0.8%	45	0.3%	256	1.1%	29	0.2%
Unrated	3,004	11.1%	1,485	9.1%	3,163	13.1%	1,308	9.5%
Total	**26,983**	**100.0%**	**16,233**	**100.0%**	**24,157**	**100.0%**	**13,812**	**100.0%**

Credit risk related to receivables

The largest amount of the ZIC Group's 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. ZIC 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, are regarded as unsecured; however, some of these receivable positions may be offset by collateral. Zurich Insurance Group reports internally on Zurich Insurance Group's 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 managed accordingly. See notes 15 and 24 of the ZIC Group consolidated financial statements for additional information on receivables.

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 the Zurich Insurance Group and highlights the main scenarios contributing to the capital required for Zurich's internal model.
- Documents and reviews operational events exceeding a threshold determined by Zurich'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, the 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 business resilience (see sub-section 'digital and resilience risk'), as well as combating fraud.

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 Zurich Insurance Group's internal model calculations, claims fraud is part of insurance risk and non-claims fraud is part of operational risk.

Liquidity risk

Liquidity risk is the risk that an entity within 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 the 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 the potential liquidity needs within Zurich Insurance Group, 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. In 2020, Zurich Insurance Group's holdings in illiquid assets were within its capacity.

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 the 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.

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

Strategic risk

Zurich Insurance Group defines 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.

Strategic risks can arise from:

- Inadequate risk-reward assessment of strategic plans
- Improper execution of strategic plans
- Unexpected changes to underlying assumptions, including on the external environment

Zurich Insurance Group works to manage risks associated with 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) assesses potential risks from both external and internal factors, looking at 2020 and beyond. These include potential mid-term implications of the COVID-19 pandemic on the future macroeconomic, financial market, customer and operating environments. The ExCo members define actions to respond as appropriate and review 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.

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 reputational 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.

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Financial overview

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The financial overview is the management analysis of the business performance of Zurich Insurance Company Ltd and its subsidiaries (collectively the Zurich Insurance Company Group or ZIC Group) for the year ended December 31, 2020, compared with 2019.

The information contained within the financial overview is unaudited and is based on the consolidated results of the ZIC Group for the years ended December 31, 2020 and 2019. All amounts are shown in U.S. dollars and rounded to the nearest million unless otherwise stated, with the consequence that the rounded amounts may not always add up to the rounded total. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts.
This document should be read in conjunction with the annual results 2020 of the ZIC Group and in particular with its consolidated financial statements and embedded value report for the year ended December 31, 2020.

In addition to the figures stated in accordance with International Financial Reporting Standards (IFRS), the ZIC Group uses business operating profit (BOP), new business metrics and other performance indicators to enhance the understanding of its results. Details of these additional measures are set out in the separately published glossary. These should be viewed as complementary to, and not as substitutes for, the IFRS figures. For a reconciliation of BOP to net income attributable to shareholders (NIAS), see note 27 (table 27.4) of the audited consolidated financial statements for the year ended December 31, 2020.

Certain comparatives have been revised as a result of reclassifications and other adjustments. For details refer to note 1 of the audited consolidated financial statements.

Financial overview (continued)

Financial highlights

in USD millions, for the years ended December 31	2020	2019	Change[1]
Business operating profit	**4,043**	5,116	(21%)
Net income attributable to shareholders	**3,684**	3,885	(5%)
P&C business operating profit	**2,080**	2,878	(28%)
P&C gross written premiums and policy fees	**35,518**	34,184	4%
P&C combined ratio	**98.4%**	96.4%	(2.0 pts)
Life business operating profit	**1,423**	1,486	(4%)
Life gross written premiums, policy fees and insurance deposit	**27,616**	33,479	(18%)
Life new business annual premium equivalent (APE)[2]	**3,625**	4,331	(16%)
Life new business margin, after tax (as % of APE)[2]	**25.1%**	25.8%	(0.8 pts)
Life new business value, after tax[2]	**788**	976	(19%)
Farmers business operating profit	**1,432**	1,629	(12%)
Farmers Management Services management fees and other related revenues	**3,703**	3,780	(2%)
Farmers Management Services managed gross earned premium margin	**6.8%**	7.0%	(0.2 pts)
Farmers Life new business annual premium equivalent (APE)[2]	**75**	82	(9%)
Average Group investments[3]	**205,371**	190,902	8%
Net investment result on Group investments[3]	**6,939**	7,286	(5%)
Net investment return on Group investments[3,4]	**3.4%**	3.8%	(0.4 pts)
Total return on Group investments[3,4]	**6.3%**	8.2%	(1.9 pts)
Shareholders' equity	**37,462**	34,305	9%

1 Parentheses around numbers represent an adverse variance.
2 Details of the principles for calculating new business are included in the embedded value report in 2019. New business value and new business margin are calculated after the effect of non-controlling interests, whereas APE is presented before non-controlling interests.
3 Including investment cash.
4 Calculated on average Group investments.

Overall ZIC Group business operating profit declined 21 percent despite a return to growth over the second half of the year. The decline was driven by the impact of COVID-19 and higher claims from natural catastrophes, which were only partially offset by underlying earnings growth and a strong performance from financial markets.

Net income attributable to shareholders declined 5 percent with higher realized gains partially offsetting the decline in business operating profit.

Operating update

Property & Casualty (P&C)

in USD millions, for the years ended December 31	Total		
	2020	2019	Change
Gross written premiums and policy fees	35,518	34,184	4%
Net earned premiums and policy fees	26,396	25,608	3%
Insurance benefits and losses, net of reinsurance	17,536	16,475	(6%)
Net underwriting result	423	922	(54%)
Net investment result	2,045	2,171	(6%)
Business operating profit	**2,080**	**2,878**	**(28%)**
Loss ratio	66.4%	64.3%	(2.1 pts)
Expense ratio	32.0%	32.1%	0.1 pts
Combined ratio	**98.4%**	**96.4%**	**(2.0 pts)**

BOP by segment

in USD millions, for the years ended December 31	Business operating profit (BOP)		
	2020	2019	Change
Europe, Middle East & Africa (EMEA)	755	1,117	(32%)
North America	1,396	1,578	(11%)
Asia Pacific	48	236	(80%)
Latin America	239	240	–
Group Reinsurance	(357)	(292)	(22%)
Total	**2,080**	**2,878**	**(28%)**

Gross written premiums in Property & Casualty (P&C) for 2020 increased 4 percent in U.S. dollars and on a like-for-like basis, after adjusting for currency movements and closed acquisitions and disposals. Growth was supported by higher premium rates in commercial insurance, which accelerated during the year across all regions.

Business operating profit in 2020 was USD 2.1 billion, 28 percent lower than in the previous year. The decline was mainly driven by the impact of the COVID-19 outbreak, higher catastrophe losses than in the previous year, as well as a lower investment result. The overall impact of the COVID-19 outbreak on Property & Casualty was USD 544 million, including USD 450 million of claims net of frequency benefits and premium refunds.

The net investment result declined by USD 126 million compared to the previous year, with lower reinvestment yields leading to reduced investment income, which was partially offset by a strong performance from hedge funds.

The contribution of other items, which include the net non-technical result and non-controlling interests, was USD 173 million lower than in the previous year. This was driven by a combination of non-recurring charges, lower income from cash and cash equivalents, and an operating loss at Cover-More, the ZIC Group's specialist travel and assistance provider, which saw a sharp decline in sales as a result of widespread travel restrictions to counter the COVID-19 outbreak.

Operating update (continued)

Combined ratio

in %, for the years ended December 31	Combined ratio		
	2020	2019	Change
Europe, Middle East & Africa (EMEA)	96.6%	94.3%	(2.3 pts)
North America	97.7%	96.5%	(1.2 pts)
Asia Pacific	100.5%	94.2%	(6.3 pts)
Latin America	91.8%	94.7%	3.0 pts
Group Reinsurance	nm	nm	nm
Total	**98.4%**	**96.4%**	**(2.0 pts)**

The 2020 combined ratio of 98.4 percent was 2 percentage points higher than in the previous year. The deterioration was entirely driven by COVID-19 claims and higher catastrophes, while underlying performance continued to improve year on year.

In EMEA, the combined ratio deteriorated by 2.3 percentage points, due to COVID-19 related claims and voluntary actions to support customers during the outbreak, which were partially offset by lower claims frequency, especially in motor, resulting from restrictions implemented by governments to control the pandemic.

In North America, the combined ratio was 1.2 percentage points higher than in the previous year. This was driven by a strong underlying improvement from the earn-through of rate increases, which was more than offset by the impact of higher catastrophe losses resulting from the COVID-19 outbreak, civil unrest in the U.S., and an active Atlantic storm season.

The Asia Pacific combined ratio was 6.3 percentage points higher than in 2019, due to adverse prior year development as well as higher catastrophe losses, largely related to COVID-19.

The Latin America combined ratio was 3.0 percentage points lower than in the previous year, with the improvement driven by a lower accident year loss ratio excluding catastrophes.

Operating update (continued)

Life

in USD millions, for the years ended December 31	2020	2019	Change
Insurance deposits	13,663	18,328	(25%)
Gross written premiums and policy fees	13,953	15,151	(8%)
Net investment income on Group investments	2,753	2,915	(6%)
Insurance benefits and losses, net of reinsurance	9,306	10,190	9%
Business operating profit	**1,423**	**1,486**	**(4%)**
Net policyholder flows[1]	4,310	6,320	(32%)
Assets under management[2]	303,443	275,433	10%
Total reserves for life insurance contracts, net of reinsurance, and liabilities for investment contracts (net reserves)	247,439	226,765	9%

1 Net policyholder flows are defined as the sum of gross written premiums and policy fees and deposits, less policyholder benefits.
2 Assets under management comprise balance sheet Group investments and unit-linked investments plus assets that are managed by third parties, on which fees are earned.

BOP by segment

in USD millions, for the years ended December 31	2020	2019	Change
Europe, Middle East & Africa (EMEA)	945	1,037	(9%)
North America	(13)	(30)	57%
Asia Pacific	269	204	32%
Latin America	219	269	(19%)
Group Reinsurance	4	6	(37%)
Total	**1,423**	**1,486**	**(4%)**

Life business operating profit for 2020 was USD 1.4 billion, 4 percent below the prior year. Excluding COVID-19 effects of USD 173 million life business operating profit grew 7 percent despite adverse movements in exchange rates and a lower contribution from favorable one-off items mainly in EMEA.

In EMEA, business operating profit was impacted by the COVID-19 outbreak, mainly in the UK and to a lesser extent in Switzerland and Zurich International. On a reported basis, business operating profit decreased by 9 percent compared to the prior year. Adjusted for COVID-19, business operating profit increased 6 percent mainly driven by Switzerland and the joint venture with Banco Sabadell in Spain.

In Latin America, business operating profit decreased 19 percent due largely to adverse development in exchange rates. In local currency, growth was 4 percent, mainly driven by favorable results in Chile and Argentina, partially offset by higher COVID-19 claims in Zurich Santander.

Asia Pacific contributed a business operating profit of USD 269 million, up 32 percent vs the prior year. The performance in the second half improved significantly, driven by improved performance within the Australian life business.

In North America, which excludes Farmers Life, business operating earnings increased by USD 17 million due to favorable claims experience more than offsetting the absence of a favorable one-off item in the prior year.

Net inflows of USD 4.3 billion were USD 2.0 billion lower than in the prior year. On a like-for-like basis net inflows were down USD 1.3 billion, mainly driven by EMEA, which benefitted from one-time inflows in Switzerland in 2019.

Assets under management (AuM) increased 10 percent.

Operating update (continued)

NBV, APE and NBM by Segment

in USD millions, for the years ended December 31	New business value, after tax (NBV)[1]		New business annual premium equivalent (APE)[2]		New business margin, after tax (as % of APE) (NBM)[3]	
	2020	2019	**2020**	2019	**2020**	2019
Europe, Middle East & Africa (EMEA)	500	576	2,300	2,760	22.7%	21.9%
North America	44	49	108	139	41.0%	35.2%
Asia Pacific	101	211	213	268	47.9%	79.9%
Latin America	142	140	1,005	1,164	23.0%	18.9%
Total	**788**	**976**	**3,625**	**4,331**	**25.1%**	**25.8%**

1 New business value is calculated on embedded value principles net of non-controlling interests.
2 APE is shown gross of non-controlling interests.
3 New business margin is calculated using new business value as a percentage of APE based on figures net of non-controlling interests for both metrics.

Life new business annual premium equivalent (APE) sales decreased 7 percent on a like-for-like basis, adjusting for currency movements, acquisitions and disposals. The decline in sales was largely driven by government-imposed restrictions related to the COVID-19 outbreak and expected reductions in several markets from exceptional levels in 2019. On a reported basis APE was 16 percent lower.

In EMEA, APE sales in 2020 decreased by 12 percent on a like-for-like basis compared with 2019. The decline was mainly driven by a reduction in corporate pensions business in Switzerland following exceptional sales in the previous year, and by lower savings business in Italy, Portugal and for the joint venture with Banco Sabadell in Spain, partly as a result of the COVID-19 lockdowns throughout the year.

APE sales in Latin America increased 8 percent on a like-for-like basis. Higher sales of unit-linked and individual protection business at Zurich Santander were partly offset by lower sales volumes in Chile and corporate protection business across the region.

In Asia Pacific, APE sales decreased 21 percent on a like-for-like basis, reflecting lower sales volumes in Japan, Malaysia and Indonesia, mainly driven by the outbreak of COVID-19.

In North America, APE sales were 8 percent lower than in the prior year due to reduced sales of corporate protection business and lower individual protection sales.

The new business margin remained on an attractive level at 25.1 percent as reported or 24.9 percent on a like-for-like basis. New business value (NBV) decreased 16 percent on a like-for-like basis, driven by lower new business volumes, unfavorable economic assumption changes due to lower yields in EMEA and operating assumption changes impacting mainly Australia and Japan. On a reported basis, NBV declined 19 percent.

Operating update (continued)

Farmers

in USD millions, for the years ended December 31	2020	2019	Change
Farmers Management Services (FMS)	1,312	1,389	(6%)
Farmers Re	25	14	78%
Farmers Life	95	226	(58%)
Total business operating profit	**1,432**	**1,629**	**(12%)**

Farmers Management Services (FMS) business operating profit decreased 6 percent compared to the prior year. This was mainly driven by reduced fee revenues as a result of the premium credits of approximately USD 311 million to customers at the Farmers Exchanges in the first half of the year. As a result, the managed gross earned premium margin decreased 0.2 percentage point to 6.8 percent mainly due to the COVID-19 related impact. The result was also impacted by lower investment income as a result of decreasing investment yields and an unfavorable mark-to-market impact on a deferred compensation plan compared with a favorable impact in the prior year.

Farmers Re business operating profit of USD 25 million was USD 11 million higher than in the prior year driven by an improved loss ratio.

Farmers Life business operating profit of USD 95 million was 58 percent lower than in the prior year. The result was mainly driven by higher mortality compared with a favorable experience in the prior year and annual assumption updates. This includes USD 45 million of claims related to COVID-19 in the second half of the year and USD 6 million relating to an accelerated amortization of deferred acquisition costs.

Farmers Exchanges

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.

Financial information about the Farmers Exchanges is proprietary to the Farmers Exchanges, but is provided to support an understanding of the performance of Farmers Group, Inc. and Farmers Re.

in USD millions, for the years ended December 31	2020	2019	Change
Gross written premiums	20,108	20,656	(3%)
Gross earned premiums	20,109	20,441	(2%)

Gross written premiums at the Farmers Exchanges decreased 3 percent and were broadly flat, excluding USD 311 million of COVID-19 related premium credits and lower volumes of commercial rideshare business following measures initiated by U.S. states in response to the COVID-19 outbreak.

Group Functions and Operations

in USD millions, for the years ended December 31	**2020**	2019	Change
Holding and Financing	(330)	(435)	24%
Headquarters	(509)	(387)	(31%)
Total business operating profit	**(839)**	**(822)**	**(2%)**

The business operating loss reported under Group Functions and Operations increased by USD 17 million to USD 839 million. This was driven by a reduction in Holding and Financing costs due to lower interest expenses, more than offset by an increase in headquarter expenses compared to prior year as a result of increased investments in innovative new business propositions, and cyber security.

Non-Core Businesses

in USD millions, for the years ended December 31	**2020**	2019	Change
Zurich Legacy Solutions	(14)	(52)	72%
Other run-off	(40)	(3)	nm
Total business operating profit	**(54)**	**(54)**	**1%**

The ZIC Group's Non-Core Businesses, which comprises run-off portfolios that are managed with the intention of proactively reducing risk and releasing capital, reported an operating loss of USD 54 million driven by adverse developments in a legacy life portfolio as a result of the COVID-19 outbreak.

Consolidated financial statements

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Consolidated financial statements (continued)

Consolidated income statements

in USD millions, for the years ended December 31	Notes	2020	2019
Revenues			
Gross written premiums		48,221	48,056
Policy fees		2,334	2,469
Gross written premiums and policy fees		50,555	50,525
Less premiums ceded to reinsurers		(9,988)	(9,274)
Net written premiums and policy fees		40,567	41,251
Net change in reserves for unearned premiums	10	(623)	(949)
Net earned premiums and policy fees		39,944	40,302
Farmers management fees and other related revenues	26	3,703	3,780
Net investment income on Group investments		4,901	5,296
Net capital gains/(losses) and impairments on Group investments		2,038	1,990
Net investment result on Group investments	6	6,939	7,286
Net investment result on unit-linked investments		7,389	19,485
Net gains/(losses) on divestment of businesses	5	57	(295)
Other income		958	1,127
Total revenues		58,990	71,684
Benefits, losses and expenses			
Insurance benefits and losses, gross of reinsurance	10	35,899	33,620
Less ceded insurance benefits and losses	10	(8,158)	(6,051)
Insurance benefits and losses, net of reinsurance	10	27,741	27,570
Policyholder dividends and participation in profits, net of reinsurance	10	8,325	20,582
Underwriting and policy acquisition costs, net of reinsurance	10	8,555	8,529
Administrative and other operating expense	12	8,105	8,122
Interest expense on debt		400	402
Interest credited to policyholders and other interest		581	590
Total benefits, losses and expenses		53,706	65,795
Net income before income taxes		5,284	5,889
of which: Attributable to non-controlling interests		406	434
Income tax (expense)/benefit	17	(1,311)	(1,706)
attributable to policyholders	17	(46)	(365)
attributable to shareholders	17	(1,264)	(1,341)
of which: Attributable to non-controlling interests		(117)	(137)
Net income after taxes		**3,973**	**4,183**
attributable to non-controlling interests		290	297
attributable to shareholders		3,684	3,885

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Consolidated statements of comprehensive income

in USD millions, for the years ended December 31

	Net income attributable to shareholders	Net unrealized gains/(losses) on available-for-sale investments	Cash flow hedges
2019			
Comprehensive income for the period	3,885	3,486	91
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		5,070	126
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(1,041)	(39)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		(579)	(3)
Foreign currency translation effects		36	7
2020			
Comprehensive income for the period	3,684	1,664	71
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		2,885	64
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(1,092)	(37)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		(335)	–
Foreign currency translation effects		207	44

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Cumulative foreign currency translation adjustment	Total other comprehensive income recycled through profit or loss	Revaluation reserve	Net actuarial gains/(losses) on pension plans	Total other comprehensive income not recycled through profit or loss	Total other comprehensive income attributable to shareholders	Total comprehensive income attributable to shareholders	Total comprehensive income attributable to non-controlling interests	Total comprehensive income
(58)	3,519	13	(42)	(29)	3,490	7,375	544	7,920
199	5,395	9	48	57	5,452			
(258)	(1,338)	–	–	–	(1,338)			
–	–	–	–	–	–			
–	(582)	4	(27)	(24)	(606)			
–	43	–	(62)	(62)	(19)			
618	2,353	61	(92)	(31)	2,322	6,005	268	6,273
635	3,583	83	28	112	3,695			
(17)	(1,146)	–	–	–	(1,146)			
–	–	(17)	–	(17)	(17)			
–	(335)	(5)	(13)	(18)	(353)			
	251	–	(107)	(107)	143			

Consolidated financial statements (continued)

Consolidated balance sheets

Assets

in USD millions, as of December 31	Notes	2020	2019
Assets:			
Cash and cash equivalents		**11,300**	**7,986**
Total Group investments	6	211,227	193,948
Equity securities		20,322	18,932
Debt securities		161,710	147,507
Investment property		14,749	13,261
Mortgage loans		5,783	5,935
Other loans		8,620	8,274
Investments in associates and joint ventures		43	39
Investments for unit-linked contracts		135,058	126,211
Total investments		**346,285**	**320,158**
Reinsurers' share of liabilities for insurance contracts	8	25,523	22,752
Deposits made under reinsurance contracts		503	726
Deferred policy acquisition costs	11	20,021	19,207
Deferred origination costs	11	426	400
Receivables and other assets	15	20,353	19,322
Deferred tax assets	17	1,314	1,151
Assets held for sale[1]	5	2,538	2,087
Property and equipment	13	2,705	2,635
Attorney-in-fact contracts	14	1,025	1,025
Goodwill	14	4,089	3,610
Other intangible assets	14	4,230	4,333
Total assets		**440,314**	**405,393**

1 As of December 31, 2020, the ZIC Group had USD 2.5 billion of assets held for sale based on agreements signed to sell business of Zurich Insurance plc and Zurich International Life Limited (see note 5). In 2019, the ZIC Group reclassified USD 2 billion of assets to held for sale based on agreements signed to sell business in the UK and Germany (see note 5).

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Liabilities and equity

in USD millions, as of December 31	Notes	2020	2019
Liabilities			
Liabilities for investment contracts	9	69,507	61,761
Deposits received under ceded reinsurance contracts		910	994
Deferred front-end fees		5,372	5,173
Liabilities for insurance contracts	8	283,497	264,140
Obligations to repurchase securities		784	977
Other liabilities	16	19,094	17,214
Deferred tax liabilities	17	5,136	4,533
Liabilities held for sale[1]	5	2,477	1,996
Senior debt	18	5,484	5,247
Subordinated debt	18	8,306	6,852
Total liabilities		**400,569**	**368,886**
Equity			
Share capital	19	660	660
Additional paid-in capital	19	11,761	11,761
Net unrealized gains/(losses) on available-for-sale investments		5,745	4,082
Cash flow hedges		526	454
Cumulative foreign currency translation adjustment[2]		(7,188)	(7,872)
Revaluation reserve		284	223
Retained earnings[2]		25,674	24,998
Shareholders' equity		37,462	34,305
Non-controlling interests		2,283	2,203
Total equity		**39,745**	**36,507**
Total liabilities and equity		**440,314**	**405,393**

1 As of December 31, 2020, the ZIC Group had USD 2.5 billion of liabilities held for sale based on agreements to sell business of Zurich Insurance plc and Zurich International Life Limited (see note 5). In 2019, the ZIC Group reclassified USD 2 billion of liabilities to held for sale based on agreements to sell certain businesses in the UK and Germany (see note 5).
2 Restated in line with Hyperinflation reclassification in Consolidated statements of changes in equity.

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Consolidated statements of cash flows

in USD millions, for the years ended December 31	**2020**	2019
Cash flows from operating activities		
Net income attributable to shareholders	3,684	3,885
Adjustments for:		
Net (gains)/losses on divestment of businesses	(57)	295
(Income)/expense from equity method accounted investments	(3)	(3)
Depreciation, amortization and impairments of fixed and intangible assets	911	967
Other non-cash items	355	34
Underwriting activities:	8,029	19,597
Liabilities for insurance contracts, gross	7,594	11,073
Reinsurers' share of liabilities for insurance contracts	(2,105)	(2,423)
Liabilities for investment contracts	3,047	11,159
Deferred policy acquisition costs	(627)	(761)
Deferred origination costs	1	18
Deposits made under assumed reinsurance contracts	206	154
Deposits received under ceded reinsurance contracts	(87)	377
Investments:	(8,079)	(20,119)
Net capital (gains)/losses on total investments and impairments	(8,255)	(19,903)
Net change in derivatives	42	(347)
Net change in money market investments	(572)	(584)
Sales and maturities		
Debt securities	47,770	54,294
Equity securities	57,167	60,733
Other	6,100	7,369
Purchases		
Debt securities	(48,527)	(56,272)
Equity securities	(56,961)	(58,985)
Other	(4,842)	(6,423)
Net changes in sale and repurchase agreements	(248)	(361)
Movements in receivables and payables	565	717
Net changes in other operational assets and liabilities	649	(406)
Deferred income tax, net	(89)	302
Net cash provided by/(used in) operating activities	5,717	4,908

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

in USD millions, for the years ended December 31	**2020**	2019
Cash flows from investing activities		
Additions to tangible and intangible assets	(552)	(751)
Disposals of tangible and intangible assets	55	114
(Acquisitions)/disposals of equity method accounted investments, net	12	(5)
Acquisitions of companies, net of cash acquired	(26)	(1,672)
Divestments of companies, net of cash divested	8	108
Dividends from equity method accounted investments	1	1
Net cash provided by/(used in) investing activities	(502)	(2,206)
Cash flows from financing activities		
Dividends paid	(3,299)	(3,101)
Issuance of debt	2,028	1,398
Repayment of debt	(1,120)	(1,370)
Lease principal repayments	(217)	(196)
Net cash provided by/(used in) financing activities	(2,609)	(3,269)
Foreign currency translation effects on cash and cash equivalents	682	43
Change in cash and cash equivalents	3,288	(524)
Cash and cash equivalents as of January 1	8,633	9,156
Total cash and cash equivalents as of December 31	**11,920**	**8,633**
of which: Cash and cash equivalents	11,300	7,986
of which: Unit-linked	620	647

Other supplementary cash flow disclosures[1]		
Other interest income received	4,479	4,830
Dividend income received	1,367	1,764
Other interest expense paid	(929)	(908)
Income taxes paid	(1,438)	(1,528)

1 These amounts are primarily included in the operating activities of the Cash flow statement.

Cash and cash equivalents

in USD millions, as of December 31	**2020**	2019
Cash and cash equivalents comprise the following:		
Cash at bank and in hand	10,923	7,964
Cash equivalents	997	668
Total	**11,920**	**8,633**

For the periods ended December 31, 2020 and 2019, cash and cash equivalents held to meet local regulatory requirements were USD 440 million and USD 313 million, respectively.

Consolidated financial statements (continued)

Consolidated statements of changes in equity

in USD millions

	Share capital	Additional paid-in capital
Balance as of December 31, 2018 as previously reported	660	11,761
Effect of adoption IFRS 16[1]	–	–
Effect of adoption IAS 29 and restatement under IFRIC 7[2]	–	–
Balance as of January 1, 2019 after the adoption of IFRS 16, IAS 29 and restatement under IFRIC 7	660	11,761
Issuance of share capital	–	–
Dividends to shareholders	–	–
Share-based payment transactions	–	–
Treasury share transactions	–	–
Cumulative foreign currency translation adjustment due to hyperinflation	–	–
Reclassification from revaluation reserves	–	–
Total comprehensive income for the period, net of tax	–	–
Net income	–	–
Net unrealized gains/(losses) on available-for-sale investments	–	–
Cash flow hedges	–	–
Cumulative foreign currency translation adjustment	–	–
Revaluation reserve	–	–
Net actuarial gains/(losses) on pension plans	–	–
Net changes in capitalization of non-controlling interests	–	–
Balance as of December 31, 2019	660	11,761
Balance as of December 31, 2019 as previously reported	660	11,761
Issuance of share capital	–	–
Dividends to shareholders	–	–
Share-based payment transactions	–	–
Treasury share transactions	–	–
Change in ownership interests with no loss of control	–	–
Cumulative foreign currency translation adjustment due to hyperinflation[3]	–	–
Reclassification from revaluation reserves	–	–
Total comprehensive income for the period, net of tax	–	–
Net income	–	–
Net unrealized gains/(losses) on available-for-sale investments	–	–
Cash flow hedges	–	–
Cumulative foreign currency translation adjustment	–	–
Revaluation reserve	–	–
Net actuarial gains/(losses) on pension plans	–	–
Net changes in capitalization of non-controlling interests	–	–
Balance as of December 31, 2020	**660**	**11,761**

1 Effect of adoption of IFRS 16 'Leases' (2019 adoption).
2 Effect of adoption of IAS 29 'Financial Reporting in Hyperinflationary Economies.' (2019 adoption) In addition to the adoption of IAS 29 in 2019, in March 2020 clarification by IFRS Interpretations Committee the Group amended the presentation of effects of initial application of hyperinflationary accounting within equity which resulted in a reclassification of USD 204 million from retained earnings to cumulative foreign currency translation adjustment (CTA). This additional restatement on the initial adoption in 2019 has increased CTA from USD 116 million to USD 320 million and decreased retained earnings from (USD 66 million) to (USD 270 million).
3 Current year effect of IAS 29 'Financial Reporting in Hyperinflationary Economies'.

The notes to the consolidated financial statements are an integral part of these consolidated financial statements.

Consolidated financial statements (continued)

Net unrealized gains/(losses) on available-for-sale investments	Cash flow hedges	Cumulative foreign currency translation adjustment	Revaluation reserve	Retained earnings	Shareholders' equity	Non-controlling interests	Total equity
596	363	(8,244)	211	24,499	29,844	2,206	32,050
–	–	–	–	(129)	(129)	(1)	(130)
–	–	320	–	(270)	50	13	63
596	363	(7,925)	211	24,100	29,765	2,218	31,983
–	–	–	–	–	–	–	–
–	–	–	–	(2,883)	(2,883)	(218)	(3,101)
–	–	–	–	(63)	(63)	–	(63)
–	–	–	–	–	–	–	–
–	–	111	–	–	111	8	119
–	–	–	–	–	–	–	–
3,486	91	(58)	13	3,844	7,375	544	7,920
–	–	–	–	3,885	3,885		
3,486	–	–	–	–	3,486		
–	91	–	–	–	91		
–	–	(58)	–	–	(58)		
–	–	–	13	–	13		
–	–	–	–	(42)	(42)		
–	–	–	–	–	–	(350)	(350)
4,082	454	(7,872)	223	24,998	34,305	2,203	36,507
4,082	454	(7,872)	223	24,998	34,305	2,203	36,507
–	–	–	–	–	–	–	–
–	–	–	–	(3,147)	(3,147)	(152)	(3,299)
–	–	–	–	218	218	–	218
–	–	–	–	–	–	–	–
–	–	–	–	(3)	(3)	–	(3)
–	–	67	–	–	67	6	73
–	–	–	–	17	17	–	17
1,664	71	618	61	3,592	6,005	268	6,273
–	–	–	–	3,684	3,684		
1,664	–	–	–	–	1,664		
–	71	–	–	–	71		
–	–	618	–	–	618		
–	–	–	61	–	61		
–	–	–	–	(92)	(92)		
–	–	–	–	–	–	(42)	(42)
5,745	**526**	**(7,188)**	**284**	**25,674**	**37,462**	**2,283**	**39,745**

Zurich Insurance Company Ltd (ZIC) and its subsidiaries (collectively the Zurich Insurance Company Group or ZIC Group) is a provider of insurance products and related services. The ZIC Group operates in Europe, Middle East & Africa (EMEA), North America, Latin America and Asia Pacific through subsidiaries, as well as branch and representative offices.

Zurich Insurance Company Ltd is incorporated in Zurich, Switzerland. The registered office is Mythenquai 2, 8002 Zurich, Switzerland. Zurich Insurance Company Ltd is a wholly owned subsidiary of Zurich Insurance Group Ltd and together with its subsidiaries forms part of the Zurich Insurance Group (collectively the Group)

On March 3, 2021, the Board of Directors of Zurich Insurance Company Ltd authorized these consolidated financial statements for issue. These financial statements will be submitted for approval to the Annual General Meeting of Shareholders to be held on April 7, 2021.

1. Basis of presentation

General information

The consolidated financial statements of the ZIC Group have been prepared in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law. Where IFRS does not contain clear guidance governing the accounting treatment of certain transactions, including those that are specific to insurance and reinsurance products, IFRS permits reference to another comprehensive body of accounting principles that uses a similar conceptual framework. Accounting policies are established for the Zurich Insurance Group (the Group) and are equally applicable to the ZIC Group. The Group's accounting policies for insurance and reinsurance contracts are therefore based on those developed by the Group before the adoption of IFRS 4 in areas where IFRS 4 did not include specific requirements. Before the adoption of IFRS 4, the Group typically applied U.S. GAAP pronouncements issued by the Financial Accounting Standards Board (FASB) on insurance and reinsurance contracts. Any changes to such pronouncements subsequent to this adoption are not reflected in the Group's accounting policies. In case of business combinations, the Group may decide to maintain the local statutory treatment if this does not distort the fair presentation of the financial position of the Group. If significant, the impact of such cases would be described elsewhere in the notes to these consolidated financial statements.

The accounting policies applied by the reportable segments are the same as those applied by the ZIC Group. The ZIC Group accounts for inter-segment revenues and transfers as if the transactions were with third parties at current market prices. Dividends, realized capital gains and losses as well as gains and losses on the transfer of net assets are eliminated within the segment, whereas all other intercompany gains and losses are eliminated at ZIC Group level. In the consolidated financial statements, inter-segment revenues and transfers are eliminated.

Certain amounts recorded in the consolidated financial statements reflect estimates and assumptions made by management about insurance liability reserves, investment valuations, interest rates and other factors. Since the end of 2019, the COVID-19 pandemic has developed rapidly with far-reaching impacts across the insurance industry and the global economy overall. The global nature of the pandemic and the varying government actions taken to mitigate it make the potential losses (including the wide range of related coverage issues and associated litigation generated) inherently more difficult to model than traditional catastrophic losses or other loss events with a consequent increase in uncertainty around them. Management has considered the effect of COVID-19 to the extent possible in its estimates and assumptions. Specifically, insurance liabilities reflect management's best estimate of claims activity directly related to COVID-19 as well as premium returns and rebates to customers where appropriate. For additional information on insurance liabilities, please refer to note 8.

Investment valuations and interest rates incorporate market conditions as of December 31, 2020 and recoverability of intangible assets has been tested where the value of these intangible assets, including goodwill, is sensitive to prevailing economic conditions. For more information on investments and fair value, please see note 6 and 23, respectively. For more information on intangible assets, please see note 14. Management has also implemented recent amendments to IFRS 16 Leases which allow lessees not to account for rent concessions as lease modifications if they are a direct consequence of COVID-19 and meet certain conditions. The impact of the amendments to IFRS 16 Leases are immaterial to the ZIC Group. Actual results may differ from the estimates and assumptions made.

Disclosures under IFRS 4 'Insurance Contracts' and IFRS 7 'Financial Instruments: Disclosures' relating to the nature and extent of risks, and capital disclosures under IAS 1 'Presentation of Financial Statements' have been included in the audited sections of the risk review on pages 3 to 22, and they form an integral part of the consolidated financial statements.

The ZIC Group's consolidated balance sheets are not presented using a current/non-current classification. The following balances are generally considered to be current: cash and cash equivalents, deferred policy acquisition costs on property & casualty contracts, receivables, reserve for premium refunds and obligations to repurchase securities.

Consolidated financial statements (continued)

The following balances are generally considered to be non-current: equity securities, investment property, investments in associates and joint ventures, deferred policy acquisition costs on life insurance contracts, deferred tax assets, property and equipment, goodwill, other intangible assets and deferred tax liabilities.

The following balances are mixed in nature (including both current and non-current portions): debt securities, mortgage loans, other loans, reinsurers' share of liabilities for insurance contracts, deposits made under assumed reinsurance contracts, deferred origination costs, other assets, reserves and investments for unit-linked contracts, liabilities for investment contracts, deposits received under ceded reinsurance contracts, deferred front-end fees, reserves for losses and loss adjustment expenses, reserves for unearned premiums, future life policyholder benefits, policyholder contract deposits and other funds, other liabilities, senior and subordinated debt, and assets and liabilities held for sale.

Maturity tables have been provided for the following balances: debt securities (table 6.4), derivative assets and derivative liabilities (tables 7.1 and 7.2), reserves for insurance contracts (tables 8.9a and 8.9b), liabilities for investment contracts (tables 9.3a and 9.3b), finance lease receivables (table 13.6), operating lease payments to be received (table 13.7), other financial liabilities (table 16.2), lease liabilities (table 16.3) and outstanding debt (table 18.2).

All amounts in the consolidated financial statements, unless otherwise stated, are shown in U.S. dollars, rounded to the nearest million with the consequence that the rounded amounts may not add to the rounded total in all cases. All ratios and variances are calculated using the underlying amounts rather than the rounded amounts.

Table 1 summarizes the principal exchange rates used for translation purposes. Net gains/(losses) on foreign currency transactions included in the consolidated income statements were USD (66) million and USD (69) million for the years ended December 31, 2020 and 2019, respectively. Foreign currency exchange forward and swap gains/(losses) included in these amounts were USD 154 million and USD 40 million for the years ended December 31, 2020 and 2019, respectively. In 2019, a cumulative foreign currency translation adjustment loss of USD 258 million was recognized upon closure of the sale of the ZIC Group's Venezuelan operations (see note 5).

Principal exchange rates

Table 1

USD per foreign currency unit	Consolidated balance sheets at end-of-period exchange rates		Consolidated income statements and cash flows at average exchange rates	
	12/31/20	12/31/19	**12/31/20**	12/31/19
Euro	1.2231	1.1223	1.1415	1.1196
Swiss franc	1.1304	1.0326	1.0663	1.0063
British pound	1.3656	1.3243	1.2836	1.2762
Brazilian real	0.1924	0.2481	0.1958	0.2540
Australian dollar	0.7716	0.7026	0.6907	0.6953

Consolidated financial statements (continued)

2. New accounting standards and amendments to published accounting standards

Standards, amendments and interpretations effective or early-adopted as of January 1, 2020 and relevant for the ZIC Group's operations

Table 2.1 shows new accounting standards or amendments to and interpretations of standards relevant to the ZIC Group that have been implemented for the financial year beginning January 1, 2020, with no material impact on the ZIC Group's financial position or performance. Amendments resulting from the annual improvements to IFRS Standards 2018–2020 have no impact on the ZIC Group's financial statements.

Table 2.1

Standard/ Interpretation

		Effective date
Amended standards		
IFRS 3	Definition of a Business	January 1, 2020
IFRS 4	Extension of the Temporary Exemption from Applying IFRS 9	January 1, 2020
IAS 1/IAS 8	Definition of Material	January 1, 2020
IAS 39/IFRS 7	Interest Rate Benchmark Reform	January 1, 2020
IFRS 16	COVID-19-Related Rent Concessions	June 1, 2020[1]
IAS 39/IFRS 7/IFRS 4/ IFRS 16	Interest Rate Benchmark Reform (Phase 2)	January 1, 2020[2]

1 The ZIC Group early-adopted the amendment to IFRS 16 'Leases' to account for all lessees' rent concessions occurring as a direct consequence of the COVID-19 pandemic in the same way as if a change in lease payments were not lease modifications. The amendment has no material impact on the ZIC Group's financial statements.
2 The ZIC Group early-adopted the amendment to IAS 39, IFRS 7, IFRS 4 and IFRS 16. The amendment has no material impact on the ZIC Group's financial statements.

Standards, amendments and interpretations issued that are not yet effective or adopted by the ZIC Group

Table 2.2 shows new accounting standards or amendments to and interpretations of standards relevant to the ZIC Group, which are not yet effective or adopted by the ZIC Group.

Table 2.2

Standard/ Interpretation

		Effective date
New standards/interpretations		
IFRS 9	Financial Instruments	January 1, 2023
IFRS 17	Insurance Contracts	January 1, 2023
Amended standards		
IFRS 3	Reference to the Conceptual Framework	January 1, 2022
IAS 16	Property, Plant and Equipment: Proceeds before Intended Use	January 1, 2022
IAS 37	Onerous Contracts – Cost of Fulfilling a Contract	January 1, 2022
IAS 1	Classification of Liabilities as Current or Non-current	January 1, 2023

IFRS 17 'Insurance contracts' and IFRS 9 'Financial Instruments'

IFRS 17 'Insurance contracts' provides comprehensive guidance on accounting for insurance contracts and investment contracts with discretionary participation features and is expected to have a significant impact on accounting for insurance contracts and presentation of the insurance revenue and insurance service result. For long-duration life insurance contracts, IFRS 17 is expected to have a significant impact on actuarial modeling as granular cash flow projections and regular updates of all assumptions will be required resulting in either profit or loss volatility or affecting 'contractual service margin', a separate component of the insurance liability representing unearned profits from in-force contracts. Further, IFRS 17 introduces different measurement approaches for the insurance contract liabilities reflecting a different extent of policyholder participation in investment or insurance entity performance (non-participating, indirect participating, direct participating).

On June 25, 2020 the International Accounting Standards Board (IASB) published limited amendments to IFRS 17, including an extension of the effective date of IFRS 17 and IFRS 9 by two years to January 1, 2023 (retrospective application). The limited amendments are the result of re-deliberations and incorporate changes to the recognition of the loss recovery component on reinsurance contracts held, allocation of insurance acquisition cash flows to expected contracts renewals and additional transition reliefs.

Consolidated financial statements (continued)

IFRS 9 'Financial Instruments' introduces a classification and measurement concept for financial assets that is based on the contractual cash flow characteristics and the holding intent. Under IFRS 9, all equity securities and fund investments, and some debt instruments will be measured at fair value through profit or loss because the characteristics of the contractual cash flows from such instruments are not solely payments of principal and interest on the principal amount outstanding. Furthermore, IFRS 9 introduces a requirement to recognize expected credit losses for financial assets carried at amortized cost or at fair value, with changes in fair value recognized in other comprehensive income (OCI). Though overall profit or loss volatility is expected to increase under IFRS 9, the measurement approach for direct participating contracts in IFRS 17 allows such volatility to be largely absorbed in the measurement of insurance liabilities with an option to reflect in shareholders' equity (OCI) the effect of any asset-liability mismatch. Therefore, the ZIC Group decided to defer the full implementation of IFRS 9 until IFRS 17 becomes effective to better align the measurement approaches for the financial assets held and the insurance liabilities where appropriate. Based on the analysis performed as of December 31, 2015, the ZIC Group was eligible to apply the temporary exemption from the adoption of IFRS 9 for reporting entities that have not previously applied any version of IFRS 9 and whose activities are predominantly related to insurance, as the predominance ratio reflecting the share of liabilities connected with insurance to total liabilities exceeded 90 percent. No reassessment of eligibility was required during subsequent annual periods up to and including 2020 as there was no significant change in the activities performed by the ZIC Group. We refer to the Annual Report 2016 for further details on the eligibility assessment. The ZIC Group presents additional disclosures of indicative effects from adoption of IFRS 9 required by IFRS 4 'Applying IFRS 9 with IFRS 4' during the period of deferral (see note 24).

In order to adopt IFRS 17 and IFRS 9 in the consolidated financial statements, a joint IFRS 17 and IFRS 9 Group Implementation Program (Program) sponsored by the Group Chief Financial Officer has been operating since 2017. A steering committee comprised of senior management from various functions (finance, risk, IT, operations and investment management) oversees the work performed by individual work streams. A dedicated methodology work stream covers group accounting policies, actuarial methodologies and disclosure requirements to be consistently implemented throughout the Group, including ZIC Group. This work stream further contributes to the industry wide discussions on standard interpretation and its operational effects and has been closely monitoring the developments in the IASB Transition Resource Group for IFRS 17 and IASB re-deliberations to evaluate the effects and align the accounting policies and actuarial methodologies accordingly. The implementation work stream drives the development of the target core solution landscape at ZIC Group and local levels and analyses processes, data and systems implications. In 2020, the focus of the Program was on finalizing the implementation efforts and completing an initial parallel run that will serve as a basis for further analysis of the effects from IFRS 17 on the consolidated financial statements. Though the changes to IFRS 17 introduced in 2020 will result in extension of certain implementation efforts into 2021, the focus of the Program will shift from implementation towards education of key stakeholders and analysis of wider impacts on ZIC Group operations.

The ZIC Group continues to assess the impact of the application of both IFRS 17 and IFRS 9 as well as the impact of the limited amendments on the implementation to date. As of December 31, 2020 it was not practicable to quantify what the potential impact would be on the ZIC Group's financial position or performance once these standards are adopted.

Other standards, amendments and interpretations shown in table 2.2 are expected to have no or an insignificant impact on the ZIC Group's financial position or performance.

Consolidated financial statements (continued)

3. Summary of significant accounting policies

Significant accounting policies applied in these consolidated financial statements are set out below. These policies have been consistently applied to all years presented unless otherwise stated. Other accounting policies are presented as part of the respective note disclosures.

a) Consolidation principles

The ZIC Group's consolidated financial statements include the assets, liabilities, equity, revenues, expenses and cash flows of Zurich Insurance Company Ltd and its subsidiaries. A subsidiary is an entity that Zurich Insurance Company Ltd either directly or indirectly controls. The results of subsidiaries acquired are included in the consolidated financial statements from the date of acquisition. The results of subsidiaries that have been divested during the year are included up to the date control ceased. All intra-ZIC Group balances, profits and transactions are eliminated.

Changes in ownership interests in a subsidiary that do not result in a change in control are recorded within equity.

Non-controlling interests are shown separately in equity, consolidated income statements, consolidated statements of comprehensive income and consolidated statements of changes in equity.

The consolidated financial statements are prepared as of December 31 based on individual company financial statements at the same date. In some cases, information is included with a time lag of up to three months. The consequent effect on the ZIC Group's consolidated financial statements is not material.

b) Foreign currency translation and transactions

Foreign currency translation

Due to the ZIC Group's economic exposure to the U.S. dollar (USD), the presentation currency of the ZIC Group's consolidated financial statements is USD. Many ZIC Group companies have a different functional currency, being that of the respective primary economic environment in which these companies operate. Assets and liabilities are translated into the presentation currency at end-of-period exchange rates, while income statements and statements of cash flows are translated at average exchange rates for the period. The resulting foreign currency translation differences are recorded directly in other comprehensive income (OCI) as cumulative translation adjustment (CTA).

Foreign currency transactions and balances

Foreign currency transactions are translated into the functional currency using the spot exchange rate at the date of the transaction or, for practical reasons, a weighted average rate, if exchange rates do not fluctuate significantly. Foreign currency monetary items and foreign currency non-monetary items that are carried at fair value are translated at end-of-period exchange rates. The resulting foreign currency translation differences are recorded in income, except for the following:

- Foreign currency translation differences that are recognized in OCI in conjunction with the recognition of unrealized gains or losses on available-for-sale investments; and
- Foreign currency translation differences arising on monetary items that form part of net investments in foreign operations, as well as foreign currency translation differences arising from monetary items that are designated as hedging instruments in a qualifying net investment hedge relationship, are included directly in OCI as CTA.

Hyperinflation

The ZIC Group considers various factors to determine whether an economy in a country where a foreign operation is situated is hyperinflationary, including the cumulative three-year inflation rate. If an economy becomes hyperinflationary, the financial statements of foreign operations with the functional currency of the hyperinflationary economy are restated to reflect the current purchasing power at the end of the reporting period using the official consumer price indices commonly used in the respective country. The restatement includes all balance sheet amounts that are not expressed in terms of the measuring unit current at the balance sheet date and items of comprehensive income for the current year by applying the change in the price index from the dates when the items of income and expense were originally recorded. The restated financial statements of a foreign operation are translated into the ZIC Group's presentation currency at closing rates. Any translation adjustment resulting from initial application of the hyperinflationary accounting is recognized directly in equity.

c) Insurance contracts and investment contracts with discretionary participating features (DPF)

Classification

Contracts issued that transfer significant insurance risk to the ZIC Group and obligations arising from investment contracts with DPF are accounted for as insurance contracts.

The ZIC Group also issues products containing embedded options that entitle the policyholder to switch all or part of the current and future invested funds into another product issued by the ZIC Group. Where this results in the reclassification of an investment product to a product that meets the definition of an insurance contract, the previously held reserve and the related deferred origination costs are reclassified and are accounted for in accordance with the accounting policy that is to be applied to the new product on a prospective basis. As a consequence, no gain or loss is recognized when a contract is reclassified from an investment to an insurance contract.

Once a contract has been classified as an insurance contract, no reclassification can subsequently be made.

Premiums

Property & Casualty

Premiums from the sale of property & casualty products are generally recorded when written and are recognized as revenue in relation to the insurance coverage provided. The unearned premium reserve represents the portion of the premiums written related to the unexpired coverage period.

Life insurance

Premiums from traditional life insurance contracts, including participating contracts and annuity policies with life contingencies, are recognized as revenue when they are due from the policyholder. For single premium and limited pay contracts, premiums are recognized as revenue when due, with any excess profit deferred and recognized in income in a constant relationship to the insurance in-force or, for annuities, the amount of expected benefit payments.

Amounts collected as premiums from investment-type insurance contracts such as universal life, unit-linked and unitized with-profits contracts are generally reported as deposits. Revenue from these contracts consists of policy fees for the cost of insurance, administration and surrenders during the period. Front-end fees charged to the customer at inception, particularly for single premium contracts, are deferred and recognized over the estimated life of the contracts following the same pattern that is applied to deferred acquisition costs and addressed below. Regular fees charged to the customer periodically (monthly, quarterly or annually) either directly or by making a deduction from invested funds are billed in advance and recognized on a straight-line basis over the period in which the service is rendered. Fees charged at the end of the period are accrued over the service period as a receivable and are offset against the financial liability when charged to the customer.

Cash flows from certain universal life-type contracts in the ZIC Group's Spanish operations are recognized as gross written premiums and insurance benefits and losses and not as deposits.

Reserves for losses and loss adjustment expenses

Losses and loss adjustment expenses are charged to income as incurred. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Any changes in estimates are reflected in the results of operations in the period in which estimates are changed. The ZIC Group does not discount its loss reserves, other than for claims with payment patterns which are fixed and reasonably determinable, and claims in economies determined to be hyperinflationary where inflation constitutes a significant input in the reserving process.

Reserves for life benefits

Future life policyholder benefits represent the estimated future benefit liability for traditional life insurance policies and include the value of accumulated declared bonuses or dividends that have vested to policyholders.

The reserves for life benefits for participating traditional life insurance policies are calculated using a net level premium valuation method based on actuarial assumptions taking into account guaranteed mortality benefits and interest rates.

The reserves for life benefits for other traditional life insurance policies are calculated using a net level premium valuation method based on actuarial assumptions including mortality, persistency, expenses and investment return, plus a margin for adverse deviations. These assumptions are locked in at inception and are regularly assessed as part of the liability adequacy testing over the period of the contract.

Policyholder contract deposits represent the estimated policy benefits for investment-type insurance contracts invested in non-unit-linked funds. This liability comprises the accumulation of premiums received, less charges, plus declared policyholder dividends.

Certain insurance contracts and investment contracts with DPF offered by the ZIC Group contain benefit features for which the amount and timing of declaration and payment are at the discretion of the ZIC Group. Where that discretion has not been exercised, the total amount expected to be allocated to policyholders as required by local insurance regulation or contractual provisions is included in the policyholder other funds.

Unrealized gains or losses arising on the revaluation of available-for-sale assets are recorded directly in OCI in accordance with the ZIC Group's accounting policy for such assets. Where these assets are related to life insurance, corresponding adjustments to the reserves for life benefits and related assets are also recognized directly in OCI.

Reserves for unit-linked contracts are based on the fair value of the financial instruments backing those contracts less any fees and assessments charged to the policyholders. The related assets for unit-linked insurance contracts are designated at fair value through profit or loss in order to reduce measurement inconsistencies.

For products containing guarantees in respect of minimum death benefits (GMDB), retirement income benefits (GRIB) and/or annuitization options (GAO), additional liabilities are recorded in proportion to the receipt of the contracted revenues which are subject to a loss adequacy test taking into account policyholder behavior and current market conditions.

For products managed on a dynamic basis, an option in IFRS 4 is used to measure insurance liabilities using current financial and non-financial assumptions to better reflect the way that these products are managed. Financial assets related to these liabilities are designated at fair value through profit or loss.

Deferred acquisition costs (DAC)

Costs that vary with and are directly related to the acquisition of new and renewal business, including for example commissions and certain underwriting and policy issue expenses, are deferred and subsequently amortized over a defined period. Such costs are presented on balance sheet net of commissions paid to reinsurers in respect of business ceded.

Property & Casualty

DAC for property & casualty contracts is amortized over the period in which the related premiums are earned.

Life insurance

DAC for traditional participating life insurance contracts is amortized based on estimated gross margins expected to be realized over the life of the contract. Estimated gross margins are updated for actual and anticipated future experience and discounted using the latest revised interest rate for the remaining benefit period. Resulting deviations are reflected in income.

DAC for other traditional life insurance and annuity contracts is amortized over the life of the contracts, based on expected premiums. Expected premiums are estimated at the date of policy issue for application throughout the life of the contract unless a premium deficiency subsequently occurs.

DAC for investment-type insurance contracts such as universal life, unit-linked and unitized with-profits contracts is amortized based on estimated gross profits expected to be realized over the life of the contract. Estimated gross profits are updated for actual and anticipated future experience and discounted using either the interest rate in effect at the inception of the contracts or the latest revised interest rate for the remaining benefit period, depending on whether crediting is based on the policyholder's or on the reporting entity's investment performance. Resulting deviations are reflected in income.

Unamortized DAC for life insurance contracts accrues interest at a rate consistent with the related assumptions for reserves.

For traditional participating and investment-type life insurance contracts, DAC is adjusted for the impact of unrealized gains/(losses) on allocated investments that are recorded in OCI.

Liability adequacy tests

Liability adequacy tests are performed annually for groupings of contracts determined in accordance with the ZIC Group's manner of acquiring, servicing and measuring the profitability of its insurance contracts.

Property & Casualty

For property & casualty contracts, unearned premiums are tested to determine whether they are sufficient to cover related expected losses, loss adjustment expenses, policyholder dividends, unamortized DAC and maintenance expenses, using current assumptions and considering anticipated investment returns. If a premium deficiency is identified, the DAC asset for the respective grouping of contracts is written down by the amount of the deficiency. If, after writing down the DAC asset to nil, a premium deficiency still exists for the respective grouping of contracts, then a premium deficiency reserve is established for the amount of the remaining deficiency.

Life insurance
For life insurance contracts, the carrying amount of the existing reserve for life benefits, including any deferred front-end fees, reduced by the unamortized balance of DAC or present value of future profits of acquired insurance contracts (PVFP), is compared with the reserve for life benefits, calculated using revised assumptions for actual and anticipated experience as of the valuation date. If a deficiency is identified, the DAC or PVFP for the respective grouping of contracts is written down by the amount of the deficiency. If, after writing down the DAC or PVFP to nil, a deficiency still exists for the respective grouping of contracts, the reserve for life benefits is increased by the amount of the remaining deficiency.

Reinsurance
The ZIC Group's insurance subsidiaries cede risk in the normal course of business to limit the potential for losses arising from certain exposures. Reinsurance does not relieve the originating insurer of its liability. Certain ZIC Group insurance companies assume reinsurance business as part of their normal business.

Reinsurance contracts that do not transfer significant insurance risk are accounted for using the deposit method.

A deposit asset or liability is recognized based on the premium paid, or received less any explicitly identified premiums or fees to be retained by the ceding company. Interest on deposits is accounted for using the effective interest rate method. Future cash flows are estimated to calculate the effective yield, and revenues and expenses are recorded as interest income or expense. Reinsurance deposit assets or liabilities also include funds deposited or held by the ZIC Group under assumed or ceded reinsurance contracts, respectively, when funds are retained by the reinsured under the terms of the contract.

Reinsurance is recorded gross in the consolidated balance sheet. Reinsurance assets include balances expected to be recovered from reinsurance companies for ceded paid and unpaid losses and loss adjustment expenses, ceded unearned premiums and ceded future life policy benefits. Amounts recoverable from reinsurers are estimated in a manner consistent with the assumptions used for the liabilities associated with the underlying insurance contracts.

Reinsurance assets are assessed for impairment on a regular basis and impairment losses, if any, are recorded in the same manner as for loans and receivables.

d) Liabilities for investment contracts (without DPF)
Investment contracts are those contracts that do not transfer significant insurance risk. The ZIC Group issues investment contracts without fixed terms (unit-linked) and investment contracts with fixed and guaranteed terms (fixed interest rate).

Unit-linked investment contracts
These represent portfolios maintained to meet the specific investment objectives of policyholders who bear the credit, market and liquidity risks related to the investments. The liabilities are carried at fair value, which is determined by reference to the underlying financial assets. Changes in fair value are recorded in income. The related assets for unit-linked investment contracts are designated at fair value through profit or loss in order to reduce measurement inconsistencies.

The services provided by the ZIC Group under such contracts are investment management and policy administration services that are provided over time and are not contingent on meeting specified performance criteria. Fees from such services are recognized ratably over the service period as policy fee revenue except where such fees are charged in connection with contract origination in which case such fees are recognized as contract liabilities (included within deferred front-end fees). The costs to fulfill over time services are generally recognized as incurred, except the costs of acquiring new investment contracts with investment management services, such as commissions and other incremental expenses directly related to the issuance of each new contract. Such fees enhance the resources that will be used to satisfy future performance obligations and – to the extent recoverable – are capitalized as contract assets (deferred origination costs; DOC) and amortized in line with the revenue generated by providing investment management services. Refer to note 11 for further information.

Investment contracts at amortized cost
Liabilities for investment contracts with fixed and guaranteed terms are measured at amortized cost using the effective interest rate method. Transaction costs are included in the calculation of the effective yield. As of each reporting date, the ZIC Group re-estimates the expected future cash flows and re-calculates the carrying amount of the financial liability by computing the present value of estimated future cash flows using the original effective interest rate for the financial liability. Any adjustment is immediately recognized in income.

e) Group investments excluding derivative financial instruments
Group investments are accounted for at either (a) fair value through OCI; (b) fair value through profit or loss; or (c) amortized cost.

The majority of Group investments are accounted for at fair value through OCI (available-for-sale financial assets) and include debt and equity securities as well as fund investments. Such assets are carried at fair value, with changes in fair value recognized in OCI, until the securities are either sold or impaired. Interest income determined using the effective interest method and dividend income from financial assets at fair value through OCI is included in net investment income. The cumulative unrealized gains or losses recorded in OCI are net of cumulative deferred income taxes, certain related life policyholder liabilities and deferred acquisition costs. When available-for-sale financial assets are sold, impaired or otherwise disposed of, the cumulative gains or losses are reclassified from OCI to income as net capital gains/(losses) on investments and impairments.

Group investments at fair value through profit or loss include debt and equity securities backing certain life insurance contracts with participation features, and financial assets evaluated on a fair value basis. The designation of these assets at fair value through profit or loss eliminates or significantly reduces a measurement inconsistency that would otherwise arise from measuring assets or recognizing the gains and losses on these assets on a different basis to the liabilities.

Group investments at amortized cost include debt securities for which the ZIC Group has the positive intention and ability to hold to maturity (held-to-maturity financial assets) as well as mortgage and other loans (loans and receivables). Such investments are carried at amortized cost using the effective interest rate method, less any charges for impairment. When an impairment is determined to have occurred, the carrying amount of held-to-maturity investments and loans and receivables is reduced through the use of an allowance account, and the movement in the impairment allowance is recognized in income as an impairment loss.

The ZIC Group recognizes regular purchases and sales of financial assets on the trade date, which is the date on which the ZIC Group commits to purchase or sell the asset.

Realized and unrealized gains and losses arising from changes in the fair value are recognized in income, within net capital gains/(losses) on investments and impairments, in the period in which they arise. Interest income determined using the effective interest method and dividend income from financial assets at fair value through profit or loss is included in net investment income.

Group investments include investment property accounted for at fair value through profit or loss. Rental income from investment property is recognized on a straight-line basis over the lease term and included in net investment income along with rental operating expenses for investment property recognized on an accrual basis.

Group investments include the following in cash and cash equivalents: cash on hand, deposits held at call with banks, cash collateral received, and other highly liquid investments with maturities of three months or less from the date of acquisition that are readily convertible into cash and are subject to an insignificant risk of change in fair value. Cash and cash equivalents are stated at current redemption value.

Impairment of financial assets
The ZIC Group assesses at each reporting date whether there is objective evidence that loss events have occurred that negatively affect the estimated future cash flows of a financial asset or a group of financial assets. The evaluation of whether a financial asset is impaired requires significant judgment (see note 4).

f) Derivative financial instruments and hedge accounting
Derivative financial instruments, except those designated under a qualifying cash flow or net investment hedge relationship, are carried at fair value on the balance sheet with changes in fair value recognized in income.

Derivative financial instruments that qualify for hedge accounting
Derivative financial instruments are used by the ZIC Group to economically hedge risks. In limited circumstances derivative financial instruments are designated as hedging instruments for accounting purposes in:

- Fair value hedges which are hedges of the exposure to changes in the fair value of a recognized asset or liability
- Cash flow hedges, which are hedges of the exposure to variability in cash flows attributable to a particular risk either associated with a recognized asset or liability, or a highly probable forecast transaction that could affect profit or loss
- Net investment hedges, which are hedges of a net investment in a foreign operation

All hedge relationships are formally documented, including the risk management objectives and strategy for undertaking the hedge. At inception of a hedge and on an ongoing basis, the hedge relationship is formally assessed to determine whether the hedging instruments are expected to be (prospective assessment) and have been (retrospective assessment) highly effective in offsetting changes in fair values or cash flows of hedged items attributable to the hedged risk. If the qualifying criteria for the application of hedge accounting are no longer met, the hedge relationship is discontinued prospectively, in which case the hedging instrument and the hedged item are then subsequently reported independently in accordance with the respective accounting policy.

The accounting treatment of a qualifying hedge relationship is further described in note 7.

g) Attorney-in-fact (AIF) contracts

The AIF contracts reflect the ability of the ZIC Group to generate future revenues through Farmers Group Inc. (FGI) based on the FGI's relationship with the Farmers Exchanges. The Farmers Exchanges are not owned by FGI, a wholly owned subsidiary of the Group. In determining that these relationships have an indefinite useful life, the ZIC Group took into consideration the organizational structure of inter-insurance exchanges, under which subscribers exchange contracts with each other and appoint an attorney-in-fact to provide non-claims services, and the historical AIF relationship between FGI and the Farmers Exchanges. The value of the AIF contracts is tested for impairment at least annually.

The services provided by FGI under such contracts are non-claims services including risk selection, preparation and mailing of policy documents and invoices, premium collection, management of the investment portfolios and certain other administrative functions. The multiple performance obligations covered by the consideration received are considered to be a series with the same pattern of transfer, therefore, the performance obligations are not separated. The revenue for the services provided includes Farmers management fee, membership fees and revenues for ancillary services. Farmers management fees are determined as a percentage of gross premiums earned by the Farmers Exchanges and recognized ratably over the period the services are provided. Membership fees are one-time fees charged at the time of the policy issuance that do not cover a distinct performance obligation. Such fees are recognized as revenue over the expected life of the customer relationship. The incremental costs incurred in connection with the customer setup activity are recognized as an asset and subsequently amortized using the same pattern as the related revenue. The revenue for ancillary services includes remuneration for services provided that are not covered by Farmers management fees where FGI acts as a principal. Typically, these services are provided over time, so that the revenue is also recognized over time. Refer to note 26 for further information.

h) Goodwill

Goodwill on the acquisition of subsidiaries is capitalized and tested for impairment annually, or more frequently if there are indications of impairment. For the purpose of impairment testing, goodwill is allocated to cash-generating units (CGUs) based on the level at which management monitors operations and makes decisions related to the continuation or disposal of assets and operations. If goodwill has been allocated to a CGU and an operation within that unit is disposed of, the carrying amount of the operation includes attributable goodwill when determining the gain or loss on disposal.

i) Intangible assets

All intangible assets have finite lives and are carried at cost, less accumulated amortization and impairments. Such assets are generally amortized using the straight-line method over their useful lives and reviewed for impairment at least annually, or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Present value of future profits from acquired insurance contracts (PVFP)

An intangible asset representing the PVFP arises from the acquisition of life insurance businesses. Such an asset is amortized over the expected life of the acquired contracts, following the same principles as for DAC. The carrying value of the PVFP asset is tested periodically for impairment as part of the liability adequacy test for insurance contracts.

Distribution agreements

Distribution agreements may have useful lives extending up to 30 years, estimated based on the period of time over which they are expected to provide economic benefits, but for no longer than the contractual term, after taking into account all economic and legal factors such as stability of the industry, competitive position and the period of control over the assets.

Software

Costs associated with research and maintenance of internally-developed computer software are expensed as incurred. Costs incurred during the development phase are capitalized. Software under development is tested for impairment annually.

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire and bring the specific software into use.

The useful lives of computer software licenses and capitalized internal software development costs generally range from three to five years. In limited circumstances, capitalized software development costs may be amortized over a period of up to 10 years, taking into account the effects of obsolescence, technology, competition and other economic and legal factors.

j) Employee benefits

Share-based compensation and cash incentive plans

The ZIC Group operates long-term incentive plans that are accounted for as cash-settled share-based compensation plans. The fair value of these incentive plans is determined at the grant date and is recognized as an expense in income over the vesting period, with a corresponding increase recorded within other liabilities for employee benefit plans.

Subsequently, the fair value of the liability is re-measured at the end of each reporting period with any changes in fair value recognized in profit or loss for the period.

Retirement benefits

Contributions to defined contribution plans are recorded as an expense in the period in which the economic benefit from the employees' service was received.

Defined benefit plan obligations and contributions are determined annually by qualified actuaries using the projected unit credit method. The ZIC Group's expense related to these plans is accrued over the employees' service periods based on the actuarially determined cost for the period. Net interest and service costs are determined using the spot rate approach. Actuarial gains and losses are recognized, in full in the period in which they occur, in OCI. Past service costs, which result from plan amendments and curtailments, are recognized in income when the plan amendment or curtailment occurs (which is the date from which the plan change is irrevocable) and the date on which a constructive obligation arises. Settlement gains or losses are recognized in income when the settlement occurs.

Other post-employment benefits

Other post-employment benefits, such as medical care and life insurance, are also provided for certain employees and are primarily funded internally. Similar to defined benefit plans, the cost of such benefits is accrued over the service period of the employees based on the actuarially determined cost for the period.

k) Leases

The ZIC Group is typically acting as a lessee in property and car or equipment leases. Further, the ZIC Group is acting as a lessor in leases of investment property.

When acting as a lessee, under IFRS 16, the ZIC Group recognizes a right-of-use asset and a corresponding lease liability at the lease commencement date when the leased asset is available for use by the ZIC Group. The lease liability is measured at the present value of the lease payments due over the lease term, discounted using the Group's incremental borrowing rate. Any options to extend or terminate a lease that the ZIC Group is reasonably certain to exercise are included in the lease term. The right-of-use asset is initially recognized at an amount equal to the lease liability adjusted for lease prepayments made or lease incentives received, initial direct costs and any estimated costs to dismantle or restore the leased asset.

The right-of-use asset is depreciated over the shorter of the leased asset's useful life or the lease term on a straight-line basis. The right-of-use asset is included in 'Property and equipment' and disclosed separately in note 13. The carrying amount of the lease liability is increased to reflect the unwinding of the discount so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period and is reduced by the lease payments made during the period. Lease payments include fixed payments and variable payments that depend on a non-leveraged index or a rate. Lease liabilities are included within 'Other Liabilities.'

The ZIC Group records short-term leases and leases of low-value assets as an expense on a straight-line basis over the lease term. Short-term leases are leases with a lease term of 12 months or less. Low-value assets are comprised of hardware and smaller office equipment. The lease expense is included in 'Administrative and other operating expense.'

When acting as a lessor of investment property in an operating lease, the ZIC Group follows the accounting policy in paragraph e).

4. Critical accounting judgments and estimates

The application of certain accounting policies necessitates critical accounting estimates that involve discretionary judgments and the use of assumptions which are susceptible to change due to inherent uncertainties. Because of the uncertainties involved, actual results could differ significantly from the assumptions and estimates made by management. Such critical accounting estimates are of significance to insurance reserves and deferred acquisition costs, the determination of fair value for financial assets and liabilities, impairment charges, deferred taxes and employee benefits.

a) Reserves for insurance contracts and deferred acquisition costs

Property & Casualty

The ZIC Group is required to establish reserves for payment of losses and loss adjustment expenses that arise from the ZIC Group's property & casualty products. These reserves represent the expected ultimate cost to settle claims occurring prior to, but still outstanding as of, the balance sheet date. The ZIC Group establishes its reserves by product line, type and extent of coverage and year of occurrence. There are two categories of loss reserve: reserves for reported losses and reserves for incurred but not reported (IBNR) losses. Additionally, reserves are held for loss adjustment expenses, which contain the estimated legal and other expenses expected to be incurred to finalize the settlement of the losses.

The ZIC Group's reserves for reported losses and loss adjustment expenses are based on estimates of future payments to settle reported claims. The ZIC Group bases such estimates on the facts available at the time the reserves are established. These reserves are generally established on an undiscounted basis to recognize the estimated costs of bringing pending claims to final settlement. The reserve calculation takes into account inflation, as well as other factors that can influence the amount of reserves required, some of which are subjective and some of which are dependent on future events. In determining the level of reserves, the ZIC Group considers historical trends and patterns of loss payments, pending levels of unpaid claims and types of coverage. In addition, court decisions, economic conditions and public attitudes may affect the ultimate cost of settlement and, as a result, the ZIC Group's estimation of reserves. Between the reporting and final settlement of a claim circumstances may change, which may result in changes to established reserves. Items such as changes in law and interpretations of relevant case law, results of litigation, changes in medical costs, as well as costs of vehicle and home repair materials and labor rates can substantially impact ultimate settlement costs. Accordingly, the ZIC Group reviews and re-evaluates claims and reserves on a regular basis. Amounts ultimately paid for losses and loss adjustment expenses can vary significantly from the level of reserves originally set.

The ZIC Group establishes IBNR reserves, to recognize the estimated cost of losses for events which have already occurred but which have not yet been notified. These reserves are established to recognize the estimated costs required to bring such claims to final settlement. As these losses have not yet been reported, the ZIC Group relies upon historical information and statistical models, based on product line, type and extent of coverage, to estimate its IBNR liability. The ZIC Group also uses reported claim trends, claim severities, exposure growth, and other factors in estimating its IBNR reserves. These reserves are revised as additional information becomes available and as claims are actually reported.

The time required to learn of and settle claims is an important consideration in establishing the ZIC Group's reserves. Short-tail claims, such as those for motor and property damage, are normally reported soon after the incident and are generally settled within months. Long-tail claims, such as bodily injury, pollution, asbestos and product liability, can take years to develop and additional time to settle. For these claims, information concerning the event, such as the required medical treatment for bodily injury claims and the required measures to clean up pollution, may not be readily available. Accordingly, the reserving analysis of long-tail lines of business is generally more difficult and subject to greater uncertainties than for short-tail claims.

Since the ZIC Group does not establish reserves for catastrophes in advance of the occurrence of such events, these events may cause volatility in the levels of its incurred losses and reserves subject to the effects of reinsurance recoveries. This volatility may also be contingent upon political and legal developments after the occurrence of the event.

The ZIC Group uses a number of accepted actuarial methods to estimate and evaluate the amount of reserves recorded. The nature of the claim being reserved for and the geographic location of the claim influence the techniques used by the ZIC Group's actuaries. Additionally, the ZIC Group's Corporate Center actuaries perform periodic reserve reviews of the ZIC Group's businesses throughout the world. Management considers the results of these reviews and adjusts its reserves for losses and loss adjustment expenses, where necessary.

Life insurance

The reserves for future life policyholder benefits and policyholder contract deposits and other funds contain a number of assumptions regarding mortality or longevity, lapses, surrenders, expenses, discount rates and investment returns. These assumptions can vary by country, year of policy issuance and product type and are determined with reference to past experience adjusted for new trends, current market conditions and future expectations. As such the liabilities for future life policyholder benefits and policyholder contract deposits may not represent the ultimate amounts paid out to policyholders. For example:

- The estimated number of deaths determines the value of the benefit payments. The main source of uncertainty arises because of the potential for pandemics and wide-ranging lifestyle changes, such as changes in eating, smoking and exercise habits, which could result in earlier deaths for age groups in which the ZIC Group has significant exposure to mortality risk.
- For contracts that insure the risk of longevity, such as annuity contracts, an appropriate allowance is made for people living longer. Continuing improvements in medical care and social conditions could result in further improvements in longevity in excess of those allowed for in the estimates used to determine the liability for contracts where the ZIC Group is exposed to longevity risk.
- Under certain contracts, the ZIC Group has offered product guarantees (or options to take up product guarantees), including fixed minimum interest rate or mortality rate returns. In determining the value of these options and/or benefits, estimates have been made as to the percentage of contract holders that may exercise them. Changes in investment conditions could result in significantly more contract holders exercising their options and/or benefits than has been assumed.
- Estimates are made as to future investment income arising from the assets backing long-term insurance contracts. These estimates are based on current market returns as well as expectations about future economic and financial developments.
- Assumptions are determined with reference to current and historical customer data, as well as industry data. Interest rate assumptions reflect expected earnings on the assets supporting the future policyholder benefits. The information used by the ZIC Group's qualified actuaries in setting such assumptions includes, but is not limited to, pricing assumptions, available experience studies and profitability analysis.

Deferred policy acquisition costs and the present value of future profits (PVFP) are recognized on balance sheet only to the extent that they are recoverable from future policy income which also depends on the above assumptions. Recoverability is tested at contract inception and subsequently on a regular basis with reference to current expectations of future profits or margins.

See note 8 for further information on liabilities for insurance contracts and note 11 for deferred policy acquisition costs. Also refer to the insurance risk section of the risk review.

b) Fair value measurement

In determining the fair values of investments in debt and equity instruments traded on exchanges and in over-the-counter (OTC) markets, the ZIC Group makes extensive use of independent, reliable and reputable third-party pricing providers and only in rare cases places reliance on valuations that are derived from internal models.

In addition, the ZIC Group's policy is to ensure that independently-sourced prices are developed by making maximum use of current observable market inputs derived from orderly transactions and by employing widely-accepted valuation techniques and models. When third-party pricing providers are unable to obtain adequate observable information for a particular financial instrument, the fair value is determined either by requesting selective non-binding broker quotes or by using internal valuation models.

Valuations can be subject to significant judgment, especially when the fair value is determined based on at least one significant unobservable input parameter; such items are classified within level 3 of the fair value hierarchy. See notes 6, 7 and 23 for further information regarding the estimate of fair value.

c) Impairment of assets

Financial assets

A financial asset is considered impaired if there is objective evidence of impairment as a result of one or more occurred loss events that have an impact on the estimated future cash flows of the financial asset.

The evaluation of whether an available-for-sale debt security is impaired requires analysis of the credit standing of a particular issuer and involves management judgment. When assessing impairment of available-for-sale debt securities, the ZIC Group places emphasis on issuer specific factors, such as significant financial difficulty, default or delinquency on interest or principal payments. A credit rating downgrade, worsened liquidity or decline in fair value below the weighted-average cost is not by itself considered a loss event, but rather incorporated in the impairment analysis along with other available information.

The ZIC Group determines that there is objective evidence of impairment of an available-for-sale equity security, if at the reporting date:

- its fair value is below the weighted-average cost by an amount significantly exceeding the volatility threshold determined quarterly for the respective equity market (such as North America, Asia Pacific, UK, Switzerland and other European countries); or
- its fair value has been below the weighted-average cost for a prolonged period of 24 consecutive months or longer

Goodwill and attorney-in-fact (AIF) contracts

Goodwill is allocated to a cash generating unit (CGU) as outlined in note 3. The ZIC Group has defined the CGUs according to regions, separating Property & Casualty (P&C), Life businesses and other (see note 27). The CGUs which carry the majority of goodwill and AIF contracts are presented in table 4.

For goodwill impairment testing, the recoverable amount is the higher of its fair value less costs to sell and its value-in-use.

Fair value is determined, considering quoted market prices, current share values in the market place for similar publicly traded entities, and recent sale transactions of similar businesses.

Value-in-use is determined using the present value of estimated future cash flows expected to be generated from the CGU. Cash flow projections are based on business plan projections, which are approved by management, typically covering a three-year period or, if appropriate and adequately justified, a longer period, which may be necessary to more accurately represent the nature of the cash flows used to test the goodwill. Cash flows beyond this period are extrapolated using, among others, estimated perpetual growth rates, which typically do not exceed the expected inflation of the geographical areas in which the cash flows supporting the goodwill are generated. If cash flows are generated in different geographical areas with different expected inflation rates, weighted averages are used. The discount rates applied reflect the respective risk-free interest rate adjusted for the relevant risk factors to the extent they have not already been considered in the underlying cash flows.

The discount rates used in the recoverable amount calculations for developed markets are based on the weighted average cost of capital and consider government bond rates which are further adjusted for equity risk premium, appropriate beta and leverage ratio. In emerging markets, discount rates are based on the U.S. dollar discount rate taking into account inflation differential expectations and country risks. All input factors to the discount rates are based on observable market data.

The recoverable amounts of AIF contracts and goodwill are determined on the basis of value-in-use calculations further described above. The basis for determining the values assigned to the key assumptions are current market trends and earnings projections.

Table 4 sets out for the major CGUs the applied discount rates and the perpetual nominal growth rates beyond the projection period that depend on expectations about country-specific growth rates and inflation as of the date of valuation, as well as the value of goodwill and AIF contracts as of December 31, 2020.

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Table 4

Discount and perpetual growth rates for goodwill and AIF contracts for major CGUs

	Business	in USD millions	Discount rates in % 2020	Discount rates in % 2019	Perpetual nominal growth rate in % 2020	Perpetual nominal growth rate in % 2019
Farmers	Farmers	1,845	7.9	8.5	2.3	–
North America	P&C	355	7.8	7.8	2.0	2.0
Europe, Middle East & Africa	P&C	367	7.5	6.6	1.8	2.0
Asia Pacific	P&C	914	8.4	7.6	2.2	2.2
Asia Pacific	Life	1,271	8.4	7.6	2.1	2.0
Latin America	P&C	241	18.1	13.6	5.9	3.8
Latin America	Life	89	14.2	11.9	4.3	3.6

The recoverable amount of goodwill remains contingent on future cash flows and other assumptions, particularly discount rates and the perpetual growth rate. If the estimated future cash flows and other assumptions deviate significantly from the ZIC Group's current outlook, there is a risk that the goodwill is impaired.

Quantitative sensitivity tests have been performed for all CGUs, by applying a reasonably possible change to each of the key assumptions to capture potential future variations in market conditions: a decrease in cash flows of up to 20%, an increase in the discount rate of 1.0 percentage point and a decrease in the perpetual growth rate of 1.0 percentage point. Under each individual scenario, reasonably possible changes in key assumptions did not impair goodwill and AIF contracts.

The valuation of the goodwill of the Latin America P&C CGU and Asia Pacific P&C CGU remains more sensitive to key assumptions than others, such as a further or prolonged decline in economic activity resulting from global efforts to contain COVID-19, broader macroeconomic conditions and business projections. A decrease in cash flows by 22% and 30% for both the Latin America P&C CGU and Asia Pacific P&C CGU respectively compared to the current outlook would result in the recoverable amount being equal to the carrying amount.

Distribution agreements

Qualitative analyses have been performed on distribution agreements, typically comprised of an analysis of the current financial performance, any change in the conditions in the agreement and environment that would indicate an impairment. No impairment was identified.

See notes 3, 6, 13, 14 and 15 for further information on impairment of assets.

d) Deferred taxes

Deferred tax assets are recognized if sufficient future taxable income, including income from the reversal of existing taxable temporary differences and available tax planning strategies, is available for realization. The utilization of deferred tax assets arising from temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax bases depends on the generation of sufficient taxable profits in the period in which the underlying asset or liability is recovered or settled. If applicable tax law acknowledges different types of expenses to be tax deductible, deferred tax assets are only recognized if they give rise to deductions against the same type of taxable income. The utilization of deferred tax assets arising from unused tax losses or tax credits depends on the generation of sufficient taxable profits before the unused tax losses or tax credits expire. As of each balance sheet date, management evaluates the recoverability of deferred tax assets and, if it is considered probable that all or a portion of the deferred tax asset will not be utilized, then a valuation allowance is recognized.

See note 17 for further information on deferred taxes.

e) Employee benefits

The ZIC Group provides defined benefit plans and other post-employment plans. In assessing the ZIC Group's liability for these plans, critical judgments include estimates of mortality rates, rates of employment turnover, disability, early retirement, discount rates, future salary and pension increases and increases in long-term health care costs. Discount rates for significant plans are based on a yield curve approach. The ZIC Group sets the discount rate by creating a hypothetical portfolio of high-quality corporate bonds for which the timing and amount of cash flows approximate the estimated payouts of the defined benefit plan. These assumptions may differ from actual results due to changing economic conditions, higher or lower withdrawal rates, or longer or shorter life spans of participants. These differences may result in variability of pension income or expense recorded in future years.

See note 20 for further information on employee benefits.

5. Acquisitions and divestments

Transactions in 2020

Acquisitions

Healthinsite

On December 15, 2020, Zurich Insurance Company Ltd completed the acquisition of Healthinsite Proprietary Limited and Insite Holding Pty Limited (collectively referred to as Healthinsite). Healthinsite provides innovative health and behavioral risk management solutions internationally to corporate clients and is the owner of proprietary software.

MetLife Property and Casualty business

On December 11, 2020, the Group's subsidiary Farmers Group, Inc. and the Farmers Exchanges entered into an agreement to acquire MetLife's U.S. property and casualty business for USD 3.9 billion (the Group has no ownership interest in the Farmers Exchanges. Farmers Group, Inc., a wholly owned subsidiary of the Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as its attorney-in-fact and receives fees for its services). The transaction is subject to regulatory approval and is expected to complete in Q2 2021. The transaction will give the Farmers Exchanges a nationwide presence and access to new distribution channels that provide a strong platform for accelerated growth, while further increasing Zurich's stable, fee-based earnings streams.

Swiss Commercial Accident and Health business

On May 29, 2020, after receiving regulatory approval, Zurich Insurance Company Ltd acquired the Commercial Accident and Health business from CSS Versicherung AG.

Divestments

Held for sale

As of December 31, 2020, the total assets reclassified to held for sale were USD 2.5 billion and the total liabilities reclassified to held for sale were USD 2.5 billion, as per transactions below.

Zurich International Life portfolio

On December 22, 2020, Zurich International Life Limited entered into an agreement to sell an insurance portfolio. The transaction is subject to regulatory and court approvals and is expected to be completed in Q4 2021. As of December 31, 2020, assets reclassified to held for sale were USD 775 million and liabilities reclassified to held for sale were USD 746 million.

UK Employers' liability portfolio

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 2024. As of December 31, 2020, assets reclassified to held for sale were USD 1.7 billion and liabilities reclassified to held for sale were USD 1.7 billion.

Divested

UK International Portfolio Bond

On November 30, 2020, Zurich Life Assurance plc completed the sale of its UK international Bond Portfolio to Monument Re, with a pre-tax loss of USD 14 million, recognized in the income statement.

US Corporate Life & Pensions (CLP)

On March 19, 2020, Zurich Holding Company of America, Inc., Zurich American Life Insurance Company and Zurich American Life Insurance Company of New York signed an agreement to sell the Corporate Life and Pensions (CLP) business to Aflac Incorporated (Aflac) and its insurance subsidiaries, American Family Life Assurance Company of Columbus and American Family Life Assurance Company of New York. On November 2, 2020, the ZIC Group completed the sale with a pre-tax gain of USD 115 million, recognized in the income statement.

UK Retail Wealth Business

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). On May 1, 2020, the ZIC Group completed the sale with a pre-tax loss of USD 141 million, of which USD 123 million was recognized in December 2019, in the income statement, including an impairment of assets of USD 210 million.

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Germany Architects & Engineers portfolio

On September 5, 2019, Zurich Insurance plc entered into an agreement to transfer the German Architects & Engineers portfolio to Darag Deutsche Versicherungs- und Rückversicherungs-AG. On June 30, 2020, the ZIC Group completed the sale of the portfolio with a pre-tax gain of USD 22 million, recorded in the income statement.

Transactions in 2019

Acquisitions

Adira Insurance

On November 27, 2019, ZIC Group completed the acquisition of 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 USD 469 million, including potential future incremental payments based on business performance. The agreement includes a 20-year distribution agreement. Based on the purchase price, the value of goodwill is USD 212 million.

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. As part of the transaction, the Group entered into a 20-year strategic alliance agreement with ANZ in Australia to distribute life insurance products through its bank channels.

Table 5.1 shows the balance sheet line items as of the OnePath acquisition date, representing the fair value of tangible and intangible assets and goodwill, which has increased by USD 57 million in 2020 as a result of post-acquisition adjustments.

Table 5.1

OnePath balance sheet as of the acquisition date

in USD millions, as of May 31, 2019	**Total**[1]
Cash and cash equivalents	253
Total Group investments	2,233
Total unit-linked investments	770
Total investments	3,003
Reinsurers' share of reserves for insurance contracts	125
Receivables and other assets	223
Deferred tax assets	353
Property and equipment	1
Goodwill	992
Other intangible assets	47
Assets acquired	**4,996**
Liabilities for insurance contracts	2,205
Liabilities for investment contracts	1,206
Accrued liabilities	18
Other liabilities	162
Deferred tax liabilities	13
Liabilities acquired	**3,604**
Net assets acquired	1,392
Non-controlling interests	
Total acquisition costs	**1,392**

1 As of December 31, 2020, the assets and liabilities of OnePath are recognized at acquisition date, May 31, 2019.

OnePath's pro-forma gross written premiums and net income after taxes for the 12 months ended December 31, 2019, were approximately USD 1.1 billion and USD 42 million, respectively. In addition, the Group generated net income after taxes of USD 14 million for the respective period on its existing reinsurance agreement with OnePath. The Group incurred transaction-related costs of approximately USD 26 million in non-technical expenses in BOP, the majority of which were incurred in 2019.

Divestments

UK workplace pensions and savings business

On October 12, 2017, the ZIC 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 related 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. The ZIC Group has recorded a pre-tax gain of USD 17 million in the income statement upon completion of the sale, including a pre-tax loss of USD 7 million recognized in 2020.

Venezuelan Operations

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

ADAC Autoversicherung AG and Bonnfinanz AG

On January 1, 2019, the ZIC Group completed the sale of its 51 percent participation in ADAC Autoversicherung AG and on April 2, 2019, the ZIC Group completed the sale of Bonnfinanz AG, with pre-tax gains of USD 19 million and USD 41 million, respectively, recorded within net gains/(losses) on divestment of businesses.

6. Group investments

Group investments are those for which the ZIC Group bears part or all of the investment risk. They also include investments related to investment contracts with discretionary participation features. Net investment result on Group investments includes returns on investment-related cash, which is included in cash and cash equivalents on the consolidated balance sheets.

Table 6.1

Net investment result on Group investments

in USD millions, for the years ended December 31	Net investment income		Net capital gains/(losses) and impairments		Net investment result		of which impairments	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
Investment cash	12	20	–	–	12	20	–	–
Equity securities[1]	384	470	874	1,047	1,258	1,516	(357)	(80)
Debt securities	3,798	4,051	905	685	4,702	4,736	58	(129)
Investment property[2]	502	473	514	581	1,016	1,054	–	–
Mortgage loans	141	161	6	7	147	168	(1)	–
Other loans	329	365	3	27	332	393	(1)	(7)
Investments in associates and joint ventures	3	3	15	(1)	18	1	–	–
Derivative financial instruments	–	–	(280)	(356)	(280)	(356)	–	–
Investment result, gross, on Group investments	5,169	5,542	2,038	1,990	7,206	7,532	(302)	(216)
Investment expenses on Group investments	(268)	(246)	–	–	(268)	(246)	–	–
Investment result, net, on Group investments	**4,901**	**5,296**	**2,038**	**1,990**	**6,939**	**7,286**	**(302)**	**(216)**

1 For the year ended December 31, 2020 the ZIC Group has recognized USD 357 million impairments on Equity securities, mainly in EMEA and North America, due to the volatility of the stock markets in response to the COVID-19 pandemic.
2 Rental operating expenses for investment property amounted to USD 144 million and USD 141 million for the years ended December 31, 2020 and 2019, respectively.

Table 6.2

Details of Group investments by category

as of December 31	**2020**		2019	
	USD millions	**% of total**	USD millions	% of total
Equity securities:				
Fair value through profit or loss	4,714	2.2	4,391	2.3
Available-for-sale	15,608	7.4	14,540	7.5
Total equity securities	20,322	9.6	18,932	9.8
Debt securities:				
Fair value through profit or loss	7,115	3.4	6,713	3.5
Available-for-sale	152,330	72.1	138,676	71.5
Held-to-maturity	2,265	1.1	2,117	1.1
Total debt securities	161,710	76.6	147,507	76.1
Investment property	14,749	7.0	13,261	6.8
Mortgage loans	5,783	2.7	5,935	3.1
Other loans	8,620	4.1	8,274	4.3
Investments in associates and joint ventures	43	0.0	39	0.0
Total Group investments	**211,227**	**100.0**	**193,948**	**100.0**

Investments with a carrying value of USD 6.6 billion and USD 6.2 billion are held to meet local regulatory requirements in each of the years ended December 31, 2020 and 2019, respectively.

Consolidated financial statements (continued)

Details of debt securities by category

Table 6.3

in USD millions, as of December 31	Fair value through profit or loss		Available-for-sale		Held-to-maturity		Total	Total
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
Debt securities:								
Government and supra-national bonds	3,854	3,542	75,598	66,196	2,077	1,942	81,529	71,681
Corporate securities	2,817	2,682	60,575	54,846	188	175	63,579	57,703
Mortgage and asset-backed securities	444	489	16,157	17,634	–	–	16,602	18,123
Total debt securities	**7,115**	**6,713**	**152,330**	**138,676**	**2,265**	**2,117**	**161,710**	**147,507**

Debt securities maturity schedule

Table 6.4

in USD millions, as of December 31	Fair value through profit or loss		Available-for-sale		Held-to-maturity		Total	Total
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
Debt securities:								
< 1 year	573	743	6,933	7,412	86	20	7,592	8,175
1 to 5 years	1,984	1,513	38,615	35,878	802	816	41,401	38,206
5 to 10 years	1,429	1,295	33,965	32,681	796	729	36,189	34,706
> 10 years	2,686	2,674	56,660	45,071	581	552	59,927	48,296
Subtotal	6,671	6,225	136,173	121,042	2,265	2,117	145,108	129,384
Mortgage and asset-backed securities:								
< 1 year	–	–	36	19	–	–	36	19
1 to 5 years	91	115	1,443	2,017	–	–	1,534	2,133
5 to 10 years	98	67	2,224	1,801	–	–	2,322	1,867
> 10 years	255	307	12,454	13,797	–	–	12,709	14,104
Subtotal	444	489	16,157	17,634	–	–	16,602	18,123
Total	**7,115**	**6,713**	**152,330**	**138,676**	**2,265**	**2,117**	**161,710**	**147,507**

The analysis in table 6.4 is provided by contractual maturity. Actual maturities may differ from contractual maturities because certain borrowers have the right to call or prepay certain obligations with or without call or prepayment penalties.

Investment property

Table 6.5

in USD millions	Total	
	2020	2019
As of January 1	13,261	12,351
Additions and improvements	1,009	1,284
Disposals	(1,112)	(777)
Market value revaluation	586	428
Transfer from/to assets held for own use	25	25
Transfer to assets held for sale	(88)	(36)
Foreign currency translation effects[1]	1,069	(15)
As of December 31	**14,749**	**13,261**

1 Increase is mainly driven by foreign exchange-related impacts on real estate in Germany and Switzerland as the USD weakened against Euro and Swiss franc.

Investment property consists of investments in commercial, residential and mixed-use properties primarily located in Germany, U.S. and Switzerland.

Consolidated financial statements (continued)

Net unrealized gains/(losses) on Group investments included in equity

Table 6.6

in USD millions, as of December 31	Total 2020	Total 2019
Equity securities: available-for-sale	1,733	1,673
Debt securities: available-for-sale	18,911	12,997
Other	585	537
Gross unrealized gains/(losses) on Group investments	21,230	15,206
Less amount of unrealized gains/(losses) on investments attributable to:		
Life policyholder dividends and other policyholder liabilities	(12,119)	(8,574)
Life deferred acquisition costs and present value of future profits	(1,242)	(914)
Deferred income taxes	(1,481)	(1,085)
Non-controlling interests	(117)	(96)
Total[1]	**6,271**	**4,536**

1 Net unrealized gains/(losses) on Group investments include net gains arising on cash flow hedges of USD 526 million and USD 454 million as of December 31, 2020 and 2019, respectively.

Securities lending, repurchase and reverse repurchase agreements

Table 6.7

in USD millions, as of December 31	2020	2019
Securities lending agreements		
Securities lent under securities lending agreements[1]	329	156
Collateral received for securities lending	360	190
of which: Cash collateral	111	56
of which: Non-cash collateral[2]	248	134
Liabilities for cash collateral received for securities lending	111	56
Repurchase agreements		
Securities sold under repurchase agreements[3]	787	978
Obligations to repurchase securities	784	977
Reverse repurchase agreements		
Securities purchased under reverse repurchase agreements[4]	–	57
Receivables under reverse repurchase agreements	–	56

1 The ZIC Group's counterparties had the right to sell or repledge, in the absence of default, assets pledged as collateral with a fair value of USD 329 million and USD 150 million as of December 31, 2020 and 2019, respectively. The majority of these assets were debt securities.
2 The ZIC Group had the right to sell or repledge, in the absence of default by its counterparties, securities received as collateral with a fair value of USD 248 million and USD 126 million as of December 31, 2020 and 2019, respectively.
3 The ZIC Group's counterparties had the right to sell or repledge, in the absence of default, assets pledged as collateral with a fair value of USD 346 million and USD 350 million as of December 31, 2020 and 2019, respectively. The majority of these assets were debt securities.
4 The ZIC Group had the right to sell or repledge, in the absence of default by its counterparties, securities received as collateral with a fair value of nil as of December 31, 2020 and 2019, respectively.

Under the terms of securities lending or repurchase agreements, the ZIC Group retains substantially all the risks and rewards of ownership of the transferred securities, and also retains contractual rights to the cash flows from these securities. These securities are therefore not derecognized from the ZIC Group's consolidated balance sheet. Cash received as collateral is recorded as an asset, and a corresponding liability is established. Interest expense is charged to income using the effective interest rate method over the life of the agreement.

Under a reverse repurchase agreement, the securities received are not recognized on the ZIC Group's consolidated balance sheet, as long as the risk and rewards of ownership have not been transferred to the ZIC Group. The cash delivered by the ZIC Group is derecognized and a corresponding receivable is recorded within receivables and other assets. Interest income is recognized in income using the effective interest rate method over the life of the agreement.

Consolidated financial statements (continued)

7. Group derivative financial instruments and hedge accounting

The ZIC Group uses derivative financial instruments mainly for economic hedging purposes to mitigate risks. Such risks result from changes in interest rates, equity prices and exchange rates. Derivative financial instruments with a positive fair value are reported in receivables and other assets (see note 15) and those with a negative fair value are reported in other liabilities (see note 16).

Table 7.1 shows the fair value and notional amounts for all ZIC Group derivatives as of December 31, 2020 and 2019[1] separated by risks. While these notional amounts express the extent of the ZIC Group's involvement in derivative transactions, they do not, however, represent the amounts at risk.

Maturity profile of notional amounts and fair values of Group derivative financial instruments

Table 7.1[1]

in USD millions, as of December 31	2020						2019		
	Maturity by notional amount								
	< 1 year	1 to 5 years	> 5 years	**Notional amounts**	**Positive fair values**	**Negative fair values**	Notional amounts	Positive fair values	Negative fair values
Interest rate contracts[2]	2,671	9,598	8,620	20,890	1,401	(250)	12,682	929	(187)
Equity contracts	10,549	798	442	11,790	87	(68)	11,341	83	(51)
Foreign exchange contracts	20,187	309	203	20,699	275	(162)	19,443	215	(126)
Total Group derivative financial instruments	**33,408**	**10,706**	**9,265**	**53,379**	**1,763**	**(481)**	**43,466**	**1,226**	**(365)**
Thereof exchange-traded	1,187	–	–	1,187	6	(6)	683	2	(4)
Thereof OTC	32,221	10,706	9,265	52,192	1,757	(475)	42,783	1,224	(361)

1 In 2020, the ZIC Group changed the presentation of table 7.1 to simplify the disclosures of derivatives and hedge accounting and enhance the quality of the consolidated financial statements. The scope of the table has been extended to all derivatives held by the ZIC Group. In the consolidated financial statements of 2019, table 7.1 showed only instruments which did not qualify for hedge accounting.
2 Includes USD 679 million and USD 623 million notional related to derivatives centrally cleared as of December 31, 2020 and 2019, respectively.

Interest rate contracts

Interest rate contracts are used to hedge risks from changes in interest rates and to manage asset liability mismatches. Whenever possible the ZIC Group enters into exchange-traded contracts, which are standardized and regulated. Furthermore, because of the structure of the exchanges, exchange-traded contracts are not considered to carry counterparty risk. Over-the-counter (OTC) contracts are otherwise entered into and comprised of swaps and swaptions.

Equity contracts

Equity contracts are entered into, either on a portfolio or on a macro level, to protect the fair value of equity investments against a decline in equity market prices or to manage the risk return profile of equity exposures. Short positions are always covered and sometimes used to mitigate hedging costs.

Foreign exchange contracts

Swaps and forward contracts are used to hedge the ZIC Group's foreign currency exposures and to manage balance sheet mismatches.

Credit contracts

Credit contracts are credit default swaps entered into either on a portfolio or on a macro level to limit market risks arising from the investment portfolios against a change in credit spreads or to manage the risk return profile of the credit exposures.

Other contracts

Other contracts predominantly include stable value products (SVPs) issued to insurance company separate accounts in connection with certain life insurance policies (Bank Owned Life Insurance (BOLI) and Company Owned Life Insurance (COLI)) with an account value of USD 11.1 billion as of December 31, 2020 and USD 11.1 billion as of December 31, 2019, and with a market value of the underlying investments of USD 11.5 billion and USD 11.1 billion as of December 31, 2020 and 2019, respectively (not included in the table above). The Group includes the likelihood of surrender as one of the input parameters to determine the fair value of the SVPs which was nil as of December 31, 2020 and 2019.

In certain circumstances, derivative financial instruments meet the requirements of an effective hedge for accounting purposes. Where this is the case, hedge accounting may be applied. Financial information for these instruments is set out in table 7.2.

Consolidated financial statements (continued)

Notional and fair values of Group hedge accounting derivative financial instruments

Table 7.2[1]

in USD millions, as of December 31	2020			2019		
	Notional principal amounts	**Positive fair values**	**Negative fair values**	Notional principal amounts	Positive fair values	Negative fair values
Fair value hedge:						
Interest rate contracts	539	25	(5)	529	15	(8)
Foreign currency contracts	420	–	(53)	375	3	(54)
Total fair value hedges	**959**	**26**	**(58)**	**904**	**19**	**(61)**
Cash flow hedge:						
Interest rate contracts[2]	4,588	993	(78)	3,564	650	(59)
Foreign currency contracts	451	30	(11)	370	18	(5)
Total cash flow hedges	**5,040**	**1,023**	**(89)**	**3,934**	**669**	**(64)**
Net investment hedge:						
Foreign currency contracts	1,500	51	–	1,606	34	–
Total net investment hedges	**1,500**	**51**	**–**	**1,606**	**34**	**–**

1 In 2020, the ZIC Group changed the presentation of table 7.2 to simplify the disclosures of derivatives and hedge accounting and enhance quality of the financial statements. The maturity analysis is disclosed in table 7.1 above and removed from table 7.2.
2 Includes USD 679 million and USD 623 million notional related to derivatives centrally cleared as of December 31, 2020 and 2019, respectively.

Fair value hedges

Designated fair value hedges consist of interest rate swaps used to protect the ZIC Group against changes in interest rate exposure and foreign currency exposure of debt issued by the ZIC Group.

Information on debt issuances designated as hedged items in fair value hedge relationships is set out in note 18.

The ZIC Group also has fair value hedge relationships consisting of cross currency swaps and forwards to protect the ZIC Group from foreign currency fluctuation of certain fixed income securities and hybrid equity securities denominated in a currency other than the functional currency of the reporting entity.

Forward Bonds are used to hedge bond's fair values against rates movements.

Changes in the fair value of the derivative financial instruments designated as fair value hedges and changes in the fair value of the hedged item in relation to the risk being hedged are both recognized in income.

Consolidated financial statements (continued)

Table 7.3 sets out gains and losses arising from fair value hedges:

Table 7.3

Gains/(losses) arising from fair value hedges

in USD millions, for the years ended December 31	**2020**	2019
Gains/(losses)		
on hedging instruments[1]	14	23
on hedged items attributable to the hedged risk	(15)	(24)

1 Excluding current interest income, which is recognized as an offset on the same line as the interest expense of the hedged debt.

Cash flow hedges

Designated cash flow hedges, such as interest rate swaptions and forwards are used to protect the Group against variability of future cash flows due to changes in interest rates associated with expected future purchases of debt securities required for certain life insurance policies. The effective portion of the gains and losses on these swaptions are initially recognized in OCI. Subsequently the gains or losses will be recycled to profit or loss within net investment income on Group investments over the period to December 31, 2036. The gains and losses related to the ineffective portion of these hedges are recognized immediately in income within net capital gains/(losses) on investments and impairments.

The ZIC Group also uses interest rate swaps and cross currency swaps for cash flow hedging to protect against the exposure to variability of cash flows attributable to interest rate and currency risk. The hedging instrument is measured at fair value, with the effective portion of changes in its fair value recognized in OCI. The effective portion, related to spot rate changes in the fair value of the hedging instrument, is reclassified to profit or loss within administrative and other operating expense as an offset to foreign currency revaluation on the underlying hedged debt. The ineffective portion of the change in fair value is recognized directly in income within administrative and other operating expense.

As of December 31, 2020, there were no debt issuances designated as hedged items in a cash flow hedge relationship (see note 18).

The net change of gains/(losses) deferred in OCI on derivative financial instruments designated as cash flow hedges were USD 276 million and USD 196 million before tax for the years ended December 31, 2020 and 2019, respectively.

The ZIC Group recognized gains of USD 35 million and USD 33 million in the consolidated income statements within net investment income on Group investments for the years ended December 31, 2020 and 2019, respectively. The ZIC Group also recognized net gains/(losses) of USD 2 million and USD 4 million within administrative and other operating expense for the years ended December 31, 2020 and 2019, respectively, as an offset to the foreign currency revaluation on the underlying hedged items.

A nil amount for the years ended December 31, 2020 and 2019, respectively, was recognized in net capital gains/(losses) and impairments due to hedge ineffectiveness.

Consolidated financial statements (continued)

Net investment hedges

The ZIC Group applies net investment hedge accounting to protect against the effects of changes in exchange rates in its net investments in foreign operations.

Measurement of hedge effectiveness is based on changes in forward rates. Gains and losses on the designated hedging derivative and non-derivative financial instruments related to the effective portion of the hedge are recognized in OCI together with the translation gains and losses on the hedged net investment. The accumulated gains and losses in OCI are reclassified to income on disposal or partial disposal of the foreign operation.

The net change of gains/(losses) deferred in OCI were USD 120 million and USD (40) million before tax for the years ended December 31, 2020 and 2019, respectively as a result of a hedge relationship by foreign exchange forwards and swaps.

The ZIC Group has also designated certain debt issuances as hedging instruments on a non-derivative net investment hedge relationship. The notional amount of these financial instruments was USD 9.7 billion and USD 8.1 billion for the years ended December 31, 2020 and 2019, respectively. The net gains/(losses) deferred in OCI were USD 324 million and USD 242 million before tax for the years ended December 31, 2020 and 2019, respectively.

Information on debt issuances designated as hedging instruments in a net investment hedge relationship is set out in note 18.

No ineffectiveness of net investment hedges was recognized in net capital gains/(losses) and impairments for the years ended December 31, 2020 and 2019.

Derivative financial instruments: offsetting of financial assets and liabilities

Table 7.4 shows the net asset and liability position of Group derivative financial instruments subject to enforceable master netting arrangements and collateral agreements. Master netting arrangements are used by the Group to provide protection against loss in the event of bankruptcy or other circumstances that result in a counterparty being unable to meet its obligations. These arrangements commonly create a right of offset that becomes enforceable and affects the realization or settlement of individual financial assets and financial liabilities only following a specified event of default or other circumstances which would not be expected to arise in the normal course of business.

Table 7.4

Group derivative financial instruments subject to enforceable master netting arrangements and collateral agreements

in USD millions, as of December 31	Derivative assets		Derivative liabilities	
	2020	2019	**2020**	2019
Fair value	1,763	1,226	(481)	(365)
Related amounts not offset	(192)	(99)	196	100
Cash collateral (received)/pledged	(1,520)	(1,089)	114	116
Non-cash collateral (received)/pledged	(26)	(29)	61	54
Net amount	**25**	**9**	**(110)**	**(94)**

Consolidated financial statements (continued)

8. Liabilities for insurance contracts and reinsurers' share of liabilities for insurance contracts

Table 8.1

Liabilities for insurance contracts

in USD millions, as of December 31	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
Reserves for losses and loss adjustment expenses	63,327	59,165	(14,375)	(12,137)	48,951	47,028
Reserves for unearned premiums	18,724	17,551	(3,716)	(3,412)	15,009	14,139
Future life policyholder benefits	83,958	77,756	(4,256)	(3,978)	79,703	73,778
Policyholder contract deposits and other funds	31,497	27,480	(3,236)	(3,285)	28,261	24,195
Reserves for unit-linked insurance contracts	81,157	77,684	–	–	81,157	77,684
Other insurance liabilities	4,834	4,505	(1)	(1)	4,832	4,503
Total liabilities for insurance contracts[1,2]	**283,497**	**264,140**	**(25,584)**	**(22,813)**	**257,913**	**241,327**

1 2019 includes USD 2.2 billion Gross liabilities for insurance contracts from the OnePath acquisition (see note 5).
2 Total liabilities for insurance contracts ceded are gross of allowances for uncollectible amounts of USD 61 million as of December 31, 2020 and 2019.

Table 8.2

Discounted reserves for losses and loss adjustment expenses

in USD millions, as of December 31	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
Reserves for losses and loss adjustment expenses	63,327	59,165	(14,375)	(12,137)	48,951	47,028
of which: Discounted reserves	3,387	3,078	(45)	(40)	3,342	3,038
Discount effect	1,166	1,219	(23)	(24)	1,143	1,195
Undiscounted reserves for losses and loss adjustment expenses	64,492	60,384	(14,398)	(12,161)	50,094	48,223
of which: Undiscounted amount of discounted reserves	4,552	4,297	(68)	(64)	4,484	4,233
Average discount rate	3.2%	3.9%	1.9%	2.0%	3.2%	4.0%

Table 8.3

Development of reserves for losses and loss adjustment expenses

in USD millions	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
As of January 1	59,165	60,913	(12,137)	(11,535)	47,028	49,378
Losses and loss adjustment expenses incurred:						
Current year	23,832	22,400	(5,842)	(5,151)	17,989	17,249
Prior years[1]	767	(769)	(1,175)	186	(408)	(583)
Total incurred	24,598	21,631	(7,017)	(4,965)	17,581	16,666
Losses and loss adjustment expenses paid:						
Current year	(8,573)	(8,782)	1,165	1,095	(7,407)	(7,687)
Prior years	(14,119)	(14,551)	4,198	3,720	(9,921)	(10,831)
Total paid	(22,691)	(23,333)	5,363	4,815	(17,328)	(18,518)
Interest effects of discounted reserves	163	145	(3)	(3)	159	142
Acquisitions/(divestments) and transfers[2]	426	17	(356)	(519)	70	(502)
Foreign currency translation effects	1,666	(209)	(225)	70	1,441	(139)
As of December 31	**63,327**	**59,165**	**(14,375)**	**(12,137)**	**48,951**	**47,028**

1 Changes to incurred gross prior year losses and loss adjustment expenses relate largely to business with limited net impact to the ZIC Group such as liabilities related to captive business, development in losses related to 2017 catastrophe events that are substantially reinsured, and participation in large claims related to business where the ZIC Group retains only a portion of the overall loss.
2 In 2020, net reserves increased by USD 288 million following the acquisition of the CSS Versicherung AG Commercial Accident and Health business and USD 23 million following the acquisition of Adira Insurance (see note 5). Additionally, Zurich North America entered into an agreement with Lyft, a ride-sharing provider, which resulted in an increase in ceded reserves of USD 144 million. The increase in reserves is partially offset by the transfer of a portfolio in Brazil of USD 103 million to DPVAT, a motor insurance pool. In 2019, the ZIC Group reclassified USD 177 million to liabilities held for sale in Germany (see note 5). In addition, a retroactive reinsurance agreement of a Non-Core Business portfolio resulted in a decrease of net reserves by USD 402 million.

The ZIC Group establishes loss reserves, which are estimates of future payments of reported and unreported claims for losses and related expenses, with respect to insured events that have occurred. Reserving is a complex process dealing with uncertainty, requiring the use of informed estimates and judgments. Any changes in estimates or judgments are reflected in the results of operations in the period in which estimates and judgments are changed.

Significant delays may occur in the notification and settlement of claims, and a substantial measure of experience and judgment is involved in assessing outstanding liabilities, the ultimate cost of which cannot be known with certainty as of the balance sheet date. The reserves for losses and loss adjustment expenses are determined on the basis of the information available. However, it is inherent in the nature of the business written that the ultimate liabilities may vary as a result of subsequent developments.

For the year ended December 31, 2020, the increase of USD 1.9 billion in net reserves for losses and loss adjustment expenses is mainly driven by foreign exchange-related increases as the U.S. dollar weakened against the euro and British pound, and from reserves related to catastrophe losses including Hurricane Laura and Civil Unrest in North America, and COVID-19 related losses mainly in North America, Europe and Asia Pacific.

Net favorable reserve development emerged from reserves established in prior years amounting to USD 408 million mainly related to the following:

- In EMEA, favorable prior year development of USD 286 million driven by motor and liability in retail segment;
- In North America, favorable prior year development of USD 140 million driven by worker injury in retail and commercial segments.

For the year ended December 31, 2019, the decrease of USD 2.3 billion in net reserves for losses and loss adjustment expenses is mainly driven by a decrease in North America Commercial due to higher reinsurance cessions in Property, as well as the disposal of U.S. asbestos and environmental liability insurance portfolios.

Net favorable reserve development emerged from reserves established in prior years amounting to USD 583 million mainly related to the following:

- In EMEA, favorable prior year development of USD 423 million driven by motor and liability in retail segment;
- In North America, favorable prior year development of USD 174 million driven by worker injury in retail and commercial segments.

Consolidated financial statements (continued)

Development of insurance losses, net

Table 8.4

in USD millions, as of December 31	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**
Gross reserves for losses and loss adjustment expenses (undiscounted)	67,762	69,986	68,312	64,472	62,971	62,569	66,715	62,187	60,384	64,492
Reinsurance recoverable (undiscounted)	(12,421)	(12,601)	(10,993)	(9,770)	(9,231)	(9,796)	(11,092)	(11,561)	(12,161)	(14,398)
Initial net reserves for losses and loss adjustment expenses	55,341	57,385	57,319	54,703	53,739	52,773	55,623	50,627	48,223	50,094
Cumulative paid as of:										
One year later	*(13,525)*	*(13,799)*	*(13,301)*	*(12,576)*	*(11,690)*	*(10,994)*	*(11,586)*	*(10,831)*	*(9,921)*	
Two years later	*(21,245)*	*(21,465)*	*(21,002)*	*(19,460)*	*(18,562)*	*(17,808)*	*(18,277)*	*(16,727)*		
Three years later	*(26,871)*	*(27,064)*	*(26,021)*	*(24,475)*	*(23,590)*	*(22,540)*	*(22,606)*			
Four years later	*(31,129)*	*(30,691)*	*(29,851)*	*(28,105)*	*(27,106)*	*(25,764)*				
Five years later	*(33,836)*	*(33,515)*	*(32,509)*	*(30,667)*	*(29,569)*					
Six years later	*(35,935)*	*(35,579)*	*(34,426)*	*(32,375)*						
Seven years later	*(37,625)*	*(37,108)*	*(35,728)*							
Eight years later	*(38,838)*	*(38,136)*								
Nine years later	*(39,721)*									
Cumulative incurred:										
One year later	*(571)*	*(757)*	*(59)*	*149*	*(164)*	*(641)*	*(674)*	*(583)*	*(408)*	
Two years later	*(891)*	*(652)*	*(139)*	*(25)*	*(1,106)*	*(1,358)*	*(1,516)*	*(1,429)*		
Three years later	*(677)*	*(777)*	*(72)*	*(438)*	*(1,666)*	*(2,311)*	*(2,372)*			
Four years later	*(804)*	*(709)*	*(214)*	*(823)*	*(2,402)*	*(3,235)*				
Five years later	*(826)*	*(912)*	*(576)*	*(1,382)*	*(3,257)*					
Six years later	*(1,018)*	*(1,136)*	*(1,041)*	*(2,046)*						
Seven years later	*(1,112)*	*(1,552)*	*(1,539)*							
Eight years later	*(1,576)*	*(1,994)*								
Nine years later	*(1,937)*									
Net undiscounted reserves re-estimated[1]:										
One year later	*54,770*	*56,628*	*57,259*	*54,852*	*53,575*	*52,131*	*54,949*	*50,044*	*47,815*	
Two years later	*54,450*	*56,734*	*57,180*	*54,677*	*52,633*	*51,415*	*54,108*	*49,197*		
Three years later	*54,664*	*56,609*	*57,246*	*54,265*	*52,073*	*50,462*	*53,251*			
Four years later	*54,537*	*56,676*	*57,105*	*53,880*	*51,337*	*49,538*				
Five years later	*54,515*	*56,474*	*56,743*	*53,321*	*50,482*					
Six years later	*54,323*	*56,250*	*56,278*	*52,657*						
Seven years later	*54,229*	*55,834*	*55,780*							
Eight years later	*53,765*	*55,391*								
Nine years later	*53,404*									
Cumulative (deficiency)/ redundancy of net reserves	1,937	1,994	1,539	2,046	3,257	3,235	2,372	1,429	408	
Cumulative (deficiency)/ redundancy as a percentage of initial net reserves	3.5%	3.5%	2.7%	3.7%	6.1%	6.1%	4.3%	2.8%	0.8%	
Gross reserves re-estimated	64,693	66,306	65,583	61,758	59,163	58,431	64,309	61,158	61,150	
Cumulative (deficiency)/ redundancy of gross reserves[2]	3,069	3,681	2,729	2,714	3,808	4,138	2,406	1,029	(767)	
Cumulative (deficiency)/ redundancy as a percentage of initial gross reserves	4.5%	5.3%	4.0%	4.2%	6.0%	6.6%	3.6%	1.7%	(1.3%)	

1 Undiscounted amounts starting 2016, prior years are shown discounted.
2 Changes to incurred gross prior year losses and loss adjustment expenses relate largely to business with limited net impact to the ZIC Group such as liabilities related to captive business, development in losses related to 2017 catastrophe events that are substantially reinsured, and participation in large claims related to business where the ZIC Group retains only a portion of the overall loss.

Consolidated financial statements (continued)

Table 8.4 presents changes in the historical reserves for losses and loss adjustment expenses, net of reinsurance, that the ZIC Group established in 2011 and subsequent years. Reserves are presented by financial year, not by accident year. The reserves (and the development thereon) are for all accident years in that financial year. The top line of the table shows the estimated gross reserves for unpaid losses and loss adjustment expenses as of each balance sheet date, which represents the estimated amount of future payments for losses incurred in that year and in prior years. The cumulative paid portion of the table presents the cumulative amounts paid through each subsequent year in respect of the reserves established at each year end. Similarly, the cumulative incurred losses section details the sum of the cumulative paid amounts shown in the triangle above and the changes in loss reserves since the end of each financial year. The net undiscounted reserves re-estimated portion of the table shows the re-estimation of the initially recorded reserve as of each succeeding year end. Reserve development is shown in each column. Changes to estimates are made as more information becomes known about the actual losses for which the initial reserves were established. The cumulative deficiency or redundancy is equal to the initial net reserves less the liability re-estimated as of December 31, 2020. It is the difference between the initial net reserve estimate and the last entry of the diagonal in the net undiscounted reserves re-estimated portion of the table. Conditions and trends that have affected the development of reserves for losses and loss adjustment expenses in the past may or may not necessarily occur in the future, and accordingly, conclusions about future results cannot be derived from the information presented in table 8.4.

The ZIC Group has considered asbestos, including latent injury, claims and claims expenses in establishing the reserves for losses and loss adjustment expenses. The ZIC Group continues to be advised of indemnity claims asserting injuries from asbestos. Coverage and claim settlement issues, such as determination that coverage exists and the definition of an occurrence, together with increased medical diagnostic capabilities and awareness have often caused actual loss development to exhibit more variation than in other lines of business. Such claims require specialized reserving techniques and the uncertainty of the ultimate cost of these types of claims has tended to be greater than the uncertainty related to standard lines of business.

Net reserves for losses and loss adjustment expenses for asbestos amounted to USD 121 million and USD 123 million for the years ended December 31, 2020 and 2019, respectively.

Development of future life policyholder benefits

Table 8.5

in USD millions	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
As of January 1	77,756	74,950	(3,978)	(3,110)	73,778	71,839
Premiums	12,579	13,634	(1,385)	(1,368)	11,194	12,266
Claims	(11,182)	(10,631)	1,141	1,098	(10,041)	(9,534)
Fee income and other expenses	(3,856)	(3,911)	238	258	(3,618)	(3,652)
Interest and bonuses credited to policyholders	2,080	2,107	(101)	(101)	1,979	2,007
Changes in assumptions	76	49	–	–	76	49
Acquisitions/(divestments) and transfers[1]	20	1,305	39	(753)	59	552
Increase/(decrease) recorded in other comprehensive income	728	876	–	–	728	876
Foreign currency translation effects	5,757	(623)	(208)	(2)	5,548	(626)
As of December 31	**83,958**	**77,756**	**(4,256)**	**(3,978)**	**79,703**	**73,778**

1 The 2020 net movement is mainly related to adjustments to the acquisition of OnePath (see note 5), the 2019 net movement is mainly related to the acquisition of OnePath (see note 5).

Long-duration contract liabilities included in future life policyholder benefits result primarily from traditional participating and non-participating life insurance products. Short-duration contract liabilities are primarily accident and health insurance products.

Future life policyholder benefits are generally calculated by a net premium valuation. In terms of U.S. dollars, the weighted average discount rate used in the calculation of future life policyholder benefits is 2.1 percent and 2.3 percent as of December 31, 2020 and 2019, respectively.

The amount of policyholder dividends to be paid is determined annually by each life insurance subsidiary. Policyholder dividends include life policyholder share of net income and unrealized appreciation of investments that are required to be allocated by the insurance contract or by local insurance regulations. Experience adjustments related to future policyholder benefits and policyholder contract deposits vary according to the type of contract and the country. Investment, mortality and morbidity results may be passed through by experience credits or as an adjustment to the premium mechanism, subject to local regulatory provisions.

Consolidated financial statements (continued)

The net impact of changes in assumptions on future life policyholder benefits by type of assumption is shown in table 8.6.

Table 8.6

Effect of changes in assumptions for future life policyholder benefits

in USD millions, for the years ended December 31	**2020**	2019
Interest rates	13	15
Investment return	14	30
Changes in modeling	40	–
Expense	2	4
Morbidity	–	(5)
Longevity	–	5
Lapses	5	3
Other	1	(2)
Net impact of changes in assumptions	**75**	**48**

Table 8.7

Policyholder contract deposits and other funds gross

in USD millions, as of December 31	**2020**	2019
Universal life and other contracts	14,622	13,679
Policyholder dividends	16,875	13,801
Total	**31,497**	**27,480**

Table 8.8

Development of policyholder contract deposits and other funds

in USD millions		**Gross**		**Ceded**		**Net**
	2020	2019	**2020**	2019	**2020**	2019
As of January 1	27,480	24,266	(3,285)	(3,416)	24,195	20,850
Premiums	1,204	1,175	(74)	(76)	1,130	1,099
Claims	(1,210)	(1,327)	245	306	(964)	(1,021)
Fee income and other expenses	(437)	(291)	(4)	–	(441)	(290)
Interest and bonuses credited to policyholders	1,114	1,393	(118)	(119)	995	1,274
Acquisitions/(divestments) and transfers[1]	16	244	–	–	16	244
Increase/(decrease) recorded in other comprehensive income	1,517	2,328	–	–	1,517	2,328
Foreign currency translation effects	1,813	(308)	–	20	1,813	(287)
As of December 31	**31,497**	**27,480**	**(3,236)**	**(3,285)**	**28,261**	**24,195**

1 The 2020 net movement is related to the acquisition of Adira Insurance (see note 5), the 2019 net movement is mainly related to the acquisition of OnePath (see note 5).

Consolidated financial statements (continued)

Tables 8.9a and 8.9b provide an analysis of the expected maturity profile of reserves for insurance contracts, net of reinsurance, based on expected cash flows without considering the surrender values as of December 31, 2020 and 2019. Reserves for unit-linked insurance contracts amounting to USD 81 billion and USD 78 billion as of December 31, 2020 and 2019, respectively, are not included, as policyholders can generally surrender their contracts at any time, at which point the underlying unit-linked assets would be liquidated. Risks from the liquidation of unit-linked assets are largely borne by the policyholders of unit-linked contracts.

Table 8.9a

Expected maturity profile for reserves for insurance contracts, net of reinsurance – current period

in USD millions, as of December 31, 2020	**Reserves for losses and loss adjustment expenses**	**Future life policyholder benefits**	**Policyholder contract deposits and other funds**	**Total**
< 1 year	14,304	8,826	1,785	24,915
1 to 5 years	19,394	18,138	2,232	39,764
5 to 10 years	6,819	15,459	2,795	25,073
10 to 20 years	5,413	13,027	2,958	21,398
> 20 years	3,022	24,253	18,491	45,767
Total	**48,951**	**79,703**	**28,261**	**156,916**

Table 8.9b

Expected maturity profile for reserves for insurance contracts, net of reinsurance – prior period

in USD millions, as of December 31, 2019	Reserves for losses and loss adjustment expenses	Future life policyholder benefits	Policyholder contract deposits and other funds	Total
< 1 year	14,214	9,043	1,680	24,937
1 to 5 years	19,221	15,908	1,988	37,116
5 to 10 years	6,403	15,019	2,348	23,770
10 to 20 years	4,762	12,654	2,818	20,234
> 20 years	2,428	21,154	15,362	38,944
Total	**47,028**	**73,778**	**24,195**	**145,001**

9. Liabilities for investment contracts

Liabilities for investment contracts

Table 9.1

in USD millions, as of December 31	2020	2019
Unit-linked investment contracts	55,174	48,967
Investment contracts (amortized cost)	878	931
Investment contracts with DPF	13,455	11,863
Total	**69,507**	**61,761**

Unit-linked investment contracts issued by the ZIC Group are recorded at a value reflecting the returns on investment funds which include selected equities, debt securities and derivative financial instruments. Policyholders bear the full risk of the returns on these investments.

The value of financial liabilities at amortized cost is based on a discounted cash flow valuation technique. The initial valuation of the discount rate is determined by the current market assessment of the time value of money and risk specific to the liability.

Development of liabilities for investment contracts

Table 9.2

in USD millions	2020	2019
As of January 1	61,761	51,439
Premiums	6,210	10,913
Claims	(5,959)	(9,587)
Fee income and other expenses	(366)	(425)
Interest and bonuses credited to policyholders	3,364	10,257
Acquisitions/(divestments) and transfers[1]	(301)	(1,916)
Increase/(decrease) recorded in other comprehensive income	525	660
Foreign currency translation effects	4,274	419
As of December 31	**69,507**	**61,761**

1 As of December 31, 2020, the net carrying amount of liabilities for investment contracts decreased by USD 301 million due to portfolio transactions by Zurich International Life Limited and Zurich Life Assurance plc (see note 5). As of December 31, 2019, the net carrying amount of liabilities for investment contracts decreased by USD 3.1 billion due to the completion of the sale in the UK (see note 5) and increased by USD 1.2 billion from the acquisition of OnePath (see note 5).

Tables 9.3a and 9.3b provide an analysis of investment contract liabilities according to maturity, based on expected cash flows as of December 31, 2020 and 2019. The undiscounted contractual cash flows for investment contract liabilities are USD 69 billion and USD 62 billion as of December 31, 2020 and 2019, respectively. Liabilities for unit-linked investment contracts amounted to USD 55 billion and USD 49 billion as of December 31, 2020 and 2019, respectively. Policyholders of unit-linked investment contracts can generally surrender their contracts at any time, leading the underlying assets to be liquidated, risks arising from liquidation of unit-linked assets are borne by the policyholders. Certain non-unit-linked contracts also allow for surrender of the contract by the policyholder at any time. Liabilities for such contracts amounted to USD 444 million and USD 417 million as of December 31, 2020 and 2019, respectively. The ZIC Group actively manages the Life in-force business to improve persistency and retention.

Table 9.3a

Expected maturity profile for liabilities for investment contracts – current period

in USD millions, as of December 31, 2020	**Liabilities related to unit-linked investment contracts**	**Liabilities related to investment contracts (amortized cost)**	**Liabilities related to investment contracts with discretionary participation features**	**Total**
< 1 year	3,921	657	525	5,103
1 to 5 years	8,223	90	2,228	10,541
5 to 10 years	9,222	55	2,169	11,446
10 to 20 years	8,043	57	1,268	9,368
> 20 years	25,764	20	7,265	33,049
Total	**55,174**	**878**	**13,455**	**69,507**

Table 9.3b

Expected maturity profile for liabilities for investment contracts – prior period

in USD millions, as of December 31, 2019	Liabilities related to unit-linked investment contracts	Liabilities related to investment contracts (amortized cost)	Liabilities related to investment contracts with discretionary participation features	Total
< 1 year	3,888	647	494	5,029
1 to 5 years	7,449	130	1,720	9,299
5 to 10 years	8,525	69	2,278	10,873
10 to 20 years	7,601	63	1,184	8,848
> 20 years	21,503	22	6,188	27,712
Total	**48,967**	**931**	**11,863**	**61,761**

Consolidated financial statements (continued)

10. Gross and ceded insurance revenues and expenses

Insurance benefits and losses

Table 10.1

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
Losses and loss adjustment expenses	24,598	21,631	(7,017)	(4,965)	17,581	16,666
Life insurance death and other benefits	11,300	11,989	(1,141)	(1,085)	10,160	10,903
Total insurance benefits and losses	**35,899**	**33,620**	**(8,158)**	**(6,051)**	**27,741**	**27,570**

Policyholder dividends and participation in profits

Table 10.2

in USD millions, for the years ended December 31	**2020**	2019
Change in policyholder contract deposits and other funds	817	1,080
Change in reserves for unit-linked insurance contracts	4,233	9,515
Change in liabilities for investment contracts – unit-linked	3,223	10,050
Change in liabilities for investment contracts – other	147	219
Change in unit-linked liabilities related to UK capital gains tax	(95)	(283)
Total policyholder dividends and participation in profits	**8,325**	**20,582**

Underwriting and policy acquisition costs

Table 10.3

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
Amortization of deferred acquisition costs	6,585	6,525	(889)	(866)	5,696	5,660
Amortization of deferred origination costs	67	71	–	–	67	71
Commissions and other underwriting and acquisition expenses[1]	2,996	3,141	(204)	(342)	2,792	2,798
Total underwriting and policy acquisition costs	**9,647**	**9,737**	**(1,092)**	**(1,208)**	**8,555**	**8,529**

1 Net of additions related to deferred acquisition and origination costs.

Change in reserves for unearned premiums

Table 10.4

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2020	2019	**2020**	2019	**2020**	2019
Change in reserves for unearned premiums	**903**	**1,187**	**(280)**	**(239)**	**623**	**949**

Consolidated financial statements (continued)

11. Deferred policy acquisition costs and deferred origination costs

Table 11.1

Development of deferred policy acquisition costs

in USD millions	Property & Casualty		Life		Other businesses[1]		Total	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
As of January 1	5,694	5,367	11,695	12,350	1,818	1,824	19,207	19,541
Acquisition costs deferred	4,572	4,569	1,645	1,849	127	169	6,344	6,586
Amortization	(4,363)	(4,236)	(1,226)	(1,296)	(110)	(117)	(5,699)	(5,648)
Impairments[2]	–	–	(19)	(177)	–	–	(19)	(177)
Amortization (charged)/ credited to other comprehensive income	–	–	(206)	(367)	(42)	(46)	(248)	(413)
Acquisitions/(divestments) and transfers[3]	43	4	(107)	(736)	(4)	(12)	(68)	(745)
Foreign currency translation effects	38	(9)	466	74	(1)	–	503	64
As of December 31	**5,984**	**5,694**	**12,248**	**11,695**	**1,789**	**1,818**	**20,021**	**19,207**

1 Net of eliminations from inter-segment transactions.
2 In 2019, Impairment related to UK held for sale transaction (see note 5).
3 2020, Property & Casualty movement of USD 43 million is mainly related to the acquisition of Adira Insurance for USD 33 million and CSS Versicherung AG Commercial Accident and Health business for USD 5 million (see note 5). The movement in Life of USD 107 million is mainly related to an agreement entered by Zurich International Life Limited to sell an insurance portfolio (see note 5). 2019 movement in Life is related to the elimination of the internal reinsurance agreement on consolidation of OnePath (see note 5), Property & Casualty movement of USD 4 million is related to the acquisition of OnePath and the other businesses movement of USD 12 million is mainly related to the portfolio transfer in Farmers.

Table 11.2

Development of deferred origination costs

in USD millions	**2020**	2019
As of January 1	400	419
Origination costs deferred	69	53
Amortization	(71)	(71)
Acquisitions/(divestments) and transfers	(2)	–
Foreign currency translation effects	29	(1)
As of December 31	**426**	**400**

12. Expenses

Table 12 shows expenses by functional area and by type of expense.

Table 12

Expenses

in USD millions, for the years ended December 31	**2020**	2019
Administrative and other operating expenses	8,105	8,122
Underwriting and policy acquisition costs, net of reinsurance	8,555	8,529
Claims handling expenses[1]	2,494	2,535
Investment expenses	366	340
Total	**19,520**	**19,526**
of which:		
Personnel and other related costs	6,454	6,343
Building and infrastructure costs	588	441
Brand and marketing expenses	609	653
Commissions (net of DAC)	6,643	6,588
Premium taxes (net of DAC)	563	514
Asset and other non-income taxes	59	82
IT expenses	1,886	1,908
Outsourcing and professional services	2,048	2,271
Foreign currency translation	66	69
Other	603	656
Total	**19,520**	**19,526**

1 Included within losses and loss adjustment expenses (see table 10.1).

13. Property and equipment

Buildings held for own use and equipment are carried at cost less accumulated depreciation and any accumulated impairment loss. Generally, these assets are depreciated on a straight-line basis to income over the following estimated useful lives:

- buildings 25 to 50 years;
- furniture and fixtures 5 to 10 years;
- computer equipment 3 to 6 years;
- other equipment 6 to 10 years (or determined by the term of lease).

Land held for own use is carried at cost less any accumulated impairment loss.

The right-of-use asset is measured at cost less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of the lease liability. The right-of-use asset is depreciated over the shorter of the leased asset's useful life or the lease term on a straight-line basis.

Table 13.1

Property and equipment overview

in USD millions, as of December 31	Real Estate		Equipment		Total	
	2020	2019	**2020**	2019	**2020**	2019
Right-of-use	1,608	1,610	47	57	1,655	1,667
Owned and subject to operating lease	527	451	523	517	1,050	968
Total	**2,135**	**2,061**	**570**	**574**	**2,705**	**2,635**

Table 13.2

Property and equipment – current period

in USD millions	Real Estate				Equipment			Total		
	Owned	Owned – subject to operating lease	Right-of-use	Total	Owned	Right-of-use	Total	Owned incl. operating lease	Right-of-use	Total
Gross carrying value as of January 1, 2020	**589**	**3**	**2,472**	**3,064**	**1,419**	**115**	**1,535**	**2,011**	**2,587**	**4,598**
Less: accumulated depreciation/impairments	(140)	(1)	(862)	(1,003)	(903)	(58)	(961)	(1,043)	(920)	(1,963)
Net carrying value as of January 1, 2020	**449**	**2**	**1,610**	**2,061**	**517**	**57**	**574**	**968**	**1,667**	**2,635**
Additions and improvements[1]	58	1	110	170	156	16	171	215	126	341
Lease modifications	–	–	42	42	–	(3)	(3)	–	39	39
Depreciation and impairments[2]	(8)	–	(218)	(226)	(131)	(20)	(151)	(139)	(238)	(377)
Acquisitions/(divestments) and transfers	(13)	(3)	(5)	(21)	(40)	(3)	(43)	(57)	(8)	(65)
Foreign currency translation effects	41	–	68	109	22	–	22	62	69	131
Net carrying value as of December 31, 2020	**527**	**–**	**1,608**	**2,135**	**523**	**47**	**570**	**1,050**	**1,655**	**2,705**
Plus: accumulated depreciation/ impairments	134	–	1,029	1,163	871	46	918	1,005	1,075	2,081
Gross carrying value as of December 31, 2020	**661**	**–**	**2,637**	**3,298**	**1,394**	**94**	**1,487**	**2,055**	**2,731**	**4,785**

1 Includes the initial recognition of right-of-use asset in Australia of USD 47 million as a result of sale and leaseback transaction.
2 Includes impairment of fixed assets of USD 30 million.

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Property and equipment – prior period

Table 13.3

in USD millions	Real Estate				Equipment			Total		
	Owned	Owned – subject to operating lease	Right-of-use	Total	Owned	Right-of-use	Total	Owned incl. operating lease	Right-of-use	Total
Gross carrying value as of January 1, 2019	**606**	**3**	**2,146**	**2,755**	**1,374**	**117**	**1,491**	**1,983**	**2,263**	**4,246**
Less: accumulated depreciation/impairments	(147)	(1)	(793)	(941)	(840)	(43)	(883)	(988)	(836)	(1,824)
Net carrying value as of January 1, 2019	**459**	**2**	**1,353**	**1,814**	**535**	**74**	**608**	**995**	**1,427**	**2,422**
Additions and improvements	76	–	469	545	121	17	138	197	486	683
Lease modifications	–	–	(3)	(3)	–	(3)	(3)	–	(6)	(6)
Depreciation and impairments	(6)	–	(181)	(187)	(123)	(22)	(145)	(129)	(203)	(332)
Acquisitions/(divestments) and transfers[1]	(82)	–	(27)	(109)	(18)	(9)	(27)	(100)	(35)	(135)
Foreign currency translation effects	2	–	(1)	2	2	–	2	4	–	4
Net carrying value as of December 31, 2019	**449**	**2**	**1,610**	**2,061**	**517**	**57**	**574**	**968**	**1,667**	**2,635**
Plus: accumulated depreciation/ impairments	140	1	862	1,003	903	58	961	1,043	920	1,963
Gross carrying value as of December 31, 2019	**589**	**3**	**2,472**	**3,064**	**1,419**	**115**	**1,535**	**2,011**	**2,587**	**4,598**

1 Includes the sale of owned real estate in Australia of USD 87 million.

Lessee – lease expenses and income

Table 13.4

in USD millions, for the years ended December 31	**2020**	2019
Lease expenses[1]		
Interest expense on lease liabilities[2]	49	44
Short-term lease expenses	12	16
Low-value asset lease expenses	25	24
Lease income		
Income from subleasing right-of-use assets	14	32
Gains arising from sale and leaseback transactions[3]	24	53

1 Total cash outflow for leases amounts to USD 303 million and USD 280 million as of December 31, 2020 and 2019, respectively, excluding USD 2 billion and USD 1.9 billion of future cash outflows due to extension & termination options.
2 Included within 'Interest credited to policyholders and other interest.'
3 On October 23, 2019 a contract was signed between Zurich Australian Property Holdings Pty Ltd (ZAPH) and an Australian entity – Mount St Pty Ltd, for the sale of the Mount Street land and building for a total consideration of USD 245 million. Settlement took place on November 15, 2019 upon completion of all conditional precedents. Total consideration is formed of the following components: land USD 35 million, building constructed to date USD 52 million, estimated construction costs USD 70 million, final development fee (FDF) USD 88 million. 10 year lease term started from November 2020 with lease liability of USD 84 million.

Consolidated financial statements (continued)

Table 13.5

Lessor – finance lease and operating lease income

in USD millions, for the years ended December 31	2020	2019
Finance lease		
Selling profit or loss	–	7
Interest income on finance lease receivables	58	72
Total	**58**	**79**
Operating lease		
Operating lease income – property and equipment	18	23
Operating lease income – investment property	648	615
Total	**666**	**638**

Table 13.6

Maturity schedule – finance lease receivable

in USD millions, as of December 31	2020			2019		
	Carrying value	Unearned interest	Undiscounted cash flows	Carrying value	Unearned interest	Undiscounted cash flows
< 1 year	91	18	109	127	24	151
1 to 2 years	24	13	36	54	25	79
2 to 3 years	118	10	129	37	15	52
3 to 4 years	89	9	98	113	12	126
4 to 5 years	20	5	25	83	10	93
> 5 years	184	100	285	163	65	227
Total	**527**	**155**	**682**	**577**	**151**	**728**

Table 13.7

Maturity schedule – operating lease payments to be received

in USD millions, as of December 31	Undiscounted cash flows	
	2020	2019
< 1 year	480	424
1 to 2 years	324	288
2 to 3 years	274	240
3 to 4 years	221	200
4 to 5 years	190	160
> 5 years	945	893
Total	**2,434**	**2,205**

Consolidated financial statements (continued)

14. Attorney-in-fact contracts, goodwill and other intangible assets

Table 14.1

Intangible assets – current period

in USD millions	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Gross carrying value as of January 1, 2020	1,025	3,883	2,556	4,286	5,053	331	17,134
Less: accumulated amortization/impairments	–	(274)	(2,116)	(1,752)	(3,912)	(113)	(8,165)
Net carrying value as of January 1, 2020	1,025	3,610	440	2,534	1,141	218	8,968
Additions and acquisitions	–	366	–	54	355	5	780
Divestments and transfers	–	–	–	(5)	(6)	–	(12)
Amortization[1]	–	–	(33)	(115)	(300)	(12)	(460)
Amortization charged to other comprehensive income	–	–	(17)	–	–	–	(17)
Impairments	–	(33)	–	(24)	(13)	(4)	(74)
Foreign currency translation effects	–	146	24	(56)	43	2	159
Net carrying value as of December 31, 2020	**1,025**	**4,089**	**413**	**2,388**	**1,221**	**209**	**9,345**
Plus: accumulated amortization/impairments	–	323	2,236	1,885	3,810	131	8,385
Gross carrying value as of December 31, 2020	1,025	4,412	2,649	4,273	5,030	340	17,730

1 Amortization of distribution agreements is included within underwriting and policy acquisition costs.

As of December 31, 2020, intangible assets related to non-controlling interests were USD 52 million for present value of future profits (PVFP) of acquired insurance contracts, USD 972 million for distribution agreements, USD 26 million for software, USD 82 million for goodwill, USD 47 million for attorney-in-fact-contracts and USD 2 million for other intangible assets.

As a result of the acquisition of Adira Insurance in Indonesia, intangible assets increased by USD 253 million, of which USD 212 million is goodwill, USD 35 million is distribution agreements and USD 6 million is other intangible assets. Goodwill further increased following the acquisition of the CSS Versicherung AG Commercial Accident and Health business in Switzerland and also as a result of post-acquisition adjustments related to the OnePath acquisition (see note 5).

A goodwill impairment of USD 33 million was recognized relating to Bright Box, which is part of the Group Functions & Operations segment.

Table 14.2

Intangible assets by business – current period

in USD millions, as of December 31, 2020	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Property & Casualty	–	1,876	–	762	749	183	3,570
Life	–	1,365	381	1,625	57	26	3,455
Farmers	1,025	819	32	–	351	–	2,228
Group Functions and Operations	–	29	–	–	64	–	92
Net carrying value	**1,025**	**4,089**	**413**	**2,388**	**1,221**	**209**	**9,345**

Consolidated financial statements (continued)

Intangible assets – prior period

Table 14.3

in USD millions	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Gross carrying value as of January 1, 2019	1,025	2,938	2,539	4,304	4,839	309	15,954
Less: accumulated amortization/impairments	–	(276)	(2,041)	(1,578)	(3,677)	(109)	(7,682)
Net carrying value as of January 1, 2019	1,025	2,662	498	2,726	1,162	199	8,272
Additions and acquisitions	–	977	7	97	351	34	1,467
Divestments and transfers	–	–	–	–	(11)	–	(11)
Amortization[1]	–	–	(36)	(225)	(331)	(12)	(604)
Amortization charged to other comprehensive income	–	–	(24)	–	–	–	(24)
Impairments	–	–	–	–	(29)	(1)	(31)
Foreign currency translation effects	–	(30)	(5)	(64)	–	(3)	(102)
Net carrying value as of December 31, 2019	**1,025**	**3,610**	**440**	**2,534**	**1,141**	**218**	**8,968**
Plus: accumulated amortization/impairments	–	274	2,116	1,752	3,912	113	8,165
Gross carrying value as of December 31, 2019	1,025	3,883	2,556	4,286	5,053	331	17,134

1 Amortization of distribution agreements is included within underwriting and policy acquisition costs.

As of December 31, 2019, intangible assets related to non-controlling interests were USD 56 million for present value of future profits (PVFP) of acquired insurance contracts, USD 967 million for distribution agreements, USD 25 million for software, USD 46 million for goodwill, USD 47 million for attorney-in-fact-contracts and USD 4 million for other intangible assets.

As a result of the acquisition of OnePath, intangible assets increased by USD 991 million, of which USD 936 million is goodwill, USD 55 million is distribution agreements and other intangible assets (see note 5). The acquisition of QBE Colombia increased goodwill by USD 23 million. As a result of an acquisition in Slovenia, intangible assets increased by USD 21 million, of which USD 11 million is goodwill and USD 9 million is software. A small acquisition in Germany increased intangible assets by USD 7 million.

Intangible assets by business – prior period

Table 14.4

in USD millions, as of December 31, 2019	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Property & Casualty	–	1,531	–	877	659	193	3,260
Life	–	1,197	388	1,657	63	25	3,330
Farmers	1,025	819	52	–	336	–	2,233
Group Functions and Operations	–	63	–	–	83	–	145
Net carrying value	**1,025**	**3,610**	**440**	**2,534**	**1,141**	**218**	**8,968**

Consolidated financial statements (continued)

15. Receivables and other assets

Receivables and other assets

Table 15

in USD millions, as of December 31	2020	2019
Financial assets		
Group derivative assets	1,763	1,226
Unit-linked derivative assets	26	3
Receivables from policyholders	3,319	3,434
Receivables from insurance companies, agents and intermediaries	5,508	4,999
Receivables arising from ceded reinsurance	1,549	1,465
Reverse repurchase agreements	–	56
Amounts due from investment brokers	949	857
Other receivables	2,505	2,411
Allowance for impairments[1]	(332)	(263)
Accrued premiums	910	895
Accrued investment income[2]	1,576	1,550
Assets for defined benefit plans[3]	630	316
Other financial assets	174	231
Non-financial assets		
Current income tax receivables	903	826
Prepaid expenses	474	437
Other non-financial assets	399	878
Total receivables and other assets	**20,353**	**19,322**

1 Includes receivables arising from ceded reinsurance of USD 88 million and USD 58 million as of December 31, 2020 and 2019, respectively.
2 Accrued investment income on the unit-linked investments amounts to USD 87 million and USD 79 million as of December 31, 2020 and 2019, respectively.
3 See note 20.

Receivables are carried at notional amounts and are generally settled within one year. The notional and fair value amounts are not significantly different.

16. Other liabilities

Table 16.1

Other liabilities

in USD millions, as of December 31	2020	2019
Other financial liabilities		
Group derivative liabilities	481	365
Unit-linked derivative liabilities	1	2
Amounts due to agents & intermediaries	773	844
Liabilities for cash collateral received for securities lending	111	56
Amounts due to investment brokers	1,910	1,444
Bank deposits	–	–
Collateralized bank financing for structured lease vehicles	139	287
Liabilities for defined benefit plans[1]	2,800	2,519
Other liabilities for employee benefit plans	705	705
Lease liabilities	2,082	1,917
Accrued liabilities	2,218	2,192
Other financial liabilities	5,371	5,131
Other non-financial liabilities		
Current income tax payables	756	661
Restructuring provisions	167	106
Other non-financial liabilities	1,579	985
Total other liabilities	**19,094**	**17,214**

1 See note 20.

Table 16.2 shows the maturity schedule of other financial liabilities excluding liabilities for defined benefit plans and lease liabilities as of December 31, 2020 and 2019. The allocation to the time bands is based on the expected maturity date for the carrying value and the earliest contractual maturity for the undiscounted cash flows.

Table 16.2

Maturity schedule – other financial liabilities

in USD millions, as of December 31	2020		2019	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	11,287	11,299	10,460	10,487
1 to 2 years	136	144	108	121
2 to 3 years	67	71	194	203
3 to 4 years	6	7	43	47
4 to 5 years	77	93	7	10
> 5 years	139	240	215	384
Total	**11,711**	**11,854**	**11,027**	**11,252**

Table 16.3

Maturity schedule – lease liabilities

in USD millions, as of December 31	2020		2019	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	235	276	205	249
1 to 2 years	215	252	197	234
2 to 3 years	179	212	182	216
3 to 4 years	155	186	155	183
4 to 5 years	145	172	124	150
> 5 years	1,153	1,478	1,054	1,201
Total	**2,082**	**2,576**	**1,917**	**2,232**

Consolidated financial statements (continued)

Restructuring provisions

Table 16.4

in USD millions	2020	2019
As of January 1	106	258
Provisions made during the period	121	53
Increase of provisions set up in prior years	22	65
Provisions used during the period	(77)	(192)
Provisions reversed during the period	(12)	(8)
Foreign currency translation effects	6	–
Other changes[1]	2	(69)
As of December 31	**167**	**106**

1 Other changes relate to the adjustment of right-of-use assets following the implementation of IFRS 16 'Leases.'

During the year ended December 31, 2020 the ZIC Group incurred total restructuring costs of USD 214 million, of which USD 131 million is due to net increases in restructuring provisions, affecting mainly Property & Casualty in Europe, Middle East & Africa (EMEA) and Farmers.

During the year ended December 31, 2019 the ZIC Group incurred total restructuring costs of USD 160 million, of which USD 110 million is due to net increases in restructuring provisions, affecting mainly Property & Casualty in Europe, Middle East & Africa (EMEA), North America and Life EMEA.

Consolidated financial statements (continued)

17. Income taxes

Table 17.1

Income tax expense – current/deferred split

in USD millions, for the years ended December 31	**2020**	2019
Current	1,400	1,404
Deferred	(89)	302
Total income tax expense/(benefit)	**1,311**	**1,706**

Table 17.2

Expected and actual income tax expense

in USD millions, for the years ended December 31	**Rate**	**2020**	Rate	2019
Net income before income taxes		5,284		5,889
less: income tax (expense)/benefit attributable to policyholders		(46)		(365)
Net income before income taxes attributable to shareholders		5,237		5,524
Expected income tax expense attributable to shareholders computed at the Swiss statutory tax rate	21.0%	1,100	21.0%	1,160
Increase/(reduction) in taxes resulting from:				
Tax rate differential in foreign jurisdictions		(56)		(113)
Tax exempt and lower taxed income		(152)		(123)
Non-deductible expenses		166		138
Tax losses not recognized		68		188
Prior year adjustments and other		139		91
Actual income tax expense attributable to shareholders	**24.1%**	**1,264**	**24.3%**	**1,341**
plus: income tax expense/(benefit) attributable to policyholders		46		365
Actual income tax expense	24.8%	1,311	29.0%	1,706

Table 17.2 sets out the factors that cause the actual income tax expense to differ from the expected expense computed by applying the Swiss statutory tax rate of 21.0 percent, which is the rate applicable in the jurisdiction where the ultimate parent company is resident.

The ZIC Group is required to record taxes on policyholder earnings for life insurance policyholders in certain jurisdictions. Accordingly, the income tax expense or benefit attributable to these life insurance policyholder earnings is included in income tax expense. In certain jurisdictions an accrual for future policy fees that will cover the tax charge is included in insurance benefits and losses.

Taxes paid by certain of the ZIC Group's life insurance businesses are based on the investment result less allowable expenses. To the extent these taxes exceed the amount that would have been payable in relation to the shareholders' share of taxable profits, it is normal practice for certain of the ZIC Group's businesses to recover this portion from policyholders. While the relevant company has the contractual right to charge policyholders for the taxes attributable to their share of the investment result less expenses, the obligation to pay the tax authority rests with the company and therefore, the full amount of tax including the portion attributable to policyholders is accounted for as income tax. Income tax expense therefore includes an element attributable to policyholders.

Consolidated financial statements (continued)

Deferred tax assets/(liabilities) analysis by source

Table 17.3

in USD millions, as of December 31	2020		2019	
	Assets	**Liabilities**	Assets	Liabilities
Gross deferred tax				
Deferred acquisition and origination costs	79	(529)	71	(514)
Depreciable and amortizable assets	215	(141)	208	(141)
Life policyholders' benefits and deposits[1]	256	(4)	5	(8)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	27	(114)	8	(2)
Accruals and deferred income	38	(18)	25	(25)
Reserves for losses and loss adjustment expenses	127	(13)	297	(14)
Reserves for unearned premiums	570	(1)	554	–
Deferred front-end fees	4	–	5	–
Pensions and other employee benefits	513	(37)	481	(56)
Other assets/liabilities	369	(91)	236	(52)
Tax loss carryforwards	423	–	337	–
Gross deferred tax assets/(liabilities) before valuation allowance	2,620	(949)	2,226	(812)
Valuation allowance	(357)		(264)	–
Gross deferred tax assets/(liabilities) after valuation allowance	2,263	(949)	1,963	(812)
Deferred tax assets	**1,314**		**1,151**	
Gross deferred tax				
Deferred acquisition and origination costs	57	(2,643)	22	(2,377)
Depreciable and amortizable assets	473	(1,842)	326	(1,818)
Life policyholders' benefits and deposits[1]	1,533	(1,308)	1,947	(1,087)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	263	(1,672)	248	(1,348)
Accruals and deferred income	183	(90)	170	(99)
Reserves for losses and loss adjustment expenses	281	(612)	228	(484)
Reserves for unearned premiums	244	(76)	217	(70)
Deferred front-end fees	586	–	494	–
Pensions and other employee benefits	375	(382)	386	(348)
Other assets/liabilities	671	(1,285)	682	(1,697)
Tax loss carryforwards	511	–	432	–
Gross deferred tax assets/(liabilities) before valuation allowance	5,179	(9,910)	5,152	(9,329)
Valuation allowance	(404)	–	(357)	–
Gross deferred tax assets/(liabilities) after valuation allowance	4,774	(9,910)	4,796	(9,329)
Deferred tax liabilities		**(5,136)**		**(4,533)**
Net deferred tax liabilities		**(3,822)**		**(3,382)**

1 Includes reserves for unit-linked contracts.

The ZIC Group's deferred tax assets and liabilities are recorded by its tax-paying entities throughout the world, which may include several legal entities within each tax jurisdiction. Legal entities are grouped as a single taxpayer only when permitted by local legislation and when deemed appropriate. The first part of table 17.3 includes single taxpayers with a net deferred tax asset position and the second part includes single taxpayers with a net deferred tax liability position.

As of December 31, 2020 and 2019, the aggregate amount of temporary differences associated with investments in subsidiaries, branches and associates and interests in joint ventures, for which deferred tax liabilities have not been recognized amount to approximately USD 2 billion and USD 2 billion, respectively. In the remote likelihood that these temporary differences were to reverse simultaneously, the resulting tax liabilities would be very limited due to participation exemption rules.

Consolidated financial statements (continued)

Table 17.4

Development of net deferred tax liabilities

in USD millions	2020	2019
As of January 1	(3,382)	(2,790)
Net change recognized in the income statement	89	(302)
Net change recognized in equity	(355)	(606)
Net changes due to acquisitions/(divestments)	24	314
Foreign currency translation effects	(198)	2
As of December 31	**(3,822)**	**(3,382)**
attributable to policyholders	(691)	(675)
attributable to shareholders	(3,131)	(2,707)

The net deferred tax liabilities related to non-controlling interests amounted to USD 175 million and USD 206 million as of December 31, 2020 and 2019, respectively.

Table 17.5

Development of deferred income taxes included in equity

in USD millions	2020	2019
As of January 1	(203)	395
Net unrealized (gains)/losses on available-for-sale investments	(335)	(579)
Cash flow hedges	–	(3)
Revaluation reserve	(5)	4
Net actuarial (gains)/losses on pension plans	(13)	(27)
Foreign currency translation effects	(37)	8
As of December 31	**(593)**	**(203)**

Table 17.6

Tax loss carryforwards and tax credits

in USD millions, as of December 31	2020	2019
For which deferred tax assets have been recognized, expiring		
< 5 years	100	8
5 to 20 years	175	117
> 20 years or with no time limitation	619	456
Subtotal	894	581
For which deferred tax assets have not been recognized, expiring		
< 5 years	121	122
5 to 20 years	371	270
> 20 years or with no time limitation	2,585	1,893
Subtotal	3,077	2,285
Total	**3,971**	**2,866**

The tax rates applicable to tax losses for which a deferred tax asset has not been recognized are 24.5 percent and 24.4 percent as of December 31, 2020 and 2019, respectively.

The recoverability of the deferred tax asset for each taxpayer is based on the taxpayer's ability to utilize the deferred tax asset. This analysis considers the projected taxable income to be generated by the taxpayer, as well as its ability to offset the deferred tax asset against deferred tax liabilities.

Management assesses the recoverability of the deferred tax-asset carrying values based on future years' taxable income projections and believes the carrying values of the deferred tax assets as of December 31, 2020, to be recoverable.

Consolidated financial statements (continued)

18. Senior and subordinated debt

Senior and subordinated debt

Table 18.1

in USD millions, as of December 31		2020	2019
Senior debt			
Zurich Insurance Company Ltd	0.625% CHF 250 million notes, due July 2020[1]	–	260
	2.875% CHF 250 million notes, due July 2021[1]	282	257
	3.375% EUR 500 million notes, due June 2022[1,3]	623	579
	1.875% CHF 100 million notes, due September 2023[1]	121	113
	1.750% EUR 500 million notes, due September 2024[1,3]	627	579
	0.500% CHF 350 million notes, due December 2024[1]	396	362
	0.510% CHF 120 million loan, due December 2024	136	124
	1.500% CHF 150 million notes, due July 2026[1]	188	175
	0.750% CHF 200 million notes, due October 2027[1]	226	206
	1.000% CHF 200 million notes, due October 2028[1]	226	207
	1.500% EUR 500 million notes, due December 2028[1,3]	607	557
	0.100% CHF 250 million notes, due August 2032[1]	283	–
	Various debt instruments payable within 1 year to related parties[4]	14	99
Zurich Holding Comp. of America Inc	2.300% USD 400 million notes, due February 2030[1]	400	–
	Euro Commercial Paper Notes, due in less than 12 months	–	399
Zurich Finance (Australia) Limited	Floating rate AUD 241 million loan, due July 2020	–	169
	3.271% AUD 200 million loan, due May 2023	154	141
	3.477% AUD 350 million notes, due May 2023[1]	270	245
	4.500% AUD 375 million notes, due July 2038[1]	308	175
Zurich Finance (Ireland) DAC	1.625% EUR 500 million notes, due June 2039[1,3]	610	559
Other	Various debt instruments	14	41
Senior debt		5,484	5,247
Subordinated debt			
Zurich Insurance Company Ltd	2.750% CHF 225 million perpetual capital notes, first callable June 2021[1]	254	232
	2.750% CHF 200 million perpetual capital notes, first callable September 2021[1]	229	212
	4.750% USD 1 billion perpetual capital notes, first callable January 2022[1,3]	999	997
	4.250% EUR 1 billion notes, due October 2043, first callable October 2023[1,3]	1,219	1,117
	4.250% USD 300 million notes, due October 2045, first callable October 2025[1,3]	299	299
	5.625% USD 1 billion notes, due June 2046, first callable June 2026[1,3]	997	997
	3.500% EUR 750 million notes, due October 2046, first callable October 2026[1,2,3]	939	853
	5.125% USD 500 million notes, due June 2048, first callable June 2028[1,3]	498	498
	4.875% USD 500 million notes, due October 2048, first callable October 2028[1,3]	498	498
	2.750% EUR 500 million notes, due February 2049, first callable February 2029[1,3]	606	555
Zurich Finance (Ireland) DAC	1.875% EUR 750 million notes, due September 2050, first callable June 2030[1,3]	912	–
	1.600% EUR 200 million notes, due December 2052, first callable September 2032[1,3]	244	–
Zurich Finance (UK) plc	6.625% GBP 450 million perpetual notes, first callable October 2022[1]	613	593
Subordinated debt		8,306	6,852
Total senior and subordinated debt		**13,790**	**12,099**

1 Issued under the Group's Euro Medium Term Note Programme (EMTN Programme).
2 The ZIC Group applied the fair value hedge methodology either partially or in full to hedge the interest rate exposure.
3 These bonds are part of a qualifying net investment hedge to hedge the foreign currency exposure.
4 Loans with subsidiaries of the Group which are not part of ZIC Group.

None of the debt instruments listed in table 18.1 were in default as of December 31, 2020 or December 31, 2019.

To facilitate the issuance of debt, the Group has in place a Euro Medium Term Note Program (EMTN Program) allowing for the issuance of senior and subordinated notes up to a maximum of USD 18 billion. All issuances under this program are either issued or guaranteed by Zurich Insurance Company Ltd. The Group has also issued debt outside this program.

Debt issued is recognized initially at fair value of the consideration received, net of transaction costs incurred, and subsequently carried at amortized cost using the effective interest rate method, unless fair value hedge accounting is applied.

Table 18.2

Maturity schedule of outstanding debt

in USD millions, as of December 31	**2020**		2019	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	793	1,242	969	1,371
1 to 2 years	2,234	2,630	701	1,093
2 to 3 years	1,763	2,072	2,169	2,510
3 to 4 years	1,159	1,393	1,615	1,882
4 to 5 years	299	537	1,065	1,254
5 to 10 years	6,098	6,660	4,845	5,402
> 10 years	1,444	1,627	734	899
Total	**13,790**	**16,162**	**12,099**	**14,410**

Debt maturities reflect original contractual dates, taking early redemption options into account. For call/redemption dates, see table 18.1. The total notional amount of debt due in each period is not materially different from the total carrying value disclosed in table 18.2. Undiscounted cash flows include interest and principal cash flows on debt outstanding as of December 31, 2020 and 2019. Floating interest rates are assumed to remain constant as of December 31, 2020 and 2019. The aggregated cash flows are translated into U.S. dollars at end-of-period rates.

Table 18.3

Development of debt arising from financing activities

in USD millions		**Total**
	2020	2019
As of January 1	12,099	12,111
Issuance of debt recognized in cash flows	2,028	1,398
Repayment of debt recognized in cash flows	(1,120)	(1,370)
Changes in fair value	9	60
Other changes	(14)	(13)
Foreign currency translation effects	789	(86)
As of December 31	**13,790**	**12,099**

19. Shareholders' equity

Share capital

Table 19.1

number of shares, as of December 31	**2020**	2019
Issued share capital, CHF 10 par value	82,500,000	82,500,000

a) Issued share capital

As of December 31, 2020 the issued share capital of Zurich Insurance Company Ltd amounted to CHF 825,000,000, consisting of 82,500,000 fully paid registered shares with a par value of CHF 10.00 each.

b) Additional paid-in capital

On April 25, 2008, a subordinated loan agreement was entered into between Zurich Insurance Company Ltd and Zurich Group Holding, which was transferred to Zurich Insurance Group Ltd as a consequence of its merger with Zurich Group Holding. The remaining loan was CHF 2.1 billion (USD 2.1 billion) in each of the years ended December 31, 2020 and 2019.

The loan is undated and pays interest subject to solvency thresholds and the payment of interest is optional if Zurich Insurance Company Ltd does not declare or pay any dividends or other profit distributions to its shareholders.
The loan is classified as an equity instruments under IFRS as it meets the classification criteria as such under IAS 32.

20. Employee benefits

ZIC Group personnel and other related costs incurred were USD 6.5 billion and USD 6.2 billion for the years ended December 31, 2020 and 2019, respectively, including wages, salaries and social security contributions of USD 5.9 billion and USD 5.5 billion respectively.

The ZIC Group operates a number of retirement benefit arrangements for employees. Historically, the majority of employees belonged to defined benefit pension plans and some will still have past service benefits accrued in those plans.

However, the majority of employees now accrue benefits under defined contribution plans, which provide benefits equal to the amounts contributed by both the employer and the employee plus investment returns.

Certain of the ZIC Group's operating companies also provide post-employment benefit plans covering medical care and life insurance, mainly in the U.S. Eligibility for these plans is generally based on completion of a specified period of eligible service and reaching a specified age. The plans typically pay a stated percentage of medical expenses subject to deductibles and other factors. The cost of post-employment benefits is accrued during the employees' service periods.

The Group Pensions Committee is responsible for developing, reviewing and advising on the ZIC Group governance framework in matters related to pension and post-employment benefit arrangements. It provides oversight and guidance in the areas of market, demographic and reputational risk. It reports to and makes recommendations to the Group Balance Sheet Committee on material pension-related matters and reports regularly to the Remuneration Committee. The Group Pensions Committee provides a point of focus and co-ordination on the topic of pensions and post-retirement benefits at ZIC Group level for the supervision and exercise of company powers and obligations in relation to pension and post-retirement benefit plans.

Funding and asset allocation is subject to local legal and regulatory requirements.

a) Defined benefit pension plans

The largest defined benefit obligations are in the pension plans in Switzerland, the UK, the U.S. and Germany, which together comprise over 90 percent of the ZIC Group's total defined benefit obligation. The remaining plans in other countries are not individually significant, therefore no separate disclosure is provided.

Certain ZIC Group companies provide defined benefit pension plans, some of which provide benefits on retirement, death or disability related to employees' service periods and pensionable earnings. Others provide cash balance plans where the participants receive the benefit of the accumulated employer and employee contributions (where paid) together with additional cash credits in line with the rules of the plan.

Most of the ZIC Group's defined benefit pension plans are funded through contributions by the ZIC Group and, in some cases also by employees, to investment vehicles managed by trusts or foundations independent of the ZIC Group's finances, or by management committees with fiduciary responsibilities. Where a trust or foundation exists, it is required by law or by articles of association to act in the interests of the fund and of all relevant beneficiaries to the plan, which can also include the sponsoring company, and is responsible for the investment policy with regard to the assets of the fund. The trust/foundation board or committee is usually composed of representatives from both employers and plan members. Independent actuarial valuations for the plans are performed as required. It is the ZIC Group's general principle that plans are appropriately funded in accordance with local pension regulations in each country.

The pension plans typically expose the company to risks such as interest rate, price inflation, longevity and salary. To the extent that pension plans are funded, the assets held mitigate some of the liability risk but introduce some investment risk.

The overall investment policy and strategy for the ZIC Group's defined benefit pension plans is to achieve an investment return which, together with contributions, targets having sufficient assets to pay pension benefits as they fall due while also mitigating the various risks in the plans. The actual asset allocation is determined by reference to current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. The ZIC Group has a governance framework to ensure the trust/foundation board or committee considers how the asset investment strategy correlates with the maturity profile of the plan liabilities and the potential impact on the funding status of the plans, including short-term liquidity requirements. The investment strategies for each pension plan are independently determined by the governance body in each country, with oversight by the Group Pensions Committee. The pension assets are invested in diversified portfolios across geographical regions and asset classes to ensure diversified returns, also taking into account local pension laws. The investment strategies aim to mitigate asset-liability mismatches in the long run. In recent years, the integration of environmental, social and governance (ESG) factors has become a significant element of ZIC Group's pension plans' investment decision making. Pension plans will continue progressing on their responsible investment journey, leveraging ZIC Group's expertise and leadership while being cognizant of their fiduciary responsibility.

For post-employment defined benefit plans, total contributions to funded plans and benefits paid directly by the ZIC Group were USD 268 million for 2020 compared with USD 282 million for 2019. The estimated total for 2021 is USD 325 million (actual amount may differ).

Swiss pension plan
The main plan provides benefits that exceed the minimum benefit requirements under Swiss pension law. It provides a lifetime pension to members based on their accrued retirement savings in the basic and additional accounts multiplied by the applicable conversion rate at the normal retirement age of 65 (age 62 for Executive Staff). Participants can draw retirement benefits early from age 60 (age 58 for Executive Staff). Alternatively, the benefit can be taken as a lump sum payment at retirement. In addition, at retirement, the plan pays a one-off cash sum settlement equal to the accrued retirement savings in the capital account. Contributions to the plan are paid by the employees and the employer, both for retirement savings and to finance risk benefits paid out in the event of death and disability. The accumulated balance on the pension account is based on the employee and employer pension contributions and interest accrued. The interest rate credited is defined annually by the plan's Board of Trustees which is responsible for the governance of the plan. The trustees review the Pension Plan's funding status regularly as well as the technical interest rate and the conversion rates. The conversion rate at age 65 is currently being phased down to 5 percent until 2023 to align it more closely with the low interest rate environment and increased life expectancy. In 2018, both the employer and employee savings contributions were increased. The insured salary was increased by reducing the coordination deduction. The flexibility of the plan was improved by introducing three levels of savings. Top-up payments from the company were introduced to those members' pension accounts which had been part of the plan in 2017 and were affected by the changes. For them, this ensures that expected benefits at normal retirement age will be at least equal to 98.5 percent of their pensions expectations under the previous conversion rates. The top up payments will be made until 2023.

Although the Swiss plan operates like a defined contribution plan under local regulations, it is accounted for as a defined benefit pension plan under IAS 19 'Employee Benefits' because of the need to accrue a minimum level of interest on the mandatory part of the pension accounts and the payment of a lifetime pension at a fixed conversion rate under the plan rules.

Actuarial valuations are completed annually and if the plan becomes underfunded under local regulations, options for dealing with this include the ZIC Group paying additional contributions into the plan and/or reducing future benefits. At present, the plan is sufficiently funded, meaning that no additional contributions into the plans are expected to be required in the next year. The investment strategy of the Swiss plan is constrained by Swiss pension law including regulations related to diversification of plan assets. Under IAS 19, volatility arises in the Swiss pension plan net asset because the fair value of the plan assets is not directly correlated to movements in the value of the plan's defined benefit obligation in the short-term.

UK pension plan
The major UK pension plan is a hybrid arrangement and defined benefits entitlements accrued to December 31, 2015 increase in line with salary increases. Normal retirement age for the plan is 60. The plan is split into distinct sections and the two defined benefit sections are closed to new entrants and, with effect from January 1, 2016, to future benefit accrual. All employees now participate in a defined contribution section within the same trust. The notes that follow consider only the defined benefit sections. The UK Pension Trustee Board is responsible for the governance of the plan. The employer contributions are determined based on regular triennial actuarial valuations which are conducted using assumptions agreed by the Trustee Board and the sponsoring company. A local statutory valuation was carried out at an effective date of June 30, 2019 and was finalized in September 2020. This valuation disclosed a funding surplus of USD 86 million (GBP 63 million) after taking into account the value of the asset-backed funding arrangement established in 2014.

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The ongoing funding of the plan is closely monitored by the Trustee Board and a dedicated funding committee is made up of representatives from the Trustee Board and the Group. The plan rules and UK pension legislation set out maximum levels of inflationary increases applied to plan benefits. The plan assets are invested in diversified classes of assets.

U.S. pension plans

There are two major pension plans in the U.S., the Zurich North America (ZNA) pension plan and the Farmers Group, Inc. (FGI) pension plan. Both plans are funded entirely by the participating employers. The ZNA plan is a cash balance and the FGI pension plan utilizes a cash balance pension formula for benefits accruing after January 1, 2009, except with respect to certain grandfathered participants who retained a final average pay formula. Under a cash balance pension formula, an amount is credited to the cash balance account each quarter, determined by an employee's age, service and their level of earnings up to and above the social security taxable wage base. The minimum annual interest credited on the account balance is 5 percent. The cash balance account is available from age 65, or age 55 with five years of service. The benefit can be taken as a monthly annuity or as a lump sum. Both the ZNA plan and the FGI pension plan have fiduciaries as required under local pension laws. The fiduciaries are responsible for the governance of the plans. Actuarial valuations are completed regularly. The annual employer minimum required contributions are equal to expected expenses paid from the plan each year, plus a rolling amortization of any prior underfunding.

The ZNA and FGI plans have been frozen with effect from December 31, 2018. ZNA and FGI employees with a cash balance account will continue to earn interest credits on their existing cash balance account balance after the freeze date and will continue to earn eligibility service used to determine vesting and early retirement eligibility. FGI employees participating in the final average pay formula will continue to earn eligibility service used to determine vesting and the percentage of pension benefit payable for early retirement before normal retirement age of 65. ZNA and FGI employees earn only defined contribution retirement benefits with effect from January 1, 2019. In conjunction with the change in the pension plan, ZNA and FGI employees receive an additional company contribution within their defined contribution plan.

German pension plans

There are a number of legacy defined benefit plans in Germany, most of which were set up under works council agreements. Contributions to support the pension commitments are made to a contractual trust arrangement. A separate arrangement was also established in 2010 to provide for retirement obligations that were in payment at that time. Consideration is given from time to time based on the fiscal efficiency of adding recent retirees to this arrangement and to adding assets to the contractual trust.

The defined benefit plans provide benefits on either a final salary, career average salary or a cash balance basis. New entrants participate in a cash balance arrangement, which has the characteristics of a defined contribution arrangement, with a lump sum paid at retirement and a capital guarantee on members' balances, which mirrors the capital guarantee given in a conventional life insurance arrangement in Germany.

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Tables 20.1a and 20.1b set out the reconciliation of the defined benefit obligation and plan assets for the ZIC Group's post-employment defined benefit plans.

Movement in defined benefit obligation and fair value of assets – current period

Table 20.1a

in USD millions	Defined benefit obligation	Fair value of assets	Asset ceiling	Net defined benefit asset/ (liability)
As of January 1, 2020	(22,838)	21,071	(436)	(2,203)
Net post-employment benefit (expense)/income:				
Current service cost	(168)	–	–	(168)
Interest (expense)/income	(315)	275	–	(40)
Settlements gains/(losses)	6	(5)	–	1
Past service (cost)/credit	(3)	–	–	(3)
Net post-employment benefit (expense)/income	(480)	269	–	(210)
Remeasurement effects included in other comprehensive income:				
Return on plan assets excluding interest income	–	2,271	–	2,271
Experience gains/(losses)	(174)	–	–	(174)
Actuarial gains/(losses) arising from changes in demographic assumptions	(50)	–	–	(50)
Actuarial gains/(losses) arising from changes in financial assumptions	(2,027)	–	–	(2,027)
Change in asset ceiling	–	–	(30)	(30)
Remeasurement effects included in other comprehensive income	(2,251)	2,271	(30)	(10)
Employer contributions	–	233	–	233
Employer contributions paid to meet benefits directly	35	–	–	35
Plan participants' contributions	(71)	71	–	–
Payments from the plan (incl. settlements)	820	(820)	–	–
Foreign currency translation effects	(1,154)	1,141	–	(14)
As of December 31, 2020	**(25,939)**	**24,236**	**(467)**	**(2,170)**
of which: Assets for defined pension plans				630
of which: Liabilities for defined pension plans				(2,800)

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Movement in defined benefit obligation and fair value of assets – prior period

Table 20.1b

in USD millions	Defined benefit obligation	Fair value of assets	Asset ceiling	Net defined benefit asset/ (liability)
As of January 1, 2019	(20,593)	18,447	(113)	(2,260)
Net post-employment benefit (expense)/income:				
Current service cost	(138)	–	–	(138)
Interest (expense)/income	(432)	373	–	(59)
Settlements gains/(losses)	29	(24)	–	5
Past service (cost)/credit	(7)	–	–	(7)
Net post-employment benefit (expense)/income	(547)	349	–	(199)
Remeasurement effects included in other comprehensive income:				
Return on plan assets excluding interest income	–	2,350	–	2,350
Experience gains/(losses)	(89)	–	–	(89)
Actuarial gains/(losses) arising from changes in demographic assumptions	404	–	–	404
Actuarial gains/(losses) arising from changes in financial assumptions	(2,308)	–	–	(2,308)
Change in asset ceiling	–	–	(323)	(323)
Remeasurement effects included in other comprehensive income	(1,992)	2,350	(323)	35
Employer contributions	–	252	–	252
Employer contributions paid to meet benefits directly	35	–	–	35
Plan participants' contributions	(65)	65	–	–
Payments from the plan (incl. settlements)	828	(828)	–	–
Foreign currency translation effects	(503)	437	–	(67)
As of December 31, 2019	**(22,838)**	**21,071**	**(436)**	**(2,203)**
of which: Assets for defined pension plans				316
of which: Liabilities for defined pension plans				(2,519)

Net post-employment benefit (expense)/income is recognized in other employee benefits, which is included within administrative and other operating expense.

Post-employment benefits are long-term by nature. However, short-term variations between long-term actuarial assumptions and actual experience may be positive or negative, resulting in actuarial gains or losses, which are recognized in full in the period in which they occur and are included within other comprehensive income.

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Table 20.2 provides a breakdown of plan assets by asset class.

Table 20.2

Fair value of assets held in funded defined benefit pension plans

in USD millions, as of December 31	2020				2019			
	Quoted in active markets	**Other**	**Total**	**% of Total**	Quoted in active markets	Other	Total	% of Total
Cash and cash equivalents	581	–	581	2%	432	–	432	2%
Equity securities	5,538	203	5,742	24%	4,629	159	4,788	23%
Debt securities	91	17,822	17,913	74%	91	15,098	15,190	72%
Investment property	–	1,742	1,742	7%	–	1,495	1,495	7%
Mortgage loans	–	397	397	2%	–	325	325	2%
Other assets[1]	–	(2,139)	(2,139)	(9%)	–	(1,158)	(1,158)	(5%)
Total	**6,211**	**18,025**	**24,236**	**100%**	**5,152**	**15,919**	**21,071**	**100%**

1 In 2020, the ZIC Group changed presentation of amounts payable under repurchase agreements in table 20.2. These payables are disclosed as other assets, in the consolidated financial statements of 2019 they were disclosed as cash and cash equivalents. Prior year figures have been restated for comparative purposes.

For the classification of pension assets the ZIC Group follows the same principles as outlined in note 23 (Fair value measurement). Assets meeting the criteria of Level 1 are generally considered quoted in active markets, while assets meeting the criteria of Level 2 or Level 3 are generally considered in other assets.

Tables 20.3a and 20.3b provide a breakdown of the key information included in tables 20.1a and 20.1b for the main countries for the years ended December 31, 2020 and 2019, respectively.

Table 20.3a

Key information by main country – current period

in USD millions, as of December 31, 2020	**Switzerland**	**United Kingdom**	**United States**	**Germany**	**Other**	**Total**
Defined benefit obligation	(5,643)	(13,257)	(3,968)	(1,605)	(1,465)	(25,939)
Fair value of plan assets	6,274	11,371	3,699	1,604	1,287	24,236
Impact of asset ceiling	(412)	(55)	–	–	–	(467)
Net defined benefit asset/(liability)	**219**	**(1,941)**	**(269)**	**(1)**	**(178)**	**(2,170)**
of which: Assets for defined pension plans	232	–	207	147	44	630
of which: Liabilities for defined pension plans	(13)	(1,941)	(476)	(148)	(222)	(2,800)
Net post-employment benefit (expense)/income	(96)	(44)	(22)	(21)	(29)	(210)

Table 20.3b

Key information by main country – prior period

in USD millions, as of December 31, 2019	Switzerland	United Kingdom	United States	Germany	Other	Total
Defined benefit obligation	(4,843)	(11,608)	(3,707)	(1,430)	(1,250)	(22,838)
Fair value of plan assets	5,442	9,787	3,386	1,370	1,086	21,071
Impact of asset ceiling	(407)	(30)	–	–	–	(436)
Net defined benefit asset/(liability)	**192**	**(1,851)**	**(321)**	**(60)**	**(164)**	**(2,203)**
of which: Assets for defined pension plans	203	–	–	81	31	316
of which: Liabilities for defined pension plans	(11)	(1,851)	(321)	(141)	(195)	(2,519)
Net post-employment benefit (expense)/income[1]	(67)	(61)	(34)	(21)	(15)	(199)

1 In 2020 the ZIC Group changed the presentation of a past service credit resulting in USD 5 million difference in column 'Other' compared to the 2019 consolidated financial statements.

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Table 20.4 shows the key financial assumptions used to calculate the ZIC Group's post-employment defined benefit obligations and the ZIC Group's post-employment benefit expenses.

Key financial assumptions used for major plans

Table 20.4

as of December 31	2020				2019			
	Switzerland	United Kingdom	United States	Germany	Switzerland	United Kingdom	United States	Germany
Discount rate	0.0%	1.3%	2.5%	0.6%	0.2%	1.9%	3.2%	0.9%
Inflation rate (CPI)[1]	1.1%	1.9%	2.2%	1.4%	1.2%	1.9%	2.0%	1.4%
Salary increase rate	1.1%	2.8%	4.7%	2.7%	1.2%	2.8%	4.5%	2.7%
Expected future pension increases	0.1%	3.4%	n/a	1.4%	0.1%	3.5%	n/a	1.4%
Interest crediting rate	0.3%	n/a	5.0%	n/a	0.3%	n/a	5.0%	n/a

1 In the UK part of the liability is linked to the inflation measure of the Retail Price Index (RPI), which is assumed to be 1.0 percent higher than the Consumer Price Index (CPI) as of both December 31, 2020 and 2019. As RPI is expected to converge with CPI no earlier than in 2030, the RPI assumption for the UK was kept 1.0 percent higher than CPI for durations up to and including 2029 and the same as CPI for 2030 onwards as of December 31, 2020 (1.0 percent higher than CPI at all durations as of December 31, 2019).

Tables 20.5a and 20.5b set out the life expectancies used in the valuation of the ZIC Group's major plans. The mortality assumptions in each country have been based on mortality tables in accordance with typical practice in that country.

Mortality tables and life expectancies for major plans – current period

Table 20.5a

in years, as of December 31, 2020		Life expectancy at age 65 for a male currently		Life expectancy at age 65 for a female currently	
		aged 65	aged 45	aged 65	aged 45
Country	Mortality table for major plans				
Switzerland	BVG 2015 with generational projections according to CMI model adapted to Swiss mortality with a long-term trend rate of 1.25%	21.70	23.90	23.70	25.70
United Kingdom	SAPS Series 3 with CMI_2019 projection with plan specific adjustments	21.93	22.93	23.92	25.12
United States	Pri-2012 with MP-2020 Generational projection and white collar adjustment	21.74	23.12	23.14	24.49
Germany	Heubeck 2018G	20.33	23.10	23.81	26.04

Mortality tables and life expectancies for major plans – prior period

Table 20.5b

in years, as of December 31, 2019		Life expectancy at age 65 for a male currently		Life expectancy at age 65 for a female currently	
		aged 65	aged 45	aged 65	aged 45
Country	Mortality table for major plans				
Switzerland	BVG 2015 with generational projections according to CMI model adapted to Swiss mortality with a long-term trend rate of 1.25%	21.60	23.20	23.60	25.10
United Kingdom	113% of S3PMA Light (males) or 100% of S3PFA (females) with CMI_2018 projection using a long-term rate of 1.0%	21.83	22.83	23.73	24.93
	Pri-2012 with MP-2019 Generational projection and white collar adjustment	21.99	23.51	23.40	24.94
United States	RP 2014 with plan specific adjustments	21.30	22.26	23.31	24.21
Germany	Heubeck 2018G	20.18	22.96	23.69	25.93

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Table 20.6 shows the expected benefits to be paid under the ZIC Group's major plans in the future. It should be noted that actual amounts may vary from expected amounts. Therefore, future benefit payments may differ from the amounts shown.

Maturity profile of future benefit payments for major plans

Table 20.6

as of December 31	2020				2019			
	Switzerland	United Kingdom	United States	Germany	Switzerland	United Kingdom	United States	Germany
Duration of the defined benefit obligation (in years)	14.8	20.2	12.3	13.5	15.3	19.8	12.5	14.2
Maturity analysis of benefits expected to be paid (in USD millions):								
< 1 year	253	353	298	83	221	343	227	49
1 to 5 years	1,049	1,634	859	264	917	1,449	892	231
5 to 10 years	1,283	2,572	1,046	335	1,117	2,340	1,065	297

Table 20.7 sets out the sensitivity of the defined benefit obligation to changes in key actuarial assumptions. The effect on the defined benefit obligation shown allows for an alternative value for each assumption while the other actuarial assumptions remain unchanged. While this table illustrates the overall impact on the defined benefit obligation of the changes shown, the significance of the impact and the range of reasonably possible alternative assumptions may differ between the different plans that comprise the overall defined benefit obligation. In particular, the plans differ in benefit design, currency and average term, meaning that different assumptions have different levels of significance for different plans. The sensitivity analysis is intended to illustrate the inherent uncertainty in the evaluation of the defined benefit obligation under market conditions at the measurement date. Its results cannot be extrapolated due to non-linear effects that changes in the key actuarial assumptions may have on the overall defined benefit obligation. Furthermore, the analysis does not indicate a probability of such changes occurring and it does not necessarily represent the ZIC Group's view of expected future changes in the defined benefit obligation. Any management actions that may be taken to mitigate the inherent risks in the post-employment defined benefit plans are not reflected in this analysis.

Sensitivity analysis of significant actuarial assumptions

Table 20.7

	Defined benefit obligation[1]	
in USD millions, as of December 31	2020	2019
Discount rate +50 bps	2,093	1,824
Discount rate –50 bps	(2,395)	(2,093)
Salary increase rate +50 bps	(87)	(73)
Salary decrease rate –50 bps	88	70
Price inflation increase rate +50 bps	(1,078)	(1,038)
Price inflation decrease rate –50 bps	961	903
Cash balance interest credit rate +50 bps	(93)	(76)
Cash balance interest credit rate –50 bps	89	72
Mortality 10% increase in life expectancy	(2,445)	(2,162)
Mortality 10% decrease in life expectancy	2,480	2,086

1 A negative number indicates an increase and a positive number indicates a decrease in the defined benefit obligation.

b) Defined contribution pension plans

Certain of the ZIC Group's companies sponsor defined contribution pension plans. Eligibility for participation in such plans is either immediate on commencement of employment or based on completion of a specified period of continuous service. The plans provide for voluntary contributions by employees and contributions by the employer which typically range from 2 percent to 12 percent of annual pensionable salary, depending on a number of factors. The ZIC Group's contributions under these plans amounted to USD 279 million and USD 283 million for the years ended December 31, 2020 and 2019, respectively.

21. Share-based compensation and cash incentive plans

The ZIC Group has adopted various share-based compensation and cash incentive plans to attract, retain and motivate executives and employees. The plans are designed to reward employees for their contribution to the performance of the ZIC Group and to encourage employee share ownership. Share-based compensation plans include plans under which shares and options to purchase shares, based on the performance of the businesses, can be awarded. Share-based compensation plans are based on the provision of Zurich Insurance Group Ltd shares, the ultimate parent which is not part of the ZIC Group.

a) Cash incentive plans
Various businesses throughout the ZIC Group operate short-term incentive programs for executives, management and, in some cases, for employees of that business. Awards are made in cash, based on the accomplishment of both organizational and individual performance objectives. The expense recognized for these cash incentive plans amounted to USD 531 million and USD 510 million for the years ended December 31, 2020 and 2019, respectively.

b) Share-based compensation plans for employees and executives
The ZIC Group encourages employees to own shares in Zurich Insurance Group Ltd and has set up a framework based on the implementation of performance share programs. Actual plans are tailored to meet local market requirements.

The cost of share-based payments depends on various factors, including achievement of targets, and are subject to the discretion of the Remuneration Committee and the Board. Costs may therefore vary significantly from year to year. The net amounts of USD 339 million and USD 348 million for the years ended December 31, 2020 and 2019, respectively, reflect all aspects of share-based compensation, including adjustments made during the year.

The explanations below provide a more detailed overview of the main plans of the ZIC Group.

Employee share plans
Share Incentive Plan for employees in the UK
The ZIC Group established an Inland Revenue approved Share Incentive Plan and launched the Partnership Shares element of this plan in 2003, which enabled participating employees to make monthly purchases of Zurich Insurance Group Ltd shares at the prevailing market price from their gross earnings. This plan was terminated in 2007. There were 25 and 34 participants in the plan as of December 31, 2020 and 2019, respectively.

A revised Partnership Share Scheme was launched in March 2013. Participants benefit from purchasing shares by making deductions from gross salary up to a maximum of GBP 1,800 or 10 percent of their year-to-date earnings. There were 690 and 658 active participants in the plan as of December 31, 2020 and 2019, respectively.

The ZIC Group also operates a profit-sharing element of the Share Incentive Plan (Reward Shares) which was launched in 2004 with annual share allocations being made in May each year subject to business performance. The awards are based on business operating profit (BOP) after tax for the year achieved by the business unit of each participating employee. Individual awards are subject to a maximum of 5 percent of a participant's base salary (before any flexible benefit adjustments) with an overall maximum of GBP 3,600. The total number of participating employees in Reward Shares as of December 31, 2020 and 2019 was 4,280 and 2,612, respectively.

A Dividend Shares scheme was launched in 2014 which allows employees to reinvest their dividends from Partnership Shares 3 and Reward Shares 3. As of December 31, 2020 and 2019, there were 522 and 439 participants in the scheme, respectively.

Share Incentive Plan for employees in Switzerland
Under this plan, employees have the option to acquire sales-restricted shares at a 30 percent discount to the market value. The maximum permitted investment in shares is equivalent to CHF 3,500 per employee per annum. During 2020, 4,145 employees were eligible to participate in the share incentive plan, compared with 4,096 in 2019. For the years ended December 31, 2020 and 2019, 2,080 and 1,761 employees, respectively, purchased shares under the 2019 and 2020 share plans.

The Group Long-Term Incentive Plan (LTIP)
Participants in this plan are allocated a target number of performance shares as notional shares of Zurich Insurance Group Ltd in April each year (target shares). The number of target shares is calculated as a percentage of annual base salary of each participant.

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Target shares allocated in 2020 will vest after a period of three years following the year of allocation (three year cliff vesting), with the actual level of vesting between 0 percent and 200 percent of the target shares allocated, depending on the achievement of pre-defined performance criteria. The performance criteria used to determine the level of vesting are the Group's return on shareholders' equity (ROE), the position of its relative total shareholder return (TSR) measured against an international peer group of insurance companies, and the achievement of cash remittance targets. The three pre-defined performance criteria are each assessed over a period of three consecutive financial years starting in the year of allocation and have an equal weighting. One half of the shares that actually vest are sales-restricted for a further three years for members of the Executive Committee. To further align the participants with the interests of the shareholders, effective from January 1, 2014, the target shares are credited with dividend equivalent shares during the vesting period to compensate participants in LTIP for dividends paid to Zurich Insurance Group Ltd shareholders. As of December 31, 2020 and 2019 there were 1,162 and 1,133 participants in this plan, respectively.

Table 21

Shares allocated during the period

for the years ended December 31	Number		Fair value at the allocation date (in CHF)	
	2020	2019	**2020**	2019
Shares allocated during the period	510,046	517,101	333	333

The shares allocated each year are based on target under the Group's LTIP. The level of vesting will depend on the level of achievements in the performance criteria. If the vesting level is different to target, the actual cost of the share-based payments is adjusted accordingly in the year when the level of vesting is determined.

22. Commitments and contingencies, legal proceedings and regulatory investigations

The ZIC Group has provided contractual commitments and financial guarantees to external parties, associates and joint ventures as well as partnerships. These arrangements include commitments under certain conditions to make liquidity advances to cover default principal and interest payments, make capital contributions or provide equity financing.

Quantifiable commitments and contingencies

Table 22.1

in USD millions, as of December 31	**2020**	2019
Remaining commitments under investment agreements	3,695	1,398
Guarantees and letters of credit[1]	974	1,003
Undrawn loan commitments	1	1
Other commitments and contingent liabilities[2,3]	306	732

1 Guarantee features embedded in life insurance products are not included.
2 Includes USD 95 million future cash outflows, that the ZIC Group as lessee is potentially exposed to which are not reflected in the measurement of lease liabilities in the balance sheet.
3 Of which USD 47 million represents a lease agreement in UK commencing in 2022 (sale and leaseback of a new building).

Commitments under investment agreements

The ZIC Group has committed to contribute capital to third parties that engage in making investments in direct private equity, private equity funds and real estate. Commitments may be called by the counterparty over the term of the investment (generally three to five years) and must be funded by the ZIC Group on a timely basis.

Guarantees and letters of credit

In 2020 and 2019, USD 649 million and USD 629 million, respectively, related to guarantees in the aggregate amount of GBP 475 million which were provided to the directors of a wholly owned subsidiary in connection with the repatriation of capital. These guarantees have no expiry date.

The ZIC Group knows of no event of default that would require it to satisfy financial guarantees. Irrevocable letters of credit have been issued to secure certain reinsurance contracts.

The ZIC Group is active in numerous countries where insurance guarantee funds exist. The design of such funds varies from jurisdiction to jurisdiction. In some, funding is based on premiums written, in others the ZIC Group may be called upon to contribute to such funds in case of a failure of another market participant. In addition, in some jurisdictions the amount of contribution may be limited, for example, to a percentage of the net underwriting reserve net of payments already made.

The ZIC Group carries certain contingencies in the ordinary course of business in connection with the sale of its companies and businesses. These are primarily in the form of indemnification obligations provided to the acquirer in a transaction in which a ZIC Group company is the seller. They vary in scope and duration by counterparty and generally are intended to shift the potential risk of certain unquantifiable and unknown loss contingencies from the acquirer to the seller.

Zurich Insurance Group Ltd has provided unlimited guarantees in support of entities belonging to the Zurich Capital Markets group of companies.

Other contingent liabilities

The ZIC Group has received notices from various tax authorities asserting deficiencies in taxes for various years. The ZIC Group is of the view that the ultimate outcome of these reviews will not materially affect the ZIC Group's consolidated financial position.

The ZIC Group has commitments to provide collateral on certain contracts in the event of a financial strength downgrading for Zurich Insurance Company Ltd from the current AA– by Standard & Poor's. Should the rating by Standard & Poor's fall to A+, then the additional collateral based on information available amounts to nil as of both December 31, 2019 and 2020.

In common with other insurance companies, the ZIC Group is mindful of the trend toward enhanced consumer protection. There is significant uncertainty about the ultimate cost this trend might have on our business. The main areas of uncertainty concern court decisions as well as the volume of potential customer complaints related to sales activities and withdrawal rights, and their respective individual assessments.

Pledged assets

The majority of assets pledged to secure the ZIC Group's liabilities relate to debt securities pledged under short-term sale and repurchase agreements. The total amount of pledged financial assets including the securities under short-term sale and repurchase agreements amounted to USD 1.5 billion and USD 1.4 billion as of December 31, 2020 and 2019, respectively.

Terms and conditions associated with the financial assets pledged to secure the ZIC Group's liabilities are usual and standard in the markets in which the underlying agreements were executed.

Legal, compliance and regulatory developments

In recent years there has been an increase in the number of legislative initiatives that require information gathering and tax reporting regarding the ZIC Group's customers and their contracts, including the U.S. Foreign Account Tax Compliance Act (FATCA) and the expected introduction of other automatic tax information exchange regimes based on the Common Reporting Standard (CRS). The ZIC Group's compliance activities in this area could result in higher compliance costs, remedial actions and other related expenses for its life insurance, savings and pension business. There has also been increased scrutiny by various tax and law enforcement officials regarding cross-border business activities, including in particular by U.S. government authorities looking into activities of U.S. taxpayers with investments held outside the U.S. and activities of non-U.S. financial institutions that hold such investments.

The ZIC Group, on its own initiative, undertook an internal review of the life insurance, savings and pension business sold by its non-U.S. operating companies with relevant cross-border business to customers with a nexus to the U.S. The ZIC Group engaged outside counsel and other advisors to assist in this review, which was focused on assessing compliance with relevant U.S. tax laws. The review confirmed that the ZIC Group's cross-border business with U.S. persons was very limited and of a legacy nature, with the large majority of sales having occurred more than a decade ago. The review also confirmed that the ZIC Group's U.S. operating companies were not involved in or connected to those activities.

The ZIC Group has voluntarily disclosed the results of the review and the regulatory issues presented by sales to U.S. residents to the Swiss Financial Market Supervisory Authority (FINMA), the U.S. Department of Justice (DOJ) and other authorities. The ZIC Group is cooperating with these authorities.

On April 25, 2019, the DOJ announced that Zurich Life Insurance Company Ltd (ZLIC) and Zurich International Life Limited (ZILL) entered into a non-prosecution agreement (NPA) with the DOJ, which memorializes the DOJ's decision not to prosecute these entities for any U.S. tax-related offenses in connection with legacy cross-border sales to U.S. persons. Under the terms of the NPA, ZLIC and ZILL agreed to pay USD 5 million to the U.S. Treasury and to comply with certain specified conditions during the four-year term of the NPA.

This resolution has not had and will not have an adverse effect on the ZIC Group's operating results or consolidated financial condition.

Legal proceedings and regulatory investigations

The ZIC Group's business is subject to extensive supervision, and the ZIC Group is in regular contact with various regulatory authorities. The ZIC Group is continuously involved in legal proceedings, claims and regulatory investigations arising, for the most part, in the ordinary course of its business operations.

While the ZIC Group believes that it is not a party to, nor are any of its subsidiaries the subject of, any unresolved current legal proceedings, claims, litigation and investigations that will have a material adverse effect on the ZIC Group's consolidated financial condition, proceedings are inherently unpredictable, and it is possible that the outcome of any proceeding could have a material impact on results of operations in the particular reporting period in which it is resolved.

23. Fair value measurement

To measure fair value, the ZIC Group gives the highest priority to quoted and unadjusted prices in active markets. In the absence of quoted prices, fair values are calculated through valuation techniques, making the maximum use of relevant observable market data inputs. Whenever observable parameters are not available, the inputs used to derive the fair value are based on common market assumptions that market participants would use when pricing assets and liabilities. Depending on the observability of prices and inputs to valuation techniques, the ZIC Group classifies instruments measured at fair value within the following three levels (the fair value hierarchy):

Level 1 – includes assets and liabilities for which fair values are determined directly from unadjusted current quoted prices resulting from orderly transactions in active markets for identical assets/liabilities.

Level 2 – includes assets and liabilities for which fair values are determined using significant inputs other than quoted prices included in level 1 that are observable for the asset or liability, either directly or indirectly. These inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and other observable market inputs.

Level 3 – includes assets and liabilities for which fair values are determined using valuation techniques with at least one significant input not being based on observable market data. This approach is used only in circumstances when there is little, if any, market activity for a certain instrument, and the ZIC Group is required to rely on third-party providers or develop internal valuation inputs based on the best information available about the assumptions that market participants would use when pricing the asset or liability.

The governance framework and oversight of the ZIC Group's standards and procedures regarding the valuation of financial instruments measured at fair value lies within the responsibility of Group Risk Management, Group Investment Management, Treasury Capital Management and Group Finance. Specialists from these departments ensure the adequacy of valuation models, approve methodologies and sources to derive model input parameters, provide oversight over the selection of third-party pricing providers, and on a semi-annual basis review the classification within the fair value hierarchy of the financial instruments in scope.

The ZIC Group makes extensive use of third-party pricing providers to determine the fair values of its available-for-sale and fair value through profit or loss financial instruments, and only in rare cases places reliance on prices that are derived from internal models. Investment accounting, operations and process functions, are independent from those responsible for buying and selling the assets, and are responsible for receiving, challenging and verifying values provided by third-party pricing providers to ensure that fair values are reliable, as well as ensuring compliance with applicable accounting and valuation policies. The quality control procedures used depend on the nature and complexity of the invested assets. They include variance and stale price analysis, and comparisons with fair values of similar instruments and with alternative values obtained from asset managers and brokers.

Consolidated financial statements (continued)

Table 23.1 compares the fair value with the carrying value of financial assets and financial liabilities. Certain financial instruments are not included in this table as their carrying value is a reasonable approximation of their fair value. Such instruments include cash and cash equivalents, obligations to repurchase securities, deposits made under assumed reinsurance contracts, deposits received under ceded reinsurance contracts and other financial assets and liabilities. This table excludes financial assets and financial liabilities related to unit-linked contracts.

Table 23.1

Fair value and carrying value of financial assets and financial liabilities

in USD millions, as of	Total fair value		Total carrying value	
	2020	2019	**2020**	2019
Available-for-sale securities				
Equity securities	15,608	14,540	15,608	14,540
Debt securities	152,330	138,676	152,330	138,676
Total available-for-sale securities	167,938	153,216	167,938	153,216
Fair value through profit or loss securities				
Equity securities	4,714	4,391	4,714	4,391
Debt securities	7,115	6,713	7,115	6,713
Total fair value through profit or loss securities	11,829	11,105	11,829	11,105
Derivative assets	1,763	1,226	1,763	1,226
Held-to-maturity debt securities	2,991	2,757	2,265	2,117
Mortgage loans	6,205	6,351	5,783	5,935
Other loans	10,412	9,879	8,620	8,274
Total financial assets[1]	**201,139**	**184,534**	**198,198**	**181,874**
Derivative liabilities	(481)	(365)	(481)	(365)
Financial liabilities held at amortized cost				
Liabilities related to investment contracts	(1,134)	(1,106)	(878)	(931)
Senior debt	(5,865)	(5,487)	(5,484)	(5,247)
Subordinated debt	(9,204)	(7,558)	(8,306)	(6,852)
Total financial liabilities held at amortized cost	(16,202)	(14,152)	(14,668)	(13,030)
Total financial liabilities[1]	**(16,683)**	**(14,517)**	**(15,149)**	**(13,395)**

1 2019 includes equity securities, debt securities, other loans and liabilities due to investment contracts related to the OnePath acquisition (see note 5).

All of the ZIC Group's financial assets and financial liabilities are initially recorded at fair value. Subsequently, available-for-sale financial assets, fair value through profit or loss financial assets, and derivative financial instruments are carried at fair value as of the balance sheet date. All other financial instruments are carried at amortized cost and the valuation techniques used to determine their fair value measurement are described below.

Fair values of held-to-maturity debt securities and senior and subordinated debt are obtained from third-party pricing providers. The fair value received from these pricing providers may be based on quoted prices in an active market for identical assets, alternative pricing methods such as matrix pricing or an income approach employing discounted cash flow models. Such instruments are categorized within level 2.

Discounted cash flow models are used for mortgage loans and other loans. The discount yields in these models use interest rates that reflect the return a market participant would expect to receive on instruments with similar remaining maturities, cash flow patterns, currencies, credit risk and collateral. Such instruments are categorized within level 3.

Fair values of liabilities related to investment contracts and investment contracts with DPF are determined using discounted cash flow models. Such instruments are categorized within level 3 due to the unobservability of certain inputs used in the valuation.

Consolidated financial statements (continued)

Recurring fair value measurements of assets and liabilities

Table 23.2a

Fair value hierarchy – non-unit-linked – current period

in USD millions, as of December 31, 2020	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	10,571	3,291	1,746	15,608
Debt securities	–	144,354	7,976	152,330
Total available-for-sale securities	10,571	147,645	9,722	167,938
Fair value through profit or loss securities				
Equity securities	1,835	561	2,318	4,714
Debt securities	–	7,033	83	7,115
Total fair value through profit or loss securities	1,835	7,594	2,400	11,829
Derivative assets	6	1,404	353	1,763
Investment property	–	3,448	11,301	14,749
Reinsurers' share of liabilities for insurance contracts fair value option[1]	–	–	213	213
Total	**12,412**	**160,091**	**23,990**	**196,492**
Derivative liabilities	(6)	(423)	(52)	(481)
Liabilities for insurance contracts fair value option[2]	–	–	(2,294)	(2,294)
Total	**(6)**	**(423)**	**(2,346)**	**(2,775)**

1 Included within reinsurers' share of liabilities for insurance contracts.
2 Included within liabilities for insurance contracts.

Table 23.2b

Fair value hierarchy – non-unit-linked – prior period

in USD millions, as of December 31, 2019	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	10,269	2,855	1,417	14,540
Debt securities	–	130,963	7,713	138,676
Total available-for-sale securities	10,269	133,818	9,129	153,216
Fair value through profit or loss securities				
Equity securities	1,611	602	2,179	4,391
Debt securities	–	6,632	81	6,713
Total fair value through profit or loss securities	1,611	7,234	2,260	11,105
Derivative assets	2	1,092	132	1,226
Investment property	–	2,760	10,501	13,261
Reinsurers' share of liabilities for insurance contracts fair value option[1]	–	–	206	206
Total	**11,881**	**144,905**	**22,228**	**179,014**
Derivative liabilities	(4)	(320)	(42)	(365)
Liabilities for insurance contracts fair value option[2]	–	–	(2,215)	(2,215)
Total	**(4)**	**(320)**	**(2,257)**	**(2,581)**

1 Included within reinsurers' share of liabilities for insurance contracts.
2 Included within liabilities for insurance contracts.

Consolidated financial statements (continued)

Fair value hierarchy – unit-linked – current period

Table 23.3a

in USD millions, as of December 31, 2020	Level 1	Level 2	Level 3	Total
Fair value through profit or loss securities				
Equity securities	102,259	16,329	1,163	119,751
Debt securities	–	8,543	25	8,568
Other loans	10	3,152	–	3,162
Total fair value through profit or loss securities	102,269	28,024	1,188	131,481
Derivative assets	24	1	–	26
Investment property	–	–	2,957	2,957
Total investments for unit-linked contracts[1]	**102,294**	**28,026**	**4,145**	**134,464**
Financial liabilities at FV through profit or loss				
Liabilities related to unit-linked investment contracts	–	(55,214)	–	(55,214)
Derivative liabilities	–	(1)	–	(1)
Total	**–**	**(55,216)**	**–**	**(55,216)**

1 Excluding cash and cash equivalents.

Fair value hierarchy – unit-linked – prior period

Table 23.3b

in USD millions, as of December 31, 2019	Level 1	Level 2	Level 3	Total
Fair value through profit or loss securities				
Equity securities	92,528	18,203	919	111,650
Debt securities	–	8,042	21	8,062
Other loans	–	2,818	–	2,818
Total fair value through profit or loss securities	92,528	29,062	940	122,530
Derivative assets	1	2	–	3
Investment property	–	–	3,034	3,034
Total investments for unit-linked contracts[1]	**92,529**	**29,064**	**3,974**	**125,567**
Financial liabilities at FV through profit or loss				
Liabilities related to unit-linked investment contracts	–	(48,967)	–	(48,967)
Derivative liabilities	(2)	–	–	(2)
Total	**(2)**	**(48,967)**	**–**	**(48,969)**

1 Excluding cash and cash equivalents.

Within level 1, the ZIC Group has classified common stocks, exchange-traded derivative financial instruments, investments in unit trusts that are exchange listed and daily published and other highly liquid financial instruments.

Within level 2, the ZIC Group has classified government and corporate bonds, investments in unit trusts, agency mortgage-backed securities (MBS) and 'AAA' rated non-agency MBS and other asset-backed securities (ABS) where valuations are obtained from independent pricing providers. The fair value received from these pricing providers may be based on quoted prices in an active market for similar assets, alternative pricing methods such as matrix pricing or an income approach employing discounted cash flow models. If such quoted prices are not available, then fair values are estimated on the basis of information from external pricing providers or internal pricing models (for example, discounted cash flow models or other recognized valuation techniques).

Where there are active and transparent markets and no significant adjustments to the observable data required, the ZIC Group classified also a small portion of its investment property within level 2.

Over the counter derivative financial instruments are valued using internal models. The fair values are determined using dealer price quotations, discounted cash flow models and option pricing models, which use various inputs including current market and contractual prices for underlying instruments, time to expiry, yield curves and volatility of underlying instruments. Such instruments are classified within level 2 as the inputs used in pricing models are generally market observable or derived from market observable data.

Fair values of liabilities related to unit-linked investment contracts are usually determined by reference to the fair value of the underlying assets backing these liabilities. Such instruments are classified within level 2.

Consolidated financial statements (continued)

Within level 3, the ZIC Group has classified:

- Unlisted stocks, private equity funds and hedge funds that are not actively traded. The valuations of such instruments are obtained from quarterly net asset value information from the fund manager and annual audited financial statements provided by the issuing company. The prices are generally derived for each underlying company in line with the International Private Equity and Venture Capital Valuation (IPEV) guidelines, using discounted cash flow (income approach) or multiple methods (market approach). The ZIC Group has only limited insight into the specific inputs used by the fund managers hence a narrative sensitivity analysis is not applicable.
- Non-agency MBS and ABS rated below 'AAA' and private debt holdings including certain private placements and collateralized loan obligations (CLO) that are valued by independent pricing providers or external asset managers using primarily the discounted cash flow method with significant unobservable input parameters such as asset prepayment rate, default rates and credit spreads. A significant market yield increase of the benchmark securities in isolation could result in a decreased fair value, while a significant market yield decrease could result in an increased fair value. However, a reasonable variation in the option-adjusted spread taken from a set of benchmark securities with similar characteristics has only immaterial impact on fair value.
- Investment properties for which fair value is based on valuations performed annually by internal valuation specialists and generally on a rotation basis at least once every three years by an independent qualified appraiser. In general, the portfolio is valued using an internal income capitalization approach or discounted cash flow model. The models are asset specific and capitalize the sustainable investment income of a property with its risk specific cap rate or discount the net cash flows respectively. The cap rates and discount rates represent 'all risk yield' with components such as asset class yield for core assets (lowest risk) plus additional premiums for additional risks, for example second tier location or deterioration risk. All cap (discount) rate components (risk premiums) are reviewed and, if necessary, adjusted annually before revaluations are performed. The model takes into consideration external factors such as interest rate and market rents. The significant unobservable inputs which are outside this model, are rental growth, long-term vacancy rate and discount rate. Significant increases/(decreases) in rental growth, in isolation, would result in a significantly higher/(lower) fair value measurement. Significant increases/(decreases) in the long-term vacancy rate and discount rate, in isolation, would result in a significantly lower/(higher) fair value measurement. For example, an increase in discount rate of 10bps, considered in isolation, would result in a decrease in fair value by approximately 3% (i.e., USD 339 million as of December 31, 2020).
- Options and long-dated derivative financial instruments with fair values determined using counterparty valuations or calculated using significant unobservable inputs such as historical volatilities, historical correlation, implied volatilities from the counterparty or derived using extrapolation techniques. Quantitative information on unobservable inputs are not available when counterparty pricing was used. For internally calculated fair values significant increases/(decreases) in volatilities or correlation, would result in a significantly higher/(lower) fair value measurement, however, the overall effect on ZIC Group financial statements would not be material.
- Reinsurers' share of liabilities and liabilities for insurance contracts fair value option. The fair values are determined using discounted cash flow models. The discount factors used are based on derived rates for LIBOR swap forwards, spreads to U.S. Treasuries and spreads to U.S. corporate A or higher rated bond segments for financials, industrials and utilities. The liability-projected cash flows use contractual information for premiums, benefits and agent commissions, administrative expenses under third-party administrative service agreements and best estimate parameters for policy decrements. The primary unobservable inputs are the policy decrement assumptions used in projecting cash flows. These include disability claim parameters for incidence and termination (whether for recovery or death) and lapse rates. Significant increases/(decreases) in claim incidence rates and significant decreases/(increases) in claim termination rates would result in a significantly higher/(lower) fair value measurement.

For details on ZIC Group investments sensitivities, refer to section analysis by risk type in the risk review.

The fair value hierarchy is reviewed at the end of each reporting period to determine whether significant transfers between levels have occurred. Transfers between levels mainly arise as a result of changes in market activity and observability of the inputs to the valuation techniques used to determine the fair value of certain instruments.

For the year ended December 31, 2020 the ZIC Group transferred USD 3 billion of unit-linked equity securities, mainly mutual funds from Level 2 into Level 1, due to a change in price frequencies/vendor information indicating an active market with daily published net asset values.

Consolidated financial statements (continued)

Development of assets and liabilities classified within level 3 – non-unit-linked – current period

Table 23.4a

in USD millions	Available-for-sale securities		Fair value through profit or loss securities				
	Equity securities	Debt securities	Equity securities	Debt securities	Derivative assets	Derivative liabilities	Investment property
As of January 1, 2020	1,417	7,713	2,179	81	132	(42)	10,501
Realized gains/(losses) recognized in income[1]	146	11	38	–	(11)	–	228
Unrealized gains/(losses) recognized in income[1,2]	(7)	(50)	272	2	–	(5)	130
Unrealized gains/(losses) recognized in other comprehensive income	103	198	–	–	198	4	67
Purchases	281	928	331	–	16	(8)	640
Settlements/sales/redemptions	(262)	(699)	(436)	(4)	(6)	1	(1,089)
Transfer from/to assets held for own use	–	–	–	–	–	–	25
Transfers into level 3	–	523	–	9	–	–	–
Transfers out of level 3	–	(894)	–	(6)	–	–	–
Acquisitions and divestments	–	–	(134)	–	–	–	–
Foreign currency translation effects	68	246	66	1	24	(3)	798
As of December 31, 2020	**1,746**	**7,976**	**2,318**	**83**	**353**	**(52)**	**11,301**

1 Presented as net capital gains/(losses) and impairments on Group investments in the audited consolidated income statements (see note 6).
2 Unrealized gains/(losses) recognized in income for available-for-sale securities relate to impairments.

For the year ended December 31, 2020, the ZIC Group transferred USD 894 million of available-for-sale debt securities out of level 3 into level 2. The transfers were caused by the application of additional data vendors improving rating and price coverage in the areas of non-agency asset/mortgage backed/private debt securities. Partially offsetting this is the transfer of USD 523 million in securities from level 2 to level 3 predominantly resulting from a transfer of corporate bonds into private debt priced by asset managers.

Development of assets and liabilities classified within level 3 – non-unit-linked – prior period

Table 23.4b

in USD millions	Available-for-sale securities		Fair value through profit or loss securities				
	Equity securities	Debt securities	Equity securities	Debt securities	Derivative assets	Derivative liabilities	Investment property
As of January 1, 2019	1,219	7,559	2,198	78	79	(35)	10,082
Realized gains/(losses) recognized in income[1]	107	7	26	–	(12)	–	183
Unrealized gains/(losses) recognized in income[1,2]	(8)	(16)	198	2	(6)	(17)	213
Unrealized gains/(losses) recognized in other comprehensive income	34	286	–	–	61	18	–
Purchases	286	1,271	237	9	14	(8)	854
Settlements/sales/redemptions	(228)	(809)	(491)	(1)	(2)	–	(882)
Transfer from/to assets held for own use	–	–	–	–	–	–	18
Transfers into level 3	–	34	–	–	–	–	–
Transfers out of level 3	(11)	(619)	–	(7)	–	–	–
Foreign currency translation effects	17	–	11	1	(1)	1	33
As of December 31, 2019	**1,417**	**7,713**	**2,179**	**81**	**132**	**(42)**	**10,501**

1 Presented as net capital gains/(losses) and impairments on Group investments in the audited consolidated income statements (see note 6).
2 Unrealized gains/(losses) recognized in income for available-for-sale securities relate to impairments.

For the year ended December 31, 2019, the ZIC Group transferred USD 619 million of available-for-sale debt securities out of level 3 into level 2 and USD 34 million out of level 2 into level 3. The transfers were mainly driven by a pricing provider change for a significant portfolio of syndicated loans receiving market quotes on a regular basis as a result of orderly market transactions and a rating upgrading of none-agency asset backed securities to 'AAA'.

Consolidated financial statements (continued)

Table 23.5a

Development of liabilities for insurance contracts fair value option classified within level 3 – current period

in USD millions	Gross	Ceded	Net
As of January 1, 2020	2,215	(206)	2,010
Premiums	48	(4)	44
Claims	(212)	20	(192)
Fee income and other expenses	6	–	5
Interest and bonuses credited to policyholders	235	(23)	212
Changes in assumptions	2	–	2
As of December 31, 2020	**2,294**	**(213)**	**2,081**

Table 23.5b

Development of liabilities for insurance contracts fair value option classified within level 3 – prior period

in USD millions	Gross	Ceded	Net
As of January 1, 2019	2,203	(204)	1,999
Premiums	54	(5)	50
Claims	(233)	15	(218)
Fee income and other expenses	1	5	6
Interest and bonuses credited to policyholders	194	(18)	176
Changes in assumptions	(3)	–	(3)
As of December 31, 2019	**2,215**	**(206)**	**2,010**

Table 23.6a

Development assets and liabilities classified within level 3 – unit-linked – current period

in USD millions	Fair value through profit or loss securities		
	Equity securities	Debt securities	Investment property
As of January 1, 2020	919	21	3,034
Realized gains/(losses) recognized in income[1]	8	–	(62)
Unrealized gains/(losses) recognized in income[1]	93	–	(75)
Unrealized gains/(losses) recognized in shareholder's equity	–	2	–
Purchases	224	–	34
Sales/redemptions	(85)	(2)	(143)
Transfers into level 3	–	3	–
Transfers out of level 3	(1)	–	–
Foreign currency translation effects	4	1	169
As of December 31, 2020	**1,163**	**25**	**2,957**

1 Presented as net investment result on unit-linked investments in the consolidated income statements.

Consolidated financial statements (continued)

Development assets and liabilities classified within level 3 – unit-linked – prior period

Table 23.6b

in USD millions	Fair value through profit or loss securities		
	Equity securities	Debt securities	Investment property
As of January 1, 2019	619	21	3,222
Realized gains/(losses) recognized in income[1]	4	–	(55)
Unrealized gains/(losses) recognized in income[1]	61	–	20
Purchases	292	–	144
Sales/redemptions	(57)	(2)	(418)
Transfers into level 3	1	–	–
Acquisitions and divestments	–	–	7
Foreign currency translation effects	(1)	–	112
As of December 31, 2019	**919**	**21**	**3,034**

1 Presented as net investment result on unit-linked investments in the consolidated income statements.

Non-recurring fair value measurements of assets and liabilities

Under certain circumstances, the ZIC Group may measure certain assets or liabilities at fair value on a non-recurring basis when an impairment charge is recognized.

24. Analysis of financial assets

Tables 24.1a and 24.1b provide an analysis, for non-unit-linked businesses, of the age of financial assets that are past due but not impaired, and of financial assets that are individually determined to be impaired.

Analysis of financial assets – current period

Table 24.1a

in USD millions, as of December 31, 2020	Debt securities	Mortgage loans	Other loans	Receivables and other financial assets	Total
Neither past due nor impaired financial assets	161,670	5,729	8,615	12,014	188,028
Past due but not impaired financial assets					
Past due by:					
1 to 90 days	–	36	2	1,281	1,319
91 to 180 days	–	6	2	355	362
181 to 365 days	–	4	1	212	216
> 365 days	–	5	–	295	300
Past due but not impaired financial assets	–	51	4	2,143	2,198
Financial assets impaired	40	11	12	201	264
Gross carrying value	**161,710**	**5,791**	**8,632**	**14,357**	**190,490**
Less: impairment allowance					
Impairment allowances on individually assessed financial assets	–	4	12	105	121
Impairment allowances on collectively assessed financial assets	–	4	–	226	230
Net carrying value	**161,710**	**5,783**	**8,620**	**14,026**	**190,139**

Analysis of financial assets – prior period

Table 24.1b

in USD millions, as of December 31, 2019	Debt securities	Mortgage loans	Other loans	Receivables and other financial assets	Total
Neither past due nor impaired financial assets	147,382	5,882	8,268	11,773	173,305
Past due but not impaired financial assets					
Past due by:					
1 to 90 days	–	32	5	1,504	1,541
91 to 180 days	–	9	1	193	203
181 to 365 days	–	3	–	171	174
> 365 days	–	4	–	289	293
Past due but not impaired financial assets	–	48	6	2,157	2,211
Financial assets impaired	125	11	21	173	330
Gross carrying value	**147,507**	**5,941**	**8,295**	**14,104**	**175,847**
Less: impairment allowance					
Impairment allowances on individually assessed financial assets	–	2	21	69	93
Impairment allowances on collectively assessed financial assets	–	4	–	194	198
Net carrying value	**147,507**	**5,935**	**8,274**	**13,840**	**175,556**

Tables 24.2a and 24.2b show how the allowances for impairments of financial assets in tables 24.1a and 24.1b developed during the periods ended December 31, 2020 and 2019, respectively.

Development of allowance for impairments – current period

Table 24.2a

in USD millions	Mortgage loans	Other loans	Receivables
As of January 1, 2020	6	21	263
Increase/(decrease) in allowance for impairments	1	1	90
Amounts written-off	–	(11)	(29)
Acquisitions/(divestments) and transfers	–	–	10
Foreign currency translation effects	1	1	(2)
As of December 31, 2020	**8**	**12**	**332**

Development of allowance for impairments – prior period

Table 24.2b

in USD millions	Mortgage loans	Other loans	Receivables
As of January 1, 2019	6	–	243
Increase/(decrease) in allowance for impairments	–	7	22
Amounts written-off	–	15	(1)
Acquisitions/(divestments) and transfers	–	–	4
Foreign currency translation effects	–	–	(5)
As of December 31, 2019	**6**	**21**	**263**

The ZIC Group has elected to defer the full implementation of IFRS 9 until IFRS 17 becomes effective on January 1, 2023. For further information on the ZIC Group's eligibility to the temporary exemption from IFRS 9, please refer to note 2.

Under IFRS 9, the classification and measurement of all debt instruments will be driven by the business model in which these assets are held and by their contractual terms. The combined effect of the application of the business model and contractual cash flows characteristics determine whether the financial assets are measured at amortized cost, fair value with changes recognized in other comprehensive income (OCI) or fair value through profit or loss. The business model will be assessed at the date of the initial application of IFRS 9.

Debt instruments with contractual terms that give rise to cash flows that are solely payment of principal and interest on the principal amount outstanding (SPPI) will be measured at either amortized cost or at fair value with changes recognized in OCI, unless they are managed on a fair value basis. The assessment of the features of the contractual terms is referred to as the SPPI test. Debt instruments that do not pass the SPPI test will always be measured at fair value through profit or loss.

Equity instruments including fund investments will be accounted for at fair value through profit or loss. The ZIC Group does not intend to make use of the election to present changes in fair value of certain equity instruments that are not held for trading in OCI with no subsequent reclassification of realized gains or losses to the income statement.

Table 24.3a and Table 24.3b show the fair value and the carrying value at the end of current and previous reporting period for the following two groups of financial assets:

- Financial assets with contractual terms that give rise to cash flows that are SPPI;
- Other financial assets not passing the SPPI test, as well as financial assets managed on a fair value basis for which no SPPI assessment has been performed. Financial assets that have not passed the SPPI test include equities, callable bonds with significant prepayment features, hybrid bonds with certain cash flows at the discretion of the issuer and some ABS/MBS that do not fulfill the SPPI criteria for contractually linked instruments.

Net unrealized gains/(losses) on debt securities available for sale that are not SPPI amounted to USD 408 million and USD 277 million for the years ended December 31, 2020 and 2019, respectively. The carrying value on held-to-maturity debt securities, mortgage loans, other loans, and receivables include impairment allowances of USD 340 million and USD 270 million of the years ended December 31, 2020 and 2019, respectively.

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Fair value and carrying value of financial assets split by SPPI and other financial assets – current period

Table 24.3a

in USD millions, as of December 31, 2020	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	15,608	15,608	15,608	15,608
Debt securities	144,106	144,106	8,224	8,224	152,330	152,330
Total available-for-sale securities	144,106	144,106	23,832	23,832	167,938	167,938
Fair value through profit or loss securities						
Equity securities	–	–	4,714	4,714	4,714	4,714
Debt securities	–	–	7,115	7,115	7,115	7,115
Total fair value through profit or loss securities	–	–	11,829	11,829	11,829	11,829
Held-to-maturity debt securities	2,928	2,217	63	47	2,991	2,265
Mortgage loans	6,205	5,783	–	–	6,205	5,783
Other loans[1]	9,488	7,885	63	59	9,552	7,944
Receivables	13,036	13,036	–	–	13,036	13,036
Derivative assets	–	–	1,763	1,763	1,763	1,763
Total financial assets	**175,764**	**173,028**	**37,551**	**37,531**	**213,315**	**210,559**

1 Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 861 million and USD 675 million for fair value and carrying value, respectively.

Fair value and carrying value of financial assets split by SPPI and other financial assets – prior period

Table 24.3b

in USD millions, as of December 31, 2019	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	14,540	14,540	14,540	14,540
Debt securities	131,040	131,040	7,637	7,637	138,676	138,676
Total available-for-sale securities	131,040	131,040	22,177	22,177	153,216	153,216
Fair value through profit or loss securities						
Equity securities	–	–	4,391	4,391	4,391	4,391
Debt securities	–	–	6,713	6,713	6,713	6,713
Total fair value through profit or loss securities	–	–	11,105	11,105	11,105	11,105
Held-to-maturity debt securities	2,702	2,074	55	43	2,757	2,117
Mortgage loans	6,351	5,935	–	–	6,351	5,935
Other loans[1]	8,987	7,534	66	66	9,053	7,600
Receivables	12,677	12,677	–	–	12,677	12,677
Derivative assets	–	–	1,226	1,226	1,226	1,226
Total financial assets	**161,757**	**159,260**	**34,629**	**34,618**	**196,386**	**193,878**

1 Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 826 million and USD 674 million for fair value and carrying value, respectively.

With IFRS 9, the incurred loss impairment approach will be replaced by a forward-looking expected credit loss (ECL) approach that will apply to debt securities, loans and receivables that are not accounted for at fair value through profit or loss. Thus, the same ECL requirements will apply to all financial assets measured at amortized cost and those measured at fair value with changes recognized in OCI.

At initial recognition of a debt instrument, a loss allowance is recognized for expected credit losses resulting from default events within the next 12 months after the reporting date (12-month ECL). Such instruments are classified as Stage 1. The ZIC Group does not originate or acquire financial assets that are credit-impaired at initial recognition.

In the event of a significant increase in credit risk (SICR) since initial recognition, IFRS 9 requires the ECL allowance to be measured at an amount equal to lifetime expected credit losses resulting from all possible default events over the expected life of the financial instrument (lifetime ECL). Such instruments are referred to as Stage 2.

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The ZIC Group applies the 'low credit risk practical expedient,' by assuming that no increase in credit risk has occurred since initial recognition for financial assets that have an external or internal rating equivalent to 'investment grade' (i.e., 'AAA' to 'BBB–') at the reporting date. For the remaining financial assets, the ZIC Group considers all relevant reasonable supporting information that is available without undue cost or effort when determining whether a SICR has occurred since initial recognition, or not. An increase in credit risk is assessed using a transition matrix approach that determines SICR thresholds depending on the credit rating at initial recognition and residual time to maturity of the instrument. Where necessary, the quantitative assessment is supplemented by a qualitative assessment of the issuer's credit quality. For certain less material portfolios, including residential mortgage loans, the '30 days past due' criterion is used as a primary indicator of a SICR. Where a SICR is no longer observed, the instrument transitions back to stage 1.

The ZIC Group has elected to apply the simplified approach for receivables from policyholders and other receivables that are allocated to 'Stage 2' unless individually impaired. Financial assets that have become credit-impaired are allocated to stage 3 based on similar principles as are applied under IAS 39 to determine whether credit loss has been incurred.

The tables 24.4a and 24.4b show the fair value and the carrying amount (before adjusting for any impairment in case of financial assets measured at amortized cost) of financial assets whose contractual terms give rise to cash flows that are SPPI, by impairment stages:

Table 24.4a

Financial assets (SPPI) by stages – current period

in USD millions, as of December 31, 2020	Stage 1		Stage 2		Stage 3		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale debt securities	143,508	143,508	560	560	38	38	144,106	144,106
Held-to-maturity debt securities	2,927	2,216	–	–	1	1	2,928	2,217
Mortgage loans	6,166	5,750	12	12	28	29	6,205	5,791
Other loans[1]	9,461	7,858	27	27	–	–	9,488	7,885
Receivables	2,439	2,504	10,555	10,719	42	145	13,036	13,367
Total financial assets	**164,502**	**161,837**	**11,154**	**11,317**	**108**	**213**	**175,764**	**173,367**

1 Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 861 million and USD 675 million for fair value and carrying value, respectively.

Table 24.4b

Financial assets (SPPI) by stages – prior period

in USD millions, as of December 31, 2019	Stage 1		Stage 2		Stage 3		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale debt securities	130,333	130,333	505	505	202	202	131,040	131,040
Held-to-maturity debt securities	2,702	2,074	–	–	–	–	2,702	2,074
Mortgage loans	6,304	5,895	22	21	25	25	6,351	5,941
Other loans[1]	8,957	7,506	29	29	–	–	8,987	7,534
Receivables	1,873	1,908	10,761	10,924	43	109	12,677	12,941
Total financial assets	**150,170**	**147,716**	**11,317**	**11,478**	**269**	**336**	**161,757**	**159,530**

1 Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 826 million and USD 674 million for fair value and carrying value, respectively.

25. Related-party transactions

In the normal course of business, the ZIC Group enters into various transactions with related parties. Parties are considered to be related if one party has the ability to control or exercise significant influence over the other party in making financial or operational decisions, or one other party controls both. Related parties of the ZIC Group include, among others, subsidiaries, associates, joint ventures, key management personnel, and the post-employment benefit plans (see note 20). Transactions between the ZIC Group and its subsidiaries are eliminated on consolidation, and they are not disclosed in the consolidated financial statements. A list of the ZIC Group's significant subsidiaries is shown in note 28. The transactions of the ZIC Group concluded with its associates and with its joint ventures are not considered material to the ZIC Group, either individually or in aggregate.

Table 25 summarizes related-party transactions with key management personnel reflected in the consolidated financial statements. Key management personnel includes members of the Board of Directors of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd and members of the Executive Committee.

Related party transactions – key personnel

Table 25

in USD millions, for the years ended December 31	**2020**	2019
Remuneration of key personnel of the Group		
Cash compensation, current benefits and fees	31	32
Post-employment benefits	4	4
Share-based compensation	42	35
Other remuneration	4	5
Total remuneration of key personnel	**81**	**76**

As of December 31, 2020 and 2019, there were no loans, advances or credits outstanding from members of the Executive Committee. Outstanding loans and guarantees granted to members of the Board of Directors amounted to nil for the years ended December 31, 2020 and 2019. The terms 'members of the Board of Directors' and 'members of the Executive Committee' in this context include the individual as well as members of their respective households. The figures in table 25 include the fees paid to members of the Board of Directors of Zurich Insurance Group Ltd and Zurich Insurance Company Ltd, which were USD 6 million and USD 5 million for the years ended December 31, 2020 and 2019 respectively.

Information required by art. 14–16 of the Swiss Ordinance against Excessive Compensation and art. 663c paragraph 3 of the Swiss Code of Obligations is disclosed in the Remuneration report.

The cash compensation, current benefits and fees are short term in nature.

26. Relationship with the Farmers Exchanges

Farmers Group, Inc. and its subsidiaries (FGI) provide certain non-claims services to the Farmers Exchanges as their attorneys-in-fact, and also provide certain ancillary services to the Farmers Exchanges. Farmers Group Inc. is a wholly owned subsidiary of the Group. Attorney-in-fact services primarily include risk selection, preparation and mailing of policy documents and invoices, premium collection, management of the investment portfolios and certain other administrative and managerial functions. Fees for these services are primarily determined as a percentage of gross premiums earned by the Farmers Exchanges. Ancillary services primarily include information technology, brand advertising and certain distribution related services that are not covered under the attorney-in-fact contracts for which FGI acts as a principal in arranging for those services to the Exchanges. The finances and operations of the Farmers Exchanges are governed by independent Boards of Governors. In addition, the ZIC Group has the following relationships with the Farmers Exchanges.

a) Certificates of contribution/surplus notes issued by the Farmers Exchanges

As of December 31, 2020 and 2019, FGI and its subsidiary held the following surplus note and certificates of contribution issued by the Farmers Exchanges. Originally these were purchased by FGI subsidiaries in order to supplement the policyholders' surplus of the Farmers Exchanges.

Table 26.1

Certificates of contribution/surplus note

in USD millions, as of December 31	2020	2019
3.758% surplus note, due December 2027	100	100
Various other certificates of contribution	–	23
Total	**100**	**123**

In February 2020, the Farmers Exchanges repaid all the remaining certificates of contribution at various interest rates to the Fire Underwriters Association. The USD 100 million of 10-year, no call five-year notes at a 3.758 percent rate that the Farmers Exchanges issued to Farmers New World Life Insurance Company remain unchanged.

Conditions governing payment of interest and repayment of principal are outlined in the surplus note and certificates of contribution. Generally, repayment of principal and payment of interest may be made only when the issuer has an appropriate amount of surplus, and then only after approval is granted by the appropriate state insurance regulatory department in the U.S. Additionally, the approval by the issuer's governing board is needed for repayment of principal.

b) Quota share reinsurance treaty with the Farmers Exchanges

The Farmers Exchanges cede risk through a quota share reinsurance treaty, the All Lines Quota Share reinsurance agreement (All Lines agreement) with Farmers Reinsurance Company (Farmers Re Co), a wholly owned subsidiary of FGI, as well as numerous unrelated reinsurers. The All Lines agreement can be terminated after 90 days' notice by any of the parties.

The All Lines agreement provides for a cession of a quota share of the premiums earned and the ultimate net losses sustained in all lines of business written by the Farmers Exchanges.

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Table 26.2

Quota share reinsurance treaty

in USD millions, for the years ended December 31	All Lines agreement	
	2020[1]	2019[2]
Net earned premiums and policy fees	48	197
Insurance benefits and losses, net[3,4]	(24)	(143)
Total net technical expenses[5]	(16)	(63)
Net underwriting result	**9**	**(9)**

1 From January 1, 2020, Farmers Re Co assumed a 0.25 percent quota share. Another 25.75 percent was assumed by third parties. Effective December 31, 2020, Farmers Re participation in the All Lines agreement remains at 0.25 percent. Another 25.75 percent was assumed by third parties.
2 From January 1, 2019, Farmers Re Co assumed a 1.0 percent quota share. Another 28.0 percent was assumed by third parties.
3 Under the All Lines agreement, the Farmers Exchanges catastrophe losses are subject to a provisional maximum of 6.75 percent of net earned premiums dependent on loss experience and recoveries at a specified rate for each year. Based on the results for 2020, the total catastrophe recoveries subject to the All Lines agreement was USD 1.3 billion.
4 From 2012 to 2018, Zurich Insurance Company Ltd (ZIC) participated in the All Lines agreement. The insurance losses include prior year loss development assumed by ZIC of USD 8 million and USD (7) million, for the years 2020 and 2019, respectively.
5 Under the All Lines agreement, the Farmers Exchanges receive a ceding commission of 26.7 percent, 8.1 percent of premiums for unallocated loss adjustment expenses and 5.3 percent of premiums for other expenses.

c) Farmers management fees and other related revenues

Farmers Group, Inc. and its subsidiaries (FGI), wholly owned subsidiaries of the Group, are the appointed attorneys-in-fact of the Farmers Exchanges, which are not owned by FGI. As the attorney-in-fact, FGI is permitted by policyholders of the Farmers Exchanges to receive a management fee of up to 20 percent (up to 25 percent in the case of the Fire Insurance Exchange) of the gross premiums earned by the Farmers Exchanges. This management fee, the primary source of revenue for FGI, has an agreed upon margin cap of 7% which is derived from FGI gross management result divided by the gross premium earned by the Farmers Exchanges. The expected revenues and expenses are assessed monthly to determine if expected revenues will be in excess of the cap, in which case the revenue is reduced on a pro-rata basis to ensure that no revenue is recognized for the amounts exceeding the cap. In addition, FGI revenue includes reimbursement of certain ancillary service costs incurred by FGI on behalf of primarily the Farmers Exchanges that are not covered under the attorney-in-fact contracts. The amounts incurred for these services are reimbursed to FGI at cost in accordance with allocations that are subject to approval by the Farmers Exchanges Boards of Governors.

FGI has historically charged a lower management fee than the amount allowed by policyholders. The range of fees has varied by line of business over time and from year to year. The gross earned premiums of the Farmers Exchanges were USD 20.1 billion and USD 20.4 billion for the years ended December 31, 2020 and 2019, respectively.

Table 26.3

Farmers Management Services

in USD millions, for the years ended December 31	**2020**	2019	Change
Management fees and other related revenues	3,703	3,780	(2%)
Management fees[1]	2,749	2,804	
Revenues for ancillary services	842	858	
Membership fees	59	60	
Other revenues	53	58	
Management and other related expenses	2,345	2,356	–
Expenses for ancillary services	842	858	
Management and other expenses	1,504	1,498	
Gross management result	**1,357**	**1,424**	**(5%)**
Managed gross earned premium margin	6.8%	7.0%	(0.2 pts)

1 Decrease in 2020 fee revenues as a result of the COVID-19 premium credits to customers at the Farmers Exchanges and a reduction in the aggregate AIF fee rate.

27. Segment information

The Group pursues a customer-centric strategy, where the Property & Casualty (P&C) and Life businesses are managed on a regional basis. The Group's reportable segments have been identified on the basis of the businesses operated by the Group and how these are strategically managed to offer different products and services to specific customer groups. The Group has identified 13 reportable segments in accordance with IFRS 8 'Operating Segments' and segment information is presented accordingly as follows:

- Property & Casualty regions
- Life regions
- Farmers
- Group Functions and Operations
- Non-Core Businesses

The Group's reportable segments comprise the following:

Property & Casualty and Life regions

- Europe, Middle East & Africa
- North America
- Asia Pacific
- Latin America
- Group Reinsurance

Property & Casualty regions provide a variety of motor, home and commercial products and services for individuals as well as small and large businesses on both a local and global basis. Products are sold through multiple distribution channels including agents, brokers and bank distribution.

Life regions provide a comprehensive range of life and health insurance products on both an individual and a group basis, including annuities, endowment and term insurance, unit-linked and investment-oriented products, as well as full private health, supplemental health and long-term care insurance. In addition to the agent distribution channel, certain of these products are offered via bank distribution channels.

Farmers, through Farmers Group, Inc. and its subsidiaries (FGI), provides certain non-claims services and ancillary services to the Farmers Exchanges, which are owned by their policyholders. This segment also includes all reinsurance assumed from the Farmers Exchanges by the Group. Farmers Exchanges are prominent writers of personal and small commercial lines of business in the U.S. In addition, this segment includes the activities of Farmers Life, a writer of individual life insurance business in the U.S.

Group Functions and Operations comprise the Group's Holding and Financing, Headquarter and Zurich Insurance Mobile Solutions (ZIMS) activities. Certain alternative investment positions not allocated to business operating segments are included within Holding and Financing. In addition, this segment includes operational technical governance activities relating to technology, underwriting, claims, actuarial and pricing.

Non-Core Businesses include insurance and reinsurance businesses that the Group does not consider core to its operations and that are therefore mostly managed to achieve a beneficial run-off. Non-Core Businesses are mainly situated in the U.S., Bermuda, and in Europe.

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Aggregations and additional information

Regional Property & Casualty and Life results are further aggregated to show a total Property & Casualty and total Life business view.

- Property & Casualty – total
- Life – total

For additional informational purposes, the Group also discloses income statement information for Property & Casualty Commercial Insurance and Property & Casualty Retail and Other Insurance results. Other Insurance includes SME, direct market and other program business.

- Property & Casualty Commercial Insurance
- Property & Casualty Retail and SME

Business operating profit

The segment information includes the Group's internal performance measure, business operating profit (BOP). This measure is the basis on which the Group manages all of its business units. It indicates the underlying performance of the Group's business units, after non-controlling interests, by eliminating the impact of financial market volatility and other non-operational variables. BOP reflects adjustments for shareholders' taxes, net capital gains/(losses) and impairments on investments (except for certain non-insurance operations included in Non-Core Businesses, investments in hedge funds as at fair value through profit or loss, certain securities held for specific economic hedging purposes and policyholders' share of investment results for the life businesses) and non-operational foreign exchange movements. Significant items arising from special circumstances, including restructuring charges, legal matters or large one-off regulatory projects outside the ordinary course of business, gains and losses on divestment of businesses, certain business combination integration costs and impairments of goodwill are also excluded from BOP.

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Property & Casualty – Overview by segment

Table 27.1

in USD millions, for the years ended December 31	Europe, Middle East & Africa		North America	
	2020	2019	**2020**	2019
Revenues				
Direct written premiums	13,781	12,722	15,185	14,389
Assumed written premiums	2,058	1,836	851	833
Gross written premiums and policy fees	15,839	14,558	16,036	15,223
Less premiums ceded to reinsurers	(3,109)	(2,739)	(5,970)	(5,551)
Net written premiums and policy fees	12,730	11,818	10,066	9,672
Net change in reserves for unearned premiums	(387)	(327)	(250)	(116)
Net earned premiums and policy fees	12,343	11,491	9,816	9,556
Net investment income on Group investments	498	578	981	1,081
Net capital gains/(losses) and impairments on Group investments	50	37	255	174
Net investment result on Group investments	547	615	1,236	1,255
Other income	355	355	37	79
Total BOP revenues	13,246	12,461	11,089	10,890
Benefits, losses and expenses				
Insurance benefits and losses, net	8,298	7,438	6,761	6,555
Policyholder dividends and participation in profits, net	8	7	7	8
Underwriting and policy acquisition costs, net	2,440	2,168	2,538	2,295
Administrative and other operating expense (excl. depreciation/amortization)	1,433	1,458	231	309
Interest credited to policyholders and other interest	173	172	65	66
Restructuring costs and other items not included in BOP	(84)	(100)	(19)	(23)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	12,268	11,142	9,583	9,210
Business operating profit (before interest, depreciation and amortization)	**978**	**1,318**	**1,506**	**1,681**
Depreciation and impairments of property and equipment	109	92	72	66
Amortization and impairments of intangible assets	90	83	39	37
Interest expense on debt	9	18	–	–
Business operating profit before non-controlling interests	770	1,125	1,396	1,578
Non-controlling interests	15	8	–	–
Business operating profit	**755**	**1,117**	**1,396**	**1,578**

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	Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
	2,719	2,851	2,242	2,790	–	–	–	–	33,926	32,752
	207	179	57	81	597	593	(2,178)	(2,091)	1,592	1,432
	2,926	3,030	2,299	2,871	597	593	(2,178)	(2,091)	35,518	34,184
	(567)	(505)	(565)	(583)	(568)	(534)	2,178	2,091	(8,601)	(7,822)
	2,359	2,525	1,734	2,289	28	59	–	–	26,918	26,362
	80	(75)	37	(132)	(3)	(104)	–	–	(522)	(754)
	2,439	2,449	1,771	2,157	26	(45)	–	–	26,396	25,608
	92	74	160	217	10	11	–	–	1,740	1,961
	–	–	–	–	–	–	–	–	305	211
	92	74	160	217	10	11	–	–	2,045	2,171
	136	145	41	59	3	30	–	–	573	668
	2,668	2,669	1,972	2,432	38	(4)	–	–	29,014	28,447
	1,476	1,358	641	840	360	285	–	–	17,536	16,475
	–	–	–	–	–	(2)	–	–	15	12
	601	579	719	910	(9)	(13)	–	–	6,288	5,939
	487	441	260	354	36	9	–	–	2,447	2,571
	2	4	32	32	7	(3)	–	–	278	271
	(23)	(7)	(14)	(50)	–	–	–	–	(140)	(180)
	2,543	2,376	1,638	2,086	393	274	–	–	26,425	25,088
	124	**293**	**335**	**346**	**(355)**	**(279)**	**–**	**–**	**2,589**	**3,359**
	51	37	17	18	1	1	–	–	251	214
	23	19	11	13	–	–	–	–	162	151
	–	–	–	1	1	12	–	–	10	32
	51	237	306	315	(357)	(292)	–	–	2,166	2,962
	3	1	68	76	–	–	–	–	86	84
	48	**236**	**239**	**240**	**(357)**	**(292)**	**–**	**–**	**2,080**	**2,878**

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Life – Overview by segment

Table 27.2

in USD millions, for the years ended December 31	Europe, Middle East & Africa		North America	
	2020	2019	**2020**	2019
Revenues				
Life insurance deposits	9,390	13,839	761	778
Gross written premiums	7,420	8,025	137	122
Policy fees	1,388	1,564	369	339
Gross written premiums and policy fees	8,808	9,589	505	461
Net earned premiums and policy fees	8,133	8,899	469	447
Net investment income on Group investments	2,226	2,313	31	34
Net capital gains/(losses) and impairments on Group investments	434	798	6	16
Net investment result on Group investments	2,660	3,111	37	49
Net investment income on unit-linked investments	917	1,278	–	–
Net capital gains/(losses) and impairments on unit-linked investments	4,413	15,236	615	676
Net investment result on unit-linked investments	5,330	16,514	615	676
Other income	384	369	40	41
Total BOP revenues	16,507	28,893	1,161	1,214
Benefits, losses and expenses				
Insurance benefits and losses, net	6,993	7,571	385	352
Policyholder dividends and participation in profits, net	6,196	17,537	615	676
Income tax expense/(benefit) attributable to policyholders	37	333	–	–
Underwriting and policy acquisition costs, net	791	917	53	123
Administrative and other operating expense (excl. depreciation/amortization)	1,240	1,255	90	54
Interest credited to policyholders and other interest	230	212	32	39
Restructuring costs and other items not included in BOP	(82)	(99)	–	–
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	15,404	27,725	1,174	1,244
Business operating profit (before interest, depreciation and amortization)	**1,103**	**1,168**	**(13)**	**(29)**
Depreciation and impairments of property and equipment	26	23	–	–
Amortization and impairments of intangible assets	35	54	–	–
Interest expense on debt	–	2	–	–
Business operating profit before non-controlling interests	1,042	1,089	(13)	(30)
Non-controlling interests	97	52	–	–
Business operating profit	**945**	**1,037**	**(13)**	**(30)**

Life includes approximately USD 1.1 billion and USD 1.4 billion of gross written premiums and future life policyholder benefits for certain universal life-type contracts in the Group's Spanish operations for the years ended December 31, 2020 and 2019, respectively.

Consolidated financial statements (continued)

Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
2020	2019	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
112	87	3,401	3,624	–	–	–	–	13,663	18,328
2,242	1,892	2,193	3,009	33	28	(45)	(37)	11,980	13,038
147	163	69	46	–	–	–	–	1,973	2,113
2,389	2,055	2,262	3,056	33	28	(45)	(37)	13,953	15,151
2,021	1,756	1,977	2,562	24	19	–	–	12,624	13,683
167	179	331	392	–	–	(2)	(2)	2,753	2,915
34	59	12	32	–	–	–	–	486	906
201	238	343	424	–	–	(2)	(2)	3,239	3,821
107	99	31	36	–	–	–	–	1,055	1,413
(4)	126	715	1,256	–	–	–	–	5,739	17,293
104	225	746	1,292	–	–	–	–	6,794	18,706
23	23	68	85	–	–	(2)	(1)	513	518
2,348	2,242	3,133	4,363	24	19	(3)	(3)	23,169	36,728
1,094	1,004	825	1,259	10	5	–	–	9,306	10,190
124	268	756	1,288	–	–	–	–	7,691	19,769
10	32	–	–	–	–	–	–	46	365
324	279	937	1,092	9	8	(2)	(1)	2,112	2,417
522	457	162	248	1	1	–	–	2,015	2,015
13	26	22	26	–	–	–	–	297	303
(40)	(63)	41	(66)	–	–	–	–	(81)	(228)
2,048	2,003	2,742	3,847	20	13	(2)	(1)	21,387	34,831
300	**239**	**391**	**515**	**4**	**6**	**(2)**	**(2)**	**1,782**	**1,897**
9	8	10	7	–	–	–	–	45	39
9	11	9	14	–	–	–	–	52	80
16	16	1	–	–	–	(2)	(2)	16	17
266	202	371	494	4	6	–	–	1,670	1,761
(3)	(2)	152	225	–	–	–	–	246	275
269	**204**	**219**	**269**	**4**	**6**	**–**	**–**	**1,423**	**1,486**

Consolidated financial statements (continued)

Business operating profit by business

Table 27.3

in USD millions, for the years ended December 31

	Property & Casualty		Life	
	2020	2019	**2020**	2019
Revenues				
Direct written premiums	33,926	32,752	11,760	12,706
Assumed written premiums	1,592	1,432	220	332
Gross Written Premiums	35,518	34,184	11,980	13,038
Policy fees	–	–	1,973	2,113
Gross written premiums and policy fees	35,518	34,184	13,953	15,151
Less premiums ceded to reinsurers	(8,601)	(7,822)	(1,225)	(1,193)
Net written premiums and policy fees	26,918	26,362	12,727	13,958
Net change in reserves for unearned premiums	(522)	(754)	(104)	(275)
Net earned premiums and policy fees	26,396	25,608	12,624	13,683
Farmers management fees and other related revenues	–	–	–	–
Net investment income on Group investments	1,740	1,961	2,753	2,915
Net capital gains/(losses) and impairments on Group investments	305	211	486	906
Net investment result on Group investments	2,045	2,171	3,239	3,821
Net investment result on unit-linked investments	–	–	6,794	18,706
Other income	573	668	513	518
Total BOP revenues	29,014	28,447	23,169	36,728
of which: inter-business revenues	(13)	(602)	(165)	(195)
Benefits, losses and expenses				
Losses and loss adjustment expenses, net	17,539	16,477	–	–
Life insurance death and other benefits, net	(2)	(1)	9,306	10,190
Insurance benefits and losses, net	17,536	16,475	9,306	10,190
Policyholder dividends and participation in profits, net	15	12	7,691	19,769
Income tax expense/(benefit) attributable to policyholders	–	–	46	365
Underwriting and policy acquisition costs, net	6,288	5,939	2,112	2,417
Administrative and other operating expense (excl. depreciation/amortization)	2,447	2,571	2,015	2,015
Interest credited to policyholders and other interest	278	271	297	303
Restructuring costs and other items not included in BOP	(140)	(180)	(81)	(228)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	26,425	25,088	21,387	34,831
Business operating profit (before interest, depreciation and amortization)	**2,589**	**3,359**	**1,782**	**1,897**
Depreciation and impairments of property and equipment	251	214	45	39
Amortization and impairments of intangible assets	162	151	52	80
Interest expense on debt	10	32	16	17
Business operating profit before non-controlling interests	2,166	2,962	1,670	1,761
Non-controlling interests	86	84	246	275
Business operating profit	**2,080**	**2,878**	**1,423**	**1,486**

Life includes approximately USD 1.1 billion and USD 1.4 billion of gross written premiums and future life policyholder benefits for certain universal life-type contracts in the Group's Spanish operations for the years ended December 31, 2020 and 2019, respectively.

Consolidated financial statements (continued)

Farmers		Group Functions and Operations		Non-Core Businesses		Eliminations		Total	
2020	2019	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
610	593	(7)	–	34	58	–	–	46,323	46,109
49	138	–	–	54	552	(17)	(507)	1,899	1,947
659	731	(7)	–	88	610	(17)	(507)	48,221	48,056
337	326	–	–	24	30	–	–	2,334	2,469
996	1,056	(7)	–	112	640	(17)	(507)	50,555	50,525
(174)	(175)	–	–	(5)	(591)	17	507	(9,988)	(9,274)
822	882	(7)	–	107	50	–	–	40,567	41,251
(1)	59	2	–	2	21	–	–	(623)	(949)
821	941	(5)	–	109	71	–	–	39,944	40,302
3,703	3,780	–	–	–	–	–	–	3,703	3,780
189	204	162	195	166	195	(110)	(174)	4,901	5,296
2	3	–	–	174	128	–	–	966	1,248
191	207	162	195	339	323	(110)	(174)	5,867	6,544
163	194	–	–	433	584	–	–	7,389	19,485
89	123	133	218	(9)	48	(342)	(448)	958	1,127
4,967	5,245	291	413	872	1,026	(452)	(622)	57,861	71,237
(18)	(39)	(245)	(261)	(10)	475	452	622	–	–
24	143	–	–	18	47	–	–	17,581	16,666
522	419	(3)	–	338	295	–	–	10,160	10,903
545	562	(3)	–	356	342	–	–	27,741	27,570
173	204	–	–	446	597	–	–	8,325	20,582
–	–	–	–	–	–	–	–	46	365
145	152	4	2	5	20	–	–	8,555	8,529
2,372	2,333	481	487	87	69	(75)	(70)	7,327	7,404
108	111	121	150	26	37	(250)	(282)	581	590
(64)	(17)	(50)	(47)	–	(4)	–	–	(335)	(476)
3,280	3,345	553	592	920	1,060	(325)	(352)	52,239	64,564
1,687	**1,900**	**(262)**	**(179)**	**(48)**	**(34)**	**(126)**	**(270)**	**5,622**	**6,673**
72	69	12	10	–	–	–	–	380	331
114	125	70	30	–	–	–	–	398	386
–	–	495	604	5	20	(126)	(270)	400	402
1,501	1,707	(839)	(822)	(54)	(54)	–	–	4,444	5,553
70	78	–	–	–	–	–	–	402	437
1,432	**1,629**	**(839)**	**(822)**	**(54)**	**(54)**	**–**	**–**	**4,043**	**5,116**

Consolidated financial statements (continued)

Reconciliation of BOP to net income after income taxes

Table 27.4

in USD millions, for the years ended December 31

	Property & Casualty		Life	
	2020	2019	**2020**	2019
Business operating profit	**2,080**	**2,878**	**1,423**	**1,486**
Revenues/(expenses) not included in BOP:				
Net capital gains/(losses) on investments and impairments, net of policyholder allocation	835	716	390	204
Net gains/(losses) on divestment of businesses[1]	–	(198)	56	(146)
Restructuring costs	(92)	(104)	(64)	(44)
Impairments of goodwill	–	–	–	–
Other adjustments[2]	(49)	(77)	(17)	(184)
Add back:				
Business operating profit attributable to non-controlling interests	86	84	246	275
Net income before shareholders' taxes	2,861	3,300	2,034	1,591
Income tax expense/(benefit) attributable to policyholders	–	–	46	365
Net income before income taxes	**2,861**	**3,300**	**2,081**	**1,956**
Income tax (expense)/benefit				
attributable to policyholders				
attributable to shareholders				
Net income after taxes				
attributable to non-controlling interests				
attributable to shareholders				

1 In 2020, Life included gains of USD 115 million due to the sale of the Corporate Life and Pensions (CLP) business to Aflac Incorporated (Aflac) by Zurich Holding Company of America, Inc., Zurich American Life Insurance Company and Zurich American Life Insurance Company of New York, offset by losses of USD 20 million as Zurich International Life Limited entered into an agreement to sell an insurance portfolio, USD 14 million due to the sale of UK International Portfolio Bond by Zurich Life Assurance plc, USD 19 million for re-measurements of assets held for sale based on agreements to sell businesses in the UK and USD 7 million related to the sale of the UK Life business (see note 5). In 2019, Property & Casualty included losses of USD 217 million related to the sale of the Venezuelan operations offset by gains of USD 19 million related to the sale of ADAC Autoversicherung AG, Life included losses of USD 167 million for re-measurements of assets held for sale based on agreements to sell businesses in the UK and USD 43 million related to the sale of the Venezuelan operations offset by gains of USD 24 million related to the sale of the UK Life portfolio and gains of USD 39 million related to the sale of Bonnfinanz AG, Group Functions and Operations included gains of USD 44 million for re-measurements of assets held for sale based on agreements to sell businesses in the UK.

2 Other adjustments in 2020 and 2019 include charges related to the implementation of IFRS 17 and business combination integration costs.

Consolidated financial statements (continued)

	Farmers		Group Functions and Operations		Non-Core Businesses		Total	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
	1,432	**1,629**	**(839)**	**(822)**	**(54)**	**(54)**	**4,043**	**5,116**
	9	5	(181)	(254)	18	70	1,071	742
	–	–	1	49	–	–	57	(295)
	(55)	(9)	(3)	–	–	(4)	(214)	(160)
	–	–	(33)	–	–	–	(33)	–
	(8)	(8)	(14)	(47)	–	–	(88)	(316)
	70	78	–	–	–	–	402	437
	1,446	1,695	(1,068)	(1,074)	(36)	12	5,237	5,524
	–	–	–	–	–	–	46	365
	1,446	**1,695**	**(1,068)**	**(1,074)**	**(36)**	**12**	**5,284**	**5,889**
							(1,311)	(1,706)
							(46)	(365)
							(1,264)	(1,341)
							3,973	**4,183**
							290	297
							3,684	3,885

Consolidated financial statements (continued)

Assets and liabilities by business

Table 27.5

in USD millions, as of December 31

	Property & Casualty		Life	
	2020	2019	**2020**	2019
Assets				
Cash and cash equivalents	9,850	6,136	4,789	4,309
Total Group Investments	73,303	70,119	124,883	111,275
Equity securities	9,250	8,517	9,097	8,751
Debt securities	53,743	51,795	93,864	82,275
Investment property	5,195	5,048	9,298	7,838
Mortgage loans	950	1,055	4,299	4,322
Other loans	4,159	3,701	8,305	8,073
Investments in associates and joint ventures	6	2	20	16
Investments for unit-linked contracts	–	–	129,797	121,390
Total investments	73,303	70,119	254,681	232,665
Reinsurers' share of liabilities for insurance contracts	17,518	14,859	3,026	2,714
Deposits made under assumed reinsurance contracts	56	191	73	65
Deferred policy acquisition costs	5,984	5,694	12,248	11,695
Deferred origination costs	–	–	426	400
Goodwill	1,876	1,531	1,365	1,197
Other intangible assets	1,694	1,729	2,090	2,133
Other assets[1]	17,187	16,226	8,708	7,002
Total assets (after cons. of investments in subsidiaries)	**127,467**	**116,485**	**287,405**	**262,181**
Liabilities				
Liabilities for investment contracts	–	–	69,118	61,366
Liabilities for insurance contracts, gross	83,545	77,643	181,348	168,114
Reserves for losses and loss adjustment expenses, gross	61,951	57,473	–	–
Reserves for unearned premiums, gross	18,709	17,523	–	–
Future life policyholder benefits, gross	30	30	78,151	72,151
Policyholder contract deposits and other funds, gross	34	15	25,495	21,498
Reserves for unit-linked insurance contracts, gross	–	–	75,896	72,863
Other insurance liabilities, gross	2,821	2,602	1,806	1,603
Senior debt	730	621	663	657
Subordinated debt	983	953	655	647
Other liabilities[1]	13,933	12,909	15,478	13,387
Total liabilities	**99,190**	**92,126**	**267,263**	**244,171**
Equity				
Shareholders' equity				
Non-controlling interests				
Total equity				
Total liabilities and equity				
Supplementary information				
Additions and capital improvements to property, equipment and intangible assets	412	695	82	172

1 As of December 31, 2020, the ZIC Group had USD 2.5 billion of assets held for sale based on agreements signed to sell business of Zurich Insurance plc and Zurich International Life Limited (see note 5). In addition, assets held for sale include land and buildings formerly classified as investment property and held for own use amounting to USD 32 million. In 2019, the ZIC Group reclassified USD 2 billion of assets to held for sale based on agreements signed to sell business in the UK and Germany (see note 5). In addition, assets held for sale include land and buildings formerly classified as investment property and held for own use amounting to USD 38 million.

Consolidated financial statements (continued)

	Farmers		Group Functions and Operations		Non-Core Businesses		Eliminations		Total	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
	818	1,102	6,142	8,110	616	755	(10,914)	(12,426)	11,300	7,986
	5,802	5,488	10,805	9,936	5,766	5,735	(9,331)	(8,604)	211,227	193,948
	71	49	1,765	1,460	139	155	–	–	20,322	18,932
	4,150	3,821	5,762	5,467	4,551	4,562	(360)	(412)	161,710	147,507
	159	142	–	–	96	233	–	–	14,749	13,261
	534	559	–	–	–	–	–	–	5,783	5,935
	887	918	3,260	2,991	979	783	(8,971)	(8,192)	8,620	8,274
	–	–	17	17	–	3	–	–	43	39
	1,086	932	–	–	4,175	3,889	–	–	135,058	126,211
	6,887	6,420	10,805	9,936	9,941	9,624	(9,331)	(8,604)	346,285	320,158
	2,074	2,142	–	–	2,936	3,459	(30)	(422)	25,523	22,752
	142	229	–	–	283	258	(52)	(17)	503	726
	1,788	1,811	–	–	–	4	1	2	20,021	19,207
	–	–	–	–	–	–	–	–	426	400
	819	819	29	63	–	–	–	–	4,089	3,610
	383	388	64	83	–	–	–	–	4,230	4,333
	1,812	1,854	1,318	1,588	2,657	2,926	(3,746)	(3,376)	27,936	26,220
	14,723	**14,765**	**18,357**	**19,779**	**16,433**	**17,027**	**(24,072)**	**(24,843)**	**440,314**	**405,393**
	235	225	–	–	153	170	–	–	69,507	61,761
	7,484	7,364	–	3	11,182	11,463	(62)	(447)	283,497	264,140
	198	316	–	1	1,203	1,792	(26)	(417)	63,327	59,165
	21	20	–	–	(2)	10	(4)	(2)	18,724	17,551
	2,304	2,200	–	2	3,474	3,376	(1)	(2)	83,958	77,756
	3,885	3,867	–	–	2,083	2,101	–	–	31,497	27,480
	1,086	932	–	–	4,175	3,889	–	–	81,157	77,684
	(10)	29	–	–	248	296	(32)	(25)	4,834	4,505
	–	–	10,440	9,709	276	274	(6,624)	(6,013)	5,484	5,247
	–	–	9,248	7,726	–	–	(2,580)	(2,475)	8,306	6,852
	2,112	2,020	12,874	14,159	4,183	4,322	(14,805)	(15,911)	33,774	30,886
	9,831	**9,610**	**32,562**	**31,597**	**15,795**	**16,228**	**(24,072)**	**(24,846)**	**400,569**	**368,886**
									37,462	34,305
									2,283	2,203
									39,745	36,507
									440,314	**405,393**
	128	171	92	68	–	–	–	–	715	1,105

Consolidated financial statements (continued)

Property & Casualty – Commercial and Retail Insurance overview[1]

Table 27.6

in USD millions, for the years ended December 31	Commercial Insurance[2]		Retail and SME[2]	
	2020	2019	**2020**	2019
Gross written premiums and policy fees	24,697	23,192	12,454	12,506
Net earned premiums and policy fees	14,663	14,063	11,708	11,590
Insurance benefits and losses, net	10,394	9,691	6,783	6,500
Policyholder dividends and participation in profits, net	8	9	7	6
Total net technical expenses	4,222	3,999	4,188	4,310
Net underwriting result	38	365	730	774
Net investment income	1,251	1,397	481	553
Net capital gains/(losses) and impairments on investments	279	192	26	19
Net non-technical result (excl. items not included in BOP)	(84)	4	(198)	(48)
Business operating profit before non-controlling interests	1,484	1,958	1,039	1,297
Non-controlling interest	(1)	1	87	83
Business operating profit	**1,485**	**1,956**	**953**	**1,214**

1 Commercial and Retail Insurance overview exclude Group Reinsurance.
2 Beginning in 2020, ZIC Group's Commercial Insurance figures includes the North American alternative markets business, which was previously reported within Retail and other; Retail and other has been renamed as Retail and SME accordingly. Alternative markets includes businesses such as Captives, Programs, Crop, and Direct Markets which by nature are closer to how the Group and external stakeholders define commercial insurance. Prior year Commercial and Retail and SME figures have been restated for comparative purposes. Retail business BOP shifted to Commercial amounted to USD 430 million as of December 31, 2019.

Consolidated financial statements (continued)

Table 27.7

Property & Casualty – Revenues and non-current assets by region

in USD millions	Gross written premiums and policy fees from external customers: Total for the years ended December 31 2020	2019	of which Commercial Insurance for the years ended December 31 2020	2019	of which Retail and Other Insurance for the years ended December 31 2020	2019	Property, equipment and intangible assets as of December 31 2020	2019
Europe								
Austria	619	593					77	55
France	313	303					20	1
Germany	2,779	2,531					715	643
Italy	1,533	1,485					41	49
Ireland	412	363					87	85
Portugal	354	337					18	16
Spain	1,302	1,272					314	288
Switzerland	3,347	2,971					839	708
United Kingdom	3,230	2,938					156	172
Rest of Europe	818	685					74	83
Middle East & Africa								
Middle East	131	115					1	–
Europe, Middle East & Africa	14,836	13,592	5,808	5,044	9,028	8,548	2,343	2,099
North America								
Bermuda	–	7					–	–
Canada	775	590					14	17
United States	14,787	14,183					1,111	1,162
North America	15,562	14,780	15,562	14,780	–	–	1,125	1,178
Asia Pacific								
Australia	691	1,015					903	786
Hong Kong	290	307					34	44
Japan	968	874					25	29
Malaysia	367	343					59	61
Rest of Asia Pacific	511	342					277	10
Asia Pacific	2,827	2,881	877	909	1,950	1,973	1,298	930
Latin America								
Argentina	439	570					183	207
Brazil	838	1,182					357	515
Chile	318	366					22	24
Mexico	526	628					146	170
Venezuela	–	2					–	–
Rest of Latin America	167	180					64	58
Latin America	2,289	2,927	812	941	1,476	1,985	773	974
Group Reinsurance								
Group Reinsurance	5	4	–	–	5	4	1	2
Total	**35,518**	**34,184**	**23,059**	**21,674**	**12,459**	**12,510**	**5,540**	**5,184**

Consolidated financial statements (continued)

Life – Revenues and non-current assets by region

Table 27.8

in USD millions	Gross written premiums and policy fees from external customers for the years ended December 31		Life insurance deposits for the years ended December 31		Property, equipment and intangible assets as of December 31	
	2020	2019	**2020**	2019	**2020**	2019
Europe, Middle East & Africa						
Austria	99	107	56	52	27	25
Germany	2,065	2,273	1,565	1,776	73	71
Italy	1,019	871	2,040	2,699	29	38
Ireland[1]	574	577	3,146	3,276	106	88
Spain	1,615	2,090	48	59	1,146	1,083
Switzerland	1,183	1,285	276	241	3	3
United Kingdom	1,549	1,642	90	3,971	127	136
Zurich International[2]	466	513	2,044	1,260	47	58
Rest of Europe, Middle East & Africa	208	206	125	505	5	4
Europe, Middle East & Africa	8,779	9,563	9,390	13,839	1,563	1,506
North America						
United States	505	461	761	778	–	–
North America	505	461	761	778	–	–
Asia Pacific						
Australia	1,580	1,179	26	11	1,349	1,182
Hong Kong	54	56	18	20	–	–
Indonesia	58	62	–	–	2	2
Japan	469	407	–	–	15	15
Malaysia	228	237	68	55	88	91
Rest of Asia Pacific[3]	–	114	–	–	–	–
Asia Pacific	2,389	2,055	112	87	1,454	1,290
Latin America						
Argentina	117	90	92	80	35	41
Brazil	1,145	1,437	2,980	3,246	239	329
Chile	562	1,075	137	168	360	344
Mexico	388	412	192	131	100	113
Uruguay	41	42	–	–	–	–
Colombia	10	–	–	–	–	–
Latin America	2,262	3,056	3,401	3,624	734	827
Total	**13,935**	**15,135**	**13,663**	**18,328**	**3,751**	**3,624**

1 Includes business written under freedom of services and freedom of establishment in Europe, and the related assets.
2 Includes business written through licenses, mainly into Asia Pacific and Middle East, and the related assets.
3 Primarily relates to the quota share agreement with OnePath.

Consolidated financial statements (continued)

28. Interest in subsidiaries

Significant subsidiaries are defined as those subsidiaries which either individually or in aggregate, contribute significantly to gross written premiums, shareholder's equity, total assets or net income attributable to shareholders.

Significant subsidiaries – non-listed

Table 28.1

as of December 31, 2020	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
Australia					
Cover-More Group Limited	Sydney	100	100	AUD	1,014.2
Zurich Australia Limited	Sydney	100	100	AUD	543.5
Zurich Australian Insurance Limited	Sydney	100	100	AUD	6.6
Zurich Financial Services Australia Limited	Sydney	100	100	AUD	2,845.0
OnePath Life Limited	Sydney	100	100	AUD	1,314.4
OnePath Life Australia Holdings Pty Limited	Sydney	100	100	AUD	2,565.7
Austria					
Zürich Versicherungs-Aktiengesellschaft	Vienna	99.98	99.98	EUR	12.0
Brazil					
Zurich Santander Brasil Seguros e Previdência S.A.[1]	Sao Paulo	51	51	BRL	2,509.2
Zurich Minas Brasil Seguros S.A.	Belo Horizonte	100	100	BRL	2,700.0
Zurich Resseguradora Brasil S.A.	Sao Paulo	100	100	BRL	236.0
Chile					
Chilena Consolidada Seguros de Vida S.A.	Santiago	99.10	99.10	CLP	211,423.0
Zurich Santander Seguros de Vida Chile S.A.[1]	Santiago	51	51	CLP	24,252.9
Germany					
Deutscher Herold Aktiengesellschaft	Köln	100	100	EUR	18.4
Zürich Beteiligungs-Aktiengesellschaft (Deutschland)	Frankfurt	100	100	EUR	152.9
Zurich Deutscher Herold Lebensversicherung Aktiengesellschaft	Köln	100	100	EUR	68.5
Indonesia					
PT Asuransi Adira Dinamika Tbk	Jakarta Selatan	80	80	IDR	3,149,468.5
Ireland					
Zurich Life Assurance plc	Dublin	100	100	EUR	17.5
Zurich Holding Ireland Limited	Dublin	100	100	EUR	0.1
Zurich Insurance plc	Dublin	100	100	EUR	8.2
Italy					
Zurich Investments Life S.p.A.	Milan	100	100	EUR	199.0
Luxembourg					
REX-ZDHL S.C.S. SICAV-SIF	Leudelange	100	100	EUR	1,832.5
Malaysia					
Zurich Life Insurance Malaysia Berhad	Kuala Lumpur	100	100	MYR	579.0
Zurich Holdings Malaysia Berhad	Kuala Lumpur	100	100	MYR	613.4
Mexico					
Zurich Santander Seguros México, S.A.[1]	Mexico City	51	51	MXN	190.0

Consolidated financial statements (continued)

Significant subsidiaries – non-listed (continued)

Table 28.1

as of December 31, 2020	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
Spain					
Bansabadell Pensiones, E.G.F.P, S.A.	Madrid	50	50	EUR	7.8
Bansabadell Seguros Generales, S.A. de Seguros y Reaseguros	Madrid	50	50	EUR	10.0
Bansabadell Vida S.A. de Seguros y Reaseguros	Madrid	50	50	EUR	43.9
Zurich Latin America Holding S.L. - Sociedad Unipersonal	Barcelona	100	100	EUR	43.0
Zurich Santander Holding (Spain), S.L.[1]	Boadilla del Monte	51	51	EUR	94.3
Zurich Santander Holding Dos (Spain), S.L.[1]	Madrid	51	51	EUR	40.0
Zurich Santander Insurance America, S.L.	Madrid	51	51	EUR	177.0
Zurich Vida, Compañía de Seguros y Reaseguros, S.A. - Sociedad Unipersonal	Madrid	100	100	EUR	56.4
Switzerland					
Zurich Finance Company AG	Zurich	100	100	CHF	0.2
Zurich Life Insurance Company Ltd	Zurich	100	100	CHF	60.0
Zürich Rückversicherungs-Gesellschaft AG	Zurich	100	100	CHF	11.7
United Kingdom					
Allied Zurich Holdings Limited	St. Hélier, Jersey	100	100	GBP	547.6
Zurich Assurance Ltd	Cheltenham, England	100	100	GBP	306.1
Zurich Employment Services Limited	Cheltenham, England	100	100	GBP	287.1
Zurich Financial Services (UKISA) Limited	Cheltenham, England	100	100	GBP	1,340.8
Zurich Holdings (UK) Limited	Fareham, England	100	100	GBP	238.8
Zurich International Life Limited	Douglas, Isle of Man	100	100	GBP	123.4
Zurich UK General Services Limited	Fareham, England	100	100	GBP	385.7
United States of America					
Farmers Group, Inc.[2]	Carson City, NV	87.90	95.38	USD	0.001
Farmers Reinsurance Company[2]	Woodland Hills, CA	87.90	95.38	USD	58.8
Farmers New World Life Insurance Company[2]	Bellevue, WA	87.90	95.38	USD	6.6
Zurich American Company, LLC[3]	Wilmington, DE	100	100	USD	0.0
Zurich American Insurance Company	New York, NY	100	100	USD	5.0
Zurich American Life Insurance Company	Schaumburg, IL	100	100	USD	2.5
Zurich Holding Company of America, Inc.[4]	Wilmington, DE	100	100	USD	0.0
ZCM Matched Funding Corp.	George Town, Cayman Islands	100	100	USD	0.00001
Centre Group Holdings (U.S.) Limited	Wilmington, DE	100	100	USD	0.00001
ZCM (U.S.) Limited	Wilmington, DE	100	100	USD	0.00001
Zurich Capital Markets Inc.	Wilmington, DE	100	100	USD	0.00001
Zurich Structured Finance, Inc.	Wilmington, DE	100	100	USD	0.012

1 Entities 100% owned by a ZIC subsidiary which is ultimately 51% owned by ZIC.
2 The ownership percentages in Farmers Group, Inc. and its fully owned subsidiaries have been calculated based on the participation rights of Zurich Insurance Group in a situation of liquidation, dissolution or winding up of Farmers Group, Inc.
3 The LLC interests have no nominal value in accordance with the company's certification of formation and local legislation.
4 Shares have no nominal value in accordance with the company's articles of incorporation and local legislation.

Due to the nature of the insurance industry, the Group's business is subject to extensive regulatory supervision, and companies in the Group are subject to numerous legal restrictions and regulations. These restrictions may refer to minimum capital requirements or the ability of the Group's subsidiaries to pay dividends imposed by regulators in the countries in which the subsidiaries operate. These are considered industry norms, generally applicable to insurers who operate in the same markets.

For Zurich Santander Insurance America, S.L. and its subsidiaries, and the Bansabadell insurance entities, certain protective rights exist, which, among others, include liquidation, material sale of assets, transactions affecting the legal ownership structure, dividend distribution and capital increase, distribution channel partnerships and governance, which are not quantifiable.

For details on the Group's capital restrictions, see the capital management section in the risk review, which forms an integral part of the consolidated financial statements.

Table 28.2 shows the summarized financial information for each subsidiary that has non-controlling interests that are material to the ZIC Group. Farmers Group, Inc and its subsidiaries are owned 95.38 percent by the ZIC Group and in total a 100 percent by the Group. Therefore, they are not separately disclosed.

Non-controlling interests

Table 28.2

in USD millions, as of December 31	Zurich Santander Insurance America, S.L. and its subsidiaries		Bansabadell insurance entities	
	2020	2019	**2020**	2019
Non-controlling interests percentage	49%	49%	50%	50%
Total Investments	13,853	15,395	12,037	11,023
Other assets	3,264	3,365	1,951	1,672
Insurance and investment contract liabilities[1]	14,534	16,285	11,989	11,046
Other liabilities	1,168	955	521	375
Net assets	**1,416**	**1,520**	**1,477**	**1,275**
Non-controlling interests in net assets	**694**	**745**	**739**	**637**
Total revenues	2,155	3,099	1,706	2,196
Net income after taxes	290	391	166	90
Other comprehensive income	(112)	7	138	15
Total comprehensive income	**178**	**398**	**304**	**105**
Non-controlling interests in total comprehensive income	**87**	**195**	**152**	**52**
Dividends paid to non-controlling interests	99	186	50	38

1 Includes reserves for premium refunds, liabilities for investment contracts, deposits received under ceded reinsurance contracts, deferred front-end fees and liabilities for insurance contracts.

29. Events after the balance sheet date

On January 12, 2021, the ZIC Group announced the successful placement of USD 1.75 billion of dated subordinated notes. The notes will be issued by Zurich Finance (Ireland) DAC and will mature in April 2051.

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Report of the statutory auditor

Report of the statutory auditor

to the General Meeting of Zurich Insurance Company Ltd, Zurich

Report on the audit of the consolidated financial statements

Opinion
We have audited the consolidated financial statements of Zurich Insurance Company Ltd and its subsidiaries (the ZIC Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the year ended December 31, 2020, the consolidated balance sheet as of December 31, 2020, the consolidated statement of cash flows and consolidated statement of changes in equity for the year ended December 31, 2020, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements (pages 33 to 138 and the audited sections of the risk review on pages 3 to 22) give a true and fair view of the consolidated financial position of the ZIC Group as at December 31, 2020 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion
We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the ZIC Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the International Code of Ethics for Professional Accountants (including International Independence Standards) of the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall ZIC Group audit materiality: USD 230 million

We concluded full scope audit work at 28 business units in 10 countries. The full scope audit work addressed 71% and 74% of the ZIC Group's gross written premiums and policy fees (GWP) and total assets, respectively. In addition, specific procedures were performed on a further 22 business units in 10 countries representing a further 6% and 7% of the ZIC Group's GWP and total assets, respectively.

As key audit matters the following areas of focus have been identified:

- Valuation of actuarially determined life insurance assets and liabilities
- Valuation of property and casualty reserves
- Recoverability of goodwill and attorney-in-fact contracts

Report of the statutory auditor (continued)

Audit materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall ZIC Group audit materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall ZIC Group audit materiality	USD 230 million
How we determined it	We determined an amount with reference to the 3 year average of net income before income taxes (NIBIT) and business operating profit (BOP) as appropriate benchmarks for measuring audit materiality. We applied a 5% rule of thumb which resulted in a selected overall audit materiality of USD 230 million.
Rationale for the materiality benchmark applied	We chose NIBIT as a benchmark because, in our view, it is a key indicator for analysts and other external parties, and is a generally accepted benchmark. We also consider BOP as a benchmark because, in our view, it is the benchmark against which the ZIC Group's performance is most commonly measured.

We agreed with the Audit Committee that we would report to them misstatements above USD 20 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the ZIC Group, the accounting processes and controls, and the industry in which the ZIC Group operates.

In establishing the overall approach to the ZIC Group audit, we determined the type of work that needed to be performed at the business units by us, as the ZIC Group engagement team, or by component auditors from PwC network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those business units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements of the ZIC Group as a whole.

The ZIC Group's business units vary significantly in size and we identified 28 which, in our view, required an audit of their complete financial information, due to their size or risk characteristics. Audits of these business units were performed using materiality levels lower than the materiality level for the ZIC Group as a whole, ranging from USD 20 million to USD 150 million, and established by reference to the size of, and risks associated with, the business concerned. Specific audit procedures on certain balances and transactions were performed at a further 22 business units. Together the full scope audits and specific audit procedures accounted for 77% and 81% of the ZIC Group's GWP and total assets, respectively.

Our involvement included various site visits and component auditor working paper reviews across significant business units, together with discussions around audit approach and audit results arising from the work during regular conference calls with the component audit teams.

Report of the statutory auditor (continued)

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of actuarially determined life insurance assets and liabilities

Key audit matter

The ZIC Group's valuation of the actuarially determined life insurance assets (including deferred policy acquisition costs, deferred origination costs, and present value of future profits) and liabilities (reserves for insurance contracts and deferred front-end fees) is based on complex actuarial methodologies and models and involves comprehensive assumption setting processes with regards to future events. Actuarial assumptions selected by the ZIC Group with respect to interest rates, investment returns, mortality, morbidity, longevity, persistency, expenses, stock market volatility and future policyholder behavior and the underlying methodologies and assumptions used may result in material impacts on the valuation of actuarially determined life insurance assets and liabilities.

Specifically, the continued low interest rate environment, which results in reduced investment returns, influences policyholders' behaviors, thereby creating a risk of accelerated amortization of deferred policy acquisition costs and a strain on the sufficiency of reserves for traditional life insurance contracts. The risk has increased by the impact of COVID-19 on the economic environment and policy behavior.

Refer to Notes 4, 8 and 11 to the consolidated financial statements.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting processes used by management related to the valuation of actuarially determined life insurance assets and liabilities.

In relation to the particular matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying data to source documentation.
- Involving our life insurance actuarial experts to independently test and challenge management's methodology and the assumptions used (including the impact of COVID-19), with particular consideration of industry studies, the ZIC Group's experience and management's liability adequacy testing procedures. We focused on the changes to life actuarial methodology and assumptions during the year and assessed whether the methodologies are in compliance with recognized actuarial practices as well as regulatory and reporting requirements.
- Testing, on a sample basis, the calculation models applied to estimate the actuarially determined life insurance assets and liabilities.

Finally, we assessed the adequacy of the disclosures in the consolidated financial statements by comparing it against the IFRS standards.

Based on the work performed we determined that the methodologies, assumptions and underlying data used in the valuation of actuarially determined life insurance assets and liabilities are reasonable.

Report of the statutory auditor (continued)

Valuation of property and casualty reserves

Key audit matter	How our audit addressed the key audit matter
The valuation of property and casualty loss reserves involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date. The ZIC Group uses a range of actuarial methodologies to estimate these provisions. Property and casualty loss reserves require significant judgment relating to factors and assumptions such as inflation, claims development patterns and regulatory changes. Specifically, long-tail lines of business, which often have low frequency, high severity claims settlements, are generally more difficult to project and subject to greater uncertainties than those with short-tail, high frequency claims. Further, not all natural catastrophes and other catastrophes (including COVID-19) can be modeled using actuarial methodologies, which increases the degree of judgment needed in estimating property and casualty loss reserves. Refer to Notes 4 and 8 to the consolidated financial statements.	We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting and governance processes used by management related to the valuation of property and casualty reserves. In relation to the particular matters set out opposite, our substantive testing procedures included the following: – Testing the completeness and accuracy of underlying claims data utilized by the ZIC Group's actuaries in estimating property and casualty loss reserves. – Utilizing information technology audit techniques to analyze claims through claims data plausibility checks and recalculation of claims development patterns. – Involving our actuarial experts to independently test management's property and casualty loss reserve studies and evaluate the reasonableness of the methodology and assumptions used against recognized actuarial practices and industry standards. Our work has included assessing managements methodology and assumptions used for establishing COVID-19 loss reserves. – Performing independent re-projections on selected product lines, particularly focusing on the largest and most uncertain property and casualty reserves. For these product lines our actuarial experts compared their re-projected reserves to those recorded by the ZIC Group and assessed whether the recorded reserves were within a reasonable range. – Performing sensitivity testing and evaluated the appropriateness of any significant adjustments made by management relating to property and casualty reserve estimates. Finally, we assessed the adequacy of the disclosures in the consolidated financial statements by comparing it against the IFRS standards. Based on the work performed we determined that the conclusions reached by Management with regard to the valuation of property and casualty reserves are reasonable.

Report of the statutory auditor (continued)

Recoverability of goodwill and attorney-in-fact contracts

Key audit matter

The ZIC Group's goodwill is allocated to cash generating units (CGUs) that are identified generally at a segment level. The valuation and recoverability of significant goodwill and attorney-in-fact contracts involves complex judgments and estimates, including projections of future income, terminal growth rate assumptions, and discount rates. There is now greater uncertainty surrounding the projections of future income of certain businesses due to COVID-19. These assumptions and estimates can have a material impact on the valuations and impairment decisions reflected in the consolidated financial statements of the ZIC Group.

Refer to Notes 3, 4 and 14 to the consolidated financial statements.

How our audit addressed the key audit matter

We assessed the design effectiveness of selected key controls over terminal growth rate assumptions, and discount rates related to the recoverability of goodwill and attorney-in-fact contracts. In relation to the particular matters set out opposite, our substantive testing procedures included the following:

– Corroborating the justification of the CGUs defined by management for goodwill allocation.

– Testing the ZIC Group's discounted cash flow model that supports the value-in-use calculations in order to assess the appropriateness of the methodology applied in the ZIC Group's annual impairment assessment.

– Testing the reasonableness of the assumptions used in the impairment assessment including projections of future income, terminal growth rate assumptions, discount rates and sensitivity analyses to determine the impact of those assumptions. We have assessed the impact of COVID-19 on projections of future income.

– Engaging our internal valuation experts to assist in the testing of key assumptions and inputs.

Finally, we assessed the adequacy of the disclosures in the consolidated financial statements by comparing it against the IFRS standards.

Based on the work performed we consider Management's impairment testing including the assumptions used to support the carrying value of goodwill and attorney-in-fact contracts as reasonable.

Report of the statutory auditor (continued)

Other information in the annual report
The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of Zurich Insurance Company Ltd, the audited sections of the risk review on pages 3 to 22 and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements
The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the ZIC Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the ZIC Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements
In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Alex Finn
Audit expert
Auditor in charge

Mark Humphreys
Audit expert

Zurich, March 3, 2021

Financial statements – statutory accounts

Board of Directors and auditors, as of December 31, 2020

Board of Directors and auditors

	Residence	Expiration of current term of office
Board of Directors		
Michel M. Liès, Chairman	Zollikon, Switzerland	2021
Christoph Franz, Vice Chairman	Zug, Switzerland	2021
Joan Amble	Darien, CT, USA	2021
Catherine Bessant	Charlotte, NC, USA	2021
Alison Carnwath	Devon, United Kingdom	2021
Michael Halbherr	Zurich, Switzerland	2021
Jeffrey Hayman	Moorestown, NJ, USA	2021
Monica Mächler	Pfäffikon, SZ, Switzerland	2021
Kishore Mahbubani	Singapore, Singapore	2021
Jasmin Staiblin	Pfäffikon, SZ, Switzerland	2021
Barry Stowe	Nashville, TN, USA	2021
Claudia Biedermann, Company Secretary		

Auditors
PricewaterhouseCoopers AG

Honorary Chairman Fritz Gerber, the long-standing Honorary Chairman of Zurich Insurance Company Ltd, passed away on May 10, 2020. He was appointed to this position in recognition of his leadership and extraordinary service to the Company and this appointment did not confer Board membership or director's duties or rights, nor did it entitle him to any directors' fees. With the passing of Fritz Gerber, the role of a Honorary Chairman no longer exists.

Management report

Zurich Insurance Company Ltd (ZIC or the Company) is a corporation domiciled in Zurich, Switzerland, and was incorporated on November 1, 1872. The Company is the principal operating insurance company of the Zurich Insurance Group (ZIG or the Group). As well as being an insurance company, it also acts as the holding company for all subsidiaries and other affiliates of the Group except for the Group's property loans and banking activities.

The results of ZIC include the direct Property and Casualty (P&C) insurance business in Switzerland with its largest branches located in Canada, Japan and Hong Kong as well as assumed reinsurance business from its subsidiaries and the Farmers Exchanges.[1]

ZIC reported a net income after taxes of CHF 2.4 billion in 2020, a 36 percent decrease compared to 2019. This decrease was mainly driven by a lower net investment result of CHF 1.4 billion and higher net insurance benefits and losses of CHF 1.2 billion.

Total gross written premiums and policy fees increased by CHF 709 million or 5 percent to CHF 15.0 billion for the year ended December 31, 2020. In local currency, gross written premiums and policy fees increased by 8 percent or CHF 1.2 billion. Direct gross written premiums and policy fees increased by CHF 367 million to CHF 4.8 billion mainly due to ongoing growth in Switzerland, Canada and Japan. Assumed gross written premiums and policy fees increased by CHF 342 million to CHF 10.2 billion mainly due to an increase in Group internal life reinsurance in 2020 as well as due to the negative impact of the non-renewal of a Group internal reinsurance contract in 2019.

The net insurance reserves decreased by CHF 791 million compared with the year ended December 31, 2019. As the Swiss franc strengthened against the U.S dollar and the British pound during 2020, the net insurance reserves translated into Swiss franc decreased. In local currency, the net insurance reserves increased by CHF 577 million, mainly driven by the acquisition of a commercial accident and health insurance portfolio in Switzerland, the COVID-19 pandemic as well as catastrophe and weather events in the United States during 2020. This increase was partially offset by a release of net insurance reserves 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.

The net investment result decreased by CHF 1.4 billion to CHF 3.5 billion, mainly due to lower income from and higher write-downs on investments in subsidiaries and associates and to the overall volatility in the equity securities markets during 2020 in response to the COVID-19 pandemic.

Shareholder's equity decreased by CHF 539 million to CHF 25.4 billion for the year ended December 31, 2020, from CHF 25.9 billion for the year ended December 31, 2019. This decrease reflects the dividend payment to Zurich Insurance Group Ltd of CHF 2.9 billion in 2020, which was approved at the Annual General Meeting on April 1, 2020, partially offset by the net income after taxes of CHF 2.4 billion.

ZIC is fully integrated into the Group-wide risk assessment process of the Zurich Insurance Group. This risk process also addresses the nature and scope of business activities and the specific risks of ZIC. For more information, see the Risk review on pages 3 to 22 of this Annual Report.

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

Financial statements – statutory accounts (continued)

On May 29, 2020, after receiving regulatory approval, the Company acquired the commercial accident and health business from CSS Versicherung AG.

On December 11, 2020, Farmers Group, Inc., and the Farmers Exchanges entered into an agreement to acquire MetLife's U.S. property and casualty business for USD 3.9 billion (Zurich Insurance Group has no ownership interest in the Farmers Exchanges. Farmers Group, Inc., a wholly owned subsidiary of the Zurich Insurance Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as its attorney-in-fact and receives fees for its services). The transaction is subject to regulatory approval and is expected to complete in the second quarter 2021. The transaction will give the Farmers Exchanges a nationwide presence and access to new distribution channels that provide a strong platform for accelerated growth, whilst further increasing Zurich's stable, fee-based earnings streams.

On December 15, 2020, the Company completed the acquisition of Healthinsite Proprietary Limited and Insite Holding Pty Limited (collectively referred to as Healthinsite). Healthinsite provides innovative health and behavioral risk management solutions internationally to corporate clients and is the owner of proprietary software. Their carrying value amounted to CHF 15 million as of December 31, 2020.

Since the end of 2019, the COVID-19 pandemic has developed rapidly with far-reaching impacts across the insurance industry and the global economy overall. The global nature of the pandemic and the varying government actions taken to mitigate it make the potential losses (including the wide range of related coverage issues and associated litigation generated) inherently more difficult to model than traditional catastrophic losses or loss events with a consequent increase in uncertainty around them. Management has considered the effect of COVID-19 to the extent possible in its estimates and assumptions. Specifically, insurance reserves reflect management's best estimate of claims activity directly related to COVID-19 as well as premium returns and rebates to customers where appropriate.

The continuing nature of COVID-19 pandemic has the potential to impact the Company's future results both positively and negatively with the overall outcome dependent on factors such as the duration of lockdowns imposed by governments and levels of mortality. Following re-underwriting measures taken since the start of the pandemic, the Company's exposure to business interruption claims has been significantly reduced from the 2020 level. More broadly, continued rate increases within the Company's property and casualty business are expected to support growth and improve the Company's underwriting performance, while persistent low yields may have an adverse impact on investment results.

Financial statements – statutory accounts (continued)

Income statements

Income statements

in CHF millions, for the years ended December 31	Notes	2020	2019
Gross written premiums and policy fees		14,995	14,286
Premiums ceded to reinsurers		(3,804)	(3,839)
Net written premiums and policy fees		11,192	10,448
Change in reserves for unearned premiums, gross		(283)	(246)
Change in reserves for unearned premiums, ceded		55	82
Net earned premiums and policy fees		10,963	10,283
Other income		1,173	1,117
Total technical income		**12,136**	**11,400**
Claims paid, annuities and loss adjustment expenses, gross		(9,469)	(11,302)
Claims paid, annuities and loss adjustment expenses, ceded		1,901	2,210
Change in insurance reserves, gross	14	(1,019)	2,044
Change in insurance reserves, ceded	14	621	243
Insurance benefits and losses, net of reinsurance		(7,966)	(6,804)
Underwriting & policy acquisition costs, gross		(3,266)	(3,111)
Underwriting & policy acquisition costs, ceded		519	331
Underwriting & policy acquisition costs, net of reinsurance		(2,747)	(2,780)
Administrative and other expense	4	(1,892)	(2,142)
Total technical expense		**(12,604)**	**(11,727)**
Investment income	5	4,297	5,165
Investment expenses	6	(845)	(340)
Net investment result		3,452	4,825
Other financial income		978	447
Other financial expense		(966)	(460)
Operating result		**2,996**	**4,485**
Interest expense on debt and other interest expense		(523)	(610)
Net income before taxes		**2,472**	**3,875**
Direct tax expenses		(112)	(161)
Net income after taxes		**2,361**	**3,714**

The notes to the financial statements are an integral part of these financial statements.

Financial statements – statutory accounts (continued)

Balance sheets

Assets

in CHF millions, as of December 31	Notes	2020	2019
Investments			
Real estate		1,346	1,466
Investments in subsidiaries and associates	7	34,685	34,352
Debt securities		17,550	18,840
Other loans		5,243	5,113
Mortgage loans		794	970
Equity securities		4,688	4,609
Mixed investments funds		52	54
Other investments	8	5,939	7,466
Total investments		**70,298**	**72,870**
Other assets			
Derivative assets		893	552
Deposits made under assumed reinsurance contracts		2,145	2,302
Cash and cash equivalents		5,644	4,272
Insurance reserves, ceded	13	6,915	6,634
Fixed assets	9	87	94
Deferred acquisition costs, net of reinsurance	10	2,003	2,008
Intangible assets	11	98	129
Receivables from insurance and reinsurance business	12	1,517	1,433
Other receivables		537	767
Other assets		27	25
Accrued assets		647	729
Total other assets		**20,512**	**18,945**
Total assets		**90,810**	**91,815**

The notes to the financial statements are an integral part of these financial statements.

Financial statements – statutory accounts (continued)

Liabilities and shareholder's equity

in CHF millions, as of December 31	Notes	2020	2019
Liabilities			
Insurance reserves, gross	13	36,768	37,279
Provisions	16	1,249	1,449
Senior and other debt	17	13,878	14,236
Derivative liabilities		279	201
Deposits received under ceded reinsurance contracts		157	167
Liabilities from insurance and reinsurance business	18	1,327	1,434
Other liabilities		1,193	1,311
Accrued liabilities		1,622	1,602
Subordinated debt	17	8,939	8,199
Total liabilities		**65,411**	**65,877**
Shareholder's equity (before appropriation of available earnings)			
Share capital	19	825	825
Capital contribution reserve		5,570	5,570
Legal reserve		485	485
General free reserve		4,272	4,272
Retained earnings:			
Beginning of year		*14,786*	*13,822*
Dividend paid		*(2,900)*	*(2,750)*
Net income after taxes		*2,361*	*3,714*
Retained earnings, end of year		14,246	14,786
Total shareholder's equity (before appropriation of available earnings)		**25,398**	**25,938**
Total liabilities and shareholder's equity		**90,810**	**91,815**

The notes to the financial statements are an integral part of these financial statements.

Notes to the financial statements

1. Basis of presentation

The Company's financial statements are presented in accordance with the Swiss Code of Obligations and relevant insurance supervisory law, including the FINMA Insurance Supervision Ordinance (ISO-FINMA), revised December 15, 2015.

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

2. Summary of significant accounting policies

Investments

Real estate held for investment and for own use held in Switzerland is carried at the acquisition cost less required or permissible impairment, and is valued on a single valuation basis. Real estate held by branches located outside Switzerland is carried at the local statutory value valid in the country where the real estate is located, valued on a single valuation basis.

Investments in subsidiaries and associates are held at acquisition cost less necessary impairments. The method to determine the necessary impairments is considering the similarity of the underlying investments in subsidiaries and associates such as the fungibility of capital or the pooling of reinsurance as well as the potential dependency with other investments in subsidiaries and associates. Investments in subsidiaries and associates in both "Property and Casualty (P&C)" and "Life" are assessed on a regional basis (Europe, Middle East & Africa, North America, Asia Pacific, Latin America and Group Reinsurance), further "Farmers", "Group Functions and Operations" and "Non-Core Businesses" are considered as similar assets. For these sub-groups, the book value of the sub-group is compared to its fair value. If needed, the carrying value of the investments in subsidiaries and associates is impaired accordingly.

Debt securities are carried at amortized cost using the effective interest rate method. The valuation of debt securities held in the single investor funds in Switzerland is the same as for directly held securities.

Mortgage and other loans are valued at their nominal value less any necessary impairments.

Equity securities which are quoted on a stock exchange are carried at the stock exchange price as of December 31. Unquoted equity securities are carried at the acquisition cost with a deduction for necessary impairments. The valuation of equity securities held in single investor funds in Switzerland is the same as for directly held securities.

Mixed investments funds invests into different asset types. Mixed investment funds are carried at market price as of December 31.

Other investments consists of asset-backed and mortgage-backed securities as well as collaterized debt/loan obligations, which are carried at amortized cost using the effective interest rate method.

Other assets

Derivative financial instruments

Derivative financial instruments held for purposes of economic hedging are carried at fair value.

Deposits made under assumed reinsurance contracts

Reinsurance deposits consist of funds deposited with ceding insurers to guarantee contractual liabilities for assumed reinsurance.

Deferred acquisition costs, net of reinsurance

Acquisition costs related to reinsurance business are deferred. For P&C business, the deferred costs are subsequently amortized over the period in which the related assumed premiums are earned. For life business, the deferred costs are amortized over the life of the contract based on expected premiums or the estimated gross margin expected to be realized over the life of the contract, depending on the type of underlying contracts.

Accrued assets
This amount relates primarily to interest income accruals, other prepaid expenses and other accrued income. Accrued investment income within the single investor funds in Switzerland is recorded as a write-up on investments.

Insurance reserves

Reserves for unearned premiums represent the portion of the premiums written relating to the unexpired term of insurance coverage as of the balance sheet date. In many insurance contracts, the insurance period for which the insurance company assumes a risk against a premium paid does not correspond to the Company's financial year. Thus, an amount equivalent to the unearned portion of the premium is set up as a reserve at the end of the financial year.

Reserves for losses and loss adjustment expenses represent reserves for reported claims and estimates for losses incurred but not yet reported (IBNR). In addition, equalization reserves are included where these are accepted or required by the regulator in the country where such reserves are held. The reserves represent estimates of future payments of reported and unreported claims for losses and related expenses with respect to insured events that have occurred. Reserving is a complex process dealing with uncertainty, requiring the use of informed estimates and judgments. Any changes in estimates are reflected in the income statements in the period in which estimates are changed.

Future life policyholders' benefits represent the estimated future benefit liability for life insurance policies and include the value of accumulated declared bonuses or dividends that have vested to policyholders. These liabilities relate to assumed reinsurance contracts. The liabilities are primarily measured using current financial and non-financial assumptions. Certain pension and annuity liabilities are calculated using a net level premium valuation method based on actuarial assumptions including mortality, persistency, expenses and investment return, plus a margin for adverse deviations.

Other income and administrative and other expense

Other income includes interest income on deposits received under ceded reinsurance contracts as well as other technical and other non-technical income. Administrative and other expense represent primarily technical expense in connection with the operation of the insurance business.

Investment income and expense

Realized capital gains/losses on investments occur when the sales price or redemption value is higher or lower than the carrying value at the time of sale. The gain/loss is the difference between carrying value and the sales price or redemption value.

Write-downs and write-ups on investments include losses arising from a decrease in the fair value below cost or the carrying value at the previous year end on equity securities and necessary impairments of debt securities and investments in subsidiaries and associates. Write-ups of quoted equity securities are gains resulting from the difference between the lower carrying value at the beginning of the year or at the later purchase date and the higher carrying value as of the end of December. Write-ups also include gains as a result of the reversal of impairments on unquoted equity securities up to the acquisition cost value. Write-downs and write-ups further include the change in valuation of the single investor funds, which also include the investment income of the investments within these funds.

Other financial income and expense

Other financial income includes interest income on cash and cash equivalents as well as gains on derivatives. Other financial expenses includes mainly losses on derivatives.

Direct tax expenses

Direct tax expenses include both Swiss and foreign income tax expense and capital tax expense in Switzerland as well as foreign withholding tax expense on investment income.

3. Exchange rates

The presentation currency for ZIC and its branches is Swiss franc. Several ZIC branches operate outside Switzerland with different functional currencies. A functional currency is the currency of the primary economic environment in which the branch operates. Assets and liabilities of those branches with functional currencies other than Swiss franc are translated into the presentation currency at end-of-period exchange rates, except for investments in subsidiaries and associates where historical exchange rates are used. Revenues and expenses are translated using the average exchange rate of the year. The resulting exchange differences are recorded in the income statements.

The table below summarizes the principal exchange rates that have been used for translation purposes.

Principal exchange rates

CHF per foreign currency unit	Balance sheets		Income statements	
	12/31/2020	12/31/2019	**2020**	2019
Canadian dollar	0.69	0.75	0.70	0.75
Euro	1.08	1.09	1.07	1.11
British pound	1.21	1.28	1.20	1.27
U.S. dollar	0.88	0.97	0.94	0.99

4. Administrative and other expense

Administrative and other expense

in CHF millions, for the years ended December 31	**2020**	2019
Administration and other general expenses	(766)	(1,096)
Personnel expenses	(1,071)	(1,081)
Amortization and impairments of software and equipment	(79)	(70)
Foreign currency transaction gains and losses	(7)	192
Gains and losses on foreign currency derivatives	31	(87)
Total administrative and other expense	**(1,892)**	**(2,142)**

Administration and other general expenses decreased by CHF 330 million to CHF 766 million in 2020. The higher recognition of several financial provisions, mainly in relation to employee benefits plans, impacted the 2019 result negatively compared to 2020. The impact due to foreign currency transactions and derivatives was heavily driven by the depreciation of the U.S. dollar exchange rate in 2020.

Financial statements – statutory accounts (continued)

5. Investment income

Investment income

in CHF millions, for the years ended December 31	Current income		Write-ups		Realized capital gains		Total	
	2020	2019	**2020**	2019	**2020**	2019	**2020**	2019
Real estate	86	92	–	–	256	24	343	116
Investments in subsidiaries and associates	2,341	3,025	–	–	–	4	2,341	3,029
Debt securities	271	331	52	43	217	104	540	478
Other loans	180	200	–	–	8	8	188	208
Mortgage loans	15	19	–	–	7	7	22	27
Equity securities	67	98	238	576	325	358	629	1,032
Mixed investments funds	2	3	–	–	–	–	2	3
Other investments	192	241	–	–	40	31	232	272
Total investment income	**3,154**	**4,010**	**290**	**619**	**853**	**536**	**4,297**	**5,165**

Total investment income decreased by CHF 868 million or 17 percent to CHF 4.3 billion in 2020. Dividend income from subsidiaries and associates decreased by CHF 684 million to CHF 2.3 billion in 2020, mainly due to lower dividend payments from Farmers Group, Inc., and from Zurich Holding Ireland Limited, partially offset by higher dividend income from Zurich Vida, Compañía de Seguros y Reaseguros, S.A. - Sociedad Unipersonal. The lower write-ups on equity securities were mainly driven by the volatile equity market environment in 2020.

6. Investment expenses

Investment expenses

in CHF millions, for the years ended December 31	Write-downs		Realized capital losses		Total	
	2020	2019	**2020**	2019	**2020**	2019
Real estate	(5)	–	–	(1)	(5)	(2)
Investments in subsidiaries and associates	(279)	(10)	(6)	–	(285)	(10)
Debt securities	(32)	(2)	(51)	(32)	(83)	(33)
Other loans	(4)	(1)	(4)	(19)	(8)	(19)
Mortgage loans	–	–	–	–	–	–
Equity securities	(149)	(37)	(177)	(111)	(327)	(148)
Mixed investments funds	(2)	(1)	–	–	(2)	(1)
Other investments	–	–	(50)	(48)	(50)	(48)
Sub-total investment expenses	**(470)**	**(51)**	**(289)**	**(210)**	**(759)**	**(261)**
Investment general expenses	n.a.	n.a.	n.a.	n.a.	(86)	(79)
Total investment expenses					**(845)**	**(340)**

Total investment expenses increased by CHF 505 million or 148 percent to CHF 845 million in 2020, mainly due to higher write-downs on investments in subsidiaries and associates of CHF 279 million, compared to CHF 10 million in 2019. The impairments in 2020 mainly relate to subsidiaries in Latin America P&C business and Bright Box HK Limited. Further, investment expenses on equity securities increased by CHF 178 million in 2020 compared to 2019 due to higher impairment and realized losses driven by the volatile equity market in 2020.

7. Investments in subsidiaries and associates

The table below shows the significant subsidiaries of ZIC with a carrying value of at least CHF 500 million and/or net income exceeding CHF 100 million. The carrying value of the listed subsidiaries and associates represents 88 percent of the total investments in subsidiaries and associates of CHF 34.7 billion.

Significant subsidiaries

as of December 31, 2020	Registered office	Voting rights %	Ownership interest %		Nominal value of common stock (in local currency millions)
Australia					
Zurich Financial Services Australia Limited[1]	Sydney	100.0	100.0	AUD	2,845.0
Brazil					
Zurich Minas Brasil Seguros S.A.[1]	Belo Horizonte	100.0	100.0	BRL	2,700.0
Germany					
Zürich Beteiligungs-Aktiengesellschaft (Deutschland)[1]	Frankfurt	100.0	100.0	EUR	152.9
Ireland					
Zurich Holding Ireland Limited	Dublin	100.0	100.0	EUR	0.1
Zurich Insurance plc[1,2]	Dublin	4.5	4.5	EUR	8.2
Italy					
Zurich Investments Life S.p.A.[1]	Milan	100.0	100.0	EUR	199.0
Spain					
Zurich Latin America Holding S.L. - Sociedad Unipersonal	Barcelona	100.0	100.0	EUR	43.0
Zurich Vida, Compañía de Seguros y Reaseguros, S.A. - Sociedad Unipersonal[1]	Madrid	100.0	100.0	EUR	56.4
Switzerland					
Zurich Life Insurance Company Ltd[1]	Zurich	100.0	100.0	CHF	60.0
Zurich Finance Company AG	Zurich	100.0	100.0	CHF	0.2
Zurich Reinsurance Company Ltd[1]	Zurich	100.0	100.0	CHF	11.7
United Kingdom					
Allied Zurich Holdings Limited	St. Hélier, Jersey	100.0	100.0	GBP	547.6
Zurich International Life Limited[1]	Douglas, Isle of Man	100.0	100.0	GBP	123.4
United States of America					
Farmers Group, Inc.[1,3,4]	Carson City, NV	87.9	95.4	USD	0.0
Zurich Holding Company of America, Inc.	Wilmington, DE	100.0	100.0	USD	0.0

1 Regulated insurance companies.
2 The indirectly held voting rights percentage and ownership interest percentage are 100 percent for Zurich Insurance plc.
3 The ownership percentages in Farmers Group, Inc., and its fully owned subsidiaries have been calculated based on the participation rights of ZIC in a situation of liquidation, dissolution or winding up of Farmers Group, Inc.
4 The Farmers Exchanges are owned by their policyholders. Farmers Group, Inc., a wholly owned subsidiary of the Zurich Insurance Group, provides certain non-claims services and ancillary services to the Farmers Exchanges as attorney-in-fact and receives fees for its services.

Financial statements – statutory accounts (continued)

The table below shows the most significant indirectly held subsidiaries of ZIC with a net asset value exceeding USD 1.0 billion (based on IFRS values) and ownership interest of more than 10 percent.

Significant indirect subsidiaries

as of December 31, 2020	Registered office	Parent company	Voting rights %[3]	Ownership interest %[3]
Australia				
OnePath Life Australia Holdings Pty Limited	Sydney	Zurich Financial Services Australia Limited[1]	100.0	100.0
OnePath Life Limited	Sydney	OnePath Life Australia Holdings Pty Limited	100.0	100.0
Zurich Australia Limited[2]	Sydney	Zurich Financial Services Australia Limited[1]	100.0	100.0
Bermuda				
Zurich Global, Ltd.	Pembroke, Bermuda	Zurich Holding Company of America, Inc.[1]	100.0	100.0
Germany				
Zurich Deutscher Herold Lebensversicherung Aktiengesellschaft	Köln	Zürich Beteiligungs-Aktiengesellschaft (Deutschland)[1]	32.5	32.5
		Deutscher Herold Aktiengesellschaft	67.5	67.5
Luxembourg				
REX-ZDHL S.C.S SICAV-SIF	Leudelange	Zurich Deutscher Herold Lebensversicherung Aktiengesellschaft	100.0	100.0
Spain				
Zurich Santander Holding (Spain), S.L.	Boadilla del Monte	Zurich Santander Insurance America, S.L.	51.0	51.0
Bansabadell Vida S.A. de Seguros y Reaseguros[2]	Madrid	Zurich Vida, Compañía de Seguros y Reaseguros, S.A. - Sociedad Unipersonal[1]	50.0	50.0
United Kingdom				
Zurich Assurance Ltd	Cheltenham, England	Eagle Star Holdings Limited	100.0	100.0
Zurich Financial Services (UKISA) Limited[2]	Cheltenham, England	Allied Zurich Holdings Limited[1]	100.0	100.0
United States of America				
Farmers New World Life Insurance Company	Bellevue, WA	Farmers Group, Inc.[1]	87.9	95.4
Zurich American Company, LLC	Wilmington, DE	Zurich Holding Company of America, Inc.[1]	100.0	100.0
Zurich American Insurance Company	New York, NY	Zurich Holding Company of America, Inc.[1]	100.0	100.0

1 Direct subsidiary of the Company.
2 Zurich Australia Limited, Bansabadell Vida S.A. de Seguros y Reaseguros and Zurich Financial Services (UKISA) Limited have been added to the list of significant indirect subsidiaries.
3 The voting and ownership percentage are disclosed based on a Zurich Insurance Company Group view.

Financial statements – statutory accounts (continued)

8. Other investments

Other investments

in CHF millions, as of December 31	2020	2019
Asset-backed securities	662	1,347
Mortgage-backed securities	4,819	5,661
Collateralized debt/loan obligations	458	458
Total other investments	**5,939**	**7,466**

The decrease in other investments was related to the termination of the WAQS reinsurance treaty with Zurich American Insurance Company in 2018, which is now in run-off. Further, the decrease was also driven by the depreciation of the U.S. dollar in 2020.

9. Fixed assets

Fixed assets

in CHF millions, as of December 31	2020	2019
Furniture and equipment	370	376
Accumulated amortization	(283)	(282)
Total fixed assets	**87**	**94**

10. Deferred acquisition costs

Deferred acquisition costs, net of reinsurance

in CHF millions, as of December 31	2020	2019
Deferred acquisition costs, assumed reinsurance	2,072	2,081
Deferred acquisition costs, retroceded reinsurance	(69)	(72)
Total deferred acquisition costs, net of reinsurance	**2,003**	**2,008**

11. Intangible assets

Intangible assets consists of acquired and self-developed software.

12. Receivables from insurance and reinsurance business

Receivables from insurance and reinsurance business

in CHF millions, as of December 31	2020	2019
Receivables from policyholders	138	94
Receivables from agents and intermediaries	208	199
Receivables from insurance and reinsurance companies	1,171	1,140
Total receivables from insurance and reinsurance business	**1,517**	**1,433**

13. Insurance reserves, net

Insurance reserves, net

in CHF millions, as of December 31	2020	2019
Gross		
Reserves for unearned premiums	4,440	4,342
Reserves for losses and loss adjustment expenses	26,067	26,956
Other technical reserves	816	746
Future life policyholders' benefits	5,441	5,228
Reserves for policyholders' dividends	5	7
Total insurance reserves, gross	**36,768**	**37,279**
Ceded		
Reserves for unearned premiums	(1,262)	(1,280)
Reserves for losses and loss adjustment expenses	(5,391)	(5,040)
Other technical reserves	(1)	(1)
Future life policyholders' benefits	(262)	(313)
Reserves for policyholders' dividends	–	–
Total insurance reserves, ceded	**(6,915)**	**(6,634)**
Net		
Reserves for unearned premiums	3,178	3,062
Reserves for losses and loss adjustment expenses	20,676	21,916
Other technical reserves	814	745
Future life policyholders' benefits	5,179	4,914
Reserves for policyholders' dividends	5	7
Total insurance reserves, net of reinsurance	**29,853**	**30,644**

Total net insurance reserves decreased by CHF 791 million or 3 percent to CHF 29.9 billion. In local currency however, the insurance reserves increased by CHF 577 million. The gross insurance reserves decreased by CHF 510 million mainly due to the impact of the WAQS reinsurance treaty with Zurich American Insurance Company which is in run-off since 2018 as well as due to the impact of the foreign currency translation as a result of the depreciation of the U.S. dollar in 2020. The decrease was partially offset by the COVID-19 gross reserves in the amount of CHF 580 million and by increased reserves for large losses during 2020. Further, the acquisition of a commercial accident and health insurance portfolio from CSS Versicherung AG resulted in an increase of gross insurance reserves in 2020. The ceded insurance reserves increased by CHF 281 million mainly due to the impact of COVID-19 of CHF 350 million, partially offset by the impact of the foreign currency translation.

14. Change in insurance reserves, net

Change in insurance reserves, net

in CHF millions, for the years ended December 31	2020	2019
Gross		
Change in reserves for losses and loss adjustment expenses	(369)	2,420
Change in other technical reserves	(62)	251
Change in reserves for future life policyholders' benefits	(582)	(628)
Change in reserves for policyholders' dividends	(7)	1
Total change in insurance reserves, gross	**(1,019)**	**2,044**
Ceded		
Change in reserves for losses and loss adjustment expenses	660	171
Change in other technical reserves	–	–
Change in reserves for future life policyholders' benefits	(40)	72
Change in reserves for policyholders' dividends	–	–
Total change in insurance reserves, ceded	**621**	**243**
Net		
Change in reserves for losses and loss adjustment expenses	292	2,591
Change in other technical reserves	(62)	251
Change in reserves for future life policyholders' benefits	(621)	(556)
Change in reserves for policyholders' dividends	(7)	1
Total change in insurance reserves, net of reinsurance	**(398)**	**2,288**

The negative impact in the income statements due to the change in net insurance reserves in 2020 results from the reserve set-up following the acquisition of the commercial accident and health insurance portfolio from CSS Versicherung AG, from the reserves for COVID-19 losses as well as from reserves related to catastrophe losses such as hurricanes Laura and Sally, partially offset by the reserve release due to the termination of the WAQS reinsurance treaty with Zurich American Insurance Company, which is in run-off since 2018.

In 2019, the termination of the WAQS reinsurance treaty with Zurich American Insurance Company, which is in run-off since 2018, the commutation of a reinsured legacy portfolio with Zurich Insurance plc. as well as the non-renewal of a Group internal reinsurance contract with Zurich American Life Insurance Company impacted the change in net insurance reserves positively.

Financial statements – statutory accounts (continued)

15. Direct and assumed business

Direct and assumed business

in CHF millions, for the years ended December 31	2020	2019
Gross written premiums and policy fees, direct business	4,796	4,428
Gross written premiums and policy fees, assumed business	10,200	9,858
Premiums ceded to reinsurers	(3,804)	(3,839)
Net written premiums and policy fees	**11,192**	**10,448**
Change in reserves for unearned premiums, direct business	(111)	(125)
Change in reserves for unearned premiums, assumed business	(172)	(121)
Change in reserves for unearned premiums, ceded	55	82
Change in reserves for unearned premiums, net of reinsurance	**(228)**	**(164)**
Claims paid, annuities and loss adjustment expenses, direct business	(2,608)	(2,637)
Claims paid, annuities and loss adjustment expenses, assumed business	(6,861)	(8,665)
Claims paid, annuities and loss adjustment expenses, ceded	1,901	2,210
Claims paid, annuities and loss adjustment expenses, net of reinsurance	**(7,568)**	**(9,092)**
Change in insurance reserves, direct business	(212)	164
Change in insurance reserves, assumed business	(807)	1,880
Change in insurance reserves, ceded	621	243
Change in insurance reserves, net of reinsurance	**(398)**	**2,288**
Underwriting & policy acquisition costs, direct business	(966)	(833)
Underwriting & policy acquisition costs, assumed business	(2,300)	(2,278)
Underwriting & policy acquisition costs, ceded	519	331
Underwriting & policy acquisition costs, net of reinsurance	**(2,747)**	**(2,780)**

16. Provisions

The provisions were established in anticipation of expected, estimated or perceived expenditures or exposures and decreased by CHF 200 million in 2020, mainly due to a reduction of provisions to cover obligations in relation to employee benefits plans.

17. Debt

a) Senior and other debt

Senior and other debt

in CHF millions, as of December 31		2020	2019
Issuances to capital markets under Euro Medium Term Note Programme	0.625% CHF 250 million, due July 2020	–	250
	2.875% CHF 250 million, due July 2021	250	250
	3.375% EUR 500 million, due June 2022	541	543
	1.875% CHF 100 million, due September 2023	100	100
	1.75% EUR 500 million, due September 2024	541	543
	0.5% CHF 350 million, due December 2024	350	350
	1.5% CHF 150 million, due July 2026	150	150
	0.75% CHF 200 million, due October 2027	200	200
	1% CHF 200 million, due October 2028	200	200
	1.5% EUR 500 million, due December 2028	541	543
	0.1% CHF 250 million, due August 2032	250	–
Zurich Insurance Group companies	various	10,634	10,984
Other debt	various	121	122
Total senior and other debt		**13,878**	**14,236**
	thereof due in one to five years	*1,652*	*1,907*
	thereof due in more than five years	*1,341*	*1,093*

b) Subordinated debt

Subordinated debt

in CHF millions, as of December 31		2020	2019
Zurich Insurance Group Ltd	6.30% CHF 2.1 billion perpetual loan	2,132	2,132
Zurich Finance (Ireland) DAC	1.875% EUR 750 million, first callable on June 17, 2030, due September 2050	811	–
Zurich Finance (Ireland) DAC	1.60% EUR 200 million, first callable on September 17, 2032, due December 2052	216	–
Issuances to capital markets under Euro Medium Term Note Programme	2.75% CHF 225 million perpetual capital notes, callable on June 2, 2021	225	225
	2.75% CHF 200 million perpetual capital notes, first callable on September 30, 2021	200	200
	4.75% USD 1 billion perpetual notes, first callable on January 20, 2022	885	968
	4.25% EUR 1 billion notes, first callable on October 2, 2023, due October 2043	1,082	1,087
	4.25% USD 300 million subordinated notes, first callable on October 1, 2025, due October 2045	265	291
	5.625% USD 1 billion subordinated notes, first callable on June 24, 2026, due June 2046	885	968
	3.5% EUR 750 million subordinated notes, first callable on October 1, 2026, due October 2046	811	815
	5.125% USD 500 million subordinated notes, first callable on June 1, 2028, due June 2048	442	484
	4.875% USD 500 million subordinated notes, first callable on October 2, 2028, due October 2048	442	484
	2.75% EUR 500 million subordinated notes, first callable on February 19, 2029, due February 2049	541	543
Total subordinated debt		**8,939**	**8,199**
	thereof due in one to five years	*2,232*	*2,480*
	thereof due in more than five years	*6,282*	*5,718*

18. Liabilities from insurance and reinsurance business

Liabilities from insurance and reinsurance business

in CHF millions, as of December 31	2020	2019
Amounts due to policyholders	47	42
Amounts due to agents and intermediaries	19	14
Amounts due to insurance and reinsurance companies	1,261	1,378
Total liabilities from insurance and reinsurance business	**1,327**	**1,434**

Financial statements – statutory accounts (continued)

19. Share capital

Share capital and profit sharing certificates

number of shares, as of December 31	2020	2019
Issued share capital, CHF 10.00 par value	82,500,000	82,500,000

a) Issued share capital
ZIC's issued share capital amounted to CHF 825,000,000, consisting of 82,500,000 fully paid registered shares with a par value of CHF 10.00 each.

b) Shareholders
As of December 31, 2020 and 2019, 100 percent of the registered shares of the Company were owned by Zurich Insurance Group Ltd.

Shareholder's equity

in CHF millions, as of December 31	2020	2019	changes
Shareholder's equity			
Share capital	825	825	–
Capital contribution reserve	5,570	5,570	–
Legal reserve	485	485	–
General free reserve	4,272	4,272	–
Retained earnings:			
Beginning of year	*14,786*	*13,822*	*964*
Dividend paid	*(2,900)*	*(2,750)*	*(150)*
Net income after taxes	*2,361*	*3,714*	*(1,353)*
Retained earnings, end of year	14,246	14,786	(539)
Total shareholder's equity	**25,398**	**25,938**	**(539)**

Financial statements – statutory accounts (continued)

20. Assets and liabilities relating to companies within the Zurich Insurance Group

Assets and liabilities relating to direct and indirect subsidiaries

in CHF millions, as of December 31	2020	2019
Assets		
Investments in subsidiaries and associates	34,685	34,352
Debt securities	12	13
Other loans	5,171	5,057
Derivative assets	369	228
Deposits made under assumed reinsurance contracts	1,866	1,926
Cash and cash equivalents	504	965
Insurance reserves, ceded	1,572	1,755
Deferred acquisition costs, net of reinsurance	2,014	2,022
Receivables from insurance and reinsurance business	616	642
Other receivables	173	228
Accrued assets	250	316
Total assets	**47,231**	**47,504**
Liabilities		
Insurance reserves, gross	25,759	26,381
Provisions	148	174
Senior and other debt	10,105	10,871
Derivative liabilities	34	18
Deposits received under ceded reinsurance contracts	39	53
Liabilities from insurance and reinsurance business	1,047	1,160
Other liabilities	73	79
Accrued liabilities	220	202
Subordinated debt	1,028	–
Total liabilities	**38,453**	**38,938**

Assets and liabilities relating to ZIG Ltd

in CHF millions, as of December 31	2020	2019
Assets		
Equity securities	724	605
Cash and cash equivalent	195	127
Total assets	**919**	**732**
Liabilities		
Senior and other debt	529	113
Other liabilities	–	1
Accrued liabilities	91	91
Subordinated debt	2,132	2,132
Total liabilities	**2,753**	**2,337**

21. Supplementary information

Supplementary information

in CHF millions, as of December 31	**2020**	2019
Limited guarantees, indemnity liabilities and pledges in favor of third parties	15,445	13,596
Leasing obligations not recorded on the balance sheet	275	247
Pledged assets in respect of securities lending agreements (at book value)	183	–
Security deposits	7,688	9,845
Number of employees – Average full time equivalents	5,778	5,458
Audit fees	(11)	(11)
Other service fees	–	(1)

Limited guarantees, indemnity liabilities and pledges in favor of third parties included a guarantee of USD 3.0 billion both in 2020 (CHF 2.7 billion) and in 2019 (CHF 3.0 billion), in favor of subsidiaries to provide funds under certain circumstances. The total maximum exposure under this guarantee amounted to USD 200 million (CHF 177 million) as of December 31, 2020, and USD 265 million (CHF 257 million) as of December 31, 2019. In 2020, a Group internal funding agreement letter in the amount of USD 2.4 billion (CHF 2.2 billion) in connection with the agreement of the Group's subsidiary Farmers Group, Inc., and the Farmers Exchanges to acquire MetLife's U.S. property and casualty business has been added.

In addition to the guarantees listed above, the Company has provided unlimited guarantees in support of various subsidiaries belonging to the Zurich Insurance Group.

According to regulatory requirements, CHF 12.1 billion and CHF 12.6 billion were attributed to tied assets, as of December 31, 2020 and 2019, respectively.

To secure the insurance reserves of the assumed reinsurance business, investments with a value of CHF 7.7 billion and CHF 9.9 billion as of December 31, 2020 and 2019, respectively, were deposited in favor of ceding companies.

22. Net release of hidden reserves

In 2020 and in 2019, there was no material release of hidden reserves.

Proposed appropriation of available earnings

number of shares, as of December 31	2020	2019
Registered shares eligible for dividends		
Eligible shares	82,500,000	82,500,000

The Board of Directors proposes to the Annual General Meeting to be held on April 7, 2021, to appropriate the available earnings for 2020 as follows:

in CHF	Available earnings
Available earnings	
As of January 1, 2020	14,785,920,904
Dividend paid	(2,900,000,000)
Net income after taxes	2,360,522,124
Available earnings, as of December 31, 2020	**14,246,443,028**

The Board of Directors proposes a dividend of CHF 2,600,000,000 out of the available earnings for 2020:

in CHF	Available earnings
Appropriation of available earnings	
As of January 1, 2021	14,246,443,028
Dividend payment out of available earnings	(2,600,000,000)
Balance carried forward	**11,646,443,028**

Zurich, March 3, 2021

On behalf of the Board of Directors of Zurich Insurance Company Ltd

Michel M. Liès

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Report of the statutory auditor

Report of the statutory auditor

To the General Meeting of Zurich Insurance Company Ltd, Zurich

Report on the audit of the financial statements

Opinion
We have audited the financial statements of Zurich Insurance Company Ltd (the Company), which comprise the income statement for the year ended December 31, 2020, balance sheet as of December 31, 2020 and notes, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements (pages 149 to 165) as of December 31, 2020 comply with Swiss law and the Company's articles of association.

Basis for opinion
We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall audit materiality: CHF 185 million

We concluded full scope audit work at the holding company and three business units in one country.
The full scope audit work addressed 78% and 78% of the Company's gross written premiums and policy fees (GWP) and total assets, respectively.
In addition, specific procedures were performed on a further seven business units in three countries representing a further 6% and 10% of the Company's GWP and total assets, respectively.

As key audit matters the following areas of focus have been identified:

- Valuation of property and casualty reserves
- Valuation of life insurance reserves
- Recoverability of carrying value of investments in subsidiaries

Report of the statutory auditor (continued)

Audit materiality
The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgment, we determined certain quantitative thresholds for materiality, including the overall audit materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall audit materiality	CHF 185 million
How we determined it	We have selected the Company's total revenue (premium income and investment income) as appropriate benchmark for measuring materiality. We applied a 1% rule of thumb which resulted in an overall audit materiality of CHF 185 million.
Rationale for the materiality benchmark applied	We chose total revenues as a benchmark because, in our view, it is the benchmark which is the most relevant for the Company, as it is a large insurance company with relatively stable premium and investment income, and is a generally accepted benchmark. Total revenues are an important key performance indicator. It reflects the capability of insurer to write new business and to renew the contracts.

We agreed with the Audit Committee that we would report to them misstatements above CHF 17 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope
We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

The structure of the Company consists of a holding company and 47 business units. In establishing the overall approach to the audit, we determined the type of work that needed to be performed at the business units by us, as the Group engagement team, or by component auditors from PwC network firms operating under our instruction. Where the work was performed by component auditors, we determined the level of involvement we needed to have in the audit work at those business units to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the financial statements of the Company as a whole.

The Company's business units vary significantly in size and we identified four which, in our view, required an audit of their complete financial information, due to their size or risk characteristics. Audits of these business units were performed using materiality levels lower than the materiality level for the Company as a whole, ranging from CHF 80 million to CHF 180 million, and established by reference to the size of, and risks associated with, the business concerned. Specific audit procedures on certain balances and transactions were performed at a further seven business units. Together full scope audits and the specific audit procedures accounted for 84% and 89% of Company reported GWP and total assets, respectively.

Our engagement team's involvement included various site visits and component auditor working paper reviews across significant business units, together with discussions around audit approach and audit results arising from the work during regular conference calls with the component audit teams.

Report of the statutory auditor (continued)

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of property and casualty reserves

Key audit matter

The valuation of property and casualty loss reserves involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date. The Company uses a range of actuarial methodologies to estimate these provisions. Property and casualty loss reserves require significant judgment relating to factors and assumptions such as inflation, claims development patterns and regulatory changes.

Specifically, long-tail lines of business, which often have low frequency, high severity claims settlements, are generally more difficult to project and subject to greater uncertainties than those with short-tail, high frequency claims. Further, not all natural and other catastrophes (including COVID-19) can be modeled using actuarial methodologies, which increases the degree of judgment needed in estimating property and casualty loss reserves.

Refer to Note 2 ("Summary of significant accounting policies") and Note 13 ("Insurance reserves, net") to the 2020 financial statements.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting and governance processes used by management related to the valuation of property and casualty reserves.

In relation to the particular matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying claims data utilized by the Company's actuaries in estimating property and casualty loss reserves.
- Utilizing information technology audit techniques to analyze claims through claims data plausibility checks and recalculation of claims development patterns.
- Involving our actuarial experts to independently test management's property and casualty loss reserve studies and evaluate the reasonableness of the methodology and assumptions used against recognized actuarial practices and industry standards. Our work has included assessing managements methodology and assumptions used for establishing COVID-19 reserves.
- Performing independent re-projections on selected product lines, particularly focusing on the largest and most uncertain property and casualty reserves. For these product lines our actuarial specialists compared their re-projected reserves to those recorded by the Company and assessed whether the recorded reserves were within a reasonable range.
- Performing sensitivity testing and evaluated the appropriateness of any significant adjustments made by management relating to property and casualty reserve estimates.

Finally, we assessed the adequacy of the disclosures in the financial statements.

Based on the work performed we determined that the conclusions reached by Management with regard to the valuation of property and casualty reserves are reasonable.

Report of the statutory auditor (continued)

Valuation of life insurance reserves

Key audit matter

The Company acts as a reinsurance company for life business written by affiliated companies, including 100% of certain US and UK business.

The Company's valuation of the life insurance liabilities (reserves for insurance contracts) is based on complex actuarial methodologies and models and involves comprehensive assumption setting processes with regards to future events. Actuarial assumptions selected by the Company with respect to interest rates, investment returns, mortality, morbidity, longevity, persistency, expenses, stock market volatility and future policyholder behavior and the underlying methodologies and assumptions used may result in material impacts on the valuation of actuarially determined life insurance reserves.

Specifically, the continued low interest rate environment, which results in reduced investment returns, influences policyholders' behaviors and creates a strain on the sufficiency of reserves for traditional life insurance contracts. The risk has increased by the impact of COVID-19 on the economic environment and policy behavior.

Refer to Note 2 ("Summary of significant accounting policies") and Note 13 ("Insurance reserves, net") to the 2020 financial statements.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls over actuarial methodology, integrity of data used in the actuarial valuation, and the assumptions setting processes used by management related to the valuation of actuarially determined life insurance reserves.

In relation to the particular matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying data to source documentation.
- Involving our life insurance actuarial experts to independently test and challenge management's methodology and the assumptions used (including the impact of COVID-19), with particular consideration of industry studies, the Company's experience and management's liability adequacy testing procedures. We focused on the changes to life actuarial methodology and assumptions during the year and assessed whether the methodologies are in compliance with recognized actuarial practices as well as regulatory and reporting requirements.
- Testing, on a sample basis, the calculation models applied to estimate the actuarially determined life insurance reserves.

Finally, we assessed the adequacy of the disclosures in the financial statements.

Based on the work performed we determined that the methodologies, assumptions and underlying data used in the valuation of life insurance reserves are reasonable.

Report of the statutory auditor (continued)

Recoverability of carrying value of investments in subsidiaries

Key audit matter

We consider the investments in subsidiaries to be a key audit matter not only due to the judgment involved but also based on the magnitude of CHF 34.7 billion, which makes up 38% of the Company's total assets.

Investments in subsidiaries are carried at cost less necessary impairments. The need for impairment is assessed by grouping the subsidiaries into regional sub-groups. Necessary impairments are recorded on an individual basis.

Management assesses whether there are any impairments in the carrying value of the investments in subsidiaries. The Company compares the carrying value to the market value of the subsidiary as of December 31. If the valuations indicate a need for an impairment, the Company reduces the carrying value of the investment in subsidiary accordingly. The determination whether an investment in subsidiary needs to be impaired includes assumptions about the profitability of the underlying business and growth, which involves management's judgment. There is now greater uncertainty surrounding the projections of future income of certain businesses due to COVID-19.

Refer to Note 2 ("Summary of significant accounting policies") and Note 7 ("Investments in subsidiaries and associates") to the 2020 financial statements.

How our audit addressed the key audit matter

We obtained an understanding of management's process and controls, and assessed and tested the design and operating effectiveness of selected key controls over the recoverability of the carrying value of investments in subsidiaries.

In relation to the particular matters set out opposite, our testing procedures included the following:

- Assessing the appropriateness of the Company's impairment testing methodology, including the grouping of the subsidiaries into the sub-groups defined by management and used for the impairment test.
- Testing the mathematical accuracy of management's calculation.
- Testing the reasonableness of the assumptions used in the impairment assessment including projections of future income, terminal growth rate assumptions and discount rates. We have assessed the impact of COVID-19 on projections of future income.
- Re-performing management's impairment test on the carrying value of all investments in subsidiaries and challenged the impairment decisions taken.

Finally, we assessed the adequacy of the disclosures in the financial statements.

Based on the work performed we consider management's impairment testing including the assumptions used to support the carrying value of investments in subsidiaries as reasonable.

Report of the statutory auditor (continued)

Responsibilities of the Board of Directors for the financial statements
The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the Company's articles of association, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located at the website of EXPERTsuisse: http://expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements
In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of association. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Mark Humphreys Audit expert Auditor in charge	Ray Kunz Audit expert

Zurich, March 3, 2021

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, in the financial services industries in particular; (iii) performance of financial markets; (iv) levels of interest rates and currency exchange rates; (v) frequency, severity and development of insured claims events; (vi) mortality and morbidity experience; (vii) policy renewal and lapse rates; (viii) increased litigation activity and regulatory actions; and (ix) changes in laws and regulations and in the policies of regulators may have a direct bearing on the results of operations of Zurich Insurance Group Ltd and its Group and on whether the targets will be achieved. Specifically in relation with the COVID-19 related statements, such statements were made on the basis of circumstances prevailing at a certain time and on the basis of specific terms and conditions (in particular applicable exclusions) of insurance policies as written and interpreted by the Group and may be subject to regulatory, legislative, governmental and litigation-related developments affecting the extent of potential losses covered by a member of the Group or potentially exposing the Group to additional losses if terms or conditions are retroactively amended by way of legislative or regulatory action. 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" 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 three Exchanges and in that capacity provide certain non-claims services and ancillary services to the Farmers Exchanges. 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. Financial information about the Farmers Exchanges is proprietary to the Farmers Exchanges, 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 adviser.

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

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

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