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Message from our Group Chief Financial Officer

All targets exceeded

"The results show the Group making further strong progress. All 2017 to 2019 targets were exceeded, with all business units contributing. Together with our customer-focused strategy, a simplified operating model and strong balance sheet, these results position us well for the future."

George Quinn
Group Chief Financial Officer

Full year 2019 results show strong performance across all businesses, with business operating profit (BOP) up 16 percent and a BOPAT ROE of 14.2 percent. Net income increased 12 percent to the highest level in a decade. A dividend increase of 5 percent has been proposed.

Well positioned for the future

Together with the Group's customer-focused strategy and simplified operating model, the results position the Group well to take advantage of ongoing changes within the global insurance industry and to deliver further value to shareholders.

2017 to 2019 targets exceeded

The Group has exceeded the ambitious targets set in 2016, resulting in a simpler, more agile and efficient company. The business has been further strengthened through targeted acquisitions in key geographies.

2017–2019 financial targets

Target: >12.0%
BOPAT ROE[1]
14.2%
FY 2019

Target range: 100–120%
Estimated Z-ECM ratio[2]
129%
FY 2019

Target: >USD 9.5bn
Cumulative cash remittances
USD 10.9bn
As of FY 2019

Target: USD 1.5bn
Cumulative net expense savings
USD 1.6bn
As of FY 2019

[1] Business operating profit after tax return on equity, excluding unrealized gains and losses.
[2] Full year 2019 Z-ECM reflects midpoint estimate with an error margin of +/–5 percentage points.

Message from our Group Chief Financial Officer

Progress made across all businesses

Property & Casualty results showed further strong year-on-year progress with BOP up 38 percent, driven by an improved underwriting performance and higher investment results, which more than compensated for a challenging year in the Group's North American crop business.

Gross written premiums increased 2 percent with growth strengthening over the year, led by hardening pricing and underlying growth, with current positive pricing trends expected to continue through 2020.

The Group's combined ratio improved by 1.4 percentage points over the year, continuing the trend of recent years and despite adverse development of the North American crop insurance business.

The results also continued to demonstrate the strength of the Group's reserves, with prior year reserve development of 2.3 points at the same level as in 2018.

The Group's Life business delivered a strong performance against a high 2018 result with BOP declining 4 percent due to adverse currency movements. On a like-for-like basis adjusting for acquisitions, disposals and currency movements, growth was 2 percent, despite a lower contribution from favorable one-time items.

The Group's strategy of focusing on protection business and capital-efficient savings products positions it well for a continuation of low investment yields, with 85 percent of annual premium equivalent (APE) sales from protection and capital-efficient savings products.

Farmers delivered business operating profit growth of 4 percent, reflecting fee growth and favorable mark-to-market movements on a deferred compensation plan at Farmers Management Services, as well as a strong performance at Farmers Life. The Farmers Exchanges continued to deliver steady and consistent growth supported by Farmers strategy to deepen customer relationships, broaden product offerings and expand in the eastern U.S.

Group Functions and Operations showed an improved performance with the associated net loss reduced by 5 percent due to lower net costs associated with the Group's headquarters.

A strong capital position and cash generation

During the year, management continued to improve the Group's focus and optimize the use of capital. The Group's balance sheet and internal economic capital model (Z-ECM) remained very strong at an estimated 129 percent[2], above the target range.

Conversion of earnings into distributable cash was strong, with USD 3.4 billion of net cash remittances over the year bringing the total net remittances to USD 10.9 billion over the past three years, well ahead of the USD 9.5 billion set in 2016.

5 percent proposed dividend increase

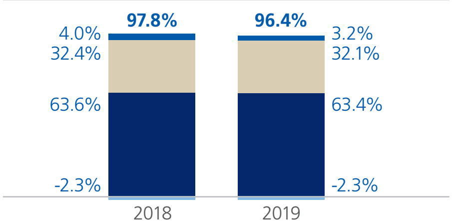
In line with the stated dividend policy, the board proposed a 5 percent increase in the dividend to CHF 20 per share.

George Quinn
Group Chief Financial Officer

Continued strong performance across all businesses

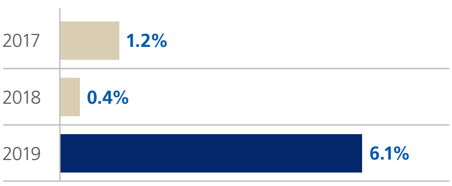
Property & Casualty (P&C)

Combined ratio (%)



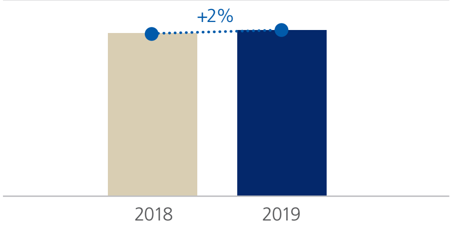
Catastrophes Expense ratio
Accident year loss ratio excluding catastrophes
Prior year development

Like-for-like GWP growth (%)[4]

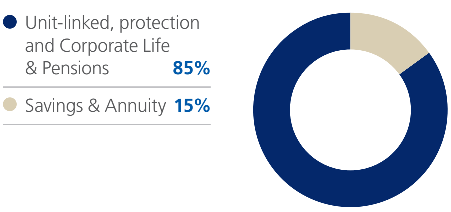


Life

Like-for-like BOP growth (%)[4]

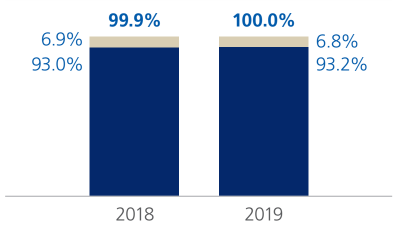


2019 APE share of non-traditional products (%)



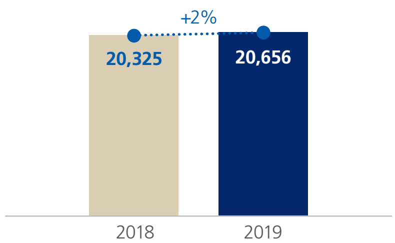
Farmers Exchanges[3]

Combined ratio (CR) (%)



Catastrophes CR excluding catastrophes

GWP growth (in USD millions)



[3] Provided for informational purposes only. Zurich Insurance 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.
[4] In local currency and adjusted for closed acquisitions and disposals.

Financial overview

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The information contained within the financial review is unaudited and is based on the consolidated results of the Group for the years ended December 31, 2019 and 2018. 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 2019 of the Group and in particular with its consolidated financial statements and embedded value report for the year ended December 31, 2019.

In addition to the figures stated in accordance with International Financial Reporting Standards (IFRS), the 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 years ended December 31, 2019.

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

Financial highlights

in USD millions, for the years ended December 31	2019	2018	Change[1]
Business operating profit	**5,302**	4,566	16%
Net income attributable to shareholders	**4,147**	3,716	12%
P&C business operating profit	**2,878**	2,085	38%
P&C gross written premiums and policy fees	**34,184**	33,505	2%
P&C combined ratio	**96.4%**	97.8%	1.4 pts
Life business operating profit	**1,486**	1,554	(4%)
Life gross written premiums, policy fees and insurance deposit	**33,479**	33,448	0%
Life new business annual premium equivalent (APE)[2]	**4,331**	4,639	(7%)
Life new business margin, after tax (as % of APE)[2]	**25.8%**	24.1%	1.8 pts
Life new business value, after tax[2]	**976**	981	(1%)
Farmers business operating profit	**1,707**	1,643	4%
Farmers Management Services management fees and other related revenues	**3,780**	3,204	18%
Farmers Management Services managed gross earned premium margin	**7.0%**	7.0%	(0.0 pts)
Farmers Life new business annual premium equivalent (APE)[2]	**82**	84	(3%)
Average Group investments[3]	**190,237**	190,235	0%
Net investment result on Group investments[3]	**7,391**	6,288	18%
Net investment return on Group investments[3,4]	**3.9%**	3.3%	0.6 pts
Total return on Group investments[3,4]	**8.2%**	0.6%	7.6 pts
Shareholders' equity	**35,004**	30,189	16%
Z-ECM[5]	**129%**	124%	5 pts
Return on common shareholders' equity (ROE)[6]	**14.4%**	13.1%	1.3 pts
Business operating profit (after tax) return on common shareholders' equity (BOPAT ROE)[6]	**14.2%**	12.1%	2.2 pts

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.
5 Ratio for December 31, 2019 reflects midpoint estimate with an error margin of +/- 5 pts.
6 Shareholders' equity used to determine ROE and BOPAT ROE is adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges.

Business operating profit (BOP) for the year ended December 31, 2019 was USD 5.3 billion, up 16 percent compared with the prior period. This was driven by underlying growth across the business and a strong underwriting performance in Property & Casualty.

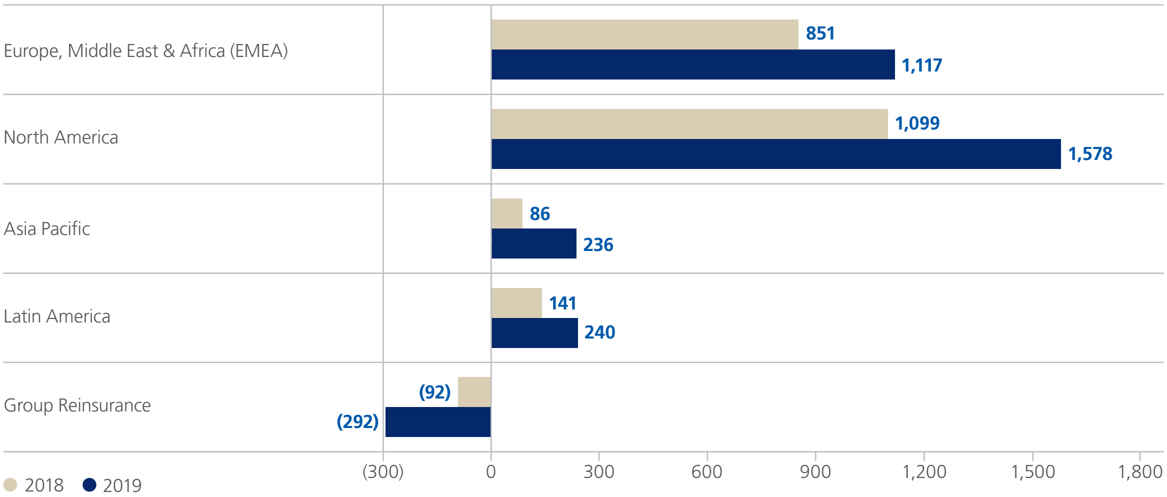
Net income attributable to shareholders (NIAS) increased 12 percent in the year 2019, with growth driven by the increase in business operating profit, higher realized gains, together with a reduction in the effective tax rate.

Operating update

Property & Casualty (P&C)

in USD millions, for the years ended December 31	2019	2018	Total Change
Gross written premiums and policy fees	34,184	33,505	2%
Net earned premiums and policy fees	25,608	26,431	(3%)
Insurance benefits and losses, net of reinsurance	16,475	17,291	5%
Net underwriting result	922	574	61%
Net investment result	2,171	1,884	15%
Business operating profit	**2,878**	**2,085**	**38%**
Loss ratio	64.3%	65.4%	1.1 pts
Expense ratio	32.1%	32.4%	0.3 pts
Combined ratio	**96.4%**	**97.8%**	**1.4 pts**

P&C business operating profit (BOP)
in USD millions, for the years ended December 31



Property & Casualty gross written premiums returned to growth in 2019, increasing 2 percent on a reported basis in U.S. dollars terms and 6 percent on a like-for-like basis, after adjusting for closed acquisitions and disposals and currency movements. Underlying growth was achieved in all regions.

Net earned premiums for the year decreased 3 percent in U.S. dollars and increased 1 percent on a like-for-like basis, with growth impacted by the earn-through of reductions in gross written premiums in the prior year and changes in reinsurance programs.

Business operating profit for the year ended December 31, 2019 was USD 2.9 billion, 38 percent higher than in the previous year, showing a strong performance across all regions. The strong regional performance was partly offset by higher losses in the Group Reinsurance unit.

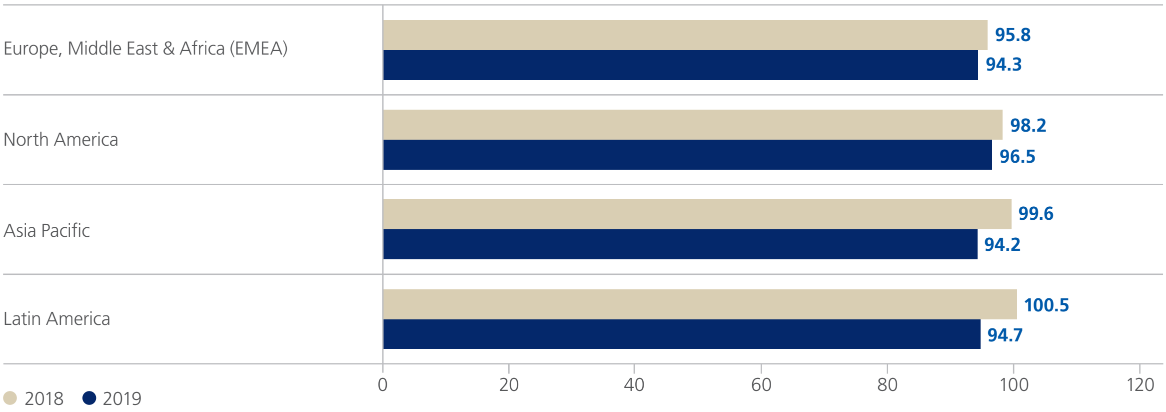
The combined ratio improved by 1.4 percentage points to 96.4 percent in 2019, leading to a USD 348 million increase in the net underwriting result to USD 922 million.

Investment income increased by 1 percent, with growth in investment income in North America and Latin America more than offsetting a decline in Europe, Middle East & Africa (EMEA). The strong performance of financial markets in 2019 led to an increase in fair value gains on the Group's hedge fund portfolio amounting to USD 211 million compared to a loss of USD 48 million in 2018.

The contribution of other items, which include the net non-technical result and non-controlling interests, was USD 158 million higher than in the previous year, mainly driven by the absence of major restructuring charges included within business operating profit and a foreign exchange gain of USD 29 million.

Operating update (continued)

P&C combined ratio
%, for the years ended December 31



The EMEA combined ratio of 94.3 percent for 2019 was 1.5 percentage points lower than in 2018, with improvement in the expense ratio and higher prior year reserve releases the main drivers.

In North America, the combined ratio was 96.5 percent, 1.7 percentage points below 2018, with a lower level of natural catastrophes and weather-related events in 2019 more than offsetting weaker results from the crop insurance portfolio.

The Asia Pacific combined ratio reduced by 5.3 percentage points to 94.2 percent, mainly due to improvements in other underwriting expenses and a lower level of natural catastrophes and weather-related events.

In Latin America, the combined ratio of 94.7 percent was 5.8 percentage points lower than in 2018, driven mainly by an improved accident year loss ratio in Mexico and Argentina and higher prior year reserve releases.

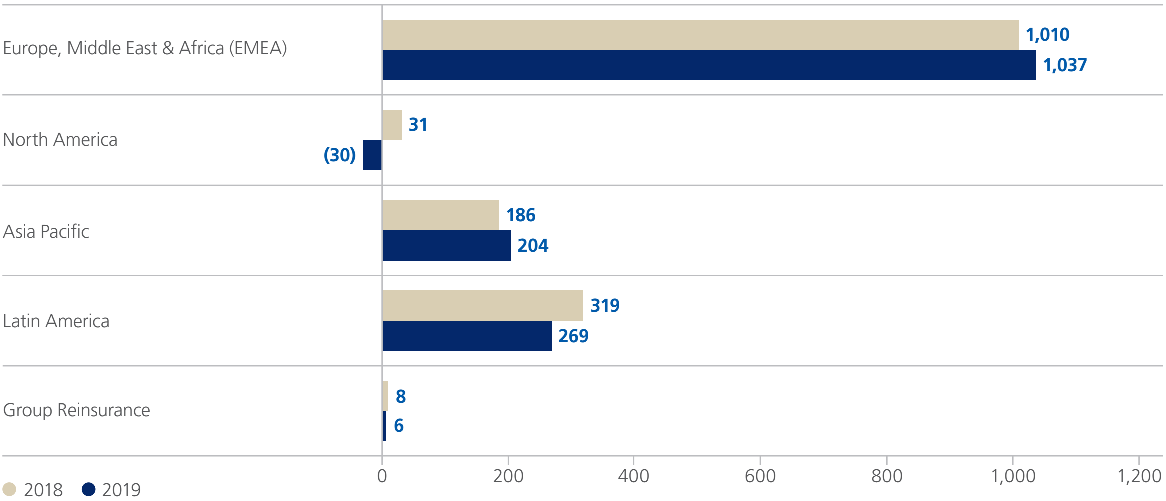
Operating update (continued)

Life

in USD millions, for the years ended December 31	2019	2018	Change
Insurance deposits	18,328	18,694	(2%)
Gross written premiums and policy fees	15,151	14,754	3%
Net investment income on Group investments	2,915	3,035	(4%)
Insurance benefits and losses, net of reinsurance	(10,190)	(9,702)	(5%)
Business operating profit	**1,486**	**1,554**	**(4%)**
Net policyholder flows[1]	6,320	7,425	(15%)
Assets under management[2]	275,423	254,248	8%
Total reserves for life insurance contracts, net of reinsurance, and liabilities for investment contracts (net reserves)	226,765	202,024	12%

[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 on balance sheet Group investments and unit-linked investments plus assets that are managed by third parties, on which fees are earned.

Life business operating profit (BOP)
in USD millions, for the years ended December 31



Life delivered a strong underlying performance against a strong 2018 result. Business operating profit decreased 4 percent to USD 1.5 billion due to a strengthening of the U.S. dollar against a number of key currencies compared to 2018 and increased 2 percent on a like-for-like basis, after adjusting for closed acquisitions and disposals and currency movements. Net positive one-off items included within the 2019 results were also lower than in the prior year.

In EMEA, business operating profit increased 3 percent in U.S. dollars and 9 percent on a like-for-like basis. Underlying growth was driven by a combination of business mix, expense savings, together with a number of favorable one-off items amounting to USD 54 million.

In Latin America, business operating profit decreased 16 percent in U.S. dollars compared to an increase of 6 percent on a like-for-like basis as a result of the devaluation of several Latin American currencies. Growth in the largest market Brazil was partially offset by higher claims in corporate protection business in Chile.

Asia Pacific business operating profit increased 10 percent in U.S. dollars, with a decrease of 4 percent on a like-for-like basis. The underlying reduction was driven primarily by weaker results in Australia which more than offset a gain related to the sale and lease-back of an own-use property.

In North America, earnings decreased by USD 61 million due to a combination of higher mortality claims and unfavorable assumption updates which offset a positive change in reserving methodology.

Net inflows decreased 15 percent compared to the prior year. The decline was primarily driven by lower volumes of savings business in EMEA which were only partially offset by higher volumes of unit-linked business in Latin America.

Assets under management increased 8 percent, mainly due to favorable market movements compared to 2018.

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]	
	2019	2018	**2019**	2018	**2019**	2018
Europe, Middle East & Africa (EMEA)	576	619	2,760	2,890	21.9%	22.8%
North America	49	15	139	82	35.2%	18.3%
Asia Pacific	211	186	268	231	79.9%	82.2%
Latin America	140	161	1,164	1,437	18.9%	15.3%
Total	**976**	**981**	**4,331**	**4,639**	**25.8%**	**24.1%**

[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.

2019 Life new business annual premium equivalent (APE) decreased 7 percent in U.S. dollars and 3 percent on a like-for-like basis.

In EMEA, like-for-like APE was flat as strong growth in the corporate pension business in Switzerland, higher unit linked sales in Italy, and higher retail protection sales in the UK were offset by the absence of a large corporate protection scheme concluded in 2018.

In Latin America APE sales decreased 15 percent on a like-for-like basis. Strong growth in Brazil was more than offset by the absence of a large corporate protection scheme in Chile written in 2018 and which is offered for tender every two years.

APE sales in Asia Pacific remained flat on a like-for-like basis. Growth in protection business in most countries was offset by lower sales in Japan.

North America APE grew 30 percent on a like-for-like basis with growth in all product lines.

New business value (NBV) increased 4 percent on a like-for-like basis and decreased 1 percent in U.S. dollars. Underlying improvements in business and country mix as well as positive operating assumptions were partially offset by adverse economic assumption updates.

EMEA and Latin America saw a decrease of NBV mainly due to adverse changes in economic assumptions and unfavorable foreign exchange movements.

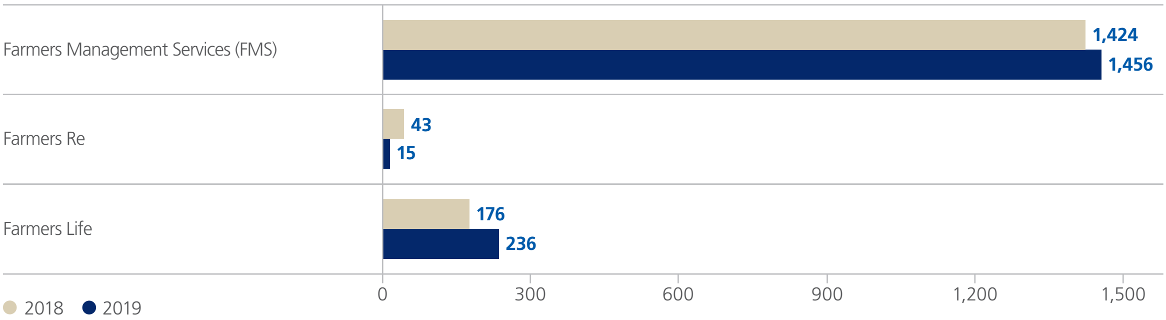
In APAC, the increase in NBV was largely driven by positive operating assumption changes. The North America NBV increased due to higher volumes and a favorable business mix.

The new business margin improved by 1.8 percentage points to 25.8 percent driven by the improvement in NBV.

Operating update (continued)

Farmers

Farmers business operating profit (BOP)
in USD millions, for the years ended December 31



Farmers Management Services (FMS) business operating profit grew 2 percent in 2019. This was driven by 1 percent growth in the gross management result, in line with the development of the Farmers Exchanges' gross earned premiums, and a USD 19 million favorable mark-to-market impact on a deferred compensation plan, compared with a USD 10 million unfavorable impact in 2018. The managed gross earned premium margin remained stable at 7.0 percent.

Farmers Re business operating profit of USD 15 million was USD 28 million lower than in 2018. This reflects the ongoing impact of the reduction in the all-lines quota share participation, further reduced to 0.25 percent effective December 31, 2019, as well as higher natural catastrophe losses and adverse prior year development from periods with a higher quota share participation.

Farmers Life business operating profit of USD 236 million was USD 59 million higher than in the prior year. Results benefited from a combination of continued growth in the in-force portfolio, favorable experience and a positive year-over-year impact from annual assumption updates. Within this, favorable mortality experience and lower amortization of deferred acquisition costs accounted for around half of the improvement.

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	**2019**	2018	Change
Gross written premiums	20,656	20,325	2%
Gross earned premiums	20,441	20,171	1%

The Farmers Exchanges showed continued growth in top-line through 2019. Gross written premiums increased by 2 percent with growth across all lines of business. Growth was also supported by the expansion of the Farmers Exchanges in the Eastern U.S., with gross written premiums up 6 percent in the expansion states, and a broadening of the agreement with Uber to provide commercial rideshare insurance in twelve additional states and the District of Columbia, building on the experience in the two states of Pennsylvania and Georgia.

Operating update (continued)

Group Functions and Operations

in USD millions, for the years ended December 31	**2019**	2018	Change
Holding and Financing	(449)	(443)	(1%)
Headquarters	(268)	(310)	14%
Total business operating profit	**(716)**	**(753)**	**5%**

The business operating loss reported under Group Functions and Operations improved by USD 36 million to USD 716 million. This was driven by a USD 43 million reduction in headquarter expenses, while Holding and Financing costs remained in line with the prior year.

Non-Core Businesses

in USD millions, for the years ended December 31	**2019**	2018	Change
Zurich Legacy Solutions	(49)	43	nm
Other run-off	(3)	(7)	59%
Total business operating profit	**(52)**	**37**	**nm**

Non-Core Businesses, which comprise run-off portfolios that are managed with the intention of proactively reducing risk and releasing capital, reported an operating loss of USD 52 million. The loss primarily reflected the net impact of previously announced transactions to exit legacy portfolios related to UK employers' liability, U.S. asbestos and environmental business, and German professional architects' and engineers' professional indemnity, as well as reserve strengthening in selected portfolios.

Financial update

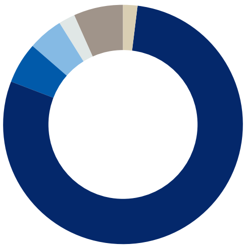
Balance sheet review

The total assets for the Group increased to USD 405 billion in 2019 from USD 395 billion in 2018. In 2019, there was an increase in total investments as market valuations improved, particularly in debt and equity securities and investments for unit-linked contracts. This is partially offset by a reduction in other assets as assets held for sale decreased following the divestment of certain businesses in the UK. Additionally, upon adoption of IFRS 16 'Leases' in January 2019, the Group recognized a Right-of-use asset (RoU) of USD 1.4 billion and the Group's 2019 acquisitions added USD 977 million of goodwill.

These factors also drove an increase in the total liabilities for the Group to USD 368 billion from USD 364 billion in 2018.

Group assets

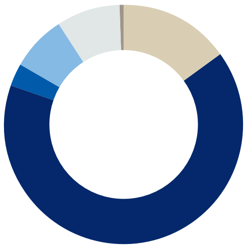
Total assets as of December 31, 2019
(in USD millions)



Cash and cash equivalents	7,880
Total investments	319,523
Reinsurers' share of liabilities	22,752
Deferred policy acquisition costs	19,207
Goodwill and other intangible assets	8,968
Other assets	26,357

Group liabilities and equity

Total liabilities and equity as of December 31, 2019
(in USD millions)



Liabilities for investment contracts	61,761
Liabilities for insurance contracts	264,140
Debt	11,999
Other liabilities	30,238
Shareholders' equity	35,004
Non-controlling interests	1,545

The Group's shareholder equity increased to USD 35 billion in 2019 from USD 30 billion in 2018. The increase primarily resulted from unrealized gains on available-for-sale investments. The Group's 2019 net income attributable to shareholders of USD 4.1 billion was offset by a dividend payment of USD 2.8 billion.

Treasury and capital management

The Group's balance sheet remains very strong, as demonstrated by S&P and Moody's financial strength ratings for the Zurich Insurance Company Ltd of AA- (positive outlook) and Aa3 (stable outlook), respectively. In addition, as of December 31, 2019, the Group's estimated Z-ECM ratio remained very strong at 129 percent, with an error margin of +/–5 percentage points.

During the year the Group saw net cash remittances of USD 3.4 billion, with total remittances over the 2017–2019 period of USD 10.9 billion, a level consistent with the Group's target for remittances to exceed USD 9.5 billion over this period. The level of remittances has been driven both by core remittances from operational earnings and capital released by management actions.

Net cash remittances by business

for the year ended December 31, 2019 (in USD millions)

Property & Casualty	2,262
Life	943
Farmers	1,217
Non-Core Businesses	(94)
Group Functions and Operations	(928)

Significant transactions in 2019

The Group continued to drive its strategic objectives of investing to improve the quality of service and experience of our customers and becoming a more agile organization.

In May 2019 the Group completed the acquisition of 100 percent of the Australian life and consumer credit insurance business (OnePath Life and OnePath General Insurance) of Australia and New Zealand Banking Group Limited (ANZ) for USD 1.4 billion, making Zurich one of the largest Life insurance players in Australia. As part of the transaction, Zurich will enter into a 20-year strategic alliance agreement with ANZ in Australia to distribute life insurance products through ANZ bank channels.

The Group continues to focus on growth opportunities in the Asia Pacific region. In November 2019 the Group completed the acquisition to acquire 80 percent of Adira Insurance from Bank Danamon Indonesia and a minority investor for approximately USD 465 million. The acquisition includes a 20-year distribution agreement.

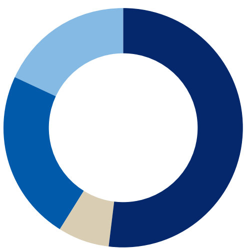
Being a responsible taxpayer

As part of Zurich's tax strategy, the Group strives to manage tax costs and control associated risks for the benefit of its customers, employees, shareholders and for society as a whole. The Group employs rigorous tax accounting and reporting oversight. The location of Group subsidiaries and affiliated companies is driven by business reasons and not the avoidance of tax. The Group's consolidated result includes only a very limited number of companies located in low or nil tax rate jurisdictions and in all cases these carry out operative insurance, reinsurance and asset management activities.

Total tax contribution reflects Zurich's economic contribution to the economy in taxes – the direct and indirect taxes paid by Zurich ('tax borne by the shareholders') and those taxes that Zurich is legally obliged to collect on behalf of the tax administrations ('tax collected'):

Taxes borne by Shareholders

Total 2018: USD 2.1bn
(all numbers based on IFRS excluding deferred income tax)



Shareholder income tax	52%
Stamp duty and other taxes	7%
Employer social security	23%
Irrecoverable VAT	18%

Taxes collected

Total 2018: USD 6bn
(all numbers based on IFRS excluding deferred income tax)

Employee social security	7%
Other taxes (incl. WHT)	22%
Payroll tax	17%
PH income and other taxes	9%
Premium tax	36%
VAT declared	10%

See more details on our tax strategy in our Sustainability pages at www.zurich.com.

The shareholders' effective tax rate decreased to 23.6 percent for the period ended December 31, 2019 compared with 24.9 percent for the same period of 2018. The decrease was driven primarily by one-off tax benefits through the recalibration of net deferred tax liabilities arising from the Swiss corporate tax reform enacted in 2019, under which Swiss profits of the Group are now taxed at 21.0 percent, compared with 22.0 percent in previous years.

Message from our Group Chief Investment Officer

Strong performance across asset classes supports investment return

Solid net investment income of USD 5.3 billion and exceptional total investment return of 8.2 percent contributed strongly to Group financial performance in 2019.

Policy easing drives markets higher

2019 was an extraordinary year in capital markets. Many asset classes posted new records despite slowing global growth, social unrest and geopolitical friction. Government bonds, credit, equities and real estate all performed strongly, driven in large part by a profound shift toward policy easing by central banks. Amid fears of a manufacturing recession and escalating trade tensions, yields decreased markedly, with some sovereign bond yield curves dropping below zero. As a result, the levels of negative-yielding debt reached an all-time high. For institutional investors such as Zurich, with about 80 percent of assets invested in fixed income, such developments presented challenges when investing their cash flow and managing assets against liabilities.

> "We continue delivering attractive returns while maintaining discipline and focusing on the quality of our investment portfolios."
>
> **Urban Angehrn**
> Group Chief Investment Officer

Total investments[1]

(%)

Credit, private debt	44.2%
Government and government guaranteed	34.1%
Real estate	7.2%
Cash	5.2%
Equities	5.2%
Mortgages	2.4%
Hedge funds, private equity	1.7%

[1] Market value of the investment portfolio (economic view).

Message from our Group Chief Investment Officer

Solid investment result

Despite lower yields and volatile markets, we achieved USD 5.3 billion of net investment income (NII), 2 percent lower than in 2018 in U.S. dollar terms. Excluding currency effects, NII increased by 5 percent. We achieved this strong performance through a combination of higher business inflows, measures to preserve book yield, and by continuing to deploy our strategy to increase allocation into illiquid assets such as real estate and private debt.

Net capital gains totaled USD 2.1 billion, USD 1.2 billion higher than in 2018. The increase was largely driven by turnover in the equity portfolio in a rallying market, and by gains realized from several real estate transactions. Overall, full-year total investment return reached an exceptional level of 8.2 percent.

Focus on portfolio quality and investment discipline

We aim to generate superior risk-adjusted investment returns relative to liabilities. To achieve this, disciplined risk-taking and a focus on portfolio quality are key imperatives. Zurich's fixed income portfolio remains of a very high quality with investment-grade securities making up 95 percent of the total. Our credit portfolio is well-diversified across investment segments and issuers: more than 93 percent of this portfolio consists of investment grade securities and 61 percent of the portfolio has a credit rating of at least 'A.'

We are disciplined in growing our private debt portfolio by, for instance, investing in well-diversified senior corporate loans, AAA-rated tranches of collateralized loan obligations, and infrastructure debt investments. In 2019 our allocation to this asset class comprised slightly more than 5 percent of Zurich's total investment portfolio. Our high-quality real estate portfolio expanded to USD 14.8 billion[2] and now constitutes 7.2 percent of our investment assets.

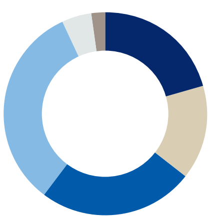
[2] incl. own-use real estate

Doing well and doing good

2019 was an important year for our responsible investment strategy. Our allocation to impact investments increased to USD 4.6 billion, of which USD 3.6 billion was held in green, social and sustainability bonds. We also developed an innovative framework that allows us to measure the social and environmental impact of our impact investment portfolio. And Zurich has joined the UN Net-Zero Asset Owner Alliance as a founding member, committing to a zero-emission portfolio of investments by 2050. I am proud of these achievements. These are tangible steps toward Zurich's ambition to become one of the most responsible and impactful businesses in the world.

Urban Angehrn
Group Chief Investment Officer

Rating of credit, private debt securities
(%)



USD 91bn
in 2019

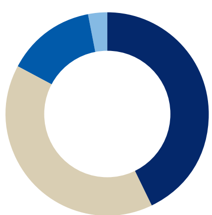
AAA	21%
AA	15%
A	25%
BBB	33%
Non-investment grade	5%
Unrated	2%

Credit and private debt
(%)

USD 91bn
in 2019

Non-Financial Credit	31%
Financial Credit	22%
Municipals, Agencies, State Credit	18%
Other	12%
Asset Backed Securities	10%
Covered Bonds	8%

Direct investment real estate
(%)



USD 13bn
in 2019

Europe	43%
Switzerland	40%
United States	14%
Other	3%

Consolidated financial statements

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Consolidated financial statements (continued)

Consolidated income statements

in USD millions, for the years ended December 31	Notes	2019	2018
Revenues			
Gross written premiums		48,056	47,038
Policy fees		2,469	2,447
Gross written premiums and policy fees		50,525	49,485
Less premiums ceded to reinsurers		(9,274)	(8,255)
Net written premiums and policy fees		41,251	41,230
Net change in reserves for unearned premiums	10	(949)	(224)
Net earned premiums and policy fees		40,302	41,007
Farmers management fees and other related revenues	26	3,780	3,204
Net investment income on Group investments		5,298	5,387
Net capital gains/(losses) and impairments on Group investments		2,093	901
Net investment result on Group investments	6	7,391	6,288
Net investment result on unit-linked investments		19,485	(4,374)
Net gains/(losses) on divestment of businesses	5	(295)	(24)
Other income		1,129	1,080
Total revenues		71,792	47,180
Benefits, losses and expenses			
Insurance benefits and losses, gross of reinsurance	10	33,620	33,483
Less ceded insurance benefits and losses	10	(6,051)	(5,837)
Insurance benefits and losses, net of reinsurance	10	27,570	27,646
Policyholder dividends and participation in profits, net of reinsurance	10	20,582	(2,736)
Underwriting and policy acquisition costs, net of reinsurance	10	8,529	8,565
Administrative and other operating expense	12	8,020	7,761
Interest expense on debt		401	402
Interest credited to policyholders and other interest		590	433
Total benefits, losses and expenses		65,692	42,070
Net income before income taxes		6,100	5,110
of which: Attributable to non-controlling interests		356	400
Income tax (expense)/benefit	17	(1,716)	(1,134)
attributable to policyholders	17	(365)	183
attributable to shareholders	17	(1,351)	(1,317)
of which: Attributable to non-controlling interests		(119)	(139)
Net income after taxes		**4,384**	**3,977**
attributable to non-controlling interests		237	261
attributable to shareholders		4,147	3,716
in USD			
Basic earnings per share	19	28.01	25.10
Diluted earnings per share	19	27.69	24.83
in CHF			
Basic earnings per share	19	27.84	24.55
Diluted earnings per share	19	27.51	24.28

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
2018			
Comprehensive income for the period	3,716	(2,428)	(47)
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		(2,049)	(5)
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(733)	(48)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		419	11
Foreign currency translation effects		(65)	(5)
2019			
Comprehensive income for the period	4,147	3,336	91
Details of movements during the period			
Change (before reclassification, tax and foreign currency translation effects and after allocation to policyholders)		4,924	126
Reclassification to income statement (before tax, foreign currency translation effects and allocation to policyholders)		(1,042)	(39)
Reclassification to retained earnings		–	–
Deferred income tax (before foreign currency translation effects)		(580)	(3)
Foreign currency translation effects		34	7

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
(914)	(3,389)	(17)	582	564	(2,825)	892	137	1,028
(914)	(2,968)	39	551	591	(2,378)			
–	(781)	–	–	–	(781)			
–	–	(66)	–	(66)	(66)			
–	431	9	(96)	(87)	344			
–	(70)	–	126	126	56			
(103)	3,323	13	(41)	(28)	3,295	7,442	478	7,921
154	5,204	9	49	58	5,262			
(258)	(1,338)	–	–	–	(1,338)			
–	–	–	–	–	–			
–	(583)	4	(28)	(24)	(607)			
–	41	–	(62)	(62)	(22)			

Consolidated financial statements (continued)

Consolidated balance sheets

Assets

in USD millions, as of December 31	Notes	2019	2018
Assets:			
Cash and cash equivalents		**7,880**	**8,649**
Total Group investments	6	193,312	182,647
Equity securities		18,296	16,220
Debt securities		147,507	139,870
Investment property		13,261	12,351
Mortgage loans		5,935	6,556
Other loans		8,274	7,614
Investments in associates and joint ventures		39	36
Investments for unit-linked contracts		126,211	109,294
Total investments		**319,523**	**291,940**
Reinsurers' share of liabilities for insurance contracts	8	22,752	21,197
Deposits made under reinsurance contracts		726	883
Deferred policy acquisition costs	11	19,207	19,541
Deferred origination costs	11	400	419
Receivables and other assets	15	19,357	18,225
Deferred tax assets	17	1,151	1,125
Assets held for sale[1]	5	2,087	24,124
Property and equipment[2]	13	2,635	1,037
Attorney-in-fact contracts	14	1,025	1,025
Goodwill	14	3,610	2,634
Other intangible assets	14	4,333	4,542
Total assets		**404,688**	**395,342**

[1] In 2019, the 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). Net decrease in total assets held for sale by USD 22 billion relates to completion of the sale in the UK. As of December 31, 2018, the Group had USD 24 billion of assets held for sale based on agreements signed to sell business in the UK, Venezuela and Germany (see note 5).
[2] The increase in property and equipment is mainly due to the establishment of a right-of-use asset upon the adoption of IFRS 16 (see note 2).

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	2019	2018
Liabilities			
Liabilities for investment contracts	9	61,761	51,439
Deposits received under ceded reinsurance contracts		994	612
Deferred front-end fees		5,173	5,177
Liabilities for insurance contracts	8	264,140	249,208
Obligations to repurchase securities		977	1,316
Other liabilities[1]	16	16,567	14,321
Deferred tax liabilities	17	4,533	3,915
Liabilities held for sale[2]	5	1,996	25,539
Senior debt	18	5,148	5,237
Subordinated debt	18	6,852	6,775
Total liabilities		**368,139**	**363,540**
Equity			
Share capital	19	11	11
Additional paid-in capital	19	1,235	1,180
Net unrealized gains/(losses) on available-for-sale investments		3,985	649
Cash flow hedges		454	363
Cumulative foreign currency translation adjustment		(9,553)	(9,676)
Revaluation reserve		223	211
Retained earnings		38,649	37,452
Shareholders' equity		35,004	30,189
Non-controlling interests		1,545	1,613
Total equity		**36,549**	**31,802**
Total liabilities and equity		**404,688**	**395,342**

[1] The increase in other liabilities is mainly due to the adoption of IFRS 16 'Leases' (see note 2).
[2] In 2019, the 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). Net decrease in total liabilities held for sale by USD 24 billion relates to completion of the sale in the UK. As of December 31, 2018, the Group had USD 26 billion of liabilities held for sale based on agreements to sell certain businesses in the UK, Venezuela 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)

Consolidated statements of cash flows

in USD millions, for the years ended December 31	**2019**	2018
Cash flows from operating activities		
Net income attributable to shareholders	4,147	3,716
Adjustments for:		
Net (gains)/losses on divestment of businesses	295	24
(Income)/expense from equity method accounted investments	(3)	(1)
Depreciation, amortization and impairments of fixed and intangible assets	967	898
Other non-cash items	248	128
Underwriting activities:	19,597	(8,726)
Liabilities for insurance contracts, gross	11,073	(1,547)
Reinsurers' share of liabilities for insurance contracts	(2,423)	(744)
Liabilities for investment contracts	11,159	(5,424)
Deferred policy acquisition costs	(761)	(1,506)
Deferred origination costs	18	19
Deposits made under assumed reinsurance contracts	154	365
Deposits received under ceded reinsurance contracts	377	110
Investments:	(20,390)	9,752
Net capital (gains)/losses on total investments and impairments	(20,006)	5,274
Net change in derivatives	(347)	(7)
Net change in money market investments	(584)	563
Sales and maturities		
Debt securities	54,248	62,303
Equity securities	61,018	65,915
Other	7,369	7,093
Purchases		
Debt securities	(56,272)	(61,496)
Equity securities	(59,392)	(64,091)
Other	(6,423)	(5,801)
Net changes in sale and repurchase agreements	(361)	(19)
Movements in receivables and payables	718	(1,103)
Net changes in other operational assets and liabilities	(636)	(294)
Deferred income tax, net	302	15
Net cash provided by/(used in) operating activities	4,884	4,388

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	2019	2018
Cash flows from investing activities		
Additions to tangible and intangible assets	(752)	(1,152)
Disposals of tangible and intangible assets	114	292
(Acquisitions)/disposals of equity method accounted investments, net	(5)	(17)
Acquisitions of companies, net of cash acquired	(1,672)	(465)
Divestments of companies, net of cash divested	108	(13)
Dividends from equity method accounted investments	1	1
Net cash provided by/(used in) investing activities	(2,206)	(1,352)
Cash flows from financing activities		
Dividends paid	(3,036)	(3,015)
Issuance of share capital	–	2
Net movement in treasury shares	(101)	(957)
Issuance of debt	1,398	3,079
Repayment of debt	(1,367)	(1,566)
Lease principal repayments	(196)	–
Net cash provided by/(used in) financing activities	(3,302)	(2,457)
Foreign currency translation effects on cash and cash equivalents	41	(319)
Change in cash and cash equivalents	(583)	260
Cash and cash equivalents as of January 1	9,110	8,850
Total cash and cash equivalents as of December 31	**8,527**	**9,110**
of which: Cash and cash equivalents	7,880	8,649
of which: Unit-linked	647	461
Other supplementary cash flow disclosures		
Other interest income received	4,830	4,851
Dividend income received	1,764	1,993
Other interest expense paid	(907)	(883)
Income taxes paid	(1,534)	(1,598)

Cash and cash equivalents

in USD millions, as of December 31	2019	2018
Cash and cash equivalents comprise the following:		
Cash at bank and in hand	7,989	8,535
Cash equivalents	537	575
Total	**8,527**	**9,110**

For the periods ended December 31, 2019 and 2018, cash and cash equivalents held to meet local regulatory requirements were USD 313 million and USD 825 million, respectively.

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

Consolidated financial statements (continued)

Consolidated statements of changes in equity

in USD millions

	Share capital	Additional paid-in capital
Balance as of December 31, 2017 as previously reported	11	1,162
Effect of adoption IFRS 15[1]	–	–
Balance as of January 1, 2018 after the adoption of IFRS 15	11	1,162
Issuance of share capital	–	2
Dividends to shareholders	–	(14)
Share-based payment transactions	–	30
Treasury share transactions	–	–
of which: share buy-back program[2]	–	–
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, 2018	11	1,180
Balance as of December 31, 2018 as previously reported	11	1,180
Effect of adoption IFRS 16[3]	–	–
Effect of adoption IAS 29[4]	–	–
Balance as of January 1, 2019 after the adoption of IFRS 16 and IAS 29	11	1,180
Issuance of share capital	–	–
Dividends to shareholders	–	–
Share-based payment transactions	–	55
Treasury share transactions	–	–
of which: share buy-back program	–	–
Cumulative foreign currency translation adjustment due to hyperinflation[5]	–	–
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	**11**	**1,235**

[1] Effect of adoption of IFRS 15 'Revenue from Contracts with Customers.'
[2] Share buy-back program reflecting the purchase value of 1.74 million shares.
[3] Effect of adoption of IFRS 16 'Leases' (see note 2).
[4] Effect of adoption of IAS 29 'Financial Reporting in Hyperinflationary Economies' (see note 3).
[5] Current year effect of IAS 29 'Financial Reporting in Hyperinflationary Economies' (see note 3).

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
3,078	410	(8,762)	228	36,936	33,062	1,831	34,893
–	–	–	–	(70)	(70)	–	(70)
3,078	410	(8,762)	228	36,866	32,993	1,831	34,824
–	–	–	–	–	2	–	2
–	–	–	–	(2,790)	(2,805)	(210)	(3,015)
–	–	–	–	(1)	29	–	29
–	–	–	–	(956)	(957)	–	(957)
–	–	–	–	(555)	(555)	–	(555)
–	–	–	–	36	36	–	36
(2,429)	(47)	(914)	(17)	4,298	891	137	1,028
–	–	–	–	3,716	3,716		
(2,428)	–	–	–	–	(2,428)		
–	(47)	–	–	–	(47)		
–	–	(914)	–	–	(914)		
–	–	–	(17)	–	(17)		
–	–	–	–	582	582		
–	–	–	–	–	–	(145)	(145)
649	363	(9,676)	211	37,452	30,189	1,613	31,802
649	363	(9,676)	211	37,452	30,189	1,613	31,802
–	–	–	–	(130)	(130)	–	(130)
–	–	116	–	(66)	50	13	63
649	363	(9,561)	211	37,256	30,109	1,626	31,735
–	–	–	–	–	–	–	–
–	–	–	–	(2,819)	(2,819)	(218)	(3,036)
–	–	–	–	(63)	(8)	–	(8)
–	–	–	–	169	169	–	169
–	–	–	–	–	–	–	–
–	–	111	–	–	111	8	119
–	–	–	–	–	–	–	–
3,336	91	(103)	13	4,106	7,442	478	7,921
–	–	–	–	4,147	4,147		
3,336	–	–	–	–	3,336		
–	91	–	–	–	91		
–	–	(103)	–	–	(103)		
–	–	–	13	–	13		
–	–	–	–	(41)	(41)		
–	–	–	–	–	–	(350)	(350)
3,985	**454**	**(9,553)**	**223**	**38,649**	**35,004**	**1,545**	**36,549**

Consolidated financial statements (continued)

Zurich Insurance Group Ltd and its subsidiaries (collectively the Group) is a provider of insurance products and related services. The 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 Group Ltd, a Swiss corporation, is the holding company of the Group and its shares are listed on the SIX Swiss Exchange. Zurich Insurance Group Ltd was incorporated on April 26, 2000, in Zurich, Switzerland. It is recorded in the Commercial Register of the Canton of Zurich under its registered address at Mythenquai 2, 8002 Zurich.

On February 12, 2020, the Board of Directors of Zurich Insurance Group 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 1, 2020.

1. Basis of presentation

General information

The consolidated financial statements of the 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. 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 Group. The 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 Group level. In the consolidated financial statements, inter-segment revenues and transfers are eliminated.

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 129 to 157, and they form an integral part of the consolidated financial statements.

The 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.

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), other financial liabilities (table 16.2), lease liabilities (table 16.3) and outstanding debt (table 18.2).

Consolidated financial statements (continued)

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 (70) million and USD 63 million for the years ended December 31, 2019 and 2018, respectively. Foreign currency exchange forward and swap gains/(losses) included in these amounts were USD 40 million and USD 168 million for the years ended December 31, 2019 and 2018, respectively. In 2019, a cumulative foreign currency translation adjustment loss of USD 258 million was recognized upon closure of the sale of the 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	
	12/31/19	12/31/18	**12/31/19**	12/31/18
Euro	1.1223	1.1451	1.1196	1.1811
Swiss franc	1.0326	1.0163	1.0063	1.0224
British pound	1.3243	1.2746	1.2762	1.3354
Brazilian real	0.2481	0.2581	0.2540	0.2755
Australian dollar	0.7026	0.7049	0.6953	0.7479

2. New accounting standards and amendments to published accounting standards

Standards, amendments and interpretations effective or early-adopted as of January 1, 2019 and relevant for the Group's operations

Table 2.1 shows new accounting standards or amendments to and interpretations of standards relevant to the Group that have been implemented for the financial year beginning January 1, 2019. The impact of applying IFRS 16 'Leases' is disclosed below. The other standards/interpretation have no material impact on the Group's financial position or performance and have been applied prospectively to transactions occurring in the current financial year.

Table 2.1

Standard/ Interpretation

		Effective date
New standards/interpretations		
IFRS 16	Leases	January 1, 2019
IFRIC 23	Uncertainty over Income Tax Treatments	January 1, 2019
Amended standards		
IAS 19	Plan Amendment, Curtailment or Settlement	January 1, 2019
IAS 28	Long-term Interests in Associates and Joint Ventures	January 1, 2019

IFRS 16 'Leases'

IFRS 16 introduces new requirements for lease accounting which have an impact on contracts where the Group acts as a lessee (and intermediate lessor). Under IFRS 16, the Group recognized a right-of-use asset and a lease liability for real estate rental contracts which were mainly classified as operating leases under IAS 17 'Leases.'

The Group adopted IFRS 16 on January 1, 2019. As permitted by the transitional provisions of IFRS 16, the Group elected to apply the modified retrospective approach and has not restated comparative figures. The adoption of IFRS 16 resulted in an increase in total assets of USD 1.4 billion and total liabilities of USD 1.5 billion. The cumulative effect of USD 130 million net of tax resulting from the measurement of the right-of-use assets on a retrospective basis was recognized as a decrease in opening retained earnings. For leases previously classified as a finance lease, the carrying amounts were not adjusted on transition to IFRS 16.

The Group applied the following practical expedients permitted on transition to IFRS 16 where the Group acts as a lessee in a lease previously classified as an operating lease:

- No reassessment whether a contract is, or contains, a lease;
- Reliance on previous assessments on whether a lease contract is onerous;
- Scope exemption for operating leases with a remaining lease term of less than 12 months as at January 1, 2019;
- Exclusion of initial direct costs for the measurement of the right-of-use asset;
- Use of hindsight in assessing whether the Group is reasonably certain to exercise an option to extend or terminate a lease.

The Table 2.2 reconciles the operating lease obligations as of December 31, 2018 to the opening lease liabilities recognized as of January 1, 2019:

Consolidated financial statements (continued)

IFRS 16: Lessee – Transition disclosures

Table 2.2

in USD millions, as of December 31	2018
Operating lease commitments applying IAS 17	2,149

in USD millions, as of January 1	**2019**
Discounted operating lease commitments applying IAS 17[1]	1,807
Transition differences resulting from:	(188)
Lease extension options	54
Software licenses	(65)
Non-lease components	(124)
Short-term/Low-value	(40)
Other	(13)
Lease liabilities	**1,619**

[1] Applied weighted average incremental borrowing rate as of January 1, 2019 amounted to 2.8%.

Right-of-use assets are presented in 'Property and equipment' and lease liabilities in 'Other liabilities.' Finance lease receivables are included in 'Other loans.' Depreciation expense for right-of-use assets amounted to USD 204 million and is disclosed in note 12 within 'Building and infrastructure costs.' Interest expense on lease liabilities included in 'Interest credited to policyholders and other interest' amounted to USD 44 million. The impact resulting from the change in accounting policy on the Group's consolidated balance sheet as of January 1, 2019 is summarized in Table 2.3.

IFRS 16: The impact of change in accounting policy

Table 2.3

in USD millions, as of January 1	**2019**
Property and Equipment	1,381
Deferred Tax Assets	26
Other Liabilities[1]	(1,543)
Deferred Tax Liabilities	5
Retained earnings	130

[1] Includes derecognition of onerous lease provisions amounted to USD 76 million.

Accounting policies applied for IFRS 16 are disclosed in note 3 paragraph k).

Consolidated financial statements (continued)

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

Table 2.4 shows new accounting standards or amendments to and interpretations of standards relevant to the Group, which are not yet effective or adopted by the Group.

Table 2.4

Standard/ Interpretation

		Effective date
New standards/interpretations		
IFRS 9	Financial Instruments	January 1, 2021
IFRS 17	Insurance Contracts	January 1, 2021
Amended standards		
IFRS 3	Definition of a Business	January 1, 2020
IAS 1/IAS 8	Definition of Material	January 1, 2020
IFRS 9	Prepayment Features with Negative Compensation	January 1, 2021

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

IFRS 17 'Insurance contracts' was published on May 18, 2017 with an effective date of January 1, 2021 (retrospective application). IFRS 17 provides comprehensive guidance on accounting for insurance contracts and investment contracts with discretionary participation features. For non-life and short-term life insurance contracts IFRS 17 introduces mandatory discounting of loss reserves as well as a risk adjustment for non-financial risk, for which confidence level equivalent disclosure will be required. Further, IFRS 17 will change the presentation of insurance contract revenue, as gross written premium will no longer be presented in the statements of comprehensive income.

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).

In September 2016, the IASB issued an amendment to IFRS 4 introducing a 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. Based on the analysis performed as of December 31, 2015, the Group was eligible to apply the temporary exemption 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 2019 as there was no significant change in the activities performed by the Group. We refer to the Annual Report 2016 for further details on the eligibility assessment. Due to the strong interaction between underlying assets held and the measurement of participating insurance contracts, the Group decided to use the option to defer the full implementation of IFRS 9 until IFRS 17 becomes effective.

Under IFRS 9, all equity securities and fund investments, and more 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, credit allowances for financial assets carried at amortized cost and debt securities measured at fair value, with changes in fair value recognized in other comprehensive income (OCI), are expected to increase due to the introduction of the expected credit loss methodology. 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. For further information on effects from IFRS 9 see note 24.

In order to adopt IFRS 17 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.

Consolidated financial statements (continued)

A dedicated methodology work stream covers group accounting policies, actuarial methodologies and disclosure requirements to be consistently implemented throughout the Group. This work stream further contributes to the industry wide discussions on standard interpretation and its operational effects and closely monitors the developments in the IASB Transition Resource Group for IFRS 17 to evaluate the effects and align the accounting policies and actuarial methodologies accordingly. The implementation work stream drives the analysis of processes, data and systems implications which have revealed implementation challenges. In 2019, considerable progress was made in finalizing the core development of the target solution landscape at Group and local levels which concluded with the successful completion of dry-run simulations. In 2020, the focus of the Program will be on finalizing the implementation efforts, analyzing the effects from IFRS 17 on the consolidated financial statements and education of key stakeholders.

In June 2019, the IASB issued an Exposure Draft with limited amendments to IFRS 17, including a proposal to defer by one year, to January 1, 2022, the effective date of IFRS 17 and the fixed expiry date for the temporary exemption in IFRS 4 from applying IFRS 9, so that both standards can be applied simultaneously. The Group completed the analysis of the proposed amendments and will closely monitor the IASB re-deliberations while continuing Program delivery according to the current implementation plan.

The Group is currently assessing the impact of the application of both IFRS 17 and IFRS 9. As of December 31, 2019, it was not practicable to quantify what the potential impact would be on the Group's financial position or performance once these standards are adopted.

Other standards, amendments and interpretations shown in table 2.4 are expected to have no or an insignificant impact on the Group's financial position or performance.

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 Group's consolidated financial statements include the assets, liabilities, equity, revenues, expenses and cash flows of Zurich Insurance Group Ltd and its subsidiaries. A subsidiary is an entity that Zurich Insurance Group 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-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 Group's consolidated financial statements is not material.

b) Foreign currency translation and transactions

Foreign currency translation

Due to the Group's economic exposure to the U.S. dollar (USD), the presentation currency of the Group's consolidated financial statements is USD. Many 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 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 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 Group and obligations arising from investment contracts with DPF are accounted for as insurance contracts.

Consolidated financial statements (continued)

The 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 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 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 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 Group contain benefit features for which the amount and timing of declaration and payment are at the discretion of the 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.

Consolidated financial statements (continued)

Unrealized gains or losses arising on the revaluation of available-for-sale assets are recorded directly in OCI in accordance with the 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 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 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 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 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 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 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 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 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 Group recognizes regular purchases and sales of financial assets on the trade date, which is the date on which the 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 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 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

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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 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 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 ten 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 Group operates long-term incentive plans that are accounted for as equity-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 in additional paid-in capital.

Subsequently, depending on the underlying performance metrics, the Group revises its estimates of the number of shares that are expected to be issued and recognizes the impact of the revision, if any, in income with a corresponding adjustment to additional paid-in capital. However, no subsequent adjustment is made after the vesting date.

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

When acting as a lessee, under IFRS 16, the 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 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 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 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.'

Under IAS 17 all operating leases were accounted for off balance sheet with lease expense recognized on a straight-line basis over the lease term. Future payments under the non-cancellable operating leases were disclosed in note 22.

When acting as a lessor of investment property in an operating lease, the 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 Group is required to establish reserves for payment of losses and loss adjustment expenses that arise from the 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 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 Group's reserves for reported losses and loss adjustment expenses are based on estimates of future payments to settle reported claims. The 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 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 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 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 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 Group relies upon historical information and statistical models, based on product line, type and extent of coverage, to estimate its IBNR liability. The 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 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 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 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 Group's actuaries. Additionally, the Group's Corporate Center actuaries perform periodic reserve reviews of the 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.

Consolidated financial statements (continued)

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 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 Group is exposed to longevity risk.
- Under certain contracts, the 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 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 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 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.

Consolidated financial statements (continued)

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 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 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 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 financial budgets, 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 capital asset pricing model 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, 2019. No impairment was identified.

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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 % 2019	Discount rates in % 2018	Perpetual nominal growth rate in % 2019	Perpetual nominal growth rate in % 2018
Farmers	Farmers	1,845	8.5	9.7	–	–
North America	P&C	355	7.8	8.9	2.0	1.6
Europe, Middle East & Africa	P&C	260	6.6	7.4	2.0	1.9
Asia Pacific	P&C	657	7.6	8.2	2.2	2.0
Asia Pacific	Life	1,108	7.6	8.8	2.0	2.0
Latin America	P&C	260	13.6	16.1	3.8	4.7
Latin America	Life	84	11.9	11.2	3.6	3.0

Sensitivity tests have been performed on goodwill and AIF contracts that typically comprise of an analysis for either a decrease in cash flows of up to 30 percent, a decrease in the perpetual growth rate of up to 1.0 percentage point or an increase in the discount rate of up to 3.5 percentage points, so as to capture potential future variations in market conditions. The recoverability of the Latin America Property & Casualty CGU goodwill is very sensitive to key assumptions such as macroeconomic conditions, industry and market growth considerations, and cost factors in particular in Brazil and Mexico.

In 2018, the Group recognized USD 52 million of goodwill relating to the acquisition of mobile solution technology. The recoverability of this goodwill is reliant upon successful achievement of ambitious growth targets.

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 Group provides defined benefit plans and other post-employment plans. In assessing the 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 healthcare costs. Discount rates for significant plans are based on a yield curve approach. The 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 2019

Acquisitions

OnePath

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

Table 5.1 shows the preliminary balance sheet line items as of the OnePath acquisition date, representing the fair value of tangible and intangible assets and draft goodwill.

Table 5.1

OnePath preliminary balance sheet as of the acquisition date

in USD millions, as of May 31, 2019	Total[1]
Cash and cash equivalents	252
Total Group investments	2,233
Total unit-linked investments	770
Total investments	3,003
Reinsurers' share of reserves for insurance contracts	168
Receivables and other assets	223
Deferred tax assets	328
Property and equipment	1
Goodwill	936
Other intangible assets	47
Assets acquired	**4,957**
Liabilities for insurance contracts	2,175
Liabilities for investment contracts	1,206
Accrued liabilities	18
Other liabilities	150
Deferred tax liabilities	12
Liabilities acquired	**3,562**
Net assets acquired	1,395
Non-controlling interests	
Total acquisition costs	**1,395**

[1] As of December 31, 2019, the assets and liabilities of OnePath are recognized at acquisition date, May 31, 2019. The Group is currently in the process of assessing preliminary purchase price adjustments.

OnePath's pro-forma gross written premiums and net income after taxes for the twelve 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.

Adira Insurance

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

Consolidated financial statements (continued)

Divestments

Held for sale

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

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

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

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

UK workplace pensions and savings business

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

Venezuelan Operations

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

ADAC Autoversicherung AG and Bonnfinanz AG

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

Transactions in 2018

Acquisitions

Blue Insurance

On October 3, 2018, Cover-More Australia Pty Ltd, a fully owned subsidiary of Zurich Insurance Company Ltd, completed the acquisition of Blue Insurance Ltd (Blue Insurance), an Irish-domiciled insurance intermediary acquired for approximately USD 64 million, subject to performance adjustments. Based on purchase price accounting, goodwill amounted to USD 37 million, including a USD 2 million increase in goodwill from post-acquisition adjustments in 2019.

EuroAmerica portfolio in Chile

On April 20, 2018, the Group announced it had entered into an agreement to acquire the individual and group life insurance portfolios as well as the long-term savings operations of EuroAmerica in Chile. The Group finalized the acquisition on November 5, 2018, for an estimated aggregate price of USD 144 million, subject to purchase price adjustments. Based on purchase price accounting, goodwill amounted to USD 90 million, including a USD 12 million reduction of goodwill in 2019 from post-acquisition adjustments.

Consolidated financial statements (continued)

Travel Ace and Universal Assistance
On March 12, 2018, the Group announced the acquisition of Travel Ace and Universal Assistance, the leading providers of traveler assistance in Latin America, for approximately USD 82 million. The transaction encompassed 19 legal entities operating throughout Latin America, most notably in Argentina, Brazil, Chile, Colombia and Mexico. Based on purchase price accounting, goodwill amounted to USD 94 million.

QBE Latin America
On February 24, 2018, the Group entered into an agreement to acquire the Latin American operations of the Australian insurer QBE Insurance Group Limited (QBE) with operations in Argentina, Brazil, Colombia, Ecuador and Mexico. On July 2, 2018, the acquisitions of Argentina and Brazil were closed for an amount, including purchase price adjustments, of USD 190 million and USD 27 million, respectively. The acquisitions of Mexico and Ecuador were closed on August 31, 2018 and October 1, 2018, each for an amount of USD 46 million including purchase price adjustments. The acquisition of Colombia was completed on February 1, 2019, for an amount of USD 18 million, subject to purchase price adjustments.

Table 5.2 shows the main balance sheet line items, including post-acquisition adjustments, representing the fair value of acquired QBE Latin America's net tangible assets, intangible assets and goodwill, based on purchase price accounting.

Table 5.2

QBE Latin America balance sheet as of the acquisition dates

in USD millions	Total
Cash and cash equivalents	89
Total investments	397
Receivables and other assets	411
Deferred tax assets	21
Property and equipment	21
Goodwill	222
Other intangible assets	51
Assets acquired	**1,212**
Liabilities for insurance contracts	736
Other liabilities	142
Deferred tax liabilities	8
Liabilities acquired	**886**
Net assets acquired	326
Total acquisition costs	**326**

QBE Latin America's net income after taxes for the months since the acquisition dates, as included in the Group consolidated income statements for the year ended December 31, 2018, amounts to USD 3 million including transaction-related costs. Pro-forma net income after taxes for the full 12 months ended December 31, 2018, amounts to approximately USD 21 million, adjusted for transaction-related costs incurred by QBE Latin America. In addition, the Group incurred transaction-related costs of approximately USD 9 million in non-technical expenses in BOP. The majority has been incurred in 2018.

Divestments
Endsleigh Limited
On March 29, 2018, the Group completed the sale of the Endsleigh Limited group of companies to A-Plan Holdings. A pre-tax loss of USD 116 million has been recorded within net gains/losses on divestment of businesses, of which USD 97 million were recognized in December 2017 at the time the sale was announced.

6. Group investments

Group investments are those for which the 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.

Net investment result on Group investments

Table 6.1

in USD millions, for the years ended December 31	Net investment income		Net capital gains/(losses) and impairments		Net investment result		of which impairments	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018
Investment cash	20	8	–	–	20	8	–	–
Equity securities	470	438	1,150	355	1,620	794	(80)	(218)
Debt securities	4,051	4,103	685	84	4,736	4,187	(129)	(32)
Investment property[1]	473	487	581	401	1,054	888	–	–
Mortgage loans	161	186	7	1	168	187	–	1
Other loans	365	382	27	14	393	397	(7)	12
Investments in associates and joint ventures	3	1	(1)	–	1	2	–	–
Derivative financial instruments	–	–	(356)	45	(356)	45	–	–
Investment result, gross, on Group investments	5,542	5,606	2,093	901	7,635	6,507	(216)	(238)
Investment expenses on Group investments	(244)	(219)	–	–	(244)	(219)	–	–
Investment result, net, on Group investments	**5,298**	**5,387**	**2,093**	**901**	**7,391**	**6,288**	**(216)**	**(238)**

[1] Rental operating expenses for investment property amounted to USD 141 million and USD 98 million for the years ended December 31, 2019 and 2018, respectively.

Details of Group investments by category

Table 6.2

as of December 31	**2019**		2018	
	USD millions	**% of total**	USD millions	% of total
Equity securities:				
Fair value through profit or loss	4,391	2.3	3,633	2.0
Available-for-sale	13,905	7.2	12,587	6.9
Total equity securities	18,296	9.5	16,220	8.9
Debt securities:				
Fair value through profit or loss	6,713	3.5	5,229	2.9
Available-for-sale	138,676	71.7	132,522	72.6
Held-to-maturity	2,117	1.1	2,118	1.2
Total debt securities	147,507	76.3	139,870	76.6
Investment property	13,261	6.9	12,351	6.8
Mortgage loans	5,935	3.1	6,556	3.6
Other loans	8,274	4.3	7,614	4.2
Investments in associates and joint ventures	39	0.0	36	0.0
Total Group investments[1]	**193,312**	**100.0**	**182,647**	**100.0**

[1] 2019 Group investments include equity securities, debt securities and other loans related to the OnePath acquisition (see note 5).

Investments with a carrying value of USD 6.2 billion are held to meet local regulatory requirements in each of the years ended December 31, 2019 and 2018.

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Details of debt securities by category

Table 6.3

in USD millions, as of December 31	Fair value through profit or loss 2019	Fair value through profit or loss 2018	Available-for-sale 2019	Available-for-sale 2018	Held-to-maturity 2019	Held-to-maturity 2018	Total 2019	Total 2018
Debt securities:								
Government and supra-national bonds	3,542	2,759	66,196	59,395	1,942	1,917	71,681	64,071
Corporate securities	2,682	2,061	54,846	55,229	175	201	57,703	57,490
Mortgage and asset-backed securities	489	409	17,634	17,899	–	–	18,123	18,308
Total debt securities	**6,713**	**5,229**	**138,676**	**132,522**	**2,117**	**2,118**	**147,507**	**139,870**

Debt securities maturity schedule

Table 6.4

in USD millions, as of December 31	Fair value through profit or loss 2019	Fair value through profit or loss 2018	Available-for-sale 2019	Available-for-sale 2018	Held-to-maturity 2019	Held-to-maturity 2018	Total 2019	Total 2018
Debt securities:								
< 1 year	743	564	7,412	6,438	20	7	8,175	7,009
1 to 5 years	1,513	1,226	35,878	35,933	816	816	38,206	37,975
5 to 10 years	1,295	981	32,681	32,632	729	462	34,706	34,076
> 10 years	2,674	2,049	45,071	39,620	552	833	48,296	42,502
Subtotal	6,225	4,820	121,042	114,624	2,117	2,118	129,384	121,562
Mortgage and asset-backed securities:								
< 1 year	–	–	19	36	–	–	19	36
1 to 5 years	115	112	2,017	1,869	–	–	2,133	1,981
5 to 10 years	67	63	1,801	2,265	–	–	1,867	2,328
> 10 years	307	235	13,797	13,728	–	–	14,104	13,963
Subtotal	489	409	17,634	17,899	–	–	18,123	18,308
Total	**6,713**	**5,229**	**138,676**	**132,522**	**2,117**	**2,118**	**147,507**	**139,870**

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 2019	Total 2018
As of January 1	12,351	12,238
Additions and improvements	1,284	757
Acquisitions/(divestments)	–	1
Disposals	(777)	(563)
Market value revaluation	428	247
Transfer from/to assets held for own use	25	–
Transfer to assets held for sale	(36)	(15)
Foreign currency translation effects	(15)	(315)
As of December 31	**13,261**	**12,351**

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

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

Table 6.6

in USD millions, as of December 31	Total 2019	Total 2018
Equity securities: available-for-sale	1,570	137
Debt securities: available-for-sale	12,997	6,567
Other	536	164
Gross unrealized gains/(losses) on Group investments	15,103	6,868
Less amount of unrealized gains/(losses) on investments attributable to:		
Life policyholder dividends and other policyholder liabilities	(8,574)	(4,857)
Life deferred acquisition costs and present value of future profits	(914)	(490)
Deferred income taxes	(1,085)	(476)
Non-controlling interests	(91)	(33)
Total[1]	**4,439**	**1,012**

[1] Net unrealized gains/(losses) on Group investments include net gains arising on cash flow hedges of USD 454 million and USD 363 million as of December 31, 2019 and 2018, respectively.

Securities lending, repurchase and reverse repurchase agreements

Table 6.7

in USD millions, as of December 31	2019	2018
Securities lending agreements		
Securities lent under securities lending agreements[1]	156	599
Collateral received for securities lending	190	676
of which: Cash collateral	56	47
of which: Non-cash collateral[2]	134	629
Liabilities for cash collateral received for securities lending	56	47
Repurchase agreements		
Securities sold under repurchase agreements[3]	978	1,318
Obligations to repurchase securities	977	1,316
Reverse repurchase agreements		
Securities purchased under reverse repurchase agreements[4]	57	48
Receivables under reverse repurchase agreements	56	47

[1] The 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 150 million and USD 599 million as of December 31, 2019 and 2018, respectively. The majority of these assets were debt securities.
[2] The 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 126 million and USD 629 million as of December 31, 2019 and 2018, respectively.
[3] The 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 350 million and USD 609 million as of December 31, 2019 and 2018, respectively. The majority of these assets were debt securities.
[4] The 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, 2019 and 2018, respectively.

Under the terms of securities lending or repurchase agreements, the 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 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 Group's consolidated balance sheet, as long as the risk and rewards of ownership have not been transferred to the Group. The cash delivered by the 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.

7. Group derivative financial instruments and hedge accounting

The 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 instruments which did not qualify for hedge accounting as of December 31, 2019 and 2018. While these notional amounts express the extent of the Group's involvement in derivative transactions, they do not, however, represent the amounts at risk.

Table 7.1

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

in USD millions, as of December 31	2019						2018		
	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:									
OTC									
Swaps	330	256	1,980	2,566	156	(50)	2,686	66	(15)
Swaptions	337	3,753	1,462	5,551	105	(69)	2,127	54	–
Exchange traded									
Futures	472	–	–	472	2	(2)	209	3	(2)
Total interest rate contracts	**1,139**	**4,009**	**3,442**	**8,589**	**263**	**(121)**	**5,022**	**123**	**(17)**
Equity contracts:									
OTC									
Swaps	–	–	36	36	–	(7)	–	–	–
Options	10,301	475	319	11,095	83	(42)	3,361	67	(35)
Exchange traded									
Futures	211	–	–	211	–	(2)	225	7	–
Total equity contracts	**10,511**	**475**	**355**	**11,341**	**83**	**(51)**	**3,586**	**75**	**(35)**
Foreign exchange contracts:									
OTC									
Swaps and forwards	17,091	–	–	17,091	159	(68)	19,840	129	(155)
Total foreign exchange contracts	**17,091**	**–**	**–**	**17,091**	**159**	**(68)**	**19,840**	**129**	**(155)**
Credit default swaps	–	–	–	–	–	–	4,000	–	(31)
Total credit contracts	**–**	**–**	**–**	**–**	**–**	**–**	**4,000**	**–**	**(31)**
Other contracts:									
OTC									
Options	–	–	–	–	–	–	54	–	(4)
Swaps	–	–	–	–	–	–	42	–	(4)
Total other contracts	**–**	**–**	**–**	**–**	**–**	**–**	**95**	**–**	**(8)**
Total Group derivative financial instruments	**28,741**	**4,484**	**3,797**	**37,022**	**505**	**(240)**	**32,543**	**327**	**(245)**

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 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. The majority of positions are for economic hedging purposes. Short positions are always covered and sometimes used to mitigate hedging costs.

Foreign exchange contracts

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

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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, 2019 and USD 10.8 billion as of December 31, 2018, and with a market value of the underlying investments of USD 11.1 billion and USD 10.4 billion as of December 31, 2019 and 2018, 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, 2019 and 2018.

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.

Table 7.2

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

in USD millions, as of December 31				2019					2018
	Maturity by notional amount			**Notional**	**Positive**	**Negative**	Notional	Positive	Negative
	< 1 year	1 to 5 years	> 5 years	**principal amounts**	**fair values**	**fair values**	principal amounts	fair values	fair values
Fair value hedges:									
Cross currency swaps	–	–	62	62	–	(54)	62	–	(49)
Interest rate swaps	–	–	421	421	15	–	2,240	63	(1)
Forex swaps and forwards	313	–	–	313	3	–	478	4	(1)
Forwards bonds	108	–	–	108	–	(8)	–	–	–
Total fair value hedges	**421**	**–**	**482**	**904**	**19**	**(61)**	**2,779**	**67**	**(52)**
Cash flow hedges:									
Interest rate swaptions	–	873	1,286	2,158	562	–	2,124	424	–
Cross currency swaps	–	261	109	370	18	(5)	343	21	(4)
Interest rate swaps[1]	2	10	771	783	8	(50)	799	7	(4)
Forex swaps and forwards	–	–	–	–	–	–	31	–	(1)
Forwards bonds	84	539	–	623	80	(9)	286	20	(20)
Total cash flow hedges	**86**	**1,683**	**2,165**	**3,934**	**669**	**(64)**	**3,583**	**472**	**(29)**
Net investment hedges:									
Forex swaps and forwards	1,606	–	–	1,606	34	–	1,666	32	–
Total net investment hedges	**1,606**	**–**	**–**	**1,606**	**34**	**–**	**1,666**	**32**	**–**

[1] Includes USD 623 million and USD 636 million notional related to derivatives centrally cleared as of December 31, 2019 and 2018, respectively.

Fair value hedges

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

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

The Group also has fair value hedge relationships consisting of cross currency swaps and forwards to protect the 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.

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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	2019	2018
Gains/(losses)		
on hedging instruments[1]	23	(7)
on hedged items attributable to the hedged risk	(24)	(2)

[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 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.

The Group uses foreign exchange swaps and forwards to protect against the exposure of the variability of future cash outflows related to reinsurance transactions. The effective portion of the gains and losses are initially recognized in OCI and will be recycled to profit or loss within underwriting and policy acquisition costs using the same pattern as the hedged item.

As of December 31, 2019, 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 196 million and USD (3) million before tax for the years ended December 31, 2019 and 2018, respectively.

The Group recognized gains of USD 33 million and USD 34 million in the consolidated income statement within net investment income on Group investments for the years ended December 31, 2019 and 2018, respectively. The Group also recognized net gains/(losses) of USD 4 million and USD 5 million within administrative and other operating expense for the years ended December 31, 2019 and 2018, respectively, as an offset to the foreign currency revaluation on the underlying hedged items.

A nil amount for the years ended December 31, 2019 and 2018, respectively, was recognized in net capital gains/(losses) and impairments due to hedge ineffectiveness.

Net investment hedges

The 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 (40) million and USD (114) million before tax for the years ended December 31, 2019 and 2018, respectively as a result of a hedge relationship by foreign exchange forwards and swaps.

The 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 8.1 billion and USD 7.5 billion for the years ended December 31, 2019 and 2018, respectively. The net gains/(losses) deferred in OCI were USD 242 million and USD 148 million before tax for the years ended December 31, 2019 and 2018, 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, 2019 and 2018.

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	
	2019	2018	**2019**	2018
Fair value	1,226	899	(365)	(325)
Related amounts not offset	(99)	(169)	100	168
Cash collateral (received)/pledged	(1,089)	(666)	116	90
Non-cash collateral (received)/pledged	(29)	(26)	54	60
Net amount	**9**	**38**	**(94)**	**(7)**

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

Liabilities for insurance contracts

Table 8.1

in USD millions, as of December 31	Gross		Ceded		Net	
	2019	2018	**2019**	2018	**2019**	2018
Reserves for losses and loss adjustment expenses	59,165	60,913	(12,137)	(11,535)	47,028	49,378
Reserves for unearned premiums	17,551	16,714	(3,412)	(3,211)	14,139	13,503
Future life policyholder benefits	77,756	74,950	(3,978)	(3,110)	73,778	71,839
Policyholder contract deposits and other funds	27,480	24,266	(3,285)	(3,416)	24,195	20,850
Reserves for unit-linked insurance contracts	77,684	68,766	–	–	77,684	68,766
Other insurance liabilities	4,505	3,599	(1)	–	4,503	3,599
Total liabilities for insurance contracts[1,2]	**264,140**	**249,208**	**(22,813)**	**(21,273)**	**241,327**	**227,936**

[1] 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 and USD 76 million as of December 31, 2019 and 2018, respectively.

Discounted reserves for losses and loss adjustment expenses

Table 8.2

in USD millions, as of December 31	Gross		Ceded		Net	
	2019	2018	**2019**	2018	**2019**	2018
Reserves for losses and loss adjustment expenses	59,165	60,913	(12,137)	(11,535)	47,028	49,378
of which: Discounted reserves	3,078	2,843	(40)	(33)	3,038	2,810
Discount effect	1,219	1,274	(24)	(26)	1,195	1,248
Undiscounted reserves for losses and loss adjustment expenses	60,384	62,187	(12,161)	(11,561)	48,223	50,627
of which: Undiscounted amount of discounted reserves	4,297	4,117	(64)	(59)	4,233	4,058
Average discount rate[1]	3.9%	2.3%	2.0%	2.5%	4.0%	2.3%

[1] Average discount rate increase due to hyperinflationary economy in Argentina.

Development of reserves for losses and loss adjustment expenses

Table 8.3

in USD millions	Gross		Ceded		Net	
	2019	2018	**2019**	2018	**2019**	2018
As of January 1	60,913	65,368	(11,535)	(11,070)	49,378	54,298
Losses and loss adjustment expenses incurred:						
Current year	22,400	22,973	(5,151)	(4,903)	17,249	18,071
Prior years	(769)	(726)	186	52	(583)	(674)
Total incurred	21,631	22,248	(4,965)	(4,851)	16,666	17,397
Losses and loss adjustment expenses paid:						
Current year	(8,782)	(8,533)	1,095	1,209	(7,687)	(7,324)
Prior years	(14,551)	(14,393)	3,720	2,807	(10,831)	(11,586)
Total paid	(23,333)	(22,926)	4,815	4,016	(18,518)	(18,910)
Interest effects of discounted reserves	145	64	(3)	(6)	142	59
Acquisitions/(divestments) and transfers[1]	17	(2,354)	(519)	156	(502)	(2,198)
Foreign currency translation effects	(209)	(1,486)	70	219	(139)	(1,267)
As of December 31	**59,165**	**60,913**	**(12,137)**	**(11,535)**	**47,028**	**49,378**

[1] In 2019, the 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. In 2018 the Group reclassified USD 1.8 billion to assets and liabilities held for sale in UK and Germany (see note 5). Additional movements mainly related to QBE and Travel Ace and Universal Assistance acquisitions (see note 5) and portfolio transfers in Germany and Australia with retroactive reinsurance agreements signed in 2018.

The 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, 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 workers' injury in retail and commercial segments.

For the year ended December 31, 2018, the decrease of USD 4.9 billion in net reserves for losses and loss adjustment expenses is mainly driven by reclassification of USD 1.8 billion to assets and liabilities held for sale (see note 5) and decrease of USD 1.3 billion due to foreign currency translation effects. In addition, certain portfolios with retroactive reinsurance agreements signed in 2018 in Germany and Australia were transferred to external parties, resulting in a decrease of net reserves of USD 690 million.

Net favorable reserve development emerged from reserves established in prior years amounting to USD 674 million mainly related to the following:

- In EMEA, favorable prior year development of USD 357 million driven by motor and liability in retail;
- In North America, favorable prior year development of USD 206 million driven by workers' injury.

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Development of insurance losses, net

Table 8.4

in USD millions, as of December 31	2010	2011	2012	2013	2014	2015	2016	2017	2018	**2019**
Gross reserves for losses and loss adjustment expenses (undiscounted)	68,274	67,762	69,986	68,312	64,472	62,971	62,254	66,715	62,187	60,384
Reinsurance recoverable (undiscounted)	(12,093)	(12,421)	(12,601)	(10,993)	(9,770)	(9,231)	(9,796)	(11,092)	(11,561)	(12,161)
Initial net reserves for losses and loss adjustment expenses	56,180	55,341	57,385	57,319	54,703	53,739	52,458	55,623	50,627	48,223
Cumulative paid as of:										
One year later	*(13,092)*	*(13,525)*	*(13,799)*	*(13,301)*	*(12,576)*	*(11,690)*	*(10,994)*	*(11,586)*	*(10,831)*	
Two years later	*(21,073)*	*(21,245)*	*(21,465)*	*(21,002)*	*(19,460)*	*(18,562)*	*(17,808)*	*(18,277)*		
Three years later	*(27,137)*	*(26,871)*	*(27,064)*	*(26,021)*	*(24,475)*	*(23,590)*	*(22,540)*			
Four years later	*(31,375)*	*(31,129)*	*(30,691)*	*(29,851)*	*(28,105)*	*(27,106)*				
Five years later	*(34,478)*	*(33,836)*	*(33,515)*	*(32,509)*	*(30,667)*					
Six years later	*(36,556)*	*(35,935)*	*(35,579)*	*(34,426)*						
Seven years later	*(38,192)*	*(37,625)*	*(37,108)*							
Eight years later	*(39,568)*	*(38,838)*								
Nine years later	*(40,562)*									
Cumulative incurred:										
One year later	*(1,302)*	*(571)*	*(757)*	*(59)*	*149*	*(479)*	*(326)*	*(674)*	*(583)*	
Two years later	*(1,819)*	*(891)*	*(652)*	*(139)*	*(25)*	*(1,106)*	*(1,043)*	*(1,516)*		
Three years later	*(2,028)*	*(677)*	*(777)*	*(72)*	*(438)*	*(1,666)*	*(1,996)*			
Four years later	*(1,891)*	*(804)*	*(709)*	*(214)*	*(823)*	*(2,402)*				
Five years later	*(2,020)*	*(826)*	*(912)*	*(576)*	*(1,382)*					
Six years later	*(2,051)*	*(1,018)*	*(1,136)*	*(1,041)*						
Seven years later	*(2,107)*	*(1,112)*	*(1,552)*							
Eight years later	*(2,188)*	*(1,576)*								
Nine years later	*(2,504)*									
Net undiscounted reserves re-estimated[1]:										
One year later	*54,878*	*54,770*	*56,628*	*57,259*	*54,852*	*53,260*	*52,131*	*54,949*	*50,044*	
Two years later	*54,361*	*54,450*	*56,734*	*57,180*	*54,677*	*52,633*	*51,415*	*54,108*		
Three years later	*54,152*	*54,664*	*56,609*	*57,246*	*54,265*	*52,073*	*50,462*			
Four years later	*54,289*	*54,537*	*56,676*	*57,105*	*53,880*	*51,337*				
Five years later	*54,160*	*54,515*	*56,474*	*56,743*	*53,321*					
Six years later	*54,129*	*54,323*	*56,250*	*56,278*						
Seven years later	*54,073*	*54,229*	*55,834*							
Eight years later	*53,992*	*53,765*								
Nine years later	*53,676*									
Cumulative (deficiency)/ redundancy of net reserves	2,504	1,576	1,552	1,041	1,382	2,402	1,996	1,516	583	
Cumulative (deficiency)/ redundancy as a percentage of initial net reserves	4.5%	2.8%	2.7%	1.8%	2.5%	4.5%	3.8%	2.7%	1.2%	
Gross reserves re-estimated	64,176	64,717	66,435	65,781	62,136	59,757	59,125	64,664	61,418	
Cumulative (deficiency)/ redundancy of gross reserves	4,097	3,045	3,552	2,531	2,337	3,213	3,129	2,051	769	
Cumulative (deficiency)/ redundancy as a percentage of initial gross reserves	6.0%	4.5%	5.1%	3.7%	3.6%	5.1%	5.0%	3.1%	1.2%	

[1] Undiscounted amounts starting 2016, prior years are shown discounted.

Consolidated financial statements (continued)

Table 8.4 presents changes in the historical reserves for losses and loss adjustment expenses, net of reinsurance, that the Group established in 2010 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, 2019. 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 Group has considered asbestos, including latent injury, claims and claims expenses in establishing the reserves for losses and loss adjustment expenses. The 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 123 million and USD 384 million for the years ended December 31, 2019 and 2018, respectively.

Development of future life policyholder benefits

Table 8.5

in USD millions	Gross		Ceded		Net	
	2019	2018	**2019**	2018	**2019**	2018
As of January 1	74,950	77,529	(3,110)	(3,201)	71,839	74,328
Premiums	13,634	13,270	(1,368)	(1,222)	12,266	12,048
Claims	(10,631)	(10,360)	1,098	952	(9,534)	(9,408)
Fee income and other expenses	(3,911)	(4,281)	258	335	(3,652)	(3,945)
Interest and bonuses credited to policyholders	2,107	1,951	(101)	(89)	2,007	1,862
Changes in assumptions	49	(24)	–	2	49	(21)
Acquisitions/(divestments) and transfers[1]	1,305	23	(753)	12	552	35
Increase/(decrease) recorded in other comprehensive income	876	(228)	–	–	876	(228)
Foreign currency translation effects	(623)	(2,931)	(2)	101	(626)	(2,830)
As of December 31	**77,756**	**74,950**	**(3,978)**	**(3,110)**	**73,778**	**71,839**

[1] The 2019 net movement is mainly related to the acquisition of OnePath (see note 5), the 2018 net movement is mainly related to the EuroAmerica acquisition in Chile (see note 5) and sale of a portfolio in Singapore.

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 2.3 percent and 2.4 percent as of December 31, 2019 and 2018, 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.

Effect of changes in assumptions for future life policyholder benefits

Table 8.6

in USD millions, for the years ended December 31	2019	2018
Interest rates	15	(1)
Investment return	30	(3)
Expense	4	(9)
Morbidity	(5)	(3)
Longevity	5	(6)
Lapses	3	5
Other	(2)	(6)
Net impact of changes in assumptions	**48**	**(23)**

Policyholder contract deposits and other funds gross

Table 8.7

in USD millions, as of December 31	2019	2018
Universal life and other contracts	13,679	13,250
Policyholder dividends	13,801	11,016
Total	**27,480**	**24,266**

Development of policyholder contract deposits and other funds

Table 8.8

in USD millions	Gross		Ceded		Net	
	2019	2018	2019	2018	2019	2018
As of January 1	24,266	24,944	(3,416)	(3,533)	20,850	21,411
Premiums	1,175	1,073	(76)	(73)	1,099	999
Claims	(1,327)	(1,319)	306	318	(1,021)	(1,001)
Fee income and other expenses	(291)	(402)	–	(6)	(290)	(407)
Interest and bonuses credited to policyholders	1,393	1,406	(119)	(123)	1,274	1,284
Acquisitions/(divestments) and transfers[1]	244	422	–	–	244	422
Increase/(decrease) recorded in other comprehensive income	2,328	(1,125)	–	–	2,328	(1,125)
Foreign currency translation effects	(308)	(734)	20	–	(287)	(734)
As of December 31	**27,480**	**24,266**	**(3,285)**	**(3,416)**	**24,195**	**20,850**

[1] The 2019 movement relates to the acquisition of OnePath (see note 5), the 2018 net movement is mainly related to the acquisition of EuroAmerica in Chile (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, 2019 and 2018. Reserves for unit-linked insurance contracts amounting to USD 78 billion and USD 69 billion as of December 31, 2019 and 2018, 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, 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**

Table 8.9b

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

in USD millions, as of December 31, 2018	Reserves for losses and loss adjustment expenses	Future life policyholder benefits	Policyholder contract deposits and other funds	Total
< 1 year	14,128	9,425	1,613	25,167
1 to 5 years	19,969	17,523	1,722	39,215
5 to 10 years	7,353	14,077	2,280	23,710
10 to 20 years	5,437	13,512	2,644	21,593
> 20 years	2,491	17,301	12,591	32,383
Total	**49,378**	**71,839**	**20,850**	**142,068**

9. Liabilities for investment contracts

Liabilities for investment contracts

Table 9.1

in USD millions, as of December 31	**2019**	2018
Unit-linked investment contracts	48,967	41,188
Investment contracts (amortized cost)	931	504
Investment contracts with DPF	11,863	9,746
Total	**61,761**	**51,439**

Unit-linked investment contracts issued by the 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	**2019**	2018
As of January 1	51,439	55,627
Premiums	10,913	13,133
Claims	(9,587)	(15,353)
Fee income and other expenses	(425)	(464)
Interest and bonuses credited to policyholders	10,257	(2,739)
Acquisitions/(divestments) and transfers[1]	(1,916)	4,139
Increase/(decrease) recorded in other comprehensive income	660	(302)
Foreign currency translation effects	419	(2,603)
As of December 31	**61,761**	**51,439**

[1] 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).

Consolidated financial statements (continued)

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, 2019 and 2018. The undiscounted contractual cash flows for investment contract liabilities are USD 62 billion and USD 51 billion as of December 31, 2019 and 2018, respectively. Liabilities for unit-linked investment contracts amounted to USD 49 billion and USD 41 billion as of December 31, 2019 and 2018, 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 417 million and USD 463 million as of December 31, 2019 and 2018, respectively. The 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, 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**

Table 9.3b

Expected maturity profile for liabilities for investment contracts – prior period

in USD millions, as of December 31, 2018

	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	2,624	227	416	3,267
1 to 5 years	6,364	140	1,477	7,981
5 to 10 years	7,548	74	1,792	9,414
10 to 20 years	6,682	42	1,113	7,837
> 20 years	17,971	22	4,948	22,940
Total	**41,188**	**504**	**9,746**	**51,439**

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	
	2019	2018	**2019**	2018	**2019**	2018
Losses and loss adjustment expenses	21,631	22,248	(4,965)	(4,851)	16,666	17,397
Life insurance death and other benefits	11,989	11,236	(1,085)	(986)	10,903	10,250
Total insurance benefits and losses	**33,620**	**33,483**	**(6,051)**	**(5,837)**	**27,570**	**27,646**

Policyholder dividends and participation in profits

Table 10.2

in USD millions, for the years ended December 31	**2019**	2018
Change in policyholder contract deposits and other funds	1,080	1,245
Change in reserves for unit-linked insurance contracts	9,515	(1,350)
Change in liabilities for investment contracts – unit-linked	10,050	(2,930)
Change in liabilities for investment contracts – other	219	190
Change in unit-linked liabilities related to UK capital gains tax	(283)	109
Total policyholder dividends and participation in profits	**20,582**	**(2,736)**

Underwriting and policy acquisition costs

Table 10.3

in USD millions, for the years ended December 31	Gross		Ceded		Net	
	2019	2018	**2019**	2018	**2019**	2018
Amortization of deferred acquisition costs	6,525	6,466	(866)	(810)	5,660	5,655
Amortization of deferred origination costs	71	74	–	–	71	74
Commissions and other underwriting and acquisition expenses[1]	3,141	2,882	(342)	(47)	2,798	2,835
Total underwriting and policy acquisition costs	**9,737**	**9,422**	**(1,208)**	**(857)**	**8,529**	**8,565**

[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	
	2019	2018	**2019**	2018	**2019**	2018
Change in reserves for unearned premiums	**1,187**	**339**	**(239)**	**(115)**	**949**	**224**

Consolidated financial statements (continued)

11. Deferred policy acquisition costs and deferred origination costs

Development of deferred policy acquisition costs

Table 11.1

in USD millions	Property & Casualty		Life		Other businesses[1]		Total	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018
As of January 1	5,367	5,289	12,350	11,624	1,824	1,751	19,541	18,663
Acquisition costs deferred[2]	4,569	4,449	1,849	2,533	169	179	6,586	7,161
Amortization	(4,236)	(4,252)	(1,296)	(1,280)	(117)	(123)	(5,648)	(5,655)
Impairments[3]	–	–	(177)	–	–	–	(177)	–
Amortization (charged)/credited to other comprehensive income	–	–	(367)	136	(46)	29	(413)	166
Acquisitions/(divestments) and transfers[4]	4	37	(736)	–	(12)	(11)	(745)	26
Foreign currency translation effects	(9)	(156)	74	(663)	–	–	64	(820)
As of December 31	**5,694**	**5,367**	**11,695**	**12,350**	**1,818**	**1,824**	**19,207**	**19,541**

[1] Net of eliminations from inter-segment transactions.
[2] In May 2018, the Group entered into a quota share reinsurance agreement with OnePath and made an upfront commission payment of USD 754 million.
[3] Impairment related to UK held for sale transaction (see note 5).
[4] 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. The 2018 Property & Casualty movement mainly related to QBE acquisition and sale of Endsleigh Limited (see note 5). The 2018 other businesses movement mainly related to the sale of a portfolio in Singapore.

Development of deferred origination costs

Table 11.2

in USD millions	**2019**	2018
As of January 1	419	460
Origination costs deferred	53	55
Amortization	(71)	(74)
Foreign currency translation effects	(1)	(22)
As of December 31	**400**	**419**

Consolidated financial statements (continued)

12. Expenses

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

Expenses

Table 12[1]

in USD millions, for the years ended December 31	**2019**	2018
Administrative and other operating expenses	8,020	7,761
Underwriting and policy acquisition costs, net of reinsurance	8,529	8,565
Claims handling expenses[2]	2,535	2,574
Investment expenses	338	315
Total	**19,422**	**19,215**
of which:		
Personnel and other related costs	6,229	6,084
Building and infrastructure costs	441	836
Brand and marketing expenses	653	332
Commissions (net of DAC)	6,588	6,422
Premium taxes (net of DAC)	514	477
Asset and other non-income taxes	86	54
IT expenses	1,909	2,054
Outsourcing and professional services	2,272	2,490
Foreign currency translation	70	(63)
Other	661	529
Total	**19,422**	**19,215**

[1] In 2019, the Group changed the presentation of table 12 and added the underwriting commission expenses as well as the allocated loss adjustment expenses (ALAE). These modifications provide a more holistic view of expenses and allow for more clear reference to other parts of the consolidated financial statements. As a result of this presentation change, the expenses disclosed in this table increased by USD 7.7 billion in 2019 (underwriting commissions USD 6.4 billion – ALAE USD 1.3 billion) and by USD 8.0 billion in 2018 (underwriting commissions USD 6.4 billion – ALAE USD 1.5 billion).
[2] 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
	2019	2019	2019
Right-of-use	1,610	57	1,667
Owned and subject to operating lease	451	517	968
Total	**2,061**	**574**	**2,635**

Table 13.2[1]

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, 2019	**606**	**3**	**2,146**	**2,755**	**1,379**	**117**	**1,496**	**1,988**	**2,263**	**4,251**
Less: accumulated depreciation/ impairments	(147)	(1)	(793)	(941)	(844)	(43)	(888)	(992)	(836)	(1,829)
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[2]	(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	907	58	965	1,048	920	1,968
Gross carrying value as of December 31, 2019	**589**	**3**	**2,472**	**3,064**	**1,424**	**115**	**1,539**	**2,016**	**2,587**	**4,603**

[1] Current Year table reflects adoption of IFRS 16 'Leases.'
[2] Includes the sale of owned real estate in Australia of USD 87 million.

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Property and equipment – prior period

Table 13.3[1]

in USD millions	Land held for own use	Buildings held for own use	Furniture and fixtures	Computer equipment	Other equipment	Total
Gross carrying value January 1, 2018	**155**	**415**	**380**	**326**	**740**	**2,017**
Less: accumulated depreciation/impairments	–	(165)	(233)	(244)	(413)	(1,055)
Net carrying value January 1, 2018	**155**	**250**	**147**	**82**	**327**	**961**
Additions and improvements	–	70	42	57	110	279
Acquisitions	5	12	2	1	2	22
Disposals[2]	–	(1)	–	–	(28)	(29)
Transfers	–	(1)	–	–	1	(1)
Depreciation and impairments	(2)	(14)	(41)	(42)	(75)	(173)
Foreign currency translation effects	(3)	(9)	(3)	(2)	(6)	(23)
Net carrying value as of December 31, 2018	**155**	**309**	**147**	**96**	**331**	**1,037**
Plus: accumulated depreciation/impairments	–	165	223	235	401	1,023
Gross carrying value as of December 31, 2018	**155**	**473**	**370**	**330**	**732**	**2,060**

[1] Prior year table does not reflect adoption of IFRS 16 'Leases.'
[2] Includes USD 25 million related to the sale of business in the UK (Endsleigh) (see note 5).

Lessee – lease expenses and income

Table 13.4

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

[1] Total cash outflow for leases as of December 31, 2019 was USD 280 million, excluding USD 1.6 billion 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 is expected to start from October 2020 to September 2029 with total lease payments of USD 104 million.

Lessor – finance lease and operating lease income

Table 13.5

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

Consolidated financial statements (continued)

Maturity schedule – finance lease receivable

Table 13.6

in USD millions, as of December 31	2019		
	Carrying value	Unearned interest	Undiscounted cash flows
< 1 year	127	24	151
1 to 2 years	54	25	79
2 to 3 years	37	15	52
3 to 4 years	113	12	126
4 to 5 years	83	10	93
> 5 years	163	65	227
Total	**577**	**151**	**728**

Maturity schedule – operating lease payments to be received

Table 13.7

in USD millions, as of December 31	Undiscounted cash flows
	2019
< 1 year	397
1 to 2 years	275
2 to 3 years	232
3 to 4 years	194
4 to 5 years	155
> 5 years	978
Total	**2,230**

Consolidated financial statements (continued)

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

Intangible assets – current period

Table 14.1

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	4,845	309	15,960
Less: accumulated amortization/ impairments	–	(276)	(2,041)	(1,578)	(3,682)	(109)	(7,687)
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	3,917	113	8,171
Gross carrying value as of December 31, 2019	1,025	3,883	2,556	4,286	5,059	331	17,140

[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 54 million for present value of future profits (PVFP) of acquired insurance contracts, USD 967 million for distribution agreements, USD 10 million for software, USD 8 million for goodwill 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. The acquisition of QBE Colombia increased goodwill by USD 23 million (see note 5). 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 – current period

Table 14.2

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)

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, 2018	1,025	2,706	2,619	4,293	4,780	247	15,671
Less: accumulated amortization/ impairments	–	(353)	(2,112)	(1,465)	(3,492)	(109)	(7,531)
Net carrying value as of January 1, 2018	1,025	2,353	507	2,828	1,288	139	8,140
Additions and acquisitions	–	462	40	570	348	81	1,501
Divestments and transfers	–	–	–	(262)	(2)	–	(263)
Amortization[1]	–	–	(46)	(220)	(406)	(10)	(681)
Amortization charged to other comprehensive income	–	–	22	–	–	–	22
Impairments	–	–	(2)	–	(37)	(1)	(40)
Foreign currency translation effects	–	(180)	(24)	(228)	(30)	(14)	(476)
Net carrying value as of December 31, 2018	**1,025**	**2,634**	**498**	**2,689**	**1,162**	**194**	**8,202**
Plus: accumulated amortization/ impairments	–	276	2,041	1,565	3,678	109	7,669
Gross carrying value as of December 31, 2018	1,025	2,911	2,539	4,254	4,840	303	15,871

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

As of December 31, 2018, intangible assets related to non-controlling interests were USD 63 million for present value of future profits (PVFP) of acquired insurance contracts, USD 1 billion for distribution agreements, USD 10 million for software, USD 9 million for goodwill and USD 3 million for other intangible assets.

As a result of the acquisition of the QBE Latin America operations intangible assets increased by USD 250 million, of which USD 195 million is goodwill and USD 55 million is distribution agreements, software and other intangible assets. As a result of the acquisition of EuroAmerica in Chile, intangible assets increased by USD 143 million, of which USD 102 million is goodwill and USD 40 million is present value of future profits (PVFP). The acquisition of Travel Ace and Universal Assistance increased goodwill by USD 94 million and distribution agreements, software and other intangible assets by USD 19 million. As a result of the acquisition of Bright Box intangible assets increased by USD 77 million, of which USD 52 million related to goodwill and USD 25 million to software. As a result of the acquisition of Blue Insurance intangible assets increased by USD 56 million, of which USD 35 million is goodwill and USD 21 million is distribution agreements, software and other intangible assets. The remaining minus USD 16 million relates to a post-acquisition adjustment of Cover-More (see note 5).

In 2018, a distribution agreement in Brazil was signed replacing the existing distribution agreement. Additional intangible assets of USD 263 million related to this distribution agreement were recorded as at December 31, 2018.

Intangible assets by business – prior period

Table 14.4

in USD millions, as of December 31, 2018	Attorney-in-fact contracts	Goodwill	PVFP	Distribution agreements	Software	Other	Total
Property & Casualty	–	1,492	–	941	452	194	3,079
Life	–	271	434	1,748	284	1	2,737
Farmers	1,025	819	63	–	339	–	2,247
Group Functions and Operations	–	52	–	–	88	–	139
Net carrying value	**1,025**	**2,634**	**498**	**2,689**	**1,162**	**194**	**8,202**

Consolidated financial statements (continued)

15. Receivables and other assets

Receivables and other assets

Table 15

in USD millions, as of December 31	2019	2018
Financial assets		
Group derivative assets	1,226	899
Unit-linked derivative assets	3	3
Receivables from policyholders	3,434	3,281
Receivables from insurance companies, agents and intermediaries	4,999	5,514
Receivables arising from ceded reinsurance	1,465	1,114
Reverse repurchase agreements	56	47
Amounts due from investment brokers	857	972
Other receivables	2,412	2,426
Allowance for impairments[1]	(263)	(243)
Accrued premiums	895	849
Accrued investment income[2]	1,550	1,601
Assets for defined benefit plans[3]	316	232
Other financial assets	231	144
Non-financial assets		
Current income tax receivables	859	634
Prepaid expenses	437	391
Other non-financial assets	880	361
Total receivables and other assets	**19,357**	**18,225**

[1] Includes receivables arising from ceded reinsurance of USD 58 million and USD 38 million as of December 31, 2019 and 2018, respectively.
[2] Accrued investment income on the unit-linked investments amounts to USD 79 million and USD 102 million as of December 31, 2019 and 2018, 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.

Consolidated financial statements (continued)

16. Other liabilities

Other liabilities

Table 16.1

in USD millions, as of December 31	2019	2018
Other financial liabilities		
Group derivative liabilities	365	325
Unit-linked derivative liabilities	2	12
Amounts due to agents & intermediaries	844	870
Liabilities for cash collateral received for securities lending	56	47
Amounts due to investment brokers	1,444	987
Bank deposits	1	1
Collateralized bank financing for structured lease vehicles	287	436
Liabilities for defined benefit plans[1]	2,519	2,491
Other liabilities for employee benefit plans	118	129
Lease liabilities[2]	1,917	38
Accrued liabilities	2,194	2,067
Other financial liabilities[2]	5,184	5,235
Other non-financial liabilities		
Current income tax payables	661	601
Restructuring provisions	106	258
Other non-financial liabilities	868	824
Total other liabilities	**16,567**	**14,321**

[1] See note 20.
[2] Lease liabilities separated from other financial liabilities as the effect of adoption IFRS 16.

Table 16.2 shows the maturity schedule of other financial liabilities excluding liabilities for defined benefit plans and lease liabilities as of December 31, 2019 and 2018. 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.

Maturity schedule – other financial liabilities

Table 16.2

in USD millions, as of December 31	2019		2018	
	Carrying value	Undiscounted cash flows	Carrying value	Undiscounted cash flows
< 1 year	9,928	9,955	9,440	9,558
1 to 2 years	108	121	188	237
2 to 3 years	194	203	49	56
3 to 4 years	43	47	131	142
4 to 5 years	7	10	42	51
> 5 years	215	384	259	491
Total	**10,495**	**10,721**	**10,109**	**10,535**

Maturity schedule – lease liabilities

Table 16.3

in USD millions, as of December 31	2019	
	Carrying value	Undiscounted cash flows
< 1 year	205	249
1 to 2 years	197	234
2 to 3 years	182	216
3 to 4 years	155	183
4 to 5 years	124	150
> 5 years	1,054	1,201
Total	**1,917**	**2,232**

Consolidated financial statements (continued)

Restructuring provisions

Table 16.4

in USD millions	2019	2018
As of January 1	258	269
Provisions made during the period	53	191
Increase of provisions set up in prior years	65	45
Provisions used during the period	(192)	(226)
Provisions reversed during the period	(8)	(13)
Foreign currency translation effects	–	(8)
Other changes[1]	(69)	–
As of December 31	**106**	**258**

[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, 2019 the 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) and North America.

During the year ended December 31, 2018 the Group incurred total restructuring costs of USD 350 million, of which USD 223 million is due to net increases in restructuring provisions, affecting mainly Property & Casualty in Europe, Middle East & Africa (EMEA), North America and Farmers.

17. Income taxes

Income tax expense – current/deferred split

Table 17.1

in USD millions, for the years ended December 31	2019	2018
Current	1,414	1,119
Deferred	302	15
Total income tax expense/(benefit)	**1,716**	**1,134**

Expected and actual income tax expense

Table 17.2

in USD millions, for the years ended December 31	Rate	2019	Rate	2018
Net income before income taxes		6,100		5,110
less: income tax (expense)/benefit attributable to policyholders		(365)		183
Net income before income taxes attributable to shareholders		5,735		5,293
Expected income tax expense attributable to shareholders computed at the Swiss statutory tax rate	21.0%	1,204	22.0%	1,165
Increase/(reduction) in taxes resulting from:				
Tax rate differential in foreign jurisdictions		(111)		(27)
Tax exempt and lower taxed income		(123)		(106)
Non-deductible expenses		138		152
Tax losses not recognized		206		98
Prior year adjustments and other		36		34
Actual income tax expense attributable to shareholders	**23.6%**	**1,351**	**24.9%**	**1,317**
plus: income tax expense/(benefit) attributable to policyholders		365		(183)
Actual income tax expense	28.1%	1,716	22.2%	1,134

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, which is the rate applicable in the jurisdiction where the ultimate parent company is resident. Following recent changes in the Swiss tax legislation, the applicable Swiss statutory tax rate has been revised to 21.0 percent for 2019 from 22.0 percent in 2018.

The 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 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 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	2019 Assets	2019 Liabilities	2018 Assets	2018 Liabilities
Gross deferred tax				
Deferred acquisition and origination costs	71	(514)	52	(658)
Depreciable and amortizable assets	208	(141)	27	(86)
Life policyholders' benefits and deposits[1]	5	(8)	4	(1)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	8	(4)	109	(49)
Accruals and deferred income	26	(25)	92	(16)
Reserves for losses and loss adjustment expenses	297	(14)	295	(116)
Reserves for unearned premiums	554	–	722	(66)
Deferred front-end fees	5	–	–	–
Pensions and other employee benefits	481	(56)	537	(72)
Other assets/liabilities	237	(52)	170	(44)
Tax loss carryforwards	390	–	634	–
Gross deferred tax assets/(liabilities) before valuation allowance	2,281	(813)	2,643	(1,110)
Valuation allowance	(317)	–	(408)	–
Gross deferred tax assets/(liabilities) after valuation allowance	1,964	(813)	2,235	(1,110)
Deferred tax assets	**1,151**		**1,125**	
Gross deferred tax				
Deferred acquisition and origination costs	22	(2,377)	25	(2,125)
Depreciable and amortizable assets	326	(1,818)	133	(1,699)
Life policyholders' benefits and deposits[1]	1,947	(1,087)	1,924	(1,017)
Unrealized (gains)/losses on available-for-sale investments and cash flow hedges	248	(1,348)	288	(860)
Accruals and deferred income	170	(99)	76	(122)
Reserves for losses and loss adjustment expenses	228	(484)	57	(90)
Reserves for unearned premiums	217	(70)	18	(6)
Deferred front-end fees	494	–	511	–
Pensions and other employee benefits	386	(348)	340	(325)
Other assets/liabilities	682	(1,697)	646	(1,732)
Tax loss carryforwards	432	–	131	–
Gross deferred tax assets/(liabilities) before valuation allowance	5,152	(9,329)	4,149	(7,976)
Valuation allowance	(357)	–	(89)	–
Gross deferred tax assets/(liabilities) after valuation allowance	4,796	(9,329)	4,061	(7,976)
Deferred tax liabilities		**(4,533)**		**(3,915)**
Net deferred tax liabilities		**(3,382)**		**(2,790)**

[1] Includes reserves for unit-linked contracts.

The 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, 2019 and 2018, 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 24 billion and USD 19 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)

Development of net deferred tax liabilities

Table 17.4

in USD millions	2019	2018
As of January 1	(2,790)	(3,281)
Net change recognized in the income statement	(302)	(15)
Net change recognized in equity	(607)	344
Net changes due to acquisitions/(divestments)	314	75
Foreign currency translation effects	3	86
As of December 31	**(3,382)**	**(2,790)**
attributable to policyholders	(675)	(457)
attributable to shareholders	(2,707)	(2,333)

The net deferred tax liabilities related to non-controlling interests amounted to USD 179 million and USD 189 million as of December 31, 2019 and 2018, respectively.

Development of deferred income taxes included in equity

Table 17.5

in USD millions	2019	2018
As of January 1	406	73
Net unrealized (gains)/losses on available-for-sale investments	(580)	419
Cash flow hedges	(3)	11
Revaluation reserve	4	9
Net actuarial (gains)/losses on pension plans	(28)	(96)
Foreign currency translation effects	8	(10)
As of December 31	**(193)**	**406**

Tax loss carryforwards and tax credits

Table 17.6

in USD millions, as of December 31	2019	2018
For which deferred tax assets have been recognized, expiring		
< 5 years	8	50
5 to 20 years	117	198
> 20 years or with no time limitation	448	747
Subtotal	573	994
For which deferred tax assets have not been recognized, expiring		
< 5 years	122	89
5 to 20 years	270	12
> 20 years or with no time limitation	2,313	2,010
Subtotal	2,705	2,112
Total	**3,278**	**3,106**

The tax rates applicable to tax losses for which a deferred tax asset has not been recognized are 24.4 percent and 23.0 percent as of December 31, 2019 and 2018, 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, 2019, 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		2019	2018
Senior debt			
Zurich Insurance Company Ltd	1.500% CHF 400 million notes, due June 2019[1,2]	–	409
	1.125% CHF 400 million notes, due September 2019[1,2]	–	411
	0.625% CHF 250 million notes, due July 2020[1]	260	258
	2.875% CHF 250 million notes, due July 2021[1]	257	253
	3.375% EUR 500 million notes, due June 2022[1,3]	579	598
	1.875% CHF 100 million notes, due September 2023[1]	113	110
	1.750% EUR 500 million notes, due September 2024[1,3]	579	583
	0.500% CHF 350 million notes, due December 2024[1]	362	356
	0.510% CHF 120 million loan, due December 2024	124	122
	1.500% CHF 150 million notes, due July 2026[1]	175	165
	0.750% CHF 200 million notes, due October 2027[1]	206	–
	1.000% CHF 200 million notes, due October 2028[1]	207	204
	1.500% EUR 500 million notes, due December 2028[1,3]	557	568
Zurich Holding Comp. of America Inc	Euro commercial paper notes, due in less than 12 months	399	399
Zurich Finance (Australia) Limited	Floating rate AUD 241 million loan due July 2020	169	170
	3.271% AUD 200 million loan due May 2023	141	141
	3.477% AUD 350 million notes, due May 2023[1]	245	246
	4.500% AUD 250 million notes, due July 2038[1]	175	176
Zurich Finance (Ireland) DAC	1.625% EUR 500 million notes, due June 2039[1,3]	559	–
Other	Various debt instruments	41	69
Senior debt		5,148	5,237
Subordinated debt			
Zurich Insurance Company Ltd	7.500% EUR 425 million notes, due July 2039, first callable July 2019[1,3]	–	486
	2.750% CHF 225 million perpetual capital notes, first callable June 2021[1]	232	228
	2.750% CHF 200 million perpetual capital notes, first callable September 2021[1]	212	209
	4.750% USD 1 billion perpetual capital notes, first callable January 2022[1,3]	997	996
	4.250% EUR 1 billion notes, due October 2043, first callable October 2023[1,3]	1,117	1,138
	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]	853	855
	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]	555	–
Zurich Finance (UK) plc	6.625% GBP 450 million perpetual notes, first callable October 2022[1]	593	570
Subordinated debt		6,852	6,775
Total senior and subordinated debt		**11,999**	**12,012**

[1] Issued under the Group's Euro Medium Term Note Programme (EMTN Programme).
[2] The 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.

None of the debt instruments listed in table 18.1 were in default as of 31 December 2019 or 31 December 2018.

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	2019		2018	
	Carrying value	**Undiscounted cash flows**	Carrying value	Undiscounted cash flows
< 1 year	870	1,272	1,894	2,319
1 to 2 years	701	1,093	308	676
2 to 3 years	2,169	2,510	690	1,056
3 to 4 years	1,615	1,882	2,164	2,473
4 to 5 years	1,065	1,254	1,636	1,880
5 to 10 years	4,845	5,402	5,144	5,756
> 10 years	734	899	176	256
Total	**11,999**	**14,310**	**12,012**	**14,416**

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, 2019 and 2018. Floating interest rates are assumed to remain constant as of December 31, 2019 and 2018. 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	
	2019	2018
As of January 1	12,012	10,784
Issuance of debt recognized in cash flows	1,398	3,079
Repayment of debt recognized in cash flows	(1,367)	(1,566)
Acquisitions/(divestments) and transfers[1]	–	(1)
Changes in fair value	60	(7)
Other changes	(13)	(9)
Foreign currency translation effects	(90)	(269)
As of December 31	**11,999**	**12,012**

[1] The 2018 movement of USD 1 million is related to the sale of Endsleigh Limited (see note 5).

Consolidated financial statements (continued)

19. Shareholders' equity, dividends and earnings per share

Share capital

Table 19.1

	Share capital in CHF	Number of shares	Par value in CHF
Issued share capital			
As of December 31, 2017	15,133,985	151,339,851	0.10
New shares issued from contingent capital in 2018	818	8,176	0.10
As of December 31, 2018	15,134,803	151,348,027	0.10
New shares issued from contingent capital in 2019	–	–	0.10
Capital reduction in 2019 (as per AGM resolutions 2019)	174,000	1,740,000	0.10
As of December 31, 2019	**14,960,803**	**149,608,027**	**0.10**
Authorized, contingent and issued share capital			
As of December 31, 2018	23,129,526	231,295,259	0.10
As of December 31, 2019	22,955,526	229,555,259	0.10

The following information related to authorized share capital and contingent share capital is specified in articles 5bis and 5ter of the Articles of Association of Zurich Insurance Group Ltd.

a) Authorized share capital

Until April 4, 2020, the Board of Zurich Insurance Group Ltd is authorized to increase the share capital of Zurich Insurance Group Ltd (Company) by an amount not exceeding CHF 4,500,000 by issuing up to 45,000,000 fully-paid registered shares with a nominal value of CHF 0.10 each. An increase in partial amounts is permitted. The Board would determine the date of issue of any such new shares, the issue price, type of payment, conditions for exercising subscription rights, and the commencement of entitlement to dividends.

The Board may issue such new shares by means of a firm underwriting by a banking institution or syndicate with a subsequent offer of those shares to current shareholders. The Board may allow the expiry of subscription rights which have not been exercised, or it may place these rights as well as shares, the subscription rights of which have not been exercised, at market conditions.

The Board is further authorized to restrict or exclude the subscription rights of shareholders and to allocate them to third parties, the Company or one of its Group companies, up to a maximum of 15,000,000 fully-paid registered shares, if the shares are to be used:

- for the take-over of an enterprise, or parts of an enterprise or of participations or for investments by the Company or one of its Group companies, or the financing including re-financing of such transactions; or
- for the purpose of expanding the scope of shareholders in connection with the quotation of shares on foreign stock exchanges or issuance of shares on the national or international capital markets (including private placements to one or more selected investors); or
- for the conversion of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') issued by the Company or one of its Group companies; or
- for the improvement of the regulatory capital position of the Company or one of its Group companies in a fast and expeditious manner.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

b) Contingent share capital

Financial Instruments

The share capital of Zurich Insurance Group Ltd may be increased by an amount not exceeding CHF 3,000,000 by issuing of up to 30,000,000 fully-paid registered shares with a nominal value of CHF 0.10 each by the voluntary or mandatory exercise of conversion and/or option rights which are granted in connection with the issuance of Financial Instruments by the Company or one of its Group companies or by mandatory conversion of Financial Instruments issued by the Company or one of its Group companies, that allow for contingent mandatory conversion into shares of the Company, or by exercising option rights which are granted to the shareholders. The subscription rights are excluded. The then-current owners of the Financial Instruments shall be entitled to subscribe for the new shares. The conversion and/or option conditions are to be determined by the Board.

Consolidated financial statements (continued)

The Board is authorized, when issuing Financial Instruments to restrict or exclude the advance subscription rights in cases where they are issued:

- for the financing including re-financing of a take-over of an enterprise, of parts of an enterprise, or of participations or of investments by the Company or one of its Group companies; or
- on national or international capital markets (including private placements to one or more selected investors); or
- for the improvement of the regulatory capital position of the Company or one of its Group companies in a fast and expeditious manner.

If the advance subscription rights are restricted or excluded by a resolution of the Board, the following applies: the Financial Instruments are to be issued at prevailing market conditions (including standard dilution protection clauses in accordance with market practice) and the setting of the conversion or issue price of the new shares must take due account of the stock market price of the shares and/or comparable instruments priced by the market at the time of issue or time of conversion.

The conversion rights may be exercisable during a maximum of ten years and option rights during a maximum of seven years from the time of the respective issue; contingent conversion features may remain in place indefinitely.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

Employee participation

During 2019 no shares were issued to Group employees out of the contingent capital. During 2018, 8,176 shares were issued to employees from contingent share capital. The remaining contingent share capital, available for issuance to employees amounted to CHF 494,723 and 4,947,232 fully paid registered shares as of December 31, 2019 and 2018, respectively, with a nominal value of CHF 0.10 each. Subscription rights, as well as advance subscription rights of the shareholders are excluded. The issuance of new shares or respective option rights to employees is subject to one or more regulations to be issued by the Board and taking into account performance, functions, levels of responsibility and criteria of profitability. New shares or option rights may be issued to employees at a price lower than that quoted on the stock exchange.

c) Additional paid-in capital

This reserve is not ordinarily available for distribution. However, as of January 1, 2011, a Swiss tax regulation based on the Swiss Corporate Tax Reform II became effective, allowing for payments free of Swiss withholding tax to shareholders out of the capital contribution reserve, created out of additional paid-in capital. Therefore, amounts qualifying under this regulation can be paid out of additional paid-in capital. As of December 31, 2019, the general capital contribution reserve amounted to CHF 29 million.

d) Treasury shares

Table 19.2

Treasury shares

number of shares, as of December 31	**2019**	2018	2017
Treasury shares	1,549,714	2,342,432	1,156,567
Treasury shares (repurchased under the public share buy-back program for cancellation purposes, see f))	–	1,740,000	–
Total Treasury shares	**1,549,714**	**4,082,432**	**1,156,567**

Treasury shares comprise shares acquired in the market as well as shares repurchased via the 2018 public share buy-back program and cancelled in June 2019 (see f) below).

e) Dividends

The dividend of CHF 19 per share was paid out of the available earnings on April 9, 2019, as approved at the Annual General Meeting on April 3, 2019. The difference between the respective amounts of the dividend at transaction day exchange rates amounting to USD 2.8 billion and at historical exchange rates are reflected in the cumulative foreign currency translation adjustment.

In 2018, the dividend of CHF 18 per share was partially paid out of the capital contribution reserve and partially out of the available earnings on April 10, 2018, as approved at the Annual General Meeting on April 4, 2018. The difference between the respective amounts of the dividend at transaction day exchange rates amounting to USD 2.8 billion and at historical exchange rates are reflected in the cumulative foreign currency translation adjustment.

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f) Share buy-back program

On April 11, 2018, Zurich Insurance Group Ltd launched a public share buy-back program for up to 1,740,000 shares of Zurich Insurance Group Ltd, which was completed on May 18, 2018. A total of 1,740,000 shares were repurchased on a second trading line on the SIX Swiss Exchange via Zürcher Kantonalbank as agent.

On April 3, 2019 the Annual General Meeting 2019 approved the cancellation of the 1,740,000 own shares of Zurich Insurance Group Ltd with a nominal value of CHF 0.10 repurchased under the public share buy-back program.

The corresponding reduction of the share capital of Zurich Insurance Group Ltd from 151,348,027 to 149,608,027 fully paid registered shares with a nominal value of CHF 0.10 each through cancellation of the repurchased own shares was completed in June 2019.

g) Earnings per share

Table 19.3

Earnings per share

for the years ended December 31	Net income attributable to common shareholders (in USD millions)	Weighted average number of shares	Per share (USD)	Per share (CHF)[1]
2019				
Basic earnings per share	**4,147**	**148,033,715**	**28.01**	**27.84**
Effect of potentially dilutive shares related to share-based compensation plans		1,739,334	(0.33)	(0.32)
Diluted earnings per share	**4,147**	**149,773,049**	**27.69**	**27.51**
2018				
Basic earnings per share	**3,716**	**148,048,737**	**25.10**	**24.55**
Effect of potentially dilutive shares related to share-based compensation plans		1,620,039	(0.27)	(0.27)
Diluted earnings per share	**3,716**	**149,668,776**	**24.83**	**24.28**

[1] The translation from U.S dollars to Swiss francs is shown for information purposes only and has been calculated at the Group's average exchange rates for the years ended December 31, 2019 and 2018.

Basic earnings per share is computed by dividing net income attributable to shareholders by the weighted average number of shares outstanding for the year, excluding the weighted average number of shares held as treasury shares. Diluted earnings per share reflects the effect of potentially dilutive shares.

20. Employee benefits

The Group had 54’030 and 52’267 employees (full-time equivalents) as of December 31, 2019 and 2018, respectively. Personnel and other related costs incurred were USD 6.2 billion and USD 6.1 billion for the years ended December 31, 2019 and 2018, respectively, including wages, salaries and social security contributions of USD 5.5 billion and USD 5.3 billion respectively.

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

However, the majority of employees now going forward accrue benefits for future service 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 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.

Governance of the Group’s pension and post-employment benefit plans is the responsibility of the Group Pensions Committee. This committee is responsible for developing, reviewing and advising on the Group governance framework for matters related to pension and post-retirement benefit plans, including the relevant policies and processes. The committee provides oversight and guidance over the Group’s principal pension and post-retirement benefit plans for accounting, benefit design, funding and investment and plan governance purposes. This includes, but is not limited to:

- oversight of the impact of the Group’s principal defined benefit pension and post-retirement benefit plans in terms of cash, expense, and balance sheet accounting impact and capital implications
- development and maintenance of policies on funding, asset allocation, risk assessment and management, and assumption setting

The Group Pensions Committee provides a point of focus and co-ordination on the topic of pensions and post-retirement benefits at Group level for the supervision and exercise of company powers and obligations in relation to pension and post-retirement benefit plans.

The Group’s policy on funding and asset allocation is subject to local legal and regulatory requirements and tax efficiency.

a) Defined benefit pension plans

Employees of the Group’s companies are or have been covered by various pension plans, the largest of which are in Switzerland, the UK, the U.S. and Germany, which together comprise over 90 percent of the Group’s total defined benefit obligation. The remaining plans in other countries are not individually significant, therefore no separate disclosure is provided.

Certain 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. Eligibility for participation in the various plans is either immediate on commencement of employment or based on completion of a specified period of continuous service.

Most of the Group’s defined benefit pension plans are funded through contributions by the Group and, in some cases also by employees, to investment vehicles managed by trusts or foundations independent of the 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. In these cases, the annual funding requirements are determined in accordance with the Group’s overall funding policy and local regulation. Independent actuarial valuations for the plans are performed as required. It is the Group’s general principle to ensure that the 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 risks. To the extent that pension plans are funded, the assets held mitigate some of the liability risk but introduce investment risk.

The overall investment policy and strategy for the 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 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.

For post-employment defined benefit plans, total contributions to funded plans and benefits paid directly by the Group were USD 282 million for 2019 compared with USD 642 million for 2018. The estimated total for 2020 is USD 278 million (actual amount may differ).

Swiss pension plan

The plan provides benefits that exceed the minimum benefit requirements under Swiss pension law. It provides a lifetime pension to members 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. 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 plans. The amount of pension payable on retirement is a result of the conversion rate applied on the accumulated balance of the individual participant's pension account at the retirement date.

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 both plans 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 interest on 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 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, 2016 and was finalized in June 2017. This valuation disclosed a funding surplus of USD 411 million (GBP 304 million) after taking into account the value of the asset-backed funding arrangement established in 2014. The statutory valuation as at June 30, 2019 is underway and expected to be finalized by September 2020.

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) 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 the present value of benefits accrued 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. In 2007, a contractual trust arrangement was set up to support all pension commitments of the employing companies in Germany. From this time, new contributions to the contractual trust arrangement relate to the pension payment refund of the employer companies.

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. These plans are now closed to new entrants, who instead participate in a new cash balance arrangement, which has the characteristics of a defined contribution arrangement with 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 Group's post-employment defined benefit plans.

Table 20.1a

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

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)

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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, 2018	(23,227)	19,934	(95)	(3,388)
Net post-employment benefit (expense)/income:				
Current service cost	(252)	–	–	(252)
Interest (expense)/income	(429)	350	–	(78)
Settlements gains/(losses)	169	(149)	–	20
Past service (cost)/credit	(28)	–	–	(28)
Net post-employment benefit (expense)/income	(540)	201	–	(339)
Remeasurement effects included in other comprehensive income:				
Return on plan assets excluding interest income	–	(713)	–	(713)
Experience gains/(losses)	199	–	–	199
Actuarial gains/(losses) arising from changes in demographic assumptions	316	–	–	316
Actuarial gains/(losses) arising from changes in financial assumptions	909	–	–	909
Change in asset ceiling	–	–	(18)	(18)
Remeasurement effects included in other comprehensive income	1,424	(713)	(18)	693
Employer contributions	–	611	–	611
Employer contributions paid to meet benefits directly	34	–	–	34
Plan participants' contributions	(65)	65	–	–
Payments from the plan (incl. settlements)	965	(965)	–	–
Foreign currency translation effects	816	(686)	–	129
As of December 31, 2018	**(20,593)**	**18,447**	**(113)**	**(2,260)**
of which: Assets for defined pension plans				232
of which: Liabilities for defined pension plans				(2,491)

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	2019				2018			
	Quoted in active markets	Other	Total	% of Total	Quoted in active markets	Other	Total	% of Total
Cash and cash equivalents	(735)	–	(735)	(3%)	(282)	–	(282)	(2%)
Equity securities	4,629	159	4,788	23%	3,658	132	3,790	21%
Debt securities	91	15,098	15,190	72%	84	13,112	13,196	72%
Investment property	–	1,495	1,495	7%	–	1,443	1,443	8%
Mortgage loans	–	325	325	2%	–	291	291	2%
Other assets[1]	–	8	8	–	–	7	7	–
Total	**3,986**	**17,085**	**21,071**	**100%**	**3,461**	**14,986**	**18,447**	**100%**

[1] UK annuity policies.

For the classification of pension assets the 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, 2019 and 2018, respectively.

Table 20.3a

Key information by main country – current 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)**
Net post-employment benefit (expense)/income[1]	(67)	(61)	(34)	(21)	(21)	(204)

[1] Canada includes a past service credit of USD 5 million.

Table 20.3b

Key information by main country – prior period

in USD millions, as of December 31, 2018	Switzerland	United Kingdom	United States	Germany	Other	Total
Defined benefit obligation	(4,590)	(10,140)	(3,387)	(1,316)	(1,160)	(20,593)
Fair value of plan assets	4,881	8,410	3,008	1,181	967	18,447
Impact of asset ceiling	(95)	(18)	–	–	–	(113)
Net defined benefit asset/(liability)	**196**	**(1,748)**	**(380)**	**(135)**	**(193)**	**(2,260)**
Net post-employment benefit (expense)/income	(98)	(95)	(106)	(26)	(13)	(339)

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

Key financial assumptions used for major plans

Table 20.4

as of December 31	2019				2018			
	Switzerland	United Kingdom	United States	Germany	Switzerland	United Kingdom	United States	Germany
Discount rate	0.2%	1.9%	3.2%	0.9%	0.8%	2.7%	4.2%	1.7%
Inflation rate (CPI)[1]	1.2%	1.9%	2.0%	1.4%	1.2%	2.2%	2.0%	1.6%
Salary increase rate	1.2%	2.8%	4.5%	2.7%	1.2%	2.0%	4.5%	2.9%
Expected future pension increases	0.1%	3.5%	n/a	1.4%	0.1%	3.6%	n/a	1.6%
Interest crediting rate	0.3%	n/a	5.0%	n/a	0.8%	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, 2019 and 2018.

Tables 20.5a and 20.5b set out the life expectancies used in the valuation of the 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, 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

Mortality tables and life expectancies for major plans – prior period

Table 20.5b

in years, as of December 31, 2018		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 Generational	22.50	24.30	24.50	26.40
United Kingdom	PNXA00 with CMI_2017 projection with plan specific adjustments	22.53	23.63	23.25	24.45
	RP 2014 with MP-2018 Generational projection and white collar adjustment	22.19	23.74	23.71	25.23
United States	RP 2014 with plan specific adjustments	21.25	22.22	23.27	24.16
Germany	Heubeck 2018G	20.04	22.83	23.57	25.83

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Table 20.6 shows the expected benefits to be paid under the 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.

Table 20.6

Maturity profile of future benefit payments for major plans

as of December 31	2019				2018			
	Switzerland	United Kingdom	United States	Germany	Switzerland	United Kingdom	United States	Germany
Duration of the defined benefit obligation (in years)	15.3	19.8	12.5	14.2	14.1	21.0	12.2	14.0
Maturity analysis of benefits expected to be paid (in USD millions):								
< 1 year	221	343	227	49	215	479	220	58
1 to 5 years	917	1,449	892	231	893	1,819	879	254
5 to 10 years	1,117	2,340	1,065	297	1,129	2,070	1,069	348

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 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.

Table 20.7

Sensitivity analysis of significant actuarial assumptions

	Defined benefit obligation[1]	
in USD millions, as of December 31	2019	2018
Discount rate +50 bps	1,824	1,647
Discount rate –50 bps	(2,093)	(1,886)
Salary increase rate +50 bps	(73)	(71)
Salary decrease rate –50 bps	70	65
Price inflation increase rate +50 bps	(1,038)	(865)
Price inflation decrease rate –50 bps	903	763
Cash balance interest credit rate +50 bps	(76)	(116)
Cash balance interest credit rate –50 bps	72	73
Mortality 10% increase in life expectancy	(2,162)	(1,841)
Mortality 10% decrease in life expectancy	2,086	1,789

[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 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 Group's contributions under these plans amounted to USD 283 million and USD 184 million for the years ended December 31, 2019 and 2018, respectively.

21. Share-based compensation and cash incentive plans

The 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 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.

a) Cash incentive plans

Various businesses throughout the 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 511 million and USD 523 million for the years ended December 31, 2019 and 2018, respectively.

b) Share-based compensation plans for employees and executives

The 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 229 million and USD 215 million for the years ended December 31, 2019 and 2018, 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 Group.

Employee share plans

Share Incentive Plan for employees in the UK

The 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 34 and 47 participants in the plan as of December 31, 2019 and 2018, 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 658 and 688 active participants in the plan as of December 31, 2019 and 2018, respectively.

The 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, 2019 and 2018 was 2,612 and 3,192, 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, 2019 and 2018, there were 439 and 385 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 2019, 4,096 employees were eligible to participate in the share incentive plan, compared with 4,097 in 2018. For the years ended December 31, 2019 and 2018, 1,761 and 1,648 employees, respectively, purchased shares under the 2018 and 2019 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 2019 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 shareholders. As of December 31, 2019 and 2018 there were 1,133 and 1,031 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)	
	2019	2018	**2019**	2018
Shares allocated during the period	517,101	544,780	333	310

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.

Consolidated financial statements (continued)

22. Commitments and contingencies, legal proceedings and regulatory investigations

The 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	2019	2018
Remaining commitments under investment agreements	1,398	2,283
Guarantees and letters of credit[1]	1,003	2,083
Future operating lease commitments[2]	–	2,149
Undrawn loan commitments	1	2
Other commitments and contingent liabilities[3,4]	732	2,346

[1] Guarantee features embedded in life insurance products are not included.
[2] Movement driven by the implementation of IFRS 16 'Leases.'
[3] Movement is related to the acquisition of OnePath in May 2019 (see note 5).
[4] Includes USD 131 million future cash outflows, that the Group as lessee is potentially exposed to which are not reflected in the measurement of lease liabilities in the balance sheet, of which USD 104 million is a lease agreement in Australia commencing in 2020 (see note 13.4).

Commitments under investment agreements

The 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 Group on a timely basis.

Guarantees and letters of credit

In 2019 and 2018, USD 629 million and USD 605 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 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 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 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 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 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.

Consolidated financial statements (continued)

Other contingent liabilities

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

The 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, 2018 and 2019.

In common with other insurance companies, the 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 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 1.4 billion and USD 2 billion as of December 31, 2019 and 2018, respectively.

Terms and conditions associated with the financial assets pledged to secure the 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 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 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 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 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 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 Group's U.S. operating companies were not involved in or connected to those activities.

The 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 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 Group's operating results or consolidated financial condition.

Legal proceedings and regulatory investigations

The Group's business is subject to extensive supervision, and the Group is in regular contact with various regulatory authorities. The 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 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 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 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 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 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 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 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 December 31	Total fair value		Total carrying value	
	2019	2018	**2019**	2018
Available-for-sale securities				
Equity securities	13,905	12,587	13,905	12,587
Debt securities	138,676	132,522	138,676	132,522
Total available-for-sale securities	152,581	145,110	152,581	145,110
Fair value through profit or loss securities				
Equity securities	4,391	3,633	4,391	3,633
Debt securities	6,713	5,229	6,713	5,229
Total fair value through profit or loss securities	11,105	8,862	11,105	8,862
Derivative assets	1,226	899	1,226	899
Held-to-maturity debt securities	2,757	2,655	2,117	2,118
Mortgage loans	6,351	6,935	5,935	6,556
Other loans	9,879	9,123	8,274	7,614
Total financial assets[1]	**183,899**	**173,583**	**181,239**	**171,158**
Derivative liabilities	(365)	(325)	(365)	(325)
Financial liabilities held at amortized cost				
Liabilities related to investment contracts	(1,106)	(606)	(931)	(504)
Senior debt	(5,388)	(5,329)	(5,148)	(5,237)
Subordinated debt	(7,558)	(6,722)	(6,852)	(6,775)
Total financial liabilities held at amortized cost	(14,052)	(12,658)	(12,930)	(12,516)
Total financial liabilities[1]	**(14,417)**	**(12,983)**	**(13,296)**	**(12,842)**

[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 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

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

Table 23.2a

in USD millions, as of December 31, 2019	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	9,633	2,855	1,417	13,905
Debt securities	–	130,963	7,713	138,676
Total available-for-sale securities	9,633	133,818	9,129	152,581
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	**11,246**	**144,905**	**22,228**	**178,379**
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.

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

Table 23.2b

in USD millions, as of December 31, 2018	Level 1	Level 2	Level 3	Total
Available-for-sale securities				
Equity securities	8,854	2,515	1,219	12,587
Debt securities	–	124,963	7,559	132,522
Total available-for-sale securities	8,854	127,478	8,778	145,110
Fair value through profit or loss securities				
Equity securities	1,409	25	2,198	3,633
Debt securities	–	5,151	78	5,229
Total fair value through profit or loss securities	1,409	5,176	2,276	8,862
Derivative assets	10	810	79	899
Investment property	–	2,269	10,082	12,351
Reinsurers' share of liabilities for insurance contracts fair value option[1]	–	–	204	204
Total	**10,273**	**135,733**	**21,419**	**167,425**
Derivative liabilities	(2)	(288)	(35)	(325)
Liabilities for insurance contracts fair value option[2]	–	–	(2,203)	(2,203)
Total	**(2)**	**(288)**	**(2,238)**	**(2,528)**

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

Consolidated financial statements (continued)

Table 23.3a

Fair value hierarchy – unit-linked – current period

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.

Table 23.3b

Fair value hierarchy – unit-linked – prior period

in USD millions, as of December 31, 2018	Level 1	Level 2	Level 3	Total
Fair value through profit or loss securities				
Equity securities	76,887	18,985	619	96,490
Debt securities	–	6,431	21	6,452
Other loans	–	2,667	–	2,667
Total fair value through profit or loss securities	76,887	28,083	640	105,610
Derivative assets	1	2	–	3
Investment property	–	–	3,222	3,222
Total investments for unit-linked contracts[1]	**76,888**	**28,084**	**3,863**	**108,835**
Financial liabilities at FV through profit or loss				
Liabilities related to unit-linked investment contracts	–	(40,828)	–	(40,828)
Derivative liabilities	(11)	(1)	–	(12)
Total	**(11)**	**(40,829)**	**–**	**(40,840)**

[1] Excluding cash and cash equivalents.

Within level 1, the 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 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 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 Group has classified:

- Unlisted stocks, private equity funds and hedge funds that are not actively traded. Such instruments are obtained from net asset value information and audited financial statements provided by the issuing company. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.
- Non-agency MBS and ABS rated below 'AAA' that are valued by independent pricing providers using a variety of valuation techniques which may require use of significant unobservable input parameters such as asset prepayment rate, default rates and credit curves. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.
- 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.
- 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. The model is asset specific and capitalizes the sustainable investment income of a property with its risk specific cap rate. This cap rate is an '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 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, market rent and vacancy rate. The significant unobservable inputs which are outside this model, are estimated rental value, rental growth, long term vacancy rate and discount rate. Significant increases/(decreases) in rental value and 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.
- 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.
- The Group's private debt holdings comprise certain private placements and other collateralized loan obligations (CLO) which are valued by dedicated external asset managers applying a combination of expert judgment and other specific adjustments for which interest rates as well as credit spreads serve as input parameters. Quantitative unobservable inputs are not developed by the Group when measuring fair value of these assets.

For details on 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.

No material transfers between level 1 and level 2 occurred for the year ended December 31, 2019.

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Table 23.4a

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

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.
[2] Unrealized gains/(losses) recognized in income for available-for-sale securities relate to impairments.

For the year ended December 31, 2019, the 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.'

Table 23.4b

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

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, 2018	988	6,251	2,566	84	61	(30)	9,464
Realized gains/(losses) recognized in income[1]	104	14	38	–	(1)	–	123
Unrealized gains/(losses) recognized in income[1,2]	(9)	(15)	(43)	(2)	(6)	(5)	136
Unrealized gains/(losses) recognized in other comprehensive income	102	(163)	–	–	11	1	–
Purchases	278	2,456	511	–	8	(4)	689
Settlements/sales/redemptions	(212)	(1,181)	(870)	(2)	(6)	–	(668)
Transfer to assets held for sale	–	–	–	–	–	–	(15)
Transfers into level 3	4	352	–	–	17	–	554
Transfers out of level 3	–	(43)	–	–	–	–	–
Foreign currency translation effects	(37)	(111)	(4)	(2)	(3)	2	(201)
As of December 31, 2018	**1,219**	**7,559**	**2,198**	**78**	**79**	**(35)**	**10,082**

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

For the year ended December 31, 2018, the Group transferred USD 352 million of available-for-sale debt securities out of level 2 into level 3. The transfers were mainly due to a review of the classification of certain collateralized loan obligations due to the observability of the inputs used in the valuation techniques to determine its fair value. The Group also transferred USD 554 million of investment property out of level 2 into level 3. The transfer resulted from a review of the classification of the real estate property due to the observability of the inputs used in the valuation techniques to determine its fair value.

Consolidated financial statements (continued)

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

Table 23.5a

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**

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

Table 23.5b

in USD millions	Gross	Ceded	Net
As of January 1, 2018	2,436	(224)	2,212
Premiums	62	(5)	57
Claims	(249)	22	(227)
Fee income and other expenses	(15)	2	(12)
Interest and bonuses credited to policyholders	(26)	1	(24)
Changes in assumptions	(6)	–	(6)
(Decreases)/increases recorded in other comprehensive income	–	–	–
As of December 31, 2018	**2,203**	**(204)**	**1,999**

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

Table 23.6a

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	–	–
Transfers out of level 3	–	–	–
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.

Consolidated financial statements (continued)

Table 23.6b

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

in USD millions	Fair value through profit or loss securities		
	Equity securities	Debt securities	Investment property
As of January 1, 2018	503	51	3,410
Realized gains/(losses) recognized in income[1]	6	–	134
Unrealized gains/(losses) recognized in income[1]	–	1	(18)
Purchases	162	–	232
Sales/redemptions	(84)	(14)	(333)
Transfers into level 3	32	–	–
Transfers out of level 3	–	(16)	–
Acquisitions and divestments	–	–	(9)
Foreign currency translation effects	(1)	(1)	(195)
As of December 31, 2018	**619**	**21**	**3,222**

[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 Group may measure certain assets or liabilities at fair value on a non-recurring basis when an impairment charge is recognized.

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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.

Table 24.1a

Analysis of financial assets – current period

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	11,775	173,307
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**	**14,105**	**175,848**
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**	**13,841**	**175,558**

Table 24.1b

Analysis of financial assets – prior period

in USD millions, as of December 31, 2018	Debt securities	Mortgage loans	Other loans	Receivables and other financial assets	Total
Neither past due nor impaired financial assets	139,831	6,475	7,592	12,061	165,959
Past due but not impaired financial assets					
Past due by:					
1 to 90 days	–	58	–	1,425	1,482
91 to 180 days	–	9	–	214	222
181 to 365 days	–	4	–	234	239
> 365 days	–	4	–	208	212
Past due but not impaired financial assets	–	75	–	2,080	2,155
Financial assets impaired	39	12	21	133	204
Gross carrying value	**139,870**	**6,561**	**7,614**	**14,273**	**168,318**
Less: impairment allowance					
Impairment allowances on individually assessed financial assets	–	1	–	74	75
Impairment allowances on collectively assessed financial assets	–	4	–	169	174
Net carrying value	**139,870**	**6,556**	**7,614**	**14,030**	**168,070**

Consolidated financial statements (continued)

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, 2019 and 2018, respectively.

Development of allowance for impairments – current period

Table 24.2a

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 and divestments	–	–	4
Foreign currency translation effects	–	–	(5)
As of December 31, 2019	**6**	**21**	**263**

Development of allowance for impairments – prior period

Table 24.2b

in USD millions	Mortgage loans	Other loans	Receivables
As of January 1, 2018	7	11	258
Increase/(decrease) in allowance for impairments	(1)	(12)	(10)
Amounts written-off	–	–	–
Acquisitions and divestments	–	–	15
Foreign currency translation effects	–	–	(20)
As of December 31, 2018	**6**	**–**	**243**

The Group has elected to defer the full implementation of IFRS 9 until IFRS 17 becomes effective on January 1, 2021. For further information on the 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 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 277 million and USD (143) million for the years ended December 31, 2019 and 2018, respectively. The carrying value on held-to-maturity debt securities, mortgage loans, other loans, and receivables include impairment allowances of USD 270 million and USD 249 million of the years ended December 31, 2019 and 2018, respectively.

Consolidated financial statements (continued)

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, 2019	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	13,905	13,905	13,905	13,905
Debt securities	131,040	131,040	7,637	7,637	138,676	138,676
Total available-for-sale securities	131,040	131,040	21,542	21,542	152,581	152,581
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	12,679	12,679	–	–	12,679	12,679
Derivative assets	–	–	1,226	1,226	1,226	1,226
Total financial assets	**161,758**	**159,262**	**33,994**	**33,982**	**195,752**	**193,244**

[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.

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, 2018	SPPI		Other financial assets		Total	
	Fair value	Carrying value	Fair value	Carrying value	Fair value	Carrying value
Available-for-sale securities						
Equity securities	–	–	12,587	12,587	12,587	12,587
Debt securities	124,829	124,829	7,694	7,694	132,522	132,522
Total available-for-sale securities	124,829	124,829	20,281	20,281	145,110	145,110
Fair value through profit or loss securities						
Equity securities	–	–	3,633	3,633	3,633	3,633
Debt securities	–	–	5,229	5,229	5,229	5,229
Total fair value through profit or loss securities	–	–	8,862	8,862	8,862	8,862
Held-to-maturity debt securities	2,655	2,118	–	–	2,655	2,118
Mortgage loans	6,935	6,556	–	–	6,935	6,556
Other loans[1]	8,295	6,865	86	112	8,381	6,978
Receivables[2]	12,665	12,665	–	–	12,665	12,665
Derivative assets	–	–	899	899	899	899
Total financial assets	**155,379**	**153,033**	**30,127**	**30,154**	**185,506**	**183,187**

[1] Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 742 million and USD 636 million for fair value and carrying value, respectively.
[2] Include a reduction of USD 293 million compared to 2018, due to a reassessment resulting in those assets not being classified as SPPI.

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 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.

Consolidated financial statements (continued)

The 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 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 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, 2019	Stage 1 Fair value	Stage 1 Carrying value	Stage 2 Fair value	Stage 2 Carrying value	Stage 3 Fair value	Stage 3 Carrying value	Total Fair value	Total 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	1,875	1,910	10,761	10,923	43	109	12,679	12,942
Total financial assets	**150,172**	**147,718**	**11,316**	**11,477**	**269**	**336**	**161,758**	**159,531**

[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.

Table 24.4b

Financial assets (SPPI) by stages – prior period

in USD millions, as of December 31, 2018	Stage 1 Fair value	Stage 1 Carrying value	Stage 2 Fair value	Stage 2 Carrying value	Stage 3 Fair value	Stage 3 Carrying value	Total Fair value	Total Carrying value
Available-for-sale debt securities	124,194	124,194	502	502	132	132	124,829	124,829
Held-to-maturity debt securities	2,653	2,115	3	3	–	–	2,655	2,118
Mortgage loans	6,870	6,498	36	34	29	29	6,935	6,561
Other loans[1]	8,191	6,762	40	40	64	64	8,295	6,866
Receivables[2]	1,637	1,647	10,936	11,126	92	136	12,665	12,909
Total financial assets	**143,545**	**141,217**	**11,517**	**11,705**	**318**	**362**	**155,379**	**153,283**

[1] Do not include policyholder loans, which will come under IFRS 17 and are therefore not applicable for IFRS 9, of USD 742 million and USD 636 million for fair value and carrying value, respectively.
[2] Include a reduction of USD 293 million in stage 2 compared to 2018, due to a reassessment resulting in those assets not being classified as SPPI.

25. Related-party transactions

In the normal course of business, the 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 Group include, among others, subsidiaries, associates, joint ventures, key management personnel, and the post-employment benefit plans (see note 20). Transactions between the Group and its subsidiaries are eliminated on consolidation, and they are not disclosed in the consolidated financial statements. A list of the Group's significant subsidiaries is shown in note 28. The transactions of the Group concluded with its associates and with its joint ventures are not considered material to the 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	2019	2018
Remuneration of key personnel of the Group		
Cash compensation, current benefits and fees	32	30
Post-employment benefits	4	4
Share-based compensation	35	23
Other remuneration	5	3
Total remuneration of key personnel	**76**	**60**

As of December 31, 2019 and 2018, 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, 2019 and 2018. 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 5 million and USD 4 million for the years ended December 31, 2019 and 2018 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 Group has the following relationships with the Farmers Exchanges.

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

As of December 31, 2019 and 2018, 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	2019	2018
3.758% surplus note, due December 2027	100	100
Various other certificates of contribution	23	23
Total	**123**	**123**

In March 2019, the Farmers Exchanges repaid a USD 0.5 million certificate of contribution at an 8.50 percent rate 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. 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 written and the ultimate net losses sustained in all lines of business written by the Farmers Exchanges.

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Quota share reinsurance treaty

Table 26.2

in USD millions, for the years ended December 31	All Lines agreement	
	2019[1]	2018[2]
Net earned premiums and policy fees	197	193
Insurance benefits and losses, net[3]	(143)	(129)
Total net technical expenses[4]	(63)	(62)
Net underwriting result	**(9)**	**2**

1 From January 1, 2019, Farmers Re Co assumed a 1.0 percent quota share. Another 28.0 percent was assumed by third parties. Effective December 31, 2019, Farmers Re participation in the All Lines agreement was reduced by 0.75 percent to 0.25 percent. Another 25.75 percent was assumed by third parties.
2 From January 1, 2018, 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 2019, the total catastrophe recoveries subject to the All Lines agreement was USD 1.3 billion.
4 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 Board 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 20.4 billion and USD 20.2 billion for the years ended December 31, 2019 and 2018, respectively.

Farmers Management Services

Table 26.3

in USD millions, for the years ended December 31	**2019**	2018	Change
Management fees and other related revenues	3,780	3,204	18%
Management fees	2,804	2,796	
Revenues for ancillary services[1]	858	287	
Membership fees	60	60	
Other revenues	58	62	
Management and other related expenses	2,356	1,792	31%
Expenses for ancillary services[1]	858	287	
Management and other expenses	1,498	1,505	
Gross management result	**1,424**	**1,412**	**1%**
Managed gross earned premium margin	7.0%	7.0%	0.0 pts

1 2019 balance includes additional effect of adoption of IFRS 15 'Revenue from Contracts with Customers.'

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 Other Insurance

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.

In 2019 the Group amended its BOP policy to exclude the monetary gains and losses resulting from the application of IAS 29 'Financial Reporting in Hyperinflationary Economies.' The policy change was implemented with prospective effect, as the impact on comparable balances was not material to the Group's financial results.

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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	
	2019	2018	**2019**	2018
Revenues				
Direct written premiums	12,722	12,955	14,389	13,912
Assumed written premiums	1,836	1,645	833	804
Gross written premiums and policy fees	14,558	14,600	15,223	14,716
Less premiums ceded to reinsurers	(2,739)	(2,389)	(5,551)	(4,988)
Net written premiums and policy fees	11,818	12,211	9,672	9,728
Net change in reserves for unearned premiums	(327)	(125)	(116)	277
Net earned premiums and policy fees	11,491	12,086	9,556	10,005
Net investment income on Group investments	578	621	1,081	1,026
Net capital gains/(losses) and impairments on Group investments	37	(8)	174	(40)
Net investment result on Group investments	615	613	1,255	986
Other income	355	320	79	50
Total BOP revenues	12,461	13,019	10,890	11,041
Benefits, losses and expenses				
Insurance benefits and losses, net	7,438	7,884	6,555	7,109
Policyholder dividends and participation in profits, net	7	8	8	10
Underwriting and policy acquisition costs, net	2,168	2,315	2,295	2,318
Administrative and other operating expense (excl. depreciation/amortization)	1,458	1,741	309	515
Interest credited to policyholders and other interest	172	181	66	(23)
Restructuring costs and other items not included in BOP	(100)	(108)	(23)	(110)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	11,142	12,022	9,210	9,819
Business operating profit (before interest, depreciation and amortization)	**1,318**	**998**	**1,681**	**1,222**
Depreciation and impairments of property and equipment	92	36	66	37
Amortization and impairments of intangible assets	83	76	37	84
Interest expense on debt	18	16	–	1
Business operating profit before non-controlling interests	1,125	869	1,578	1,099
Non-controlling interests	8	18	–	–
Business operating profit	**1,117**	**851**	**1,578**	**1,099**

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Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
2,851	2,646	2,790	2,627	–	–	–	–	32,752	32,139
179	212	81	77	593	364	(2,091)	(1,736)	1,432	1,366
3,030	2,858	2,871	2,704	593	364	(2,091)	(1,736)	34,184	33,505
(505)	(486)	(583)	(466)	(534)	(447)	2,091	1,736	(7,822)	(7,041)
2,525	2,372	2,289	2,237	59	(83)	–	–	26,362	26,465
(75)	(122)	(132)	(93)	(104)	28	–	–	(754)	(34)
2,449	2,250	2,157	2,145	(45)	(55)	–	–	25,608	26,431
74	68	217	204	11	13	–	–	1,961	1,932
–	–	–	–	–	–	–	–	211	(48)
74	68	217	204	11	13	–	–	2,171	1,884
145	137	59	32	30	62	–	–	668	601
2,669	2,454	2,432	2,381	(4)	21	–	–	28,447	28,916
1,358	1,304	840	960	285	35	–	–	16,475	17,291
–	–	–	1	(2)	–	–	–	12	19
579	580	910	916	(13)	7	–	–	5,939	6,136
441	463	354	239	9	33	–	–	2,571	2,992
4	1	32	–	(3)	(4)	–	–	271	156
(7)	(13)	(50)	9	–	–	–	–	(180)	(221)
2,376	2,335	2,086	2,126	274	72	–	–	25,088	26,373
293	**120**	**346**	**255**	**(279)**	**(51)**	**–**	**–**	**3,359**	**2,543**
37	18	18	6	1	3	–	–	214	101
19	16	13	10	–	–	–	–	151	187
–	–	1	–	12	37	–	–	32	55
237	86	315	238	(292)	(92)	–	–	2,962	2,200
1	–	76	97	–	–	–	–	84	115
236	**86**	**240**	**141**	**(292)**	**(92)**	**–**	**–**	**2,878**	**2,085**

Consolidated financial statements (continued)

Life – Overview by segment

Table 27.2

in USD millions, for the years ended December 31	Europe, Middle East & Africa		North America	
	2019	2018	**2019**	2018
Revenues				
Life insurance deposits	13,839	16,025	778	227
Gross written premiums	8,025	8,509	122	80
Policy fees	1,564	1,594	339	326
Gross written premiums and policy fees	9,589	10,103	461	407
Net earned premiums and policy fees	8,899	9,439	447	392
Net investment income on Group investments	2,313	2,474	34	22
Net capital gains/(losses) and impairments on Group investments	798	367	16	(11)
Net investment result on Group investments	3,111	2,840	49	11
Net investment income on unit-linked investments	1,278	1,375	–	–
Net capital gains/(losses) and impairments on unit-linked investments	15,236	(6,534)	676	(29)
Net investment result on unit-linked investments	16,514	(5,159)	676	(29)
Other income	369	458	41	36
Total BOP revenues	28,893	7,579	1,214	408
Benefits, losses and expenses				
Insurance benefits and losses, net	7,571	7,774	352	267
Policyholder dividends and participation in profits, net	17,537	(3,596)	676	(29)
Income tax expense/(benefit) attributable to policyholders	333	(171)	–	–
Underwriting and policy acquisition costs, net	917	925	123	68
Administrative and other operating expense (excl. depreciation/amortization)	1,255	1,302	54	57
Interest credited to policyholders and other interest	212	218	39	8
Restructuring costs and other items not included in BOP	(99)	(47)	–	–
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	27,725	6,404	1,244	372
Business operating profit (before interest, depreciation and amortization)	**1,168**	**1,175**	**(29)**	**37**
Depreciation and impairments of property and equipment	23	12	–	–
Amortization and impairments of intangible assets	54	103	–	5
Interest expense on debt	2	4	–	–
Business operating profit before non-controlling interests	1,089	1,056	(30)	31
Non-controlling interests	52	46	–	–
Business operating profit	**1,037**	**1,010**	**(30)**	**31**

Life includes approximately USD 1.4 billion and USD 2.3 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, 2019 and 2018, respectively.

Consolidated financial statements (continued)

Asia Pacific		Latin America		Group Reinsurance		Eliminations		Total	
2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
87	103	3,624	2,339	–	–	–	–	18,328	18,694
1,892	1,249	3,009	2,831	28	20	(37)	(28)	13,038	12,662
163	130	46	43	–	–	–	–	2,113	2,093
2,055	1,379	3,056	2,874	28	20	(37)	(28)	15,151	14,754
1,756	1,199	2,562	2,473	19	12	–	–	13,683	13,514
179	152	392	390	–	–	(2)	(2)	2,915	3,035
59	(35)	32	18	–	–	–	–	906	338
238	117	424	407	–	–	(2)	(2)	3,821	3,373
99	104	36	22	–	–	–	–	1,413	1,501
126	(163)	1,256	990	–	–	–	–	17,293	(5,737)
225	(60)	1,292	1,012	–	–	–	–	18,706	(4,236)
23	25	85	64	–	–	(1)	(1)	518	582
2,242	1,281	4,363	3,956	19	12	(3)	(3)	36,728	13,234
1,004	522	1,259	1,137	5	2	–	–	10,190	9,702
268	(21)	1,288	1,006	–	–	–	–	19,769	(2,640)
32	(12)	–	–	–	–	–	–	365	(183)
279	220	1,092	1,037	8	2	(1)	(1)	2,417	2,252
457	337	248	174	1	–	–	–	2,015	1,871
26	35	26	20	–	–	–	–	303	282
(63)	(12)	(66)	10	–	–	–	–	(228)	(50)
2,003	1,070	3,847	3,385	13	4	(1)	(1)	34,831	11,234
239	**212**	**515**	**571**	**6**	**8**	**(2)**	**(2)**	**1,897**	**2,000**
8	3	7	3	–	–	–	–	39	17
11	12	14	12	–	–	–	–	80	133
16	13	–	–	–	–	(2)	(2)	17	15
202	183	494	556	6	8	–	–	1,761	1,834
(2)	(2)	225	237	–	–	–	–	275	281
204	**186**	**269**	**319**	**6**	**8**	**–**	**–**	**1,486**	**1,554**

Consolidated financial statements (continued)

Business operating profit by business

Table 27.3

in USD millions, for the years ended December 31

	Property & Casualty		Life	
	2019	2018	**2019**	2018
Revenues				
Direct written premiums	32,752	32,139	12,706	12,310
Assumed written premiums	1,432	1,366	332	352
Gross Written Premiums	34,184	33,505	13,038	12,662
Policy fees	–	–	2,113	2,093
Gross written premiums and policy fees	34,184	33,505	15,151	14,754
Less premiums ceded to reinsurers	(7,822)	(7,041)	(1,193)	(1,038)
Net written premiums and policy fees	26,362	26,465	13,958	13,717
Net change in reserves for unearned premiums	(754)	(34)	(275)	(202)
Net earned premiums and policy fees	25,608	26,431	13,683	13,514
Farmers management fees and other related revenues	–	–	–	–
Net investment income on Group investments	1,961	1,932	2,915	3,035
Net capital gains/(losses) and impairments on Group investments	211	(48)	906	338
Net investment result on Group investments	2,171	1,884	3,821	3,373
Net investment result on unit-linked investments	–	–	18,706	(4,236)
Other income	668	601	518	582
Total BOP revenues	28,447	28,916	36,728	13,234
of which: inter-business revenues	(601)	(141)	(195)	(141)
Benefits, losses and expenses				
Losses and loss adjustment expenses, net	16,477	17,293	–	–
Life insurance death and other benefits, net	(1)	(2)	10,190	9,702
Insurance benefits and losses, net	16,475	17,291	10,190	9,702
Policyholder dividends and participation in profits, net	12	19	19,769	(2,640)
Income tax expense/(benefit) attributable to policyholders	–	–	365	(183)
Underwriting and policy acquisition costs, net	5,939	6,136	2,417	2,252
Administrative and other operating expense (excl. depreciation/amortization)	2,571	2,992	2,015	1,871
Interest credited to policyholders and other interest	271	156	303	282
Restructuring costs and other items not included in BOP	(180)	(221)	(228)	(50)
Total BOP benefits, losses and expenses (before interest, depreciation and amortization)	25,088	26,373	34,831	11,234
Business operating profit (before interest, depreciation and amortization)	**3,359**	**2,543**	**1,897**	**2,000**
Depreciation and impairments of property and equipment	214	101	39	17
Amortization and impairments of intangible assets	151	187	80	133
Interest expense on debt	32	55	17	15
Business operating profit before non-controlling interests	2,962	2,200	1,761	1,834
Non-controlling interests	84	115	275	281
Business operating profit	**2,878**	**2,085**	**1,486**	**1,554**

Life includes approximately USD 1.4 billion and USD 2.3 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, 2019 and 2018, respectively.

Consolidated financial statements (continued)

Farmers		Group Functions and Operations		Non-Core Businesses		Eliminations		Total	
2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
593	580	–	–	58	42	–	–	46,109	45,071
138	194	–	5	62	64	(17)	(14)	1,947	1,967
731	774	–	5	119	106	(17)	(14)	48,056	47,038
326	321	–	–	30	34	–	–	2,469	2,447
1,056	1,095	–	5	150	140	(17)	(14)	50,525	49,485
(175)	(179)	–	–	(100)	(11)	17	14	(9,274)	(8,255)
882	916	–	5	50	129	–	–	41,251	41,230
59	(1)	–	–	21	12	–	–	(949)	(224)
941	915	–	5	71	141	–	–	40,302	41,007
3,780	3,204	–	–	–	–	–	–	3,780	3,204
204	213	196	198	197	222	(174)	(212)	5,298	5,387
3	(1)	–	–	128	(109)	–	–	1,248	181
207	211	196	198	325	113	(174)	(212)	6,546	5,568
194	(52)	–	–	584	(86)	–	–	19,485	(4,374)
123	95	218	194	51	34	(448)	(425)	1,129	1,080
5,245	4,373	414	397	1,031	201	(623)	(636)	71,242	46,484
(39)	(51)	(261)	(282)	473	(21)	623	636	–	–
143	129	–	1	47	(27)	–	–	16,666	17,397
419	434	–	–	295	116	–	–	10,903	10,250
562	563	–	1	342	89	–	–	27,570	27,646
204	(43)	–	–	597	(72)	–	–	20,582	(2,736)
–	–	–	–	–	–	–	–	365	(183)
152	167	2	–	20	10	–	–	8,529	8,565
2,333	1,800	383	342	70	75	(69)	7	7,303	7,086
111	95	150	135	37	44	(282)	(279)	590	433
(17)	(49)	(47)	(43)	(4)	(1)	–	–	(476)	(364)
3,345	2,533	488	435	1,061	144	(351)	(272)	64,462	40,448
1,900	**1,840**	**(74)**	**(38)**	**(31)**	**57**	**(272)**	**(365)**	**6,780**	**6,037**
69	45	10	9	–	–	–	–	331	173
125	152	30	30	–	–	–	–	386	501
–	–	604	676	21	20	(272)	(365)	401	402
1,707	1,643	(717)	(754)	(52)	37	–	–	5,661	4,961
–	–	(1)	(1)	–	–	–	–	359	395
1,707	**1,643**	**(716)**	**(753)**	**(52)**	**37**	**–**	**–**	**5,302**	**4,566**

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	
	2019	2018	**2019**	2018
Business operating profit	**2,878**	**2,085**	**1,486**	**1,554**
Revenues/(expenses) not included in BOP:				
Net capital gains/(losses) on investments and impairments, net of policyholder allocation	716	481	204	197
Net gains/(losses) on divestment of businesses[1]	(198)	(19)	(146)	(5)
Restructuring costs	(104)	(212)	(44)	(67)
Other adjustments[2]	(77)	(9)	(184)	18
Add back:				
Business operating profit attributable to non-controlling interests	84	115	275	281
Net income before shareholders' taxes	3,300	2,441	1,591	1,977
Income tax expense/(benefit) attributable to policyholders	–	–	365	(183)
Net income before income taxes	**3,300**	**2,441**	**1,956**	**1,794**
Income tax (expense)/benefit				
attributable to policyholders				
attributable to shareholders				
Net income after taxes				
attributable to non-controlling interests				
attributable to shareholders				

[1] 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 (see note 5). In 2018, Property & Casualty included losses of USD 19 million related to the sale of Endsleigh Limited companies (see note 5), Group Functions and Operations included provision release gains of USD 16 million related to the sale of insurance operations in Morocco, Middle East and South Africa and Non-Core Businesses included losses of USD 15 million related to a portfolio transfer in Singapore.

[2] Other adjustments in 2019 include charges related to the implementation of IFRS 17, business combination integration costs and monetary losses related to hyperinflation accounting in relation to the Group's operations in Argentina.

Consolidated financial statements (continued)

	Farmers		Group Functions and Operations		Non-Core Businesses		Total	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018
	1,707	**1,643**	**(716)**	**(753)**	**(52)**	**37**	**5,302**	**4,566**
	5	28	(151)	(9)	70	24	845	720
	–	–	49	16	–	(15)	(295)	(24)
	(9)	(45)	–	(25)	(4)	(1)	(160)	(350)
	(8)	(4)	(47)	(18)	–	–	(316)	(14)
	–	–	(1)	(1)	–	–	359	395
	1,695	1,622	(866)	(790)	14	44	5,735	5,293
	–	–	–	–	–	–	365	(183)
	1,695	**1,622**	**(866)**	**(790)**	**14**	**44**	**6,100**	**5,110**
							(1,716)	(1,134)
							(365)	183
							(1,351)	(1,317)
							4,384	**3,977**
							237	261
							4,147	3,716

Consolidated financial statements (continued)

Assets and liabilities by business

Table 27.5

in USD millions, as of December 31

	Property & Casualty		Life	
	2019	2018	**2019**	2018
Assets				
Cash and cash equivalents	6,136	7,402	4,309	4,575
Total Group Investments	70,119	70,140	111,265	101,285
Equity securities	8,517	8,351	8,741	7,040
Debt securities	51,795	51,773	82,275	74,750
Investment property	5,048	4,884	7,838	7,309
Mortgage loans	1,055	1,236	4,322	4,743
Other loans	3,701	3,894	8,073	7,428
Investments in associates and joint ventures	2	2	16	14
Investments for unit-linked contracts	–	–	121,390	104,695
Total investments	70,119	70,140	232,655	205,980
Reinsurers' share of liabilities for insurance contracts	14,859	14,454	2,714	1,803
Deposits made under assumed reinsurance contracts	191	172	65	57
Deferred policy acquisition costs	5,694	5,367	11,695	12,350
Deferred origination costs	–	–	400	419
Goodwill	1,531	1,492	1,197	271
Other intangible assets	1,729	1,587	2,133	2,466
Other assets[1]	16,226	15,619	7,002	29,389
Total assets (after cons. of investments in subsidiaries)	**116,485**	**116,233**	**262,170**	**257,312**
Liabilities				
Liabilities for investment contracts	–	–	61,366	51,042
Liabilities for insurance contracts, gross	77,643	78,041	168,114	152,787
Reserves for losses and loss adjustment expenses, gross	57,473	58,835	–	–
Reserves for unearned premiums, gross	17,523	16,620	–	1
Future life policyholder benefits, gross	30	32	72,151	69,420
Policyholder contract deposits and other funds, gross	15	30	21,498	18,284
Reserves for unit-linked insurance contracts, gross	–	–	72,863	64,168
Other insurance liabilities, gross	2,602	2,524	1,603	914
Senior debt	621	719	657	681
Subordinated debt	953	918	647	612
Other liabilities[1]	12,963	13,691	13,387	36,829
Total liabilities	**92,180**	**93,369**	**244,171**	**241,951**
Equity				
Shareholders' equity				
Non-controlling interests				
Total equity				
Total liabilities and equity				
Supplementary information				
Additions and capital improvements to property, equipment and intangible assets	695	816	172	99

[1] In 2019, the Group reclassified USD 2 billion of assets to held for sale based on agreements signed to sell business in the UK (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. In 2018, the Group reclassified USD 24 billion of assets to held for sale based on agreements signed to sell business in the UK, Venezuela 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 29 million.

Consolidated financial statements (continued)

Farmers		Group Functions and Operations		Non-Core Businesses		Eliminations		Total	
2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
1,102	1,428	7,983	10,212	776	1,398	(12,426)	(16,366)	7,880	8,649
5,488	5,348	9,311	9,747	5,834	6,172	(8,704)	(10,045)	193,312	182,647
49	65	835	638	155	126	–	–	18,296	16,220
3,821	3,462	5,467	6,030	4,562	4,841	(412)	(987)	147,507	139,870
142	133	–	–	233	25	–	–	13,261	12,351
559	577	–	–	–	–	–	–	5,935	6,556
918	1,110	2,991	3,063	882	1,177	(8,291)	(9,058)	8,274	7,614
–	–	17	16	3	3	–	–	39	36
932	746	–	–	3,889	3,852	–	–	126,211	109,294
6,420	6,094	9,311	9,747	9,723	10,024	(8,704)	(10,045)	319,523	291,940
2,142	2,242	–	–	3,072	2,765	(34)	(67)	22,752	21,197
229	400	–	–	258	254	(17)	–	726	883
1,811	1,818	–	–	4	2	2	3	19,207	19,541
–	–	–	–	–	–	–	–	400	419
819	819	63	52	–	–	–	–	3,610	2,634
388	402	83	88	–	–	–	–	4,333	4,542
1,854	1,657	1,624	908	2,932	1,679	(3,383)	(3,716)	26,256	45,536
14,765	**14,860**	**19,063**	**21,007**	**16,766**	**16,122**	**(24,562)**	**(30,190)**	**404,688**	**395,342**
225	213	–	–	170	184	–	–	61,761	51,439
7,364	7,311	3	27	11,075	11,139	(59)	(96)	264,140	249,208
316	467	1	23	1,404	1,649	(30)	(61)	59,165	60,913
20	79	–	2	10	14	(2)	(2)	17,551	16,714
2,200	2,151	2	2	3,376	3,348	(2)	(4)	77,756	74,950
3,867	3,882	–	–	2,101	2,071	–	–	27,480	24,266
932	746	–	–	3,889	3,852	–	–	77,684	68,766
29	(16)	–	–	296	206	(25)	(29)	4,505	3,599
–	–	9,709	11,157	274	273	(6,113)	(7,593)	5,148	5,237
–	–	7,726	7,579	–	–	(2,475)	(2,334)	6,852	6,775
2,020	1,756	13,463	14,246	4,325	4,529	(15,919)	(20,169)	30,238	50,881
9,610	**9,279**	**30,900**	**33,009**	**15,843**	**16,124**	**(24,565)**	**(30,191)**	**368,139**	**363,540**
								35,004	30,189
								1,545	1,613
								36,549	31,802
								404,688	**395,342**
171	181	68	56	–	–	–	–	1,105	1,152

Consolidated financial statements (continued)

Table 27.6

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

in USD millions, for the years ended December 31	Commercial Insurance		Retail and Other Insurance	
	2019	2018	**2019**	2018
Gross written premiums and policy fees	16,279	15,450	19,419	19,443
Net earned premiums and policy fees	9,874	10,425	15,779	16,061
Insurance benefits and losses, net	7,157	8,071	9,034	9,185
Policyholder dividends and participation in profits, net	9	14	6	5
Total net technical expenses	2,584	2,776	5,725	5,872
Net underwriting result	124	(437)	1,015	1,000
Net investment income	1,231	1,180	719	739
Net capital gains/(losses) and impairments on investments	166	(37)	45	(11)
Net non-technical result (excl. items not included in BOP)	7	(92)	(51)	(51)
Business operating profit before non-controlling interests	1,528	614	1,727	1,677
Non-controlling interest	1	9	83	106
Business operating profit	**1,527**	**605**	**1,644**	**1,572**

[1] Commercial and Retail Insurance overview exclude Group Reinsurance.

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						Property, equipment and intangible assets	
	Total		of which Commercial Insurance		of which Retail and Other Insurance			
	for the years ended December 31		for the years ended December 31		for the years ended December 31		as of December 31	
	2019	2018	**2019**	2018	**2019**	2018	**2019**	2018
Europe								
Austria	593	597					55	40
France	303	302					1	1
Germany	2,531	2,787					643	117
Italy	1,485	1,501					49	30
Ireland	363	369					85	46
Portugal	337	312					16	15
Spain	1,272	1,188					288	300
Switzerland	2,971	2,905					708	507
United Kingdom	2,938	2,986					172	115
Rest of Europe	685	700					83	79
Middle East & Africa								
Middle East	115	97					–	–
Europe, Middle East & Africa	13,592	13,744	5,044	4,798	8,548	8,946	2,099	1,249
North America								
Bermuda	7	–					–	–
Canada	590	464					17	8
United States	14,183	13,846					1,162	716
North America	14,780	14,310	7,867	7,600	6,913	6,710	1,178	724
Asia Pacific								
Australia	1,015	933					786	748
Hong Kong	307	300					44	26
Japan	874	830					29	21
Malaysia	343	292					61	46
Rest of Asia Pacific	342	323					10	4
Asia Pacific	2,881	2,678	909	887	1,973	1,791	930	844
Latin America								
Argentina	570	615					207	187
Brazil	1,182	1,117					515	549
Chile	366	342					24	19
Mexico	628	605					170	148
Venezuela	2	11					–	–
Rest of Latin America	180	74					58	40
Latin America	2,927	2,765	941	770	1,985	1,995	974	942
Group Reinsurance								
Group Reinsurance	4	9	–	–	4	9	2	7
Total	**34,184**	**33,505**	**14,761**	**14,054**	**19,423**	**19,451**	**5,184**	**3,766**

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	
	2019	2018	2019	2018	2019	2018
Europe, Middle East & Africa						
Austria	107	136	52	53	25	25
Germany	2,273	1,811	1,776	2,076	71	290
Italy	871	1,010	2,699	1,834	38	45
Ireland[1]	577	625	3,276	3,389	88	5
Spain	2,090	3,004	59	30	1,083	1,188
Switzerland	1,285	1,217	241	201	3	3
United Kingdom	1,642	1,690	3,971	6,782	136	132
Zurich International[2]	513	423	1,260	1,480	58	37
Rest of Europe, Middle East & Africa	206	167	505	179	4	5
Europe, Middle East & Africa	9,563	10,083	13,839	16,025	1,506	1,731
North America						
United States	461	407	778	227	–	1
North America	461	407	778	227	–	1
Asia Pacific						
Australia	1,179	515	11	25	1,182	194
Hong Kong	56	66	20	22	–	–
Indonesia	62	50	–	–	2	1
Japan	407	328	–	–	15	14
Malaysia	237	228	55	55	91	81
Rest of Asia Pacific[3]	114	191	–	–	–	–
Asia Pacific	2,055	1,379	87	103	1,290	291
Latin America						
Argentina	90	105	80	89	41	9
Brazil	1,437	1,398	3,246	2,130	329	354
Chile	1,075	965	168	81	344	360
Mexico	412	379	131	39	113	111
Uruguay	42	26	–	–	–	–
Latin America	3,056	2,874	3,624	2,339	827	834
Total	**15,135**	**14,742**	**18,328**	**18,694**	**3,624**	**2,857**

[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.

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, 2019

	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	476.5
Zurich Australian Insurance Limited	Sydney	100	100	AUD	6.6
Zurich Financial Services Australia Limited	Sydney	100	100	AUD	2,674.9
OnePath Life Limited	Sydney	100	100	AUD	1,219.4
OnePath Life Australia Holdings Pty Limited	Sydney	100	100	AUD	2,470.7
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	2,476.0
Zurich Resseguradora Brasil S.A.	Sao Paulo	100	100	BRL	204.0
Chile					
Chilena Consolidada Seguros de Vida S.A.	Santiago	98.98	98.98	CLP	179,682.6
Zurich Santander Seguros de Vida Chile S.A.[1]	Santiago	51	51	CLP	24,252.9
Germany					
Deutscher Herold Aktiengesellschaft	Bonn	100	100	EUR	18.4
Zürich Beteiligungs-Aktiengesellschaft (Deutschland)	Frankfurt	100	100	EUR	152.9
Zurich Deutscher Herold Lebensversicherung Aktiengesellschaft	Bonn	100	100	EUR	68.5
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	1,446.8
Malaysia					
Zurich Life Insurance Malaysia Berhad	Kuala Lumpur	100	100	MYR	579.0
Zurich Holdings Malaysia Berhad	Kuala Lumpur	100	100	MYR	515.4
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, 2019	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.[1]	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 Insurance Company Ltd	Zurich	100	100	CHF	825.0
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	477.6
Zurich Assurance Ltd	Cheltenham, England	100	100	GBP	236.1
Zurich Employment Services Limited	Cheltenham, England	100	100	GBP	254.1
Zurich Financial Services (UKISA) Limited	Cheltenham, England	100	100	GBP	1,340.8
Zurich Holdings (UK) Limited	Fareham, England	100	100	GBP	200.8
Zurich International Life Limited	Douglas, Isle of Man	100	100	GBP	123.4
Zurich UK General Services Limited	Fareham, England	100	100	GBP	343.2

Consolidated financial statements (continued)

Significant subsidiaries – non-listed (continued)

Table 28.1

as of December 31, 2019	Registered office	Voting rights %	Ownership interest %	Nominal value of share capital (in local currency millions)	
United States of America					
Farmers Group, Inc.[2]	Carson City, NV	100	100	USD	0.001
Farmers Reinsurance Company[2]	Woodland Hills, CA	100	100	USD	58.8
Farmers New World Life Insurance Company[2]	Bellevue, WA	100	100	USD	6.6
Zurich American Company, LLC	Wilmington, DE	100	100	USD	0.00001
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.[3]	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 ZIG subsidiary which is 51% owned by ZIG.
[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] Shares have no nominal value in accordance with the company's articles of incorporation and local legislation.

Consolidated financial statements (continued)

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 Group.

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	
	2019	2018	**2019**	2018
Non-controlling interests percentage	49%	49%	50%	50%
Total Investments	15,395	13,284	11,023	10,706
Other assets	3,365	3,165	1,672	1,614
Insurance and investment contract liabilities[1]	16,285	14,093	11,046	10,699
Other liabilities	955	882	375	318
Net assets	**1,520**	**1,474**	**1,275**	**1,302**
Non-controlling interests in net assets	**745**	**722**	**637**	**651**
Total revenues	3,099	2,943	2,196	3,039
Net income after taxes	391	418	90	73
Other comprehensive income	7	(204)	15	(31)
Total comprehensive income	**398**	**214**	**105**	**42**
Non-controlling interests in total comprehensive income	**195**	**105**	**52**	**21**
Dividends paid to non-controlling interests	186	201	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

No events after the balance sheet date.

Report of the statutory auditor

Report of the statutory auditor

to the General Meeting of Zurich Insurance Group Ltd, Zurich

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Zurich Insurance Group Ltd and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the year ended December 31, 2019, the consolidated balance sheet as of December 31, 2019, the consolidated statement of cash flows and consolidated statement of changes in equity for the year ended December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements (pages 179 to 289 and the audited sections of the risk review on pages 129 to 157) give a true and fair view of the consolidated financial position of the Group as at December 31, 2019 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 Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, 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 Group audit materiality: USD 240 million

We concluded full scope audit work at 21 business units in 8 countries. The full scope audit work addressed 66% and 70% of the Group's gross written premiums and policy fees (GWP) and total assets, respectively. In addition, specific procedures were performed on a further 12 business units in 8 countries representing a further 8% and 10% of the Group's GWP and total assets, respectively.

The following key audit matters 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 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 Group audit materiality	USD 240 million
How we determined it	We have selected a combined 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 240 million.
Rationale for the materiality benchmark applied	We chose NIBIT as a benchmark because, in our view, it is the benchmark against which the Group's performance is most commonly measured, and is a generally accepted benchmark. We also consider BOP as a benchmark because, in our view, BOP is a key indicator for analysts and other external parties.

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 Group, the accounting processes and controls, and the industry in which the Group operates.

In establishing the overall approach to the Group 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 consolidated financial statements of the Group as a whole.

The Group's business units vary significantly in size and we identified 21 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 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 12 business units. Together the full scope audits and specific audit procedures accounted for 74% and 80% of Group 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 judgement, 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 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 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.

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, with particular consideration of industry studies, the 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.

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 and in line with industry accepted practice.

Report of the statutory auditor (continued)

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 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 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.

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 Group's actuaries in estimating property and casualty loss reserves.
- Utilizing information technology audit techniques to analyse 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.
- 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 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.

Based on the work performed we determined that the methodologies, assumptions and underlying data used in the valuation of property and casualty reserves are reasonable and in line with industry accepted practice.

Report of the statutory auditor (continued)

Recoverability of goodwill and attorney-in-fact contracts

Key audit matter

The Group's goodwill is allocated to cash generating units (CGUs) that are identified generally at a segment level. Acquisitions which closed in 2019 have added substantial amounts of goodwill. 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. These assumptions and estimates can have a material impact on the valuations and impairment decisions reflected in the consolidated financial statements of the 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 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 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.

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

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 Group Ltd, the audited sections of the risk review on pages 129 to 157, the Remuneration report of Zurich Insurance Group Ltd 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 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 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, February 12, 2020

Holding company

Review of the year

Zurich Insurance Group Ltd's net income after taxes for the year was CHF 2,864 million compared with CHF 67 million in 2018. In 2019, the net income after taxes mainly reflects dividend income from its subsidiary Zurich Insurance Company Ltd (ZIC) in the amount of CHF 2,750 million. No dividend was paid by ZIC in 2018, but ZIC repaid CHF 2,700 million of the subordinated debt to its parent in 2018.

The Annual General Meeting on April 3, 2019, approved a dividend of CHF 19.00 less 35 percent Swiss withholding tax per share out of the available earnings.

Shareholders' equity increased by CHF 47 million to CHF 13,608 million as of December 31, 2019, from CHF 13,561 million as of December 31, 2018, as a result of the net income after taxes for the year, partially offset by the dividend paid in 2019. During 2018, Zurich Insurance Group Ltd repurchased 1,740,000 treasury shares via a public share buy-back program. At the Annual General Meeting of April 3, 2019, the shareholders approved the cancellation of these shares. The corresponding reduction of the share capital of Zurich Insurance Group Ltd from 151,348,027 to 149,608,027 fully paid registered shares with a nominal value of CHF 0.10 each through cancellation of the repurchased treasury shares was completed in June 2019.

The Board of Directors proposes to the Annual General Meeting, which is to be held on April 1, 2020, to distribute a dividend from available earnings for 2019 of CHF 20.00 less 35 percent Swiss withholding tax per share.

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Holding company (continued)

Income statements

in CHF thousands, for the years ended December 31	Notes	2019	2018
Other operating income		44	29
Other operating expenses	4	(11,311)	(15,312)
Financial income	5	2,887,637	91,549
Dividend income		*2,753,243*	–
Interest income		*134,380*	*91,469*
Other financial income		*14*	*80*
Financial expenses		(31)	(38)
Direct taxes	6	(12,833)	(9,637)
Net income after taxes		**2,863,506**	**66,591**

Holding company (continued)

Balance sheets

Assets

in CHF thousands, as of December 31	Notes	2019	2018
Current assets			
Cash and cash equivalents		2,423	2,557
Receivables from subsidiaries		921	77
Receivables from third parties		31,375	34,222
Accrued income and prepaid expenses from subsidiaries		91,429	91,429
Total current assets		126,148	128,285
Non-current assets			
Subordinated loans to subsidiaries	7	2,132,405	2,132,405
Investments in subsidiaries	8	11,368,069	11,368,069
Total non-current assets		13,500,474	13,500,474
Total assets		**13,626,622**	**13,628,759**

Liabilities and shareholders' equity

in CHF thousands, as of December 31	Notes	2019	2018
Short-term liabilities			
Other liabilities to subsidiaries		16,258	65,028
Other liabilities to third parties		920	962
Other liabilities to shareholders		1,480	1,425
Accrued expenses and deferred income to third parties		15	47
Total short-term liabilities		18,673	67,462
Total liabilities		18,673	67,462
Shareholders' equity (before appropriation of available earnings)			
Share capital	10	14,961	15,135
Legal reserves:		802,696	1,019,984
Capital contribution reserve	*11*	*287,506*	*287,506*
General capital contribution reserve		*29,495*	*27,751*
Reserve for treasury shares (indirectly held via subsidiaries)	*12*	*258,011*	*259,755*
General legal reserve		*515,190*	*732,478*
General legal reserve		*341,140*	*341,140*
Reserve for treasury shares (indirectly held via subsidiaries)	*12*	*174,050*	*391,338*
Treasury shares (directly held by the Company)	10	–	(548,167)
Free reserve	13	344,643	344,643
Retained earnings:			
As of January 1		*12,729,702*	*15,529,736*
Dividends paid		*(2,816,854)*	*(2,475,287)*
Cancellation of treasury shares (directly held by the Company)	*10*	*(547,993)*	*–*
Net income after taxes		*2,863,506*	*66,591*
Allocation from/to reserve for treasury shares (indirectly held via subsidiaries)		*217,288*	*(391,338)*
Retained earnings, as of December 31		12,445,649	12,729,702
Total shareholders' equity (before appropriation of available earnings)		13,607,949	13,561,297
Total liabilities and shareholders' equity		**13,626,622**	**13,628,759**

Notes to the financial statements

1. General information

Zurich Insurance Group Ltd (the Company) is a corporation domiciled in Zurich, Switzerland, and its shares are listed on the SIX Swiss Exchange. It was incorporated on April 26, 2000, and is the holding company of the Zurich Insurance Group with the principal activity of holding subsidiary companies. The Company does not employ staff, as employees work in a joint capacity for Zurich Insurance Company Ltd (ZIC).

2. Basis of presentation

Zurich Insurance Group Ltd presents its financial statements in accordance with Swiss law.

All amounts in these financial statements including the notes are shown in Swiss franc thousands, rounded to the nearest thousand, unless otherwise specified.

3. Summary of significant accounting policies

a) Exchange rates

Unless otherwise stated, assets and liabilities expressed in currencies other than Swiss francs are translated at year end exchange rates. Revenues and expenses are translated using the exchange rate at the date of the transaction. Net unrealized exchange losses are recorded in the income statements and net unrealized exchange gains are deferred until realized.

b) Investments in subsidiaries

Investments in subsidiaries are equity interests, held on a long-term basis for the purpose of the holding company's business activities. Each investment in subsidiaries is valued individually and carried at its cost less adjustments for impairments.

c) Accrued income

Income is accrued for interest which is earned but not yet due for payment at the end of the reporting period.

d) Reserves for treasury shares (indirectly held via subsidiaries)

Reserves for treasury shares are accounted for at the acquisition costs of these shares held by the respective subsidiary.

e) Treasury shares (directly held by the Company)

All treasury shares held directly by the Company as of December 31, 2018, were cancelled upon approval by the Annual General Meeting of April 3, 2019, and completion of the share capital reduction process in June 2019. In 2018, treasury shares are carried at acquisition cost and presented as a deduction in shareholders' equity.

4. Other operating expenses

Other operating expenses include directors' fees of CHF 4.7 million and CHF 4.3 million for the years ended December 31, 2019, and December 31, 2018, respectively. Overhead expenses decreased by CHF 3.2 million to CHF 3.6 million in 2019. In addition, fees paid to the Swiss Financial Market Supervisory Authority of CHF 2.5 million and CHF 3.4 million are included for the years ended December 31, 2019, and December 31, 2018.

5. Financial income

Financial income for the year 2019 consists of dividend income of CHF 2,753 million mainly received from the Company's subsidiary ZIC and interest income of CHF 134.3 million (2018: CHF 91.4 million) on the subordinated loan with ZIC. This interest income is recognized when Zurich Insurance Company Ltd declares its intention to pay a dividend to the Company.

Holding company (continued)

6. Direct taxes

Direct taxes include income and capital taxes in Switzerland.

7. Subordinated loans to subsidiaries

Subordinated loans include a loan to Zurich Insurance Company Ltd of CHF 2,132 million as of December 31, 2019, and December 31, 2018, respectively. In April 2018, ZIC paid back CHF 2,700 million.

8. Investments in subsidiaries

Investments in subsidiaries

as of December 31	2019			2018		
	Carrying value[1]	Voting rights in %	Capital rights in %	Carrying value[1]	Voting rights in %	Capital rights in %
Zurich Insurance Company Ltd	11,088,466	100.00	100.00	11,088,466	100.00	100.00
Zurich Financial Services EUB Holdings Ltd	121,436	99.90	99.90	121,436	99.90	99.90
Farmers Group, Inc.	157,992	12.10	4.62	157,992	12.10	4.62
Allied Zurich Limited	175	100.00	100.00	175	100.00	100.00
Total	**11,368,069**			**11,368,069**		

[1] in CHF thousands.

In addition to the above mentioned directly held subsidiaries, the Company indirectly owns additional subsidiaries primarily through Zurich Insurance Company Ltd. Information regarding indirectly owned subsidiaries is included on pages 285 to 287 of this Annual Report.

9. Commitments and contingencies

Zurich Insurance Group Ltd has provided unlimited guarantees in support of entities belonging to the Zurich Capital Markets group of companies. The Company has also entered into support agreements and guarantees for the benefit of certain of its subsidiaries. They amounted to CHF 1,068 million as of December 31, 2019, and CHF 1,054 million as of December 31, 2018. The increase is mainly due to a positive foreign exchange effect, partially offset by an expired letter of comfort in the amount of USD 10 million (CHF 10 million) provided to an indirectly fully owned subsidiary. Furthermore, the Company has issued an unlimited guarantee in favor of the Institute of London Underwriters in relation to business transferred to Zurich Insurance plc from a Group company which no longer has insurance licenses.

Zurich Insurance Group Ltd is not aware of any event of default that would require it to satisfy any of these guarantees or to take action under a support agreement.

10. Share capital

a) Changes to the share capital

During 2018, Zurich Insurance Group Ltd had repurchased shares via a public share buy-back program for cancellation purposes. At the Annual General Meeting of April 3, 2019, the shareholders approved the cancellation of the 1,740,000 own shares of Zurich Insurance Group Ltd repurchased under the public share buy-back program. The corresponding reduction of the share capital of Zurich Insurance Group Ltd from 151,348,027 to 149,608,027 fully paid registered shares with a nominal value of CHF 0.10 each through cancellation of the repurchased own shares was completed in June 2019.

The authorized share capital (Art. 5bis 1 of the Articles of Association) is comprised of 45,000,000 shares. The contingent share capital for Financial Instruments (Art. 5ter 1a of the Articles of Association; term as defined in section b) below) is comprised of 30,000,000 shares and the contingent share capital for Group employees (Art. 5ter 2a of the Articles of Association) is comprised of 4,947,232 shares. During the year 2019, no shares were issued to Group employees out of the contingent capital. During the year 2018, a total of 8,176 shares were issued to Group employees out of the contingent capital.

Holding company (continued)

b) Authorized share capital (as specified in Article 5bis of the Articles of Association)

Until April 4, 2020, the Board of Zurich Insurance Group Ltd is authorized to increase the share capital of Zurich Insurance Group Ltd by an amount not exceeding CHF 4,500,000 by issuing up to 45,000,000 fully paid registered shares with a nominal value of CHF 0.10 each. An increase in partial amounts is permitted. The Board would determine the date of issue of any such new shares, the issue price, type of payment, conditions for exercising subscription rights, and the commencement of entitlement to dividends.

The Board may issue such new shares by means of a firm underwriting by a banking institution or syndicate with a subsequent offer of those shares to current shareholders. The Board may allow the expiry of subscription rights which have not been exercised, or it may place these rights as well as shares, the subscription rights of which have not been exercised, at market conditions.

The Board is further authorized to restrict or exclude the subscription rights of shareholders and to allocate them to third parties, Zurich Insurance Group Ltd or one of its Group companies, up to a maximum of 15,000,000 shares, if the shares are to be used:

- for the take-over of an enterprise, of parts of an enterprise or of participations or for investments by Zurich Insurance Group Ltd or one of its Group companies, or the financing including re-financing of such transactions; or
- for the purpose of expanding the scope of shareholders in connection with the quotation of shares on foreign stock exchanges or issuance of shares on the national or international capital markets (including private placements to one or more selected investors); or
- for the conversion of loans, bonds, similar debt instruments, equity-linked instruments or other financial market instruments (collectively, the 'Financial Instruments') issued by Zurich Insurance Group Ltd or one of its Group companies; or
- for the improvement of the regulatory capital position of Zurich Insurance Group Ltd or one of its Group companies in a fast and expeditious manner.

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

c) Contingent share capital (as specified in Article 5ter of the Articles of Association)

Financial Instruments

The share capital of Zurich Insurance Group Ltd may be increased by an amount not exceeding CHF 3,000,000 by issuing of up to 30,000,000 fully paid registered shares with a nominal value of CHF 0.10 each by the voluntary or mandatory exercise of conversion and/or option rights which are granted in connection with the issuance of Financial Instruments by Zurich Insurance Group Ltd or one of its Group companies or by mandatory conversion of Financial Instruments issued by the Zurich Insurance Group Ltd or one of its Group companies, that allow for contingent mandatory conversion into shares of Zurich Insurance Group Ltd, or by exercising option rights which are granted to the shareholders. The subscription rights are excluded. The then-current owners of the Financial Instruments shall be entitled to subscribe for the new shares. The conversion and/or option conditions are to be determined by the Board.

The Board is authorized, when issuing Financial Instruments to restrict or exclude the advance subscription rights in cases where they are issued:

- for the financing including re-financing of a take-over of an enterprise, of parts of an enterprise, or of participations or of investments by Zurich Insurance Group Ltd or one of its Group companies; or
- on national or international capital markets (including private placements to one or more selected investors); or
- for the improvement of the regulatory capital position of Zurich Insurance Group Ltd or one of its Group companies in a fast and expeditious manner.

If the advance subscription rights are restricted or excluded by a resolution of the Board, the following applies: the Financial Instruments are to be issued at prevailing market conditions (including standard dilution protection clauses in accordance with market practice) and the setting of the conversion or issue price of the new shares must take due account of the stock market price of the shares and/or comparable instruments priced by the market at the time of issue or time of conversion.

The conversion rights may be exercisable during a maximum of ten years and option rights during a maximum of seven years from the time of the respective issue; contingent conversion features may remain in place indefinitely.

Holding company (continued)

Up to April 4, 2020, the total of new shares issued from (i) authorized share capital where the subscription rights were restricted or excluded, and (ii) contingent share capital in connection with Financial Instruments where the advance subscription rights were restricted or excluded, may not exceed 30,000,000 new shares.

Employee participation
On January 1, 2019, the contingent share capital, to be issued to employees of Zurich Insurance Group Ltd and its subsidiaries, amounted to CHF 494,723.20 or 4,947,232 fully paid registered shares with a nominal value of CHF 0.10 each. On January 1, 2018, the contingent share capital, to be issued to employees of Zurich Insurance Group Ltd and its subsidiaries, amounted to CHF 495,540.80 or 4,955,408 fully paid registered shares with a nominal value of CHF 0.10 each.

During 2019, no shares were issued to Group employees out of the contingent capital. During 2018, 8,176 shares were issued to Group employees from contingent share capital. As of December 31, 2019 and December 31, 2018, the remaining contingent share capital available for issuance to Group employees amounted to CHF 494,723.20 or 4,947,232 fully paid registered shares with a nominal value of CHF 0.10 each. Subscription rights as well as advance subscription rights of the shareholders are excluded. The issuance of new shares or respective option rights to employees is subject to one or more regulations to be issued by the Board and taking into account performance, functions, levels of responsibility and criteria of profitability. New shares or option rights may be issued to employees at a price lower than that quoted on the stock exchange.

11. Capital contribution reserve

Capital contribution reserve

in CHF thousands	**2019**	2018
As of January 1	287,506	494,374
Transfer to free reserve (adjustment capital contribution reserve)	–	(19)
Dividend payment out of capital contribution reserve	–	(208,759)
Agio on share-based payment transactions	–	1,910
As of December 31	**287,506**	**287,506**

12. Reserves for treasury shares (indirectly held via subsidiaries)

These reserves correspond to the purchase value of all Zurich Insurance Group Ltd shares held by companies of the Zurich Insurance Group as shown in the table below.

Reserves for treasury shares (indirectly held via subsidiaries)

	Number of shares 2019	**Purchase value 2019[1]**	Number of shares 2018	Purchase value 2018[1]
As of January 1	2,342,432	651,093	1,156,567	282,088
Purchases during the year	272,874	106,310	1,634,015	502,359
Sales during the year	(1,065,592)	(325,342)	(448,150)	(133,354)
As of December 31	**1,549,714**	**432,061**	**2,342,432**	**651,093**
Thereof held in capital contribution reserve				
As of January 1	1,064,728	259,755	1,156,567	282,088
As of December 31	**1,057,654**	**258,011**	**1,064,728**	**259,755**
Thereof held in general legal reserve				
As of January 1	1,277,704	391,338	–	–
As of December 31	**492,060**	**174,050**	**1,277,704**	**391,338**
Average purchase price, in CHF		390		307
Average selling price, in CHF		210		319

[1] in CHF thousands

Holding company (continued)

13. Free reserve

Free reserve

in CHF thousands	2019	2018
As of January 1	344,643	344,624
Transfer from capital contribution reserve	–	19
As of December 31	**344,643**	**344,643**

14. Shareholders

According to information available as of December 31, 2019, Zurich Insurance Group Ltd is not aware of any person or institution, other than BlackRock, Inc., New York, (>5 percent of the shares) and The Capital Group Companies, Inc., Los Angeles, (>5 percent of the shares) which, directly or indirectly, had an interest as a beneficial owner in shares, option rights and/or conversion rights relating to shares of Zurich Insurance Group Ltd exceeding the relevant thresholds prescribed by law.

15. Remuneration of the Board of Directors and the Executive Committee

The information required by articles 14–16 of the Ordinance Against Excessive Compensation, which prevails over article 663bbis of the Swiss Code of Obligations, is disclosed and audited in the remuneration report on pages 92 to 101 of this Annual Report.

16. Shareholdings of the Board of Directors and the Executive Committee

The information on share and share option holdings of Directors and of the members of the Executive Committee (ExCo), who held office as of December 31, 2019, as required by article 663c paragraph 3 and article 959c paragraph 2 cif 11 of the Swiss Code of Obligations is included and audited in the remuneration report on pages 92 to 101 of this Annual Report.

17. Supplementary information

Cash and cash equivalents of CHF 2.4 million include restricted cash of CHF 0.3 million as of December 31, 2019, compared to cash and cash equivalents of CHF 2.6 million and thereof restricted cash of CHF 0.3 million in the previous year.

Holding company (continued)

Proposed appropriation of available earnings

as of December 31	2019	2018
Registered shares eligible for dividends[1]		
Eligible shares	149,608,027	151,348,027

[1] These figures are based on the share capital issued on December 31, 2019, and may change depending on the number of shares issued on April 6, 2020. Treasury shares are not entitled to dividends and will not be taken into account.

The Board of Directors proposes to the Annual General Meeting to be held on April 1, 2020, to appropriate the available earnings for 2019 as follows:

in CHF thousands	Available earnings
Available earnings	
As of January 1, 2019	*12,729,702*
Dividends paid	*(2,816,854)*
Cancellation of treasury shares (directly held by the Company)	*(547,993)*
Net income after taxes	*2,863,506*
Allocation from reserve for treasury shares (indirectly held via subsidiaries)	*217,288*
Available earnings, as of December 31, 2019	**12,445,649**

in CHF thousands	Available earnings
Appropriation of available earnings	
As of January 1, 2020	12,445,649
Dividend payment out of available earnings[1]	(2,992,161)
Balance carried forward[1]	**9,453,488**

[1] This figure is based on the share capital issued on December 31, 2019, and may change depending on the number of shares issued on April 6, 2020. Treasury shares are not entitled to dividends and will not be taken into account.

The Board of Directors proposes to the Annual General Meeting to be held on April 1, 2020, that the Company pay a dividend of CHF 20.00 per share, less 35 percent Swiss withholding tax, out of the available earnings for 2019 and to carry forward the remaining available earnings for 2019 in the amount of CHF 9,453 million as shown in the above table.

If this proposal is approved, a dividend of CHF 20.00 per share, less 35 percent Swiss withholding tax, will be paid from April 7, 2020.

Zurich, February 12, 2020

On behalf of the Board of Directors of Zurich Insurance Group 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 Group Ltd, Zurich

Report on the audit of the financial statements

Opinion
We have audited the financial statements of Zurich Insurance Group Ltd (the Company), which comprise the income statement for the year ended December 31, 2019, balance sheet as of December 31, 2019, and notes, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements (pages 297 to 303) as of December 31, 2019 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 135 million

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.

As key audit matter the following area of focus has been identified:

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 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 135 million
How we determined it	1% of total assets
Rationale for the materiality benchmark applied	We chose total assets as the benchmark because, in our view, it is the relevant benchmark for a holding company with no own business activities, and it is a generally accepted benchmark.

We agreed with the Audit Committee that we would report to them misstatements above CHF 13.5 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 designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

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 judgement, 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.

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 11.4 billion, which makes up more than 83% of the Company's total assets.

Investments in subsidiaries are carried at cost less necessary impairments and valued on an individual basis.

Management assesses whether there are any impairments in the carrying value of the investments in subsidiaries. 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.

We refer to note 3, para b) ("Summary of significant accounting policies") and note 8 ("Investments in subsidiaries") to the financial statements 2019.

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 a selected key control 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:

- Assessed the appropriateness of the Company's impairment testing methodology.
- Tested the mathematical accuracy of management's calculations.
- Tested the reasonableness of the assumptions used in the impairment assessment including projections of future income, terminal growth rate assumptions and discount rates.
- Re-performed management's impairment test on the carrying value of each investment in subsidiary, and challenged the impairment decisions taken.

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, February 12, 2020

Glossary

Group

Book value per share
is a measure that is calculated by dividing shareholders' equity by the number of shares issued less the number of treasury shares as of the period end.

Business operating profit (BOP)
is the Group's internal performance measure, on which the Group manages all of its business units. It indicates the underlying performance, 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. **Business operating profit before interest, depreciation and amortization (BOPBIDA)** excludes interest expense on debt, depreciation and impairments of property and equipment and amortization and impairments of intangible assets. BOPBIDA includes amortization of deferred policy acquisition costs, deferred origination costs and distribution agreements. Please refer to the 'consolidated financial statements, Note 27. Segment information, Table 27.4' for further information.

Business operating profit (after-tax) return on shareholders' equity (BOPAT ROE)
indicates the level of BOP relative to resources provided by shareholders. It is calculated as BOP, annualized on a linear basis and adjusted for taxes, divided by the average value of shareholders' equity, adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges, using the value at the beginning and end of each quarter within the period. The average shareholders' equity for each quarter is then added together and divided by the number of quarters. If the dividend is approved at the Annual General Meeting within the first ten working days in April, then the dividend is deducted from the second quarter opening shareholders' equity. Please refer to the 'supplementary information (unaudited)/ROE, EPS and BVPS' for further information.

Cash remittances
is the net extraction of capital from each of the business units (P&C, Life, Farmers and Non-Core Business) to Group Functions & Operations (GF&O) and after all central costs in GF&O. Cash remittances are typically extracted from subsidiaries by way of dividends, capital reductions, repayment of intragroup debt and reinsurance profits.

Investments
Total investments in the consolidated balance sheets include **Group investments** and investments for unit-linked contracts. Group investments are those for which the Group bears part or all of the investment risk. They also include investments related to investment contracts with discretionary participation features. Average invested assets include investment cash, but exclude cash collateral received for securities lending. The Group manages its diversified investment portfolio to optimize benefits for both shareholders and policyholders while ensuring compliance with local regulatory and business requirements under the guidance of the Group's Asset/Liability Management and Investment Committee. **Investments for unit-linked contracts** include investments where the policyholder bears the investment risk, and are held for liabilities related to unit-linked investment contracts and reserves for unit-linked contracts. They are managed in accordance with the investment objectives of each unit-linked fund. The investment result for unit-linked products is passed to policyholders through a charge to policyholder dividends and participation in profits.

Like-for-like
is the change in the underlying metric over a period of time and after removing the impact of foreign exchange movements and the impact of acquisitions and disposals.

Net savings
are based on savings calculated on the total direct cash expenses of the Group including unallocated loss adjustment expenses (ULAE) after allowance for inflation and incremental investment.

Return on shareholders' equity (ROE)
is a measure that indicates the level of profit or loss relative to resources provided by shareholders. It is calculated as net income after taxes attributable to shareholders, annualized on a linear basis, divided by the average value of shareholders' equity, adjusted for net unrealized gains/(losses) on available-for-sale investments and cash flow hedges, using the value at the beginning and end of each quarter within the period. The average shareholders' equity for each quarter is then added together and divided by the number of quarters. If the dividend is approved at the Annual General Meeting within the first ten working days in April, then the dividend is deducted from the second quarter opening shareholders' equity. Please refer to the 'supplementary information (unaudited)/ROE, EPS and BVPS' for further information.

Zurich Economic Capital Model (Z-ECM)
is an internal economic capital model which defines the Z-ECM capital required to protect the Group's policyholders in order to meet all of their claims with a confidence level of 99.95 percent over a one-year time horizon. The Z-ECM ratio is defined as the ratio of the Group's available financial resources defined under the Z-ECM to the required capital under the Z-ECM model. Please refer to the 'Annual Report/risk review' for further information.

Glossary (continued)

Property & Casualty

The following Property & Casualty (P&C) measures are net of reinsurance.

Net underwriting result
is calculated as the difference between net earned premiums and policy fees and the sum of net insurance benefits and losses and net technical expenses. Please refer to the 'supplementary information (unaudited)/P&C by segment & customer units' for further information.

Total net technical expenses
includes underwriting and policy acquisition costs, as well as the technical elements of administrative and other operating expenses, amortization of intangible assets, interest credited to policyholders and other interest, and other income. Please refer to the 'supplementary information (unaudited)/P&C by segment & customer units' for further information.

Combined ratio
is a performance measure that indicates the level of claims and net technical expenses during the period, relative to net earned premiums and policy fees. It is calculated as the sum of the loss ratio and the expense ratio. Please refer to the 'supplementary information (unaudited)/P&C by segment & customer units' for further information.

Loss ratio
is a performance measure that indicates the level of claims during the period relative to net earned premiums and policy fees. It is calculated as insurance benefits and losses net, which include paid claims, claims incurred but not reported (IBNR) and claims handling costs, divided by net earned premiums and policy fees. Please refer to the 'supplementary information (unaudited)/P&C by segment & customer units' for further information.

Expense ratio
is a performance measure that indicates the level of technical expenses during the period relative to net earned premiums and policy fees. It is calculated as the sum of net technical expenses and policyholder dividends and participation in profits, divided by net earned premiums and policy fees. Please refer to the 'Supplementary information (unaudited)/P&C by segment & customer units' for further information.

Net non-technical result
includes expenses or income not directly linked to insurance operating performance, such as gains/losses on foreign currency translation and interest expense on debt. It includes the impact of financial market volatility and other non-operational variables that distort the ongoing business performance. Please refer to the 'supplementary information (unaudited)/P&C by segment & customer units' for further information.

Life

Embedded value (EV) principles
is a methodology using a 'bottom-up' market consistent approach, which explicitly allows for market risk. In particular, asset and liability cash flows are valued using risk discount rates consistent with those applied to similar cash flows in the capital markets. Options and guarantees are valued using market consistent models calibrated to observable market prices. Please refer to the 'embedded value report/embedded value methodology' for further information.

Insurance deposits
are deposits, similar to customer account balances, not recorded as revenues. However, the fees charged on insurance deposits are recorded as revenue within gross written premiums and policy fees. These deposits arise from investment contracts and insurance contracts that are accounted for under deposit accounting. They represent the pure savings part, which is invested.

New business annual premium equivalent (APE)
is a sales index that reflects the volume of life new business sales during the period. APE is calculated as the value of new annual premiums plus 10 percent of new single premiums sold in the period and is stated before the effect of non-controlling interests. **Present value of new business premiums (PVNBP)** is calculated as the present value of new business premiums discounted at the risk-free rate, before the effect of non-controlling interests.

New business margin (NBM)
is a measure that reflects the profitability of new business and is calculated as the new business value divided by APE after the effect of non-controlling interests.

New business value (NBV), after tax
is a measure that reflects the value added by new business written during the period, including allowances for frictional costs, time value of options and guarantees, and the cost of non-market risk, and is valued at the point of sale. It is calculated as the present value of the projected after-tax profit from life insurance contracts sold during the period using a valuation methodology consistent with the EV principles, after the effect of non-controlling interests.

Glossary (continued)

Farmers

Gross management result
is a performance measure of Farmers Management Services calculated as management fees and other related revenues minus management and other related expenses, including amortization and impairments of intangible assets. Please refer to the 'supplementary information (unaudited)/Farmers' for further information.

Managed gross earned premium margin
is a performance measure calculated as the gross operating profit of Farmers Management Services divided by the gross earned premiums of the Farmers Exchanges, which 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.

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Financial calendar

For more information see page 25 of this report
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Disclaimer and cautionary statement

Imprint

The Annual Report is published in English and German, with the financial statements in English only. In the event of inconsistencies in the German translation, the English original version shall prevail.

Our reporting consists of the Annual Report, which is divided into the Group overview, the governance, the risk review and the financial review, and which contains the annual financial statements (Holding Company) and the consolidated financial statements. With regards to content, the management report as per the Articles of Association consists of the aforementioned reports excluding the remuneration report.

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