

We make
the world
more
resilient.



Half-Year 2018
Report

Contents

Financial highlights	2
Share performance & Ratings	3
Letter to shareholders	4
Key events	6
Business Units at a glance	8
Group results	10
Reinsurance	12
Property & Casualty Reinsurance	12
Life & Health Reinsurance	14
Corporate Solutions	15
Life Capital	16

Group financial statements (unaudited)	17
Income statement	18
Statement of comprehensive income	19
Balance sheet	20
Statement of shareholders' equity	22
Statement of cash flows	24

Notes to the Group financial statements (unaudited)	26
Note 1 Organisation and summary of significant accounting policies	26
Note 2 Information on business segments	29
Note 3 Insurance information	39
Note 4 Premiums written	43
Note 5 Unpaid claims and claim adjustment expenses	44
Note 6 Deferred acquisition costs (DAC) and acquired present value of future profits (PVFP)	46
Note 7 Investments	48
Note 8 Fair value disclosures	58
Note 9 Derivative financial instruments	72
Note 10 Acquisitions	76
Note 11 Debt and contingent capital instruments	77
Note 12 Earnings per share	79
Note 13 Benefit plans	80
Note 14 Variable interest entities	81

General information	86
Cautionary note on forward-looking statements	86
Note on risk factors	88
Contacts	96
Corporate calendar	96

Swiss Re Ltd

Swiss Re Ltd is the holding company of the Swiss Re Group. Its shares are listed in accordance with the International Reporting Standard on the SIX Swiss Exchange and trade under the symbol SREN.

Financial highlights

For the six months ended 30 June

USD millions, unless otherwise stated	2017	2018	Change in %
Group			
Net income attributable to common shareholders	1 211	1 006	-17
Premiums earned and fee income	16 204	16 830	4
Earnings per share in CHF	3.75	3.13	-17
Common shareholders' equity (31.12.2017/30.06.2018)	33 374	30 051	-10
Return on equity in % ¹	7.0	6.3	
Return on investments in % ²	3.5	2.6	
Net operating margin in %	9.9	8.2	
Number of employees ³ (31.12.2017/30.06.2018)	14 485	14 613	1
Property & Casualty Reinsurance			
Net income attributable to common shareholders	546	752	38
Premiums earned	7 978	7 701	-3
Combined ratio in %	97.4	92.9	
Net operating margin in %	10.0	13.0	
Return on equity in % ¹	9.1	14.5	
Life & Health Reinsurance			
Net income attributable to common shareholders	432	398	-8
Premiums earned and fee income	5 769	6 389	11
Net operating margin in %	11.2	9.9	
Return on equity in % ¹	12.7	11.5	
Corporate Solutions			
Net income attributable to common shareholders	39	58	49
Premiums earned	1 748	1 918	10
Combined ratio in %	104.5	101.7	
Net operating margin in %	2.4	3.8	
Return on equity in % ¹	3.6	5.0	
Life Capital			
Net income attributable to common shareholders	143	34	-76
Premiums earned and fee income	709	822	16
Gross cash generation ⁴	532	848	59
Net operating margin in %	13.9	5.2	
Return on equity in % ¹	4.0	1.1	

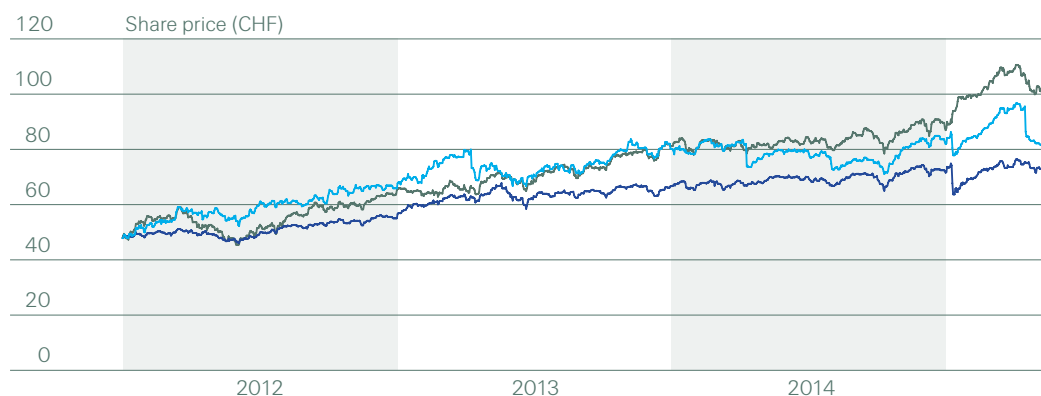
¹ Return on equity is calculated by dividing annualised net income attributable to common shareholders by average common shareholders' equity.

² Annualised, unless otherwise stated.

³ Regular staff.

⁴ Gross cash generation is the change in excess capital available over and above the target capital position, with the target capital being the minimum statutory capital plus the additional capital required by Life Capital's capital management policy, before consideration of the 15% interest in ReAssure held by MS&AD Insurance Group Holdings Inc.

Creating shareholder value



Share performance & Ratings

Share vs benchmarks

Performance in %	1 January 2012 to 27 July 2018 (p.a.)	Year to 27 July 2018
Swiss Re	10.0	-1.9
Swiss Market Index	6.8	-2.2
STOXX Europe 600 Insurance Index	12.0	-2.5

As of 27.07.2018	
Share price in CHF	89.54
Market capitalisation in CHF millions	30 320

Ratings

Standard & Poor's	AA-
Moody's	Aa3
A.M. Best	A+



— Swiss Re
 — Swiss Market Index
 — STOXX Europe 600 Insurance Index

Letter to shareholders

Charting new ground to expand our access to risk

1.0

Group net income
(USD billions)
for the first six
months of 2018

Dear shareholders,

We live in turbulent times. Views on the current state of global affairs are certainly mixed right now. If you ask an economist, they would likely share an optimistic view – global economic growth was strong in the first half of the year. Of course, we are pleased about that. But at the same time, geopolitical risks are the most concerning we've seen in a long period. Consider Brexit, the looming trade war and what seems to be a general movement away from globalisation. As a global organisation, we are not immune to these developments. Cross-border access to risk is crucial for re/insurers to absorb risk for individuals, businesses and the economy more broadly. Needless to say that we engage with clients, business partners and governments around the world to share our views of the risks.

If you've been following Swiss Re, you will know that we have also been concerned about central banks' unconventional monetary policies for quite some time. Following a period of historically low interest rates, we are pleased to now see a slow normalisation of monetary policy. The US Federal Reserve has set the tone by gradually raising rates.

Even in these turbulent times, we reported Group net income of USD 1.0 billion for the first half of 2018, with a return on equity (ROE) of 6.3% for the Group. Due to a change in US GAAP accounting guidance that came into effect in January 2018, our results reflect a negative pre-tax impact of USD 265 million. Our solid performance shows the value of our diversified book of business and our underwriting discipline. We continue to be extremely well capitalised and are ready for any opportunity or challenge that lies ahead.

Following the July P&C reinsurance treaty renewals, which focus mainly on the Americas, we managed to maintain an attractive portfolio. Year-to-date, the treaty premium volume increased by 9% to USD 14.4 billion, as we continued to allocate capital only to those opportunities that meet our profitability criteria. The year-to-date risk-adjusted price quality of the renewed portfolio stood at 103%, while the risk-adjusted price quality of the renewed portfolio improved to 104% in July. These developments are encouraging after experiencing a soft market for years.

In a world that seems to go back to a state of higher uncertainty, our vision of making the world more resilient through both our investment and business activities remains crucial. Our experience over the past year indicates that integrating Environmental, Social and Governance (ESG) benchmarks into our investment processes will lead to improved risk-adjusted returns in the long term. On the business side, we started to implement a thermal coal policy in July this year, by which we will no longer provide insurance coverage to businesses with more than 30% coal exposure. Our policy supports our commitment to limiting global warming to 1.5°C – 2°C as part of the Paris Pledge for Action and will help us guide our business towards a low-carbon economy and support our clients in the energy transition.

Even in these challenging times, your Swiss Re remains extremely well positioned. We are a leading risk knowledge company expanding our access to risk pools worldwide. How are we doing that? By applying our accumulated risk knowledge, partnering with our clients and harnessing innovative technologies to develop solutions that help extend insurance coverage to more people. For instance, our digital life insurance platform – provided through our iptiQ business – makes it possible for people to buy insurance through new channels. With the platform, our clients and partners can take advantage of our technology and knowledge, but distribute attractive products under their



Walter B. Kielholz
Chairman of the Board of Directors



Christian Mumenthaler
Group CEO

own brand. We're already seeing dynamic growth in iptiQ, and there's great potential to work with many more partners and reach millions of people. Likewise, we combine our risk expertise with analytics and algorithms to develop innovative solutions for our reinsurance clients. For example, in motor insurance, we expect that telematics will become a major avenue of growth. Our end-to-end telematics solution gives our clients the ability to analyse big data from connected vehicles, digitalise their processes and ultimately stay ahead of the competition in a rapidly expanding market.

In order to grow in the commercial insurance space, we continue to expand our footprint and improve our international business capabilities in Corporate Solutions. Through our proprietary technology platform, we currently offer domestic insurance coverage to companies headquartered in 18 countries and, in 9 out of these 18 countries, we can also offer international insurance coverage. Overall, our Corporate Solutions global network structure extends to over 80 countries. Technology-enabled service excellence will help set Corporate Solutions apart in the future. PULSE, for example, is our digital portal providing clients and brokers with real-time access to policy, claim and risk-improvement information.

Solutions like these are crucial to expanding our access to risk. They are only possible with the latest technology – and, overall, we remain convinced that technology

will fundamentally change the re/insurance value chain. To fully utilise the potential of digitalisation and help our clients master technological change, we have also built relationships with universities, tech companies and joint ventures all around the world – from Palo Alto to Beijing and Tel Aviv. Together, we are exploring ideas and partnerships to support our industry's digital transformation.

No doubt, these are very exciting and transformative times for Swiss Re and the re/insurance industry in general. We see big opportunities ahead as risk pools around the world continue to grow. We are charting new ground to share in the opportunities with our clients and partners, and ultimately support a more resilient society. Applying the knowledge that we have accumulated over more than 154 years, the innovativeness as well as the future-orientated research by the Swiss Re Institute, provides a solid foundation for our continued success story; manifested also by our globally renowned *sigma* publication series, celebrating its 50th anniversary this year.

Zurich, 3 August 2018

Walter B. Kielholz
Chairman of the Board of Directors

Furthermore, as we have previously communicated, and demonstrated by the investment of MS&AD in ReAssure, securing third-party capital to pursue further closed book transactions is already part of Swiss Re's strategy. We are therefore exploring a potential initial public offering (IPO) of our UK closed book business ReAssure in 2019. Given the size of potential opportunities that are expected in the market over the mid-term, it is important for ReAssure to have access to substantial new capital to acquire additional closed books. Under Swiss Re's Swiss Solvency Test capital regime, ReAssure's asset-intensive business is subject to significant asset risk charges. Nonetheless, the closed book consolidation market remains an attractive growth area for Swiss Re and we expect to remain a significant investor in ReAssure. Of course, there is no certainty that the explorations will lead to any transaction and we will keep you updated as appropriate.

We feel fortunate to be able to navigate these turbulent times with the best talent in the industry – who we thank for their hard work in the first half of 2018. We also thank you, our shareholders, for continuing to place your trust in us.

Christian Mumenthaler
Group CEO

Key events

31 January

Swiss Re further strengthened its position in Asia with the establishment of its regional headquarters in Singapore and the first regional Board of Directors, demonstrating its commitment to the region.

23 January

Swiss Re and India's National Insurance Academy signed a Memorandum of Understanding, an initiative aimed at developing re/insurance skills, insights and expertise among students and professionals aspiring to pursue careers in insurance in India.

19 February

Swiss Re completed its share buy-back programme of up to CHF 1.0 billion purchase value, launched on 3 November 2017.

23 February

Swiss Re reports full-year 2017 net income of USD 331 million despite USD 4.7 billion natural catastrophe losses. The Board of Directors put forward proposals to increase the regular dividend to CHF 5.00 per share and to launch a new share buy-back programme.

8 March

Swiss Re partners with The Nature Conservancy (TNC) to develop a parametric insurance policy to protect natural assets, such as coral reefs and coastlines.

15 March

Swiss Re's Board of Directors proposed an increased dividend of CHF 5.00 per share and a new share buy-back programme of up to CHF 1.0 billion at the Annual General Meeting of shareholders (AGM) on 20 April 2018.

4 April

Swiss Re hosted its Investors' Day to discuss its strategy of building on its superior capital strength, its continued investment in research and development, and its ongoing client commitment. The discussion featured Swiss Re's tech strategy.

10 April

A Swiss Re *sigma* study reported that global insured losses from disaster events of USD 144 billion in 2017 were the highest ever recorded by *sigma*.

20 April

Swiss Re shareholders approved all proposals put forward by the Board of Directors at the company's Annual General Meeting, including an increased dividend of CHF 5.00 per share, and authorised a new public share buy-back programme of up to CHF 1 billion.

2 May

Swiss Re announced the expansion of its African operations through its newly approved license for Property & Casualty business in South Africa, endorsing the development of a stronger African insurance industry.

4 May

Swiss Re reported net income of USD 457 million and a return on equity of 5.6% for the first quarter of 2018, which reflected an estimated negative pre-tax impact of USD 280 million due to a change in US GAAP accounting. The Group also announced its CHF 1.0 billion share buy-back programme was set to commence on 7 May 2018.

31 May

Swiss Re publishes its 2018 SONAR report, which provides insights on emerging risks that have the potential to affect the insurance industry landscape.

6 June

Swiss Re announces the offering of USD 500 million six-year senior exchangeable notes to replace its perpetual subordinated notes issued in 2012 and redeemed in 2017.

13 June

Swiss Re's *sigma* study reveals that the adoption of new technologies in construction will fundamentally affect the risk landscape for engineering insurance due to new risks, such as cyber.

26 June

Swiss Re launches "Responsible Investments – The next steps in our journey", a publication in which the Group shares its experience one year after its switch to ESG benchmarks. The publication provides insights into how ESG considerations have been reflected across Swiss Re's entire investment portfolio.

Business Units at a glance

Working across diversified insurance risks and businesses to maximise shareholder value

Half-year ended 30 June 2018	Net premiums earned and fee income (USD millions)	Net income (USD millions)	
Reinsurance Reinsurance provides clients and brokers with reinsurance products, insurance-based capital market instruments and risk management services. Reinsurance operates globally through two segments – Property & Casualty and Life & Health.	Property & Casualty	2018 H1 7 701	2018 H1 752
		H1* 789	2017 H1 546
	Life & Health	2018 H1 6 389	2018 H1 398
		H1* 416	2017 H1 432
Read more: page 12			
Corporate Solutions Corporate Solutions provides risk transfer solutions to large and mid-sized corporations around the world. Its innovative, highly customised products and standard insurance covers help to make businesses more resilient, while its industry-leading claims service provides additional peace of mind.		2018 H1 1 918	2018 H1 58
			H1* 65
		2017 H1 1 748	2017 H1 39
Read more: page 15			
Life Capital Life Capital manages closed and open life and health insurance books. It provides alternative access to the life and health risk pool, helping to generate stable returns and seize attractive new opportunities.		2018 H1 822	2018 H1 34
			H1* 23
		2017 H1 709	2017 H1 143
Read more: page 16			
Group (after consolidation)		2018 H1 16 830	2018 H1 1 006
			H1* 1 215
		2017 H1 16 204	2017 H1 1 211

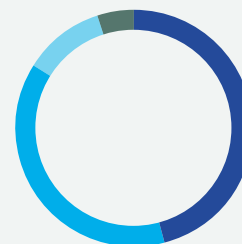
* Excludes for reference only, the impact of the new US GAAP guidance on recognition and measurement of financial instruments, which was effective for the Group as of 1 January 2018 and was not retroactively applied.

Return on equity	Return on equity*	Operating performance
14.5% (2017: 9.1%)	15.2%	Combined ratio 92.9% (2017: 97.4%)
11.5% (2017: 12.7%)	12.0%	Net operating margin 9.9% (2017: 11.2%)
5.0% (2017: 3.6%)	5.6%	Combined ratio 101.7% (2017: 104.5%)
1.1% (2017: 4.0%)	0.7%	Gross cash generation 848m (2017: USD 532m)
6.3% (2017: 7.0%)	7.7%	Net operating margin 8.2% (2017: 9.9%)

Diversified and global

Net premiums earned and fee income by business segment
(Total USD 16.8 billion)

- 46% P&C Reinsurance
- 38% L&H Reinsurance
- 11% Corporate Solutions
- 5% Life Capital



Group results

Swiss Re reported solid net income of USD 1.0 billion for the first six months of 2018, supported by premium growth and improved underwriting profitability.

Swiss Re reported net income of USD 1.0 billion for the first six months of 2018, down from USD 1.2 billion for the same period in 2017. The result reflects continued underwriting discipline offset by a lower non-participating investment result due to the absence of gains from sales of equity securities in the current period. The result was also adversely affected by the new US GAAP guidance on recognition and measurement of equity investments, which took effect as of 1 January 2018. Under the previous guidance, net income would have remained stable at USD 1.2 billion, compared to the same period last year. The net operating margin for the 2018 period was 8.2%, compared to 9.9% for the first six months of 2017.

Reinsurance reported net income of USD 1.2 billion, compared to USD 1.0 billion for the first half of 2017. Property & Casualty (P&C) Reinsurance accounted for USD 752 million, an increase from USD 546 million in the prior-year period. The current year's result benefited from strong underwriting performance and the absence of large loss experience, partially offset by lower realised gains. The net operating margin was 13.0%, compared to 10.0% in the prior-year period.

Life & Health (L&H) Reinsurance contributed USD 398 million for the first six months of 2018, a decrease from USD 432 million for the same period in 2017. The result was driven by a reduced investment return compared to the prior-year period, which included realised gains from sales of equity securities. The net operating margin was 9.9% in the first half of 2018 and 11.2% for the same period in 2017.

Corporate Solutions delivered net income of USD 58 million for the first six months of 2018, compared to USD 39 million for the same period of the previous year. The 2018 result was supported by better underwriting performance, partially offset by a reduced investment result due to lower realised gains from equity securities.

Life Capital delivered net income of USD 34 million for the first six months of 2018, down from USD 143 million for the same period in 2017, mainly due to the weaker UK investment market performance, impacting unit-linked and participating income. Life Capital's net operating margin dropped to 5.2% in the first half of 2018, compared to 13.9% in the same period of the previous year.

Common shareholders' equity, excluding non-controlling interests and the impact of contingent capital instruments, decreased to USD 30.1 billion as of 30 June 2018 from USD 33.4 billion at the end of December 2017. The decline reflects a payment to shareholders of USD 1.6 billion for the 2017 regular dividend, the share buy-back programmes launched in 2017 and 2018 as well as unrealised losses on fixed income securities, partially offset by net income for the first six months of 2018.

Return on equity (ROE) was 6.3% for the first half of 2018, compared to 7.0% for the prior-year period. Excluding the impact of the new US GAAP guidance, ROE would have been 7.7%. Earnings per share for the 2018 period were CHF 3.13 or USD 3.24, compared to CHF 3.75 (USD 3.76) for the first half of 2017.

Book value per common share decreased to USD 97.92 or CHF 97.21 at the end of June 2018, compared to USD 106.09 or CHF 103.37 at the end of December 2017. Book value per common share is based on common shareholders' equity and excludes non-controlling interests and the impact of contingent capital instruments.

Business performance

Premiums earned and fee income for the Group were USD 16.8 billion for the first six months of 2018, an increase from USD 16.2 billion in the same period of the previous year. At constant exchange rates, premiums and fees were in line with the prior-year period.

Premiums earned by P&C Reinsurance were USD 7.7 billion, a reduction from USD 8.0 billion for the same period of the previous year. The decline reflects continued underwriting discipline and active portfolio management. At constant exchange rates, premiums earned decreased by 6.7% from the prior-year period. The P&C Reinsurance combined ratio decreased to 92.9% from 97.4% for the first half of 2017, due to the absence of large natural catastrophe losses in 2018.

L&H Reinsurance premiums earned and fee income amounted to USD 6.4 billion in the first half of 2018, an increase from USD 5.8 billion year-on-year, driven by higher volumes mainly in EMEA and Asia. At constant exchange rates, premiums earned and fee income rose by 6.6%.

Corporate Solutions premiums earned increased to USD 1.9 billion from USD 1.7 billion in the prior-year period, primarily driven by growth in Primary Lead business. At constant exchange rates, premiums earned increased by 7.9%. The Corporate Solutions combined ratio was 101.7% for the first half of 2018, down from 104.5% for the same period of the previous year, primarily as a result of lower large loss activity.

Gross cash generation for Life Capital was exceptional at USD 848 million for the first six months of 2018, compared to USD 532 million for the same period of the previous year. The current year's result was driven by a strong underlying emerging surplus, the proceeds from the

Income statement

For the six months ended 30 June

USD millions	2017	2018	Change in %
Revenues			
Gross premiums written	18 145	19 589	8
Net premiums written	16 817	18 334	9
Change in unearned premiums	-867	-1 801	108
Premiums earned	15 950	16 533	4
Fee income from policyholders	254	297	17
Net investment income – non-participating business	1 786	2 023	13
Net realised investment gains/losses – non-participating business	574	-228	-140
Net investment result – unit-linked and with-profit business	1 622	385	-76
Other revenues	19	12	-37
Total revenues	20 205	19 022	-6
Expenses			
Claims and claim adjustment expenses	-6 322	-5 851	-7
Life and health benefits	-5 475	-5 990	9
Return credited to policyholders	-1 629	-520	-68
Acquisition costs	-3 387	-3 505	3
Operating expenses	-1 550	-1 625	5
Total expenses before interest expenses	-18 363	-17 491	-5
Income before interest and income tax expense	1 842	1 531	-17
Interest expenses	-284	-279	-2
Income before income tax expense	1 558	1 252	-20
Income tax expense	-314	-215	-32
Net income before attribution of non-controlling interests	1 244	1 037	-17
Income/loss attributable to non-controlling interests	1	-7	-
Net income after attribution of non-controlling interests	1 245	1 030	-17
Interest on contingent capital instruments, net of tax	-34	-24	-29
Net income attributable to common shareholders	1 211	1 006	-17

initial 5% stake sale in ReAssure to MS&AD and the finalisation of the 2017 Solvency II position.

Investment result and expenses

The Group's investment portfolio, excluding unit-linked and with-profit investments, decreased to USD 127.6 billion as of 30 June 2018, compared to USD 131.7 billion at the end of 2017. The decrease reflects the impact of rising interest rates and credit spread widening as well as a negative impact from foreign exchange rate movements.

The return on investments (ROI) was 2.6% for the first six months of 2018, compared to 3.5% for the same period of 2017. The decrease reflects the adverse impact of the new guidance on recognition and measurement of equity investments. Excluding the impact of the new US GAAP guidance, the estimated ROI would have been 3.0%, largely driven by net investment income.

The Group's non-participating net investment income was USD 2.0 billion, compared to USD 1.8 billion for the first six months of 2017. The increase reflects the impact from recent cash redeployment alongside rising interest rates as well as a higher contribution from alternative investments. The Group's fixed income running yield for the six-month period was 2.9% in 2018, in line with the same period in 2017.

The Group reported non-participating net realised losses of USD 0.2 billion for the first six months of 2018, compared to net realised gains of USD 0.6 billion for the same period in 2017. The decrease was primarily related to the contribution from equity securities, including the negative impact from the change in US GAAP guidance in the current year.

Acquisition costs for the Group increased to USD 3.5 billion for the first six months of 2018 from USD 3.4 billion for the same period of the previous year.

Operating expenses of USD 1.6 billion for the first half of 2018 remained stable year-on-year.

Interest expenses were USD 279 million, in line with the 2017 period.

The Group reported a tax charge of USD 215 million on a pre-tax income of USD 1.3 billion for the first six months of 2018, compared to a tax charge of USD 314 million on a pre-tax income of USD 1.6 billion for the same period in 2017. This translated into an effective tax rate in the current and prior-year reporting periods of 17.2% and 20.2%, respectively. The lower rate in the first half of 2018 was driven by tax benefits from intra-entity transfers, partially offset by a reduction in tax-exempt income compared to the prior-year period.

Reinsurance

The Reinsurance Business Unit, which comprises the segments Property & Casualty Reinsurance and Life & Health Reinsurance, reported a solid performance in the first six months of 2018.

Property & Casualty Reinsurance

Net income for the first six months of 2018 was USD 752 million, compared to USD 546 million in the same period of 2017, supported by strong underwriting performance partially offset by lower net realised gains, including the impact from the new US GAAP accounting guidance. Underwriting results benefited from an absence of large losses, whereas for the same period last year, it included losses from Cyclone Debbie in Australia and floods in Peru. The net operating margin was 13.0% in the current period, up from 10.0% for the same period of 2017.

The investment result was lower in the first six months of 2018 compared to the same period in 2017, largely related to the contribution from equity securities and the new US GAAP accounting guidance.

Premiums

Net premiums earned were USD 7.7 billion for the first six months of 2018, slightly down from USD 8.0 billion in the prior period, reflecting a reduction mainly in the Chinese quota share business. Gross premiums written grew by 1.8% to USD 9.6 billion in the first six months of 2018, primarily driven by favourable foreign exchange movements.

Combined ratio

P&C Reinsurance reported a combined ratio of 92.9% for the first half of 2018, compared to 97.4% in the prior-year period.

The current period benefited from benign loss experience and improved profitability of the underlying business, compared to large losses affecting the prior period. Prior-year development was positive for both periods.

Administrative expense ratio

The administrative expense ratio increased to 7.4% in the first six months of 2018, compared to 6.9% in the same period of 2017, due to foreign currency movements as well as lower premiums earned.

Lines of business

The property combined ratio decreased to 83.6% in the first six months of 2018, compared to 88.7% in the first six months of last year. The decrease was primarily due to an absence of large losses, while the comparative period included the impact from Cyclone Debbie and floods in Peru.

The casualty combined ratio slightly improved to 105.4% in the first six months of 2018, compared to 106.2% in 2017. The current period includes continued adverse development in the US, partially offset by positive prior accident year development.

The specialty combined ratio decreased to 72.3% for the first six months of 2018, compared to 85.9% in the first six months of 2017. This is a result of benign loss experience and positive prior-year development across all lines of business, predominantly in marine.

Investment result

The ROI was 2.1% for the first six months of 2018, compared to 3.0% in the same period of 2017, reflecting a reduction in the investment result of USD 147 million.

Net investment income increased by USD 163 million to USD 587 million for the first six months of 2018, driven by cash redeployment during 2017 and rising interest rates in most markets.

Net realised losses were USD 84 million for the first six months of 2018, compared to net realised gains of USD 217 million for the prior period. The decrease is largely related to the contribution from equity securities, as the prior period saw significant realised gains from sales, while the current period was negatively impacted by the new US GAAP accounting guidance.

Insurance-related investment results and foreign exchange gains/losses are not included in the figures above.

Shareholders' equity

Common shareholders' equity decreased to USD 10.0 billion as of 30 June 2018 from USD 10.8 billion as of 31 December 2017, primarily driven by dividends paid to the Group, partly offset by net income for the period. ROE for the first six months of 2018 was 14.5%, compared to 9.1% in the same period of 2017.

Outlook

Recent natural catastrophe occurrences led to rate increases for property in loss-affected-markets with ranges depending on the client and market loss. In non-loss-affected markets, rates have stabilized. We observed notable differences within Specialty lines with rate increases for loss-affected lines and markets, and moderately improving conditions in general. Pressure on general contract provisions also softened. Overall, trading conditions improved for most Property & Specialty lines. For Casualty, rates increased in segments where price levels appeared inadequate due to claims emergence (eg US Motor, US Liability and some Casualty Specialty lines). We also saw commissions reducing to address non-performance. Lastly, we continued to see some good opportunities for transactions and participated in those that met our requirements.

For Property and Casualty we are generally observing more opportunities and will increase our market share where prices, terms and conditions meet our expectations. Our differentiation model and the solutions we offer will allow us to access further attractive opportunities.

Life & Health Reinsurance

Net income was USD 398 million for the first six months of 2018, a decrease compared to the same period a year earlier. The current result was affected by lower realised gains from equity securities, partly offset by a slightly improved underwriting performance and lower operating expenses. The underwriting result benefited from improved results in Asia and EMEA and also a large transaction in Canada, partially offset by a seasonal increase in the number of claims in the US individual life business. This reflects Swiss Re's diversified product portfolio across markets. ROE was 11.5%, lower than the 12.7% reported for the same period of 2017.

Premiums

Net premiums earned and fee income increased by 10.7% to USD 6.4 billion, compared to USD 5.8 billion for the prior-year period. At constant foreign exchange rates, the increase was 6.6%. Gross premiums written in the first half increased 15.2% to USD 7.4 billion, a USD 1.0 billion increase compared to the first six months of 2017. These results reflect the positive impact of intra-group retrocession agreements and growth in Asia and EMEA, combined with favourable currency fluctuations. At constant exchange rates, the increase amounted to 11.2%.

Net operating margin

The net operating margin was 9.9% for the first six months of 2018, a decrease from 11.2% in the same period of 2017 driven by a lower investment result.

Management expense ratio

The management expense ratio was 5.0%, a decrease compared to the ratio of 5.8% in the prior-year period.

Lines of business

Income before interest and income tax expense (EBIT) for the life business slightly decreased to USD 378 million in the first six months of 2018, from USD 400 million in the prior-year period. Results for the half-year period of 2018 were impacted by a seasonal increase in the number of claims in the US individual life business, which was partially offset by a large transaction in Canada.

EBIT for the health business increased to USD 206 million in the first six months of 2018, from USD 105 million in the prior-year period. The 2018 result benefited from improved experience across all regions. The 2017 result was impacted by an increase in incurred but not reported (IBNR) in the UK critical illness business.

Investment result

The ROI was 3.6% in the first six months of 2018, compared to 4.2% in the same period of 2017, reflecting a decrease in the investment result of USD 112 million.

Net investment income increased by USD 25 million to USD 570 million for the first six months of 2018. The fixed income running yield was 3.3% in the reporting period.

Net realised gains were USD 75 million for the first six months of 2018, compared to USD 212 million for the same period in 2017, with the prior period positively impacted by significant net realised gains from sales of equity securities.

Insurance-related investment results and as foreign exchange gains/losses are not included in the figures above.

Shareholders' equity

Common shareholders' equity was USD 6.4 billion as of 30 June 2018, a decrease compared to USD 7.5 billion as of 31 December 2017. The decrease reflects the dividend paid to the Group and a change in net unrealised gains, partially offset by net income for the period.

ROE was 11.5% for the first six months of 2018, compared to 12.7% for the same period of 2017.

Outlook

We expect the life and health reinsurance business to be relatively flat in mature markets and to increase in high-growth markets. In mature markets, the prolonged low interest rate environment continues to have an unfavourable impact on long-term life business. Cession rates in the US are generally expected to decline as primary insurers retain more risk. However, we see a strong focus on capital, risk and balance sheet optimisation in mature markets, leading to opportunities for large transactions. High-growth markets are expected to see strong increases in primary life and health volumes and cession rates are expected to be stable.

We will continue to pursue growth opportunities in high-growth markets and in large transactions, including longevity deals. We are responding to the expanding need for health protection driven by ageing societies and we will apply our risk knowledge experience to help reduce the protection gap in all regions.

Corporate Solutions

Corporate Solutions benefits from a moderately improving market environment.

Corporate Solutions continued to invest in its Primary Lead capabilities in the first half of 2018. Through its proprietary technology platform, the Business Unit currently offers domestic insurance coverage to companies headquartered in 18 countries and, in 9 out of these 18 countries, Corporate Solutions can also offer international insurance programme coverage. Overall, the Corporate Solutions' global network structure extends to over 80 countries.

Corporate Solutions continued to expand its footprint by opening an office in Hamburg, Germany, focusing on servicing large and upper-mid-sized companies. The Business Unit also enhanced its presence in Mexico – where it has operated since 2014 – by obtaining a license to provide direct insurance through a newly established local subsidiary.

Performance

Net income was USD 58 million in the first six months of 2018, compared to USD 39 million in the same period of 2017, with a net operating margin of 3.8%, up from 2.4%. The result benefited from lower large natural catastrophe losses and an improved prior-year result, partially offset by higher large man-made losses compared to the same period of 2017. The investment result was lower in the first six months of 2018 compared to the same period of 2017, as the previous period benefited from higher gains on sales of equity securities.

Premiums

Net premiums earned were USD 1.9 billion in the first six months of 2018, an increase of 9.7%, mainly driven by growth in Primary Lead business, gradually realising the benefit from our strategic investment. Gross

premiums written and premiums for insurance in derivative form, net of internal fronting for the Reinsurance Business Unit, increased by 18.5% to USD 2.0 billion in the first six months of 2018, compared to USD 1.7 billion in the same period of 2017. Rates, as well as terms and conditions, improved after last year's natural catastrophe events, with high single-digit price increases in loss-affected accounts, but the rate environment remains challenging.

Combined ratio

The combined ratio decreased to 101.7% in the first six months of 2018, compared to 104.5% in the same period of 2017, primarily driven by lower large natural catastrophe losses and an improved prior-year result, partially offset by higher large man-made losses. The combined ratio continues to be heavily influenced by business written in previous underwriting years and last year in particular.

Lines of business

The property combined ratio for the first six months of 2018 improved by 13.5 percentage points to 91.7%, driven by lower large losses and favourable natural catastrophe reserve development. The first six months of 2017 were impacted by losses from Cyclone Debbie.

The casualty combined ratio decreased to 108.1% in the first six months of 2018, compared to 118.4% in the same period of 2017. Both periods were impacted by large losses, though to a lesser extent in 2018.

The specialty combined ratio for the first six months of 2018 deteriorated by 17.8 percentage points to 105.1%, impacted by a large engineering loss in Colombia.

Investment result

The ROI was 2.2% in the first six months of 2018, compared to 3.4% in the same period of 2017, driven by significantly lower net realised gains.

Net investment income increased by USD 20 million to USD 106 million in the first six months of 2018, mainly due to a higher invested asset base as well as benefiting from rising yields.

Net realised gains were USD 1 million compared to USD 60 million in the first six months of 2017, as the prior-year result benefited from significant realised gains from sales of equity securities.

Insurance-related derivative results and foreign exchange gains/losses are not included in the investment figures.

Corporate Solutions offers insurance protection against weather perils and other risks, which is accounted for as derivatives. Insurance in derivative form reported net realised gains of USD 8 million in the first six months of 2018, compared to losses of USD 5 million in the same period of 2017. The first six months of 2017 were impacted by the mild winter.

Shareholders' equity

Common shareholders' equity decreased to USD 2.2 billion since the end of 2017, with a USD 50 million dividend paid to the Group and a change in unrealised losses of USD 106 million, partially offset by net income for the period. ROE was 5.0% in the first six months of 2018, compared to 3.6% in the same period of 2017.

Outlook

Corporate Solutions expects a medium-paced, modest but steady increase of prices over the next 12 to 18 months, with more pronounced increases in property in the US and a reinforced focus on terms and conditions.

Corporate Solutions will maintain its commitment to underwriting discipline.

Life Capital

Life Capital's strategy is to create alternative access to attractive life and health risk pools. During the first half of 2018, the open book business saw strong growth in premiums written and the number of policies sold. For the closed book business, Life Capital continues to pursue selective growth.

During the first six months of 2018, net income for Life Capital declined to USD 34 million from USD 143 million in 2017, mainly due to the weaker UK investment market performance impacting unit-linked and participating income. The underlying performance in 2018 was supplemented by net realised gains on sales of fixed income securities and from market value gains on equity securities as well as lower direct costs.

The net operating margin in the first six months of 2018 was 5.2%, compared to 13.9% in the prior year.

Life Capital generated gross cash of USD 848 million during the first six months of 2018, compared to USD 532 million in the prior-year period. The exceptional gross cash generated in the current year was driven by strong underlying emerging surplus on the ReAssure business, proceeds from the sale of an initial 5% stake in ReAssure to MS&AD and the finalisation of the 2017 Solvency II position.

Life Capital paid a dividend of USD 1.1 billion to the Group during June 2018. This substantial dividend was driven by the strong capital position of the ReAssure business.

Premiums

Gross premiums written increased significantly by 98% to USD 1.8 billion during the first half of 2018, due to growth in both the individual and group open book businesses, including a large

medex transaction for iptiQ EMEA, combined with the impact of intra-group retrocession agreements.

Net premiums earned increased to USD 598 million in the first half of 2018, compared to USD 488 million in the prior-year period, due to growth in the open life and health insurance businesses and changes to intragroup retrocessions.

Investment result

The ROI was 3.4% in the first six months of 2018, in line with the same period in 2017.

Net investment income decreased by USD 12 million to USD 437 million in the first six months of 2018, mainly due to run-off within the closed book portfolios as well as lower reinvestment rates relative to the existing portfolio.

Net realised gains increased by USD 6 million to USD 58 million in the first six months of 2018, partly due to the absence of impairments in the current period.

Insurance-related investment results and foreign exchange gains/losses are not included in the figures above.

Operating expenses

Operating expenses were USD 238 million in the first six months of 2018, compared to USD 224 million in the same period last year.

Shareholders' equity

Common shareholders' equity decreased by USD 1.8 billion to USD 5.3 billion for the first six months of 2018, compared to 31 December 2017.

The decrease was mainly driven by a USD 1.1 billion dividend paid to the Group as well as a decrease of USD 0.9 billion from unrealised investment gains and currency translation, partially offset by net income in 2018. ROE was 1.1% for the first six months of 2018, compared to 4.0% for 2017. The year-on-year decrease was mainly due to the decline in net income in the current period.

Outlook

Life Capital continues to pursue growth of its individual and group life and health business in Europe and the US, and seeks selective acquisition opportunities within the closed book market in the UK. Our goal is to build a leading primary life and health business with attractive returns for shareholders through growth in both the open and closed books. In the open book business, the ambition is to grow via innovation and the use of digital technology. We continue to optimise capital and asset management, to maximise cash generation and ROE.

In the closed book business, Life Capital remains focused on achieving operational efficiencies by leveraging our operating platform. As previously communicated, and as demonstrated by the investment of MS&AD in ReAssure, securing third-party capital to pursue further closed book transactions is already part of Swiss Re's strategy. The Group is therefore exploring a potential initial public offering (IPO) of the UK closed book business ReAssure in 2019. Under the Group's Swiss Solvency Test capital regime, ReAssure's asset-intensive business is subject to significant asset risk charges. Nonetheless, the closed book consolidation market remains an attractive growth area for Swiss Re. We expect to remain a significant investor in ReAssure, if an IPO takes place. There can be no assurance that the exploration will result in an IPO of ReAssure, and there is no certainty as to the timing of, or the details relating to any such IPO, including its terms, structure or the size of Swiss Re's shareholding in ReAssure following any IPO.

Income statement

For the six months ended 30 June

USD millions	Note	2017	2018
Revenues			
Gross premiums written	4	18 145	19 589
Net premiums written	4	16 817	18 334
Change in unearned premiums		-867	-1 801
Premiums earned	3	15 950	16 533
Fee income from policyholders	3	254	297
Net investment income – non-participating business	7	1 786	2 023
Net realised investment gains/losses – non-participating business ¹	7	574	-228
Net investment result – unit-linked and with-profit business ²	7	1 622	385
Other revenues		19	12
Total revenues		20 205	19 022
Expenses			
Claims and claim adjustment expenses	3	-6 322	-5 851
Life and health benefits	3	-5 475	-5 990
Return credited to policyholders		-1 629	-520
Acquisition costs	3	-3 387	-3 505
Operating expenses		-1 550	-1 625
Total expenses before interest expenses		-18 363	-17 491
Income before interest and income tax expense		1 842	1 531
Interest expenses		-284	-279
Income before income tax expense		1 558	1 252
Income tax expense		-314	-215
Net income before attribution of non-controlling interests		1 244	1 037
Income/loss attributable to non-controlling interests		1	-7
Net income after attribution of non-controlling interests		1 245	1 030
Interest on contingent capital instruments, net of tax		-34	-24
Net income attributable to common shareholders		1 211	1 006
Earnings per share in USD			
Basic	12	3.76	3.24
Diluted	12	3.47	3.07
Earnings per share in CHF³			
Basic	12	3.75	3.13
Diluted	12	3.46	2.96

¹ Total impairments for the six months ended 30 June of USD 11 million in 2017 and nil in 2018, respectively, were fully recognised in earnings.

² Total impairments for the six months ended 30 June of USD 30 million in 2017 and USD 5 million in 2018, respectively, were fully recognised in earnings.

³ The translation from USD to CHF is shown for informational purposes only and has been calculated using the Group's average exchange rates.

The accompanying notes are an integral part of the Group financial statements.

Statement of comprehensive income

For the six months ended 30 June

USD millions	2017	2018
Net income before attribution of non-controlling interests	1 244	1 037
Other comprehensive income, net of tax:		
Change in net unrealised investment gains/losses	474	-1 693
Change in other-than-temporary impairment	2	
Change in cash flow hedges	-5	11
Change in foreign currency translation	225	-192
Change in adjustment for pension benefits	13	32
Change in credit risk of financial liabilities at fair value option		-1
Impact of sale to non-controlling shareholder		-259
Impact of Accounting Standards Updates ¹		-139
Other comprehensive income attributable to non-controlling interests		140
Total comprehensive income before attribution of non-controlling interests	1 953	-1 064
Interest on contingent capital instruments, net of tax	-34	-24
Comprehensive income attributable to non-controlling interests	1	-147
Total comprehensive income attributable to common shareholders	1 920	-1 235

¹ Impact of ASU 2018-02, ASU 2016-16 and ASU 2016-01. Please refer to Note 1 for more details.

Reclassification out of accumulated other comprehensive income

For the six months ended 30 June

2017 USD millions	Net unrealised investment gains/losses ¹	Other-than-temporary impairment	Cash flow hedges ¹	Foreign currency translation	Adjustment for pension benefits ³	Credit risk of financial liabilities at fair value option	Accumulated other comprehensive income
Balance as of 1 January	4 459	-5	-7	-6 074	-1 135	0	-2 762
Change during the period	1 525	4	18	105	-30		1 622
Amounts reclassified out of accumulated other comprehensive income	-911		-23		46		-888
Tax	-140	-2		120	-3		-25
Balance as of period end	4 933	-3	-12	-5 849	-1 122	0	-2 053

2018 USD millions	Net unrealised investment gains/losses ¹	Other-than-temporary impairment	Cash flow hedges ¹	Foreign currency translation ^{1,2}	Adjustment for pension benefits ³	Credit risk of financial liabilities at fair value option	Accumulated other comprehensive income
Balance as of 1 January	4 746	-2	-10	-5 548	-820	0	-1 634
Impact of sale to non-controlling shareholder	-325		1	52	13		-259
Impact of Accounting Standards Updates ⁴	-127				-17	5	-139
Change during the period	-2 235		8	-113	5	-1	-2 336
Amounts reclassified out of accumulated other comprehensive income	143		3	-3	36		179
Tax	399			-76	-9		314
Balance as of period end	2 601	-2	2	-5 688	-792	4	-3 875

¹ Reclassification adjustment included in net income is presented in "Net realised investment gains/losses – non-participating business".

² Reclassification adjustment is limited to translation gains and losses realised upon sale or upon complete or substantially complete liquidation of an investment in a foreign entity.

³ Reclassification adjustment included in net income is presented in "Operating expenses".

⁴ Impact of ASU 2018-02, ASU 2016-16 and 2016-01. Please refer to Note 1 for more details.

The accompanying notes are an integral part of the Group financial statements.

Balance sheet

ASSETS

USD millions	Note	31.12.2017	30.06.2018
Investments	7, 8, 9		
Fixed income securities:			
Available-for-sale (including 12 969 in 2017 and 10 991 in 2018 subject to securities lending and repurchase agreements) (amortised cost: 2017: 93 278; 2018: 90 309)		99 248	94 075
Trading (including 1 761 in 2017 and 2 263 in 2018 subject to securities lending and repurchase agreements)		2 538	3 027
Equity securities:			
Available-for-sale (including 277 in 2017 subject to securities lending and repurchase agreements) (cost: 2017: 3 544) ¹		3 862	
Trading ¹		3	
At fair value through earnings (including 97 in 2018 subject to securities lending and repurchase agreements) ¹			3 083
Policy loans, mortgages and other loans		4 110	4 214
Investment real estate		2 220	2 314
Short-term investments (including 411 in 2017 and 477 in 2018 subject to securities lending and repurchase agreements)		4 846	4 875
Other invested assets		9 904	10 422
Investments for unit-linked and with-profit business (including fixed income securities trading: 5 209 in 2017 and 4 973 in 2018, equity securities trading: 28 783 in 2017, equity securities at fair value through earnings: 27 493 in 2018)		35 166	33 746
Total investments		161 897	155 756
Cash and cash equivalents (including 322 in 2017 and 364 in 2018 subject to securities lending and 1 878 in 2017 and 1 228 in 2018 backing unit-linked and with-profit contracts)		6 806	6 819
Accrued investment income		1 095	989
Premiums and other receivables		13 834	15 234
Reinsurance recoverable on unpaid claims and policy benefits		7 942	7 606
Funds held by ceding companies		9 155	9 344
Deferred acquisition costs	6	6 871	7 722
Acquired present value of future profits	6	1 989	1 917
Goodwill		4 172	4 124
Income taxes recoverable		378	394
Deferred tax assets		4 817	5 301
Other assets		3 570	3 536
Total assets		222 526	218 742

¹ Change due to ASU 2016-01. Please refer to Note 1 for more details.

The accompanying notes are an integral part of the Group financial statements.

Financial statements

Group financial statements (unaudited)

LIABILITIES AND EQUITY

USD millions	Note	31.12.2017	30.06.2018
Liabilities			
Unpaid claims and claim adjustment expenses	5	66 795	65 174
Liabilities for life and health policy benefits	8	42 561	41 451
Policyholder account balances		37 537	35 811
Unearned premiums		11 769	13 574
Funds held under reinsurance treaties		3 109	3 176
Reinsurance balances payable		1 036	1 519
Income taxes payable		679	567
Deferred and other non-current tax liabilities		6 975	6 843
Short-term debt	11	433	901
Accrued expenses and other liabilities	7	7 190	8 619
Long-term debt	11	10 148	9 453
Total liabilities		188 232	187 088
Equity			
Contingent capital instruments		750	750
Common shares, CHF 0.10 par value			
2017: 349 452 281; 2018: 349 452 281 shares authorised and issued		33	33
Additional paid-in capital		368	556
Treasury shares, net of tax		-1 842	-2 706
Accumulated other comprehensive income:			
Net unrealised investment gains/losses, net of tax		4 746	2 601
Other-than-temporary impairment, net of tax		-2	-2
Cash flow hedges, net of tax		-10	2
Foreign currency translation, net of tax		-5 548	-5 688
Adjustment for pension and other post-retirement benefits, net of tax		-820	-792
Credit risk of financial liabilities at fair value option, net of tax			4
Total accumulated other comprehensive income		-1 634	-3 875
Retained earnings		36 449	36 043
Shareholders' equity		34 124	30 801
Non-controlling interests		170	853
Total equity		34 294	31 654
Total liabilities and equity		222 526	218 742

The accompanying notes are an integral part of the Group financial statements.

Statement of shareholders' equity

For the twelve months ended 31 December and the six months ended 30 June

USD millions	2017	2018
Contingent capital instruments		
Balance as of 1 January	1 102	750
Changes during the period	-352	
Balance as of period end	750	750
Common shares		
Balance as of 1 January	34	33
Cancellation of shares bought back	-1	
Balance as of period end	33	33
Additional paid-in capital		
Balance as of 1 January	341	368
Impact of sale to non-controlling shareholder ¹	34	123
Contingent capital instrument issuance costs	8	
Share-based compensation	-14	-21
Realised gains/losses on treasury shares ²	-1	86
Balance as of period end	368	556
Treasury shares, net of tax		
Balance as of 1 January	-1 763	-1 842
Purchase of treasury shares	-1 161	-834
Cancellation of shares bought back	1 006	
Issuance of treasury shares, including share-based compensation to employees ²	76	-30
Balance as of period end	-1 842	-2 706
Net unrealised investment gains/losses, net of tax		
Balance as of 1 January	4 459	4 746
Impact of sale to non-controlling shareholder ¹		-325
Impact of ASU 2018-02 ³		176
Impact of ASU 2016-16 ³		44
Impact of ASU 2016-01 ³		-347
Changes during the period	287	-1 693
Balance as of period end	4 746	2 601
Other-than-temporary impairment, net of tax		
Balance as of 1 January	-5	-2
Changes during the period	3	
Balance as of period end	-2	-2
Cash flow hedges, net of tax		
Balance as of 1 January	-7	-10
Impact of sale to non-controlling shareholder ¹		1
Changes during the period	-3	11
Balance as of period end	-10	2
Foreign currency translation, net of tax		
Balance as of 1 January	-6 074	-5 548
Impact of sale to non-controlling shareholder ¹		52
Changes during the period	526	-192
Balance as of period end	-5 548	-5 688

Financial statements

Group financial statements (unaudited)

USD millions	2017	2018
Adjustment for pension and other post-retirement benefits, net of tax		
Balance as of 1 January	-1 135	-820
Impact of sale to non-controlling shareholder ¹		13
Impact of ASU 2018-02 ³		-17
Changes during the period	315	32
Balance as of period end	-820	-792
Credit risk of financial liabilities at fair value option, net of tax		
Balance as of 1 January	0	0
Impact of ASU 2016-01 ³		5
Changes during the period		-1
Balance as of period end	0	4
Retained earnings		
Balance as of 1 January	38 682	36 449
Net income after attribution of non-controlling interests	398	1 030
Interest on contingent capital instruments, net of tax	-67	-24
Dividends on common shares	-1 559	-1 592
Cancellation of shares bought back	-1 005	
Impact of ASU 2018-02 ³		-159
Impact of ASU 2016-16 ³		-3
Impact of ASU 2016-01 ³		342
Balance as of period end	36 449	36 043
Shareholders' equity	34 124	30 801
Non-controlling interests		
Balance as of 1 January	82	170
Transactions with non-controlling interests	93	688
Income/loss attributable to non-controlling interests	-5	7
Other comprehensive income attributable to non-controlling interests		
Change in unrealised investment gains/losses		236
Change in foreign currency translation		-84
Other		-12
Dividends to non-controlling interests		-152
Balance as of period end	170	853
Total equity	34 294	31 654

¹ In the first half-year of 2018, MS&AD Insurance Group Holdings Inc (MS&AD) acquired a 15% non-controlling interest in ReAssure, a subsidiary of the Group.

² In the first half-year of 2018, the Group performed a review of the carrying values of treasury shares, resulting in an increase of USD 65 million in treasury shares and a corresponding increase of the same amount in additional paid-in capital. The reclassification has no impact on net income or net equity of the Group.

³ Impact of Accounting Standards Update. Please refer to Note 1 for more details.

The accompanying notes are an integral part of the Group financial statements.


Statement of cash flows

For the six months ended 30 June

USD millions	2017	2018
Cash flows from operating activities		
Net income attributable to common shareholders	1 211	1 006
Add net income/loss attributable to non-controlling interests	-1	7
Adjustments to reconcile net income to net cash provided/used by operating activities:		
Depreciation, amortisation and other non-cash items	252	269
Net realised investment gains/losses	-1 685	384
Income from equity-accounted investees, net of dividends received	50	-38
Change in:		
Technical provisions and other reinsurance assets and liabilities, net	2 088	-787
Funds held by ceding companies and under reinsurance treaties	-422	-152
Reinsurance recoverable on unpaid claims and policy benefits	101	195
Other assets and liabilities, net	-392	-115
Income taxes payable/recoverable	-205	-333
Trading positions, net	309	123
Net cash provided/used by operating activities	1 306	559
Cash flows from investing activities		
Fixed income securities:		
Sales	24 399	24 220
Maturities	2 635	2 674
Purchases	-28 418	-25 522
Net purchases/sales/maturities of short-term investments	2 965	-278
Equity securities:		
Sales	2 127	1 264
Purchases	-2 247	-683
Securities purchased/sold under agreement to resell/repurchase, net	-2 161	537
Cash paid/received for acquisitions/disposals and reinsurance transactions, net		-11
Net purchases/sales/maturities of other investments	156	169
Net purchases/sales/maturities of investments held for unit-linked and with-profit business	1 312	334
Net cash provided/used by investing activities	768	2 704
Cash flows from financing activities		
Policyholder account balances, unit-linked and with-profit business:		
Deposits	296	296
Withdrawals	-1 470	-1 552
Issuance/repayment of long-term debt	-152	380
Issuance/repayment of short-term debt	-561	-441
Purchase/sale of treasury shares	-542	-826
Dividends paid to shareholders	-1 559	-1 592
Dividends paid to non-controlling interests		-152
Transactions with non-controlling interests		811
Net cash provided/used by financing activities	-3 988	-3 076

Financial statements

Group financial statements (unaudited)



USD millions	2017	2018
Total net cash provided/used	-1 914	187
Effect of foreign currency translation	284	-174
Change in cash and cash equivalents	-1 630	13
Cash and cash equivalents as of 1 January	9 011	6 806
Cash and cash equivalents as of 30 June	7 381	6 819

Interest paid was USD 201 million and USD 198 million (thereof USD 25 million and USD 23 million for letter of credit fees) for the six months ended 30 June 2017 and 2018, respectively. Tax paid was USD 510 million and USD 542 million for the six months ended 30 June 2017 and 2018, respectively.

Cash and cash equivalents include restricted cash and restricted cash equivalents, for instance pledged cash and cash equivalents (please refer to Note 7, "Investments").

The accompanying notes are an integral part of the Group financial statements.

Notes to the Group financial statements

1 Organisation and summary of significant accounting policies

Nature of operations

The Swiss Re Group, which is headquartered in Zurich, Switzerland, comprises Swiss Re Ltd (the parent company) and its subsidiaries (collectively, the “Swiss Re Group” or the “Group”). The Swiss Re Group is a wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer. Working through brokers and a network of offices around the globe, the Group serves a client base made up of insurance companies, mid-to-large-sized corporations and public-sector clients.

Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (US GAAP). All significant intra-group transactions and balances have been eliminated on consolidation. The year-end balance sheet data presented was derived from audited financial statements. These interim financial statements do not include all disclosures that US GAAP requires on an annual basis and therefore they should be read in conjunction with the Swiss Re Group’s audited financial statements for the year ended 31 December 2017.

Use of estimates in the preparation of financial statements

The preparation of financial statements requires management to make significant estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses as well as the related disclosures, including contingent assets and liabilities. The Group’s liabilities for unpaid claims and claim adjustment expenses and policy benefits for life and health include estimates for premium, claim and benefit data not received from ceding companies at the date of the financial statements. In addition, the Group uses certain financial instruments and invests in securities of certain entities for which exchange trading does not exist. The Group determines these estimates based on historical information, actuarial analysis, financial modelling and other analytical techniques. Actual results could differ significantly from the estimates described above.

Valuation of financial assets

The fair value of the majority of the Group’s financial instruments is based on quoted prices in active markets or observable inputs. These instruments include government and agency securities, commercial paper, most investment-grade corporate debt, most high-yield debt securities, exchange-traded derivative instruments, most mortgage- and asset-backed securities and listed equity securities. In markets with reduced or no liquidity, spreads between bid and offer prices are normally wider compared to spreads in highly liquid markets. Such market conditions affect the valuation of certain asset classes of the Group, such as some asset-backed securities as well as certain derivative structures referencing such asset classes.

The Group considers both the credit risk of its counterparties and own risk of non-performance in the valuation of derivative instruments and other over-the-counter financial assets. In determining the fair value of these financial instruments, the assessment of the Group’s exposure to the credit risk of its counterparties incorporates consideration of existing collateral and netting arrangements entered into with each counterparty. The measure of the counterparty credit risk is estimated with incorporation of the observable credit spreads, where available, or credit spread estimates derived based on the benchmarking techniques where market data is not available. The impact of the Group’s own risk of non-performance is analysed in the manner consistent with the aforementioned approach, with consideration of the Group’s observable credit spreads. The value representing such risk is incorporated into the fair value of the financial instruments (primarily derivatives), in a liability position as of the measurement date. The change in this adjustment from period to period is reflected in realised gains and losses in the income statement.

For assets or derivative structures at fair value, the Group uses market prices or inputs derived from market prices. A separate internal price verification process, independent of the trading function, provides an additional control over the market prices or market input used to determine the fair values of such assets. Although management considers that appropriate values have been ascribed to such assets, there is always a level of uncertainty and judgement over these valuations. Subsequent valuations could differ significantly from the results of the process described above. The Group may become aware of counterparty

valuations, either directly through the exchange of information or indirectly, for example, through collateral demands. Any implied differences are considered in the independent price verification process and may result in adjustments to initially indicated valuations. As of 30 June 2018, the Group has not provided any collateral on financial instruments in excess of its own market value estimates.

Subsequent events

Subsequent events for the current reporting period have been evaluated up to 2 August 2018. This is the date on which the financial statements are available to be issued.

Recent accounting guidance

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, "Revenue from Contracts with Customers", which creates topic 606, "Revenue from Contracts with Customers". ASU 2014-09 outlines the principles that an entity should follow to provide useful information about the amount, timing and uncertainty of revenue and cash flows arising from contracts with its customers. The standard requires an entity to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Insurance contracts and financial instruments are not in the scope of the new standard. The Group adopted ASU 2014-09 on 1 January 2018 together with the following ASUs related to topic 606: ASU 2016-08 "Principal versus Agent considerations (Reporting Revenue Gross versus Net)", ASU 2016-10 "Identifying Performance Obligations and Licensing", ASU 2016-12 "Narrow-Scope Improvements and Practical Expedients", and ASU 2016-20 "Technical Corrections and Improvements to Topic 606". The retrospective adoption of ASU 2014-09 and related ASUs did not have a material impact on the Group's financial statements.

In January 2016, the FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities", an update to subtopic 825-10, "Financial Instruments – Overall". The ASU requires the Group to carry investments in equity securities, including partnerships, unincorporated joint ventures and limited liability companies at fair value through earnings, with the exception of equity method investments, investments that result in consolidation or investments for which the measurement alternative has been elected. The Group did not elect the measurement alternative for any of its investments. For financial liabilities to which the fair value option has been applied, the ASU requires an entity to separately present the change in fair value attributable to instrument-specific credit risk in other comprehensive income rather than in net income. In addition, the ASU requires an entity to assess whether a valuation allowance is needed on a deferred tax asset (DTA) related to fixed income securities available-for-sale in combination with the entity's other DTAs rather than separately from other DTAs. The Group adopted ASU 2016-01 on 1 January 2018 together with ASU 2018-03, "Technical Corrections and Improvements to Financial Instruments – Overall (Subtopic 825-10)". The opening balance sheet impact from the adoption is a reclassification within shareholders' equity from net unrealised investment gains, net of tax, to retained earnings of USD 347 million. In addition, USD 5 million were reclassified from retained earnings to credit risk of financial liabilities at fair value option, net of tax. These reclassifications can be found in the statement of shareholders' equity. The impact on pre-tax earnings for the first half-year of 2018 due to the adoption of ASU 2016-01 is a net realised investment loss of USD 265 million.

In February 2016, the FASB issued ASU 2016-02, "Leases", which creates topic 842, "Leases". The core principle of topic 842 is that a lessee should recognise the assets and liabilities that arise from leases. A lessee should recognise in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing the right to use the underlying asset for the lease term. This accounting treatment applies to finance leases and operating leases. The accounting applied by a lessor is largely unchanged from that applied under the current guidance. The Group will adopt this ASU on 1 January 2019. The Group is currently assessing the impact of the new requirements.

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses", an update to topic 326, "Financial Instruments – Credit Losses". ASU 2016-13 replaces the incurred loss impairment methodology in current US GAAP with a methodology that reflects expected credit losses. For financial instruments that are measured at amortised cost and available-for-sale debt securities, the standard requires that an entity recognises its estimate of expected credit losses as an allowance. The ASU is effective for annual and interim periods beginning after 15 December 2020. Early adoption for interim and annual periods after 15 December 2018 is permitted. The Group is currently assessing the impact of the new requirements.

In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments", a consensus of the FASB Emerging Issues Task Force (EITF) to topic 230, "Statement of Cash Flows". ASU 2016-15 provides guidance on eight issues related to the presentation and classification of cash receipts and cash payments in the statement of cash flows with the objective of reducing existing diversity in practice. The Group adopted ASU 2016-15 retrospectively on 1 January 2018. The adoption did not have a material impact on the Group's statement of cash flows.

In October 2016, the FASB issued ASU 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory", an update to topic 740, "Income Taxes". This ASU amends the former guidance which prohibited the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset had been sold to an outside party. This new standard requires that an entity recognises the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The Group adopted ASU 2016-16 on 1 January 2018 on a modified retrospective basis through a cumulative-effect adjustment directly to

Financial statements

Notes to the Group financial statements (unaudited)

retained earnings as of the adoption date. The adoption resulted in an increase of net unrealised investment gains/losses, net of tax, of USD 44 million against a reduction of deferred tax of USD 41 million and retained earnings of USD 3 million. The movements in equity related to the adoption of ASU 2016-16 can be found in the statement of shareholders' equity. The impact on earnings in the first half-year of 2018 due to the adoption of ASU 2016-16 is a tax benefit of USD 28 million.

In November 2016, the FASB issued ASU 2016-18, "Restricted Cash", a consensus of the FASB EITF to topic 230, "Statement of Cash Flows". The update requires that the statement of cash flows explains the change during the period in the total of cash, cash equivalents, and restricted cash and restricted cash equivalents. Restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The Group adopted ASU 2016-18 retrospectively on 1 January 2018. The adoption did not have a material impact on the Group's financial statements.

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment", an update to topic 350, "Intangibles – Goodwill and Other". This ASU simplifies the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity has to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities (including unrecognised assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under the amendments in this update, an entity should perform its regular goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognise an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognised should not exceed the total amount of goodwill allocated to that reporting unit. The new requirements are effective for goodwill impairment tests in annual and interim periods beginning after 15 December 2020. Early application of the ASU is permitted. The Group is currently assessing the impact of the new requirements.

In February 2017, the FASB issued ASU 2017-05, "Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets", an update to subtopic 610-20, "Other Income – Gains and Losses from the Derecognition of Nonfinancial Assets". This update clarifies and provides guidance on the scope of Subtopic 610-20 including financial assets meeting the definition of an in-substance nonfinancial asset. The Group adopted ASU 2017-05 retrospectively on 1 January 2018. The adoption did not have an impact on the Group's financial statements.

In March 2017, the FASB issued ASU 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost", an update to topic 715, "Compensation – Retirement Benefits". The amendments in this update require that an employer separates other components of net benefit cost from the service cost component and presents these components outside a subtotal of income from operations, if one is presented. Further, the ASU only allows the service cost component of net benefit cost to be capitalised. The Group adopted ASU 2017-07 retrospectively on 1 January 2018. The adoption did not have a material impact on the Group's financial statements.

In May 2017, the FASB issued ASU 2017-09, "Scope of Modification Accounting", an update to topic 718, "Compensation – Stock Compensation". The amendments in this update provide guidance about which changes to the terms or conditions of a share-based payment award require to apply modification accounting in Topic 718. The Group adopted ASU 2017-09 on 1 January 2018. The adoption did not have an impact on the Group's financial statements.

In February 2018, the FASB issued ASU 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income", an update to topic 220, "Income Statement – Reporting Comprehensive Income". The ASU allows a reclassification from accumulated other comprehensive income to retained earnings of stranded tax effects resulting from the Tax Cuts and Jobs Act. For unrealised gains/losses on available-for-sale securities, the Group releases the stranded tax effects to earnings on a straight-line basis over the average duration of the relevant available-for-sale portfolio as an approximation of when the individual securities within the portfolio are sold or mature. For adjustment for pension and other post-retirement benefits, stranded tax effects are released to earnings when the relevant pension plan is terminated. For foreign currency translation, stranded tax effects are released to earnings in line with recycling of the underlying foreign currency translation amounts. The Group early adopted ASU 2018-02 on 1 January 2018. The adoption resulted in a reclassification within shareholders' equity of USD 159 million of stranded tax charges from accumulated other comprehensive income to retained earnings. These stranded tax charges related to the Tax Cuts and Jobs Act. The reclassification can be found in the statement of shareholders' equity.

2 Information on business segments

The Group provides reinsurance and insurance throughout the world through its business segments. The business segments are determined by the organisational structure and by the way in which management reviews the operating performance of the Group.

The Group presents four core operating business segments: Property & Casualty Reinsurance, Life & Health Reinsurance, Corporate Solutions and Life Capital. The presentation of each segment's balance sheet is closely aligned to the segment legal entity structure. The assignment of assets and liabilities for entities that span more than one segment is determined by considering local statutory requirements, legal and other constraints, the economic view of duration and currency requirements of the reinsurance business written and the capacity of the segments to absorb risks. Interest expense is based on the segment's capital funding position. The tax impact of a segment is derived from the legal entity tax obligations and the segmentation of the pre-tax result. While most of the tax items can be directly attributed to individual segments, the tax which impacts two or more segments is allocated to the segments on a reasonable basis. Property & Casualty Reinsurance and Life & Health Reinsurance share the same year-to-date effective tax rate as both business segments belong to the Reinsurance Business Unit.

Accounting policies applied by the business segments are in line with those described in the summary of significant accounting policies (please refer to Note 1).

The Group operating segments are outlined below.

Property & Casualty Reinsurance and Life & Health Reinsurance

Reinsurance consists of two segments, Property & Casualty and Life & Health. The Reinsurance Business Unit operates globally, both through brokers and directly with clients, and provides a large range of solutions for risk and capital management. Clients include stock and mutual insurance companies as well as public sector and governmental entities. In addition to traditional reinsurance solutions, Reinsurance offers insurance-linked securities and other insurance-related capital market products in both Property & Casualty and Life & Health.

Property & Casualty includes the business lines property, casualty (including motor) and specialty. Life & Health includes the life and health lines of business.

Corporate Solutions

Corporate Solutions offers innovative insurance capacity to mid-sized and large multinational corporations across the globe. Offerings range from standard risk transfer covers and multi-line programmes, to customised solutions tailored to the needs of clients. Corporate Solutions serves customers from over 50 offices worldwide.

Life Capital

Life Capital manages Swiss Re's primary life and health business. It encompasses the closed and open life and health insurance books, including the ReAssure business and the primary life and health insurance business comprising elipsLife and iptiQ. Through ReAssure, Swiss Re acquires closed blocks of inforce life and health insurance business, either through reinsurance or corporate acquisition, and typically assumes responsibility for administering the underlying policies. The administration of the business may be managed directly or, where appropriate, in partnership with a third party. In the open books business, elipsLife, the Group life and health insurance business, offers solutions to pension funds, corporates and affinity groups through an intermediated business to business to consumer ("B2B2C") model. The iptiQ business, primarily the individual life and health business, partners with distributors and enables individuals to address their protection needs on a white labelled basis.

Group items

Items not allocated to the business segments are included in the "Group items" column, which encompasses Swiss Re Ltd, the Group's ultimate parent company, the former Legacy business in run-off, Principal Investments and certain Treasury units. Swiss Re Ltd charges trademark licence fees to the business segments which are reported as other revenues. Certain administrative expenses of the corporate centre functions that are not recharged to the operating segments are reported as Group items.

Consolidation

Segment information is presented net of external and internal retrocession and other intra-group arrangements. The Group total is obtained after elimination of intra-group transactions in the "Consolidation" column. This includes significant intra-group reinsurance arrangements, recharge of trademark licence fees, and intersegmental funding.

Financial statements

Notes to the Group financial statements (unaudited)

a) Business segments – income statement

For the six months ended 30 June

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Revenues							
Gross premiums written	9 404	6 399	1 745	932		-335	18 145
Net premiums written	9 076	5 732	1 382	627			16 817
Change in unearned premiums	-1 098	4	366	-139			-867
Premiums earned	7 978	5 736	1 748	488			15 950
Fee income from policyholders		33		221			254
Net investment income – non-participating business	463	625	75	605	92	-74	1 786
Net realised investment gains – non-participating business	170	252	44	77	31		574
Net investment result – unit-linked and with-profit business		37		1 585			1 622
Other revenues	18	1	5	3	177	-185	19
Total revenues	8 629	6 684	1 872	2 979	300	-259	20 205
Expenses							
Claims and claim adjustment expenses	-5 102		-1 220				-6 322
Life and health benefits		-4 540		-935			-5 475
Return credited to policyholders		-54		-1 575			-1 629
Acquisition costs	-2 113	-973	-250	-51			-3 387
Operating expenses	-552	-374	-357	-224	-218	175	-1 550
Total expenses before interest expenses	-7 767	-5 941	-1 827	-2 785	-218	175	-18 363
Income before interest and income tax expense/benefit							
	862	743	45	194	82	-84	1 842
Interest expenses	-142	-151	-12	-17	-46	84	-284
Income before income tax expense/benefit	720	592	33	177	36	0	1 558
Income tax expense/benefit	-165	-135	5	-34	15		-314
Net income before attribution of non-controlling interests	555	457	38	143	51	0	1 244
Income/loss attributable to non-controlling interests			1				1
Net income after attribution of non-controlling interests	555	457	39	143	51	0	1 245
Interest on contingent capital instruments, net of tax	-9	-25					-34
Net income attributable to common shareholders	546	432	39	143	51	0	1 211
Claims ratio in %	64.0		69.8				65.0
Expense ratio in %	33.4		34.7				33.6
Combined ratio in %	97.4		104.5				98.6
Management expense ratio in %		5.8					
Net operating margin in %	10.0	11.2	2.4	13.9	27.3		9.9

Business segments – income statement

For the six months ended 30 June

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Revenues							
Gross premiums written	9 570	7 372	2 043	1 841		-1 237	19 589
Net premiums written	9 289	6 423	1 713	909			18 334
Change in unearned premiums	-1 588	-107	205	-311			-1 801
Premiums earned	7 701	6 316	1 918	598			16 533
Fee income from policyholders		73		224			297
Net investment income – non-participating business	637	660	97	643	127	-141	2 023
Net realised investment gains/losses – non-participating business	-126	138	11	40	-291		-228
Net investment result – unit-linked and with-profit business		-9		394			385
Other revenues	9		2		172	-171	12
Total revenues	8 221	7 178	2 028	1 899	8	-312	19 022
Expenses							
Claims and claim adjustment expenses	-4 562		-1 289				-5 851
Life and health benefits		-5 048		-942			-5 990
Return credited to policyholders		-12		-508			-520
Acquisition costs	-2 017	-1 058	-298	-132			-3 505
Operating expenses	-572	-352	-364	-238	-270	171	-1 625
Total expenses before interest expenses	-7 151	-6 470	-1 951	-1 820	-270	171	-17 491
Income/loss before interest and income tax expense/benefit							
	1 070	708	77	79	-262	-141	1 531
Interest expenses	-148	-190	-12	-21	-49	141	-279
Income/loss before income tax expense/benefit	922	518	65	58	-311	0	1 252
Income tax expense/benefit	-170	-96	-9	-15	75		-215
Net income/loss before attribution of non-controlling interests	752	422	56	43	-236	0	1 037
Income/loss attributable to non-controlling interests			2	-9			-7
Net income/loss after attribution of non-controlling interests	752	422	58	34	-236	0	1 030
Interest on contingent capital instruments, net of tax		-24					-24
Net income/loss attributable to common shareholders	752	398	58	34	-236	0	1 006
Claims ratio in %	59.3		67.2				60.8
Expense ratio in %	33.6		34.5				33.8
Combined ratio in %	92.9		101.7				94.6
Management expense ratio in %		5.0					
Net operating margin in %	13.0	9.9	3.8	5.2			8.2

Financial statements

Notes to the Group financial statements (unaudited)

Business segments – balance sheet

As of 31 December

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Assets							
Fixed income securities	34 189	32 642	8 356	26 528	71		101 786
Equity securities	1 893	945	455	32	540		3 865
Other investments	14 460	3 212	191	2 697	5 530	-9 856	16 234
Short-term investments	1 608	996	482	1 711	49		4 846
Investments for unit-linked and with-profit business		585		34 581			35 166
Cash and cash equivalents	1 334	1 595	654	2 959	264		6 806
Deferred acquisition costs	2 146	4 234	454	37			6 871
Acquired present value of future profits		921		1 068			1 989
Reinsurance recoverable	2 541	4 638	5 737	5 200		-10 174	7 942
Other reinsurance assets	10 293	10 669	2 477	7 666	2	-8 118	22 989
Goodwill	1 944	1 873	213	142			4 172
Other	10 067	2 249	1 717	2 100	1 819	-8 092	9 860
Total assets	80 475	64 559	20 736	84 721	8 275	-36 240	222 526
Liabilities							
Unpaid claims and claim adjustment expenses	45 276	12 129	11 818	2 308		-4 736	66 795
Liabilities for life and health policy benefits		18 230	279	29 491		-5 439	42 561
Policyholder account balances		1 574		35 963			37 537
Other reinsurance liabilities	10 245	5 528	4 177	4 410	2	-8 448	15 914
Short-term debt	807	4 766		904	60	-6 104	433
Long-term debt	3 500	6 914	497	1 603		-2 366	10 148
Other	9 891	7 197	1 411	2 954	2 538	-9 147	14 844
Total liabilities	69 719	56 338	18 182	77 633	2 600	-36 240	188 232
Shareholders' equity	10 755	8 221	2 385	7 088	5 675	0	34 124
Non-controlling interests	1		169				170
Total equity	10 756	8 221	2 554	7 088	5 675	0	34 294
Total liabilities and equity	80 475	64 559	20 736	84 721	8 275	-36 240	222 526

Business segments – balance sheet

As of 30 June

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Assets							
Fixed income securities	34 739	30 727	8 097	23 494	45		97 102
Equity securities	1 649	738	275	45	376		3 083
Other investments	16 645	3 248	105	2 806	6 349	-12 203	16 950
Short-term investments	2 136	1 060	579	1 089	11		4 875
Investments for unit-linked and with-profit business		489		33 257			33 746
Cash and cash equivalents	1 151	2 496	721	2 063	388		6 819
Deferred acquisition costs	2 238	4 173	426	885			7 722
Acquired present value of future profits		880		1 037			1 917
Reinsurance recoverable	2 141	4 456	5 944	5 069		-10 004	7 606
Other reinsurance assets	11 506	10 898	2 452	8 410	3	-8 691	24 578
Goodwill	1 924	1 847	214	139			4 124
Other	9 047	4 289	1 825	2 178	2 145	-9 264	10 220
Total assets	83 176	65 301	20 638	80 472	9 317	-40 162	218 742
Liabilities							
Unpaid claims and claim adjustment expenses	43 773	12 128	11 538	2 564	1	-4 830	65 174
Liabilities for life and health policy benefits		17 862	665	28 108		-5 184	41 451
Policyholder account balances		1 456		34 355			35 811
Other reinsurance liabilities	12 305	5 709	4 127	5 256	3	-9 131	18 269
Short-term debt	2 610	8 180		267		-10 156	901
Long-term debt	2 774	4 776	497	1 554	554	-702	9 453
Other	11 715	8 073	1 415	2 374	2 611	-10 159	16 029
Total liabilities	73 177	58 184	18 242	74 478	3 169	-40 162	187 088
Shareholders' equity							
	9 998	7 117	2 245	5 293	6 148	0	30 801
Non-controlling interests	1		151	701			853
Total equity	9 999	7 117	2 396	5 994	6 148	0	31 654
Total liabilities and equity	83 176	65 301	20 638	80 472	9 317	-40 162	218 742

Financial statements

Notes to the Group financial statements (unaudited)

b) Property & Casualty Reinsurance business segment – by line of business

For the six months ended 30 June

2017 USD millions	Property	Casualty	Specialty	Unallocated	Total
Revenues					
Gross premiums written	3 863	4 104	1 437		9 404
Net premiums written	3 598	4 080	1 398		9 076
Change in unearned premiums	-894	49	-253		-1 098
Premiums earned	2 704	4 129	1 145		7 978
Net investment income				463	463
Net realised investment gains/losses				170	170
Other revenues				18	18
Total revenues	2 704	4 129	1 145	651	8 629
Expenses					
Claims and claim adjustment expenses	-1 531	-2 973	-598		-5 102
Acquisition costs	-568	-1 244	-301		-2 113
Operating expenses	-299	-168	-85		-552
Total expenses before interest expenses	-2 398	-4 385	-984	0	-7 767
Income/loss before interest and income tax expense	306	-256	161	651	862
Interest expenses				-142	-142
Income/loss before income tax expense	306	-256	161	509	720
Claims ratio in %	56.6	72.0	52.2		64.0
Expense ratio in %	32.1	34.2	33.7		33.4
Combined ratio in %	88.7	106.2	85.9		97.4

Property & Casualty Reinsurance business segment – by line of business

For the six months ended 30 June

2018 USD millions	Property	Casualty	Specialty	Unallocated	Total
Revenues					
Gross premiums written	3 825	4 221	1 524		9 570
Net premiums written	3 594	4 194	1 501		9 289
Change in unearned premiums	-887	-340	-361		-1 588
Premiums earned	2 707	3 854	1 140		7 701
Net investment income				637	637
Net realised investment gains/losses				-126	-126
Other revenues				9	9
Total revenues	2 707	3 854	1 140	520	8 221
Expenses					
Claims and claim adjustment expenses	-1 405	-2 727	-430		-4 562
Acquisition costs	-574	-1 137	-306		-2 017
Operating expenses	-284	-200	-88		-572
Total expenses before interest expenses	-2 263	-4 064	-824	0	-7 151
Income/loss before interest and income tax expense	444	-210	316	520	1 070
Interest expenses				-148	-148
Income/loss before income tax expense	444	-210	316	372	922
Claims ratio in %	51.9	70.7	37.7		59.3
Expense ratio in %	31.7	34.7	34.6		33.6
Combined ratio in %	83.6	105.4	72.3		92.9

Financial statements

Notes to the Group financial statements (unaudited)

c) Life & Health Reinsurance business segment – by line of business

For the six months ended 30 June

2017 USD millions	Life	Health	Unallocated	Total
Revenues				
Gross premiums written	4 607	1 792		6 399
Net premiums written	3 985	1 747		5 732
Change in unearned premiums	44	-40		4
Premiums earned	4 029	1 707		5 736
Fee income from policyholders	33			33
Net investment income – non-participating business ¹	485	140		625
Net realised investment gains/losses – non-participating business	16	-2	238	252
Net investment result – unit-linked and with-profit business	37			37
Other revenues	1			1
Total revenues	4 601	1 845	238	6 684
Expenses				
Life and health benefits	-3 214	-1 326		-4 540
Return credited to policyholders	-54			-54
Acquisition costs	-669	-304		-973
Operating expenses	-264	-110		-374
Total expenses before interest expenses	-4 201	-1 740	0	-5 941
Income before interest and income tax expense	400	105	238	743
Interest expenses			-151	-151
Income before income tax expense	400	105	87	592
Management expense ratio in %	5.8	6.0		5.8
Net operating margin ² in %	8.8	5.7		11.2

¹The Group revised the methodology for allocating investment return to lines of business. Comparative information for 2017 has been adjusted accordingly.

²Net operating margin is calculated as "Income before interest and income tax expense" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

Life & Health Reinsurance business segment – by line of business

For the six months ended 30 June

2018 USD millions	Life	Health	Unallocated	Total
Revenues				
Gross premiums written	5 179	2 193		7 372
Net premiums written	4 296	2 127		6 423
Change in unearned premiums	-1	-106		-107
Premiums earned	4 295	2 021		6 316
Fee income from policyholders	73			73
Net investment income – non-participating business	495	165		660
Net realised investment gains/losses – non-participating business	17	-3	124	138
Net investment result – unit-linked and with-profit business	-9			-9
Total revenues	4 871	2 183	124	7 178
Expenses				
Life and health benefits	-3 537	-1 511		-5 048
Return credited to policyholders	-12			-12
Acquisition costs	-725	-333		-1 058
Operating expenses	-219	-133		-352
Total expenses before interest expenses	-4 493	-1 977	0	-6 470
Income before interest and income tax expense	378	206	124	708
Interest expenses			-190	-190
Income/loss before income tax expense	378	206	-66	518
Management expense ratio in %	4.5	6.1		5.0
Net operating margin ¹ in %	7.7	9.4		9.9

¹ Net operating margin is calculated as "Income before interest and income tax expense" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

Financial statements

Notes to the Group financial statements (unaudited)

This page intentionally left blank

3 Insurance information

Premiums earned and fees assessed against policyholders

For the six months ended 30 June

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Premiums earned, thereof:					
Direct		25	1 499	686	2 210
Reinsurance	8 031	6 269	403	62	14 765
Intra-group transactions (assumed and ceded)	53	110	-53	-110	0
Premiums earned before retrocession to external parties	8 084	6 404	1 849	638	16 975
Retrocession to external parties	-106	-668	-101	-150	-1 025
Net premiums earned	7 978	5 736	1 748	488	15 950
Fee income from policyholders, thereof:					
Direct				173	173
Reinsurance		33		48	81
Gross fee income before retrocession to external parties		33		221	254
Retrocession to external parties					0
Net fee income	0	33	0	221	254

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Premiums earned, thereof:					
Direct		33	1 643	1 040	2 716
Reinsurance	7 774	6 640	449	60	14 923
Intra-group transactions (assumed and ceded)	58	296	-58	-296	0
Premiums earned before retrocession to external parties	7 832	6 969	2 034	804	17 639
Retrocession to external parties	-131	-653	-116	-206	-1 106
Net premiums earned	7 701	6 316	1 918	598	16 533
Fee income from policyholders, thereof:					
Direct				177	177
Reinsurance		73		47	120
Gross fee income before retrocession to external parties		73		224	297
Retrocession to external parties					0
Net fee income	0	73	0	224	297

Financial statements

Notes to the Group financial statements (unaudited)

Claims and claim adjustment expenses

For the six months ended 30 June

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Claims paid, thereof:					
Gross claims paid to external parties	-4 594	-4 684	-1 221	-1 537	-12 036
Intra-group transactions (assumed and ceded)	-94	-95	94	95	0
Claims before receivables from retrocession to external parties					
	-4 688	-4 779	-1 127	-1 442	-12 036
Retrocession to external parties	131	579	71	177	958
Net claims paid	-4 557	-4 200	-1 056	-1 265	-11 078
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:					
Gross – with external parties	-597	-336	-41	368	-606
Intra-group transactions (assumed and ceded)	207	-1	-207	1	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties					
	-390	-337	-248	369	-606
Retrocession to external parties	-155	-3	84	-39	-113
Net unpaid claims and claim adjustment expenses; life and health benefits	-545	-340	-164	330	-719
Claims and claim adjustment expenses; life and health benefits	-5 102	-4 540	-1 220	-935	-11 797

Acquisition costs

For the six months ended 30 June

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Acquisition costs, thereof:					
Gross acquisition costs with external parties	-2 129	-1 078	-271	-67	-3 545
Intra-group transactions (assumed and ceded)	-8	-1	8	1	0
Acquisition costs before impact of retrocession to external parties					
	-2 137	-1 079	-263	-66	-3 545
Retrocession to external parties	24	106	13	15	158
Net acquisition costs	-2 113	-973	-250	-51	-3 387

Claims and claim adjustment expenses

For the six months ended 30 June

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Claims paid, thereof:					
Gross claims paid to external parties	-5 732	-5 262	-1 593	-1 687	-14 274
Intra-group transactions (assumed and ceded)	-142	-186	142	186	0
Claims before receivables from retrocession to external parties					
	-5 874	-5 448	-1 451	-1 501	-14 274
Retrocession to external parties	619	639	154	265	1 677
Net claims paid	-5 255	-4 809	-1 297	-1 236	-12 597
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:					
Gross – with external parties	1 005	-168	-125	241	953
Intra-group transactions (assumed and ceded)	175	-65	-175	65	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties					
	1 180	-233	-300	306	953
Retrocession to external parties	-487	-6	308	-12	-197
Net unpaid claims and claim adjustment expenses; life and health benefits	693	-239	8	294	756
Claims and claim adjustment expenses; life and health benefits					
	-4 562	-5 048	-1 289	-942	-11 841

Acquisition costs

For the six months ended 30 June

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Acquisition costs, thereof:					
Gross acquisition costs with external parties	-2 042	-1 146	-326	-182	-3 696
Intra-group transactions (assumed and ceded)	-5	-24	5	24	0
Acquisition costs before impact of retrocession to external parties					
	-2 047	-1 170	-321	-158	-3 696
Retrocession to external parties	30	112	23	26	191
Net acquisition costs	-2 017	-1 058	-298	-132	-3 505

Financial statements

Notes to the Group financial statements

Reinsurance receivables

Reinsurance receivables as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017	2018
Premium receivables invoiced	3 135	3 496
Receivables invoiced from ceded re/insurance business	427	506
Assets arising from the application of the deposit method of accounting and meeting the definition of financing receivables	147	186
Recognised allowance	-71	-71

Policyholder dividends

Policyholder dividends are recognised as an element of policyholder benefits. In the six months ended 30 June 2017 and 2018, the relative percentage of participating insurance of the life and health policy benefits was 10% and 10%, respectively. The amount of policyholder dividend expense for the six months ended 30 June 2017 and 2018 was USD 93 million and USD 137 million, respectively.

4 Premiums written

For the six months ended 30 June

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Consolidation	Total
Gross premiums written, thereof:						
Direct		25	1 380	870		2 275
Reinsurance	9 235	6 263	310	62		15 870
Intra-group transactions (assumed)	169	111	55		-335	0
Gross premiums written	9 404	6 399	1 745	932	-335	18 145
Intra-group transactions (ceded)	-55		-169	-111	335	0
Gross premiums written before retrocession to external parties						
Retrocession to external parties	-273	-667	-194	-194		-1 328
Net premiums written	9 076	5 732	1 382	627	0	16 817

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Consolidation	Total
Gross premiums written, thereof:						
Direct		33	1 599	1 477		3 109
Reinsurance	9 381	6 635	403	61		16 480
Intra-group transactions (assumed)	189	704	41	303	-1 237	0
Gross premiums written	9 570	7 372	2 043	1 841	-1 237	19 589
Intra-group transactions (ceded)	-41	-303	-189	-704	1 237	0
Gross premiums written before retrocession to external parties						
Retrocession to external parties	-240	-646	-141	-228		-1 255
Net premiums written	9 289	6 423	1 713	909	0	18 334

5 Unpaid claims and claim adjustment expenses

A reconciliation of the opening and closing reserve balances for unpaid claims and claim adjustment expenses as of 31 December 2017 and 30 June 2018 is presented as follows:

USD millions	2017	2018
Balance as of 1 January	57 355	66 795
Reinsurance recoverable	-4 044	-4 458
Deferred expense on retroactive reinsurance	-211	-240
Net balance as of 1 January	53 100	62 097
Incurred related to:		
Current year	28 923	12 401
Prior year	-630	-193
Amortisation of deferred expense on retroactive reinsurance and impact of commutations	-5	-1
Total incurred	28 288	12 207
Paid related to:		
Current year	-8 859	-2 823
Prior year	-14 263	-9 774
Total paid	-23 122	-12 597
Foreign exchange	2 653	-969
Effect of acquisitions, disposals, new retroactive reinsurance and other items	1 178	425
Net balance as of period end	62 097	61 163
Reinsurance recoverable	4 458	3 854
Deferred expense on retroactive reinsurance	240	157
Balance as of period end	66 795	65 174

Prior-year development

Non-life claims development in the first six months ended 30 June 2018 on prior years mainly came from favourable development on the natural catastrophe events in North America and the earthquakes in Mexico that occurred in 2017 and on the earthquake in New Zealand that occurred in 2016. The favourable development related to the natural catastrophe events in North America mostly impacted specialty in the marine business and property. The favourable development in property was largely offset by adverse development on natural catastrophe events in Asia and small-to-medium-sized losses in North America. Casualty includes favourable development for liability lines of business in Europe, which was partially offset by adverse development on accident and health and workers compensation.

For the life and health business, claims development on prior year business was driven by adverse claims experience across a number of lines of business, in particular individual life and disability portfolios in the US. This was partially offset by positive experience in other regions, including Continental Europe and Asia. Claims development related to prior years also includes an element of interest accretion for unpaid claims reported at the estimated present value.

A summary of prior-year net claims and claim adjustment expenses development by lines of business as of 31 December 2017 and 30 June 2018 is shown below:

USD millions	2017	2018
Line of business:		
Property	-555	-5
Casualty	-67	-73
Specialty	-178	-249
Life and health	170	134
Total	-630	-193

6 Deferred acquisition costs (DAC) and acquired present value of future profits (PVFP)

As of 31 December 2017 and 30 June 2018, the DAC were as follows:

2017 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Opening balance as of 1 January	2 280	3 465	444	11	6 200
Deferred	4 068	1 294	553	71	5 986
Effect of acquisitions/disposals and retrocessions		-5	2	5	2
Amortisation	-4 255	-508	-549	-67	-5 379
Effect of foreign currency translation and other changes	53	-12	4	17	62
Closing balance	2 146	4 234	454	37	6 871

2018 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Total
Opening balance as of 1 January	2 146	4 234	454	37	6 871
Deferred	2 123	309	265	976	3 673
Amortisation	-2 017	-282	-292	-90	-2 681
Effect of foreign currency translation and other changes	-14	-88	-1	-38	-141
Closing balance	2 238	4 173	426	885	7 722

Retroceded DAC may arise on retrocession of reinsurance portfolios, including reinsurance undertaken as part of a securitisation. The associated potential retrocession recoveries are determined by the nature of the retrocession agreements and by the terms of the securitisation.

As of 31 December 2017 and 30 June 2018, the PVFP was as follows:

2017 USD millions	Life & Health Reinsurance	Life Capital		Total	
		Positive PVFP	Negative PVFP		Total
Opening balance as of 1 January	966	1 558	-521	1 037	2 003
Amortisation	-135	-143	45	-98	-233
Interest accrued on unamortised PVFP	52	102	-17	85	137
Effect of change in unrealised gains/losses		-1		-1	-1
Effect of foreign currency translation	38	96	-51	45	83
Closing balance	921	1 612	-544	1 068	1 989

2018 USD millions	Life & Health Reinsurance	Life Capital		Total	
		Positive PVFP	Negative PVFP		Total
Opening balance as of 1 January	921	1 612	-544	1 068	1 989
Amortisation	-53	-92	27	-65	-118
Interest accrued on unamortised PVFP	23	45	-8	37	60
Effect of change in unrealised gains/losses		9		9	9
Effect of foreign currency translation	-11	-25	13	-12	-23
Closing balance	880	1 549	-512	1 037	1 917

Retroceded PVFP may arise on retrocession of reinsurance portfolios, including reinsurance undertaken as part of a securitisation. The associated potential retrocession recoveries are determined by the nature of the retrocession agreements and by the terms of the securitisation.

7 Investments

Investment income

Net investment income by source (excluding unit-linked and with-profit business) for the six months ended 30 June was as follows:

USD millions	2017	2018
Fixed income securities	1 364	1 454
Equity securities	35	36
Policy loans, mortgages and other loans	74	70
Investment real estate	96	109
Short-term investments	33	23
Other current investments	23	60
Share in earnings of equity-accounted investees	56	120
Cash and cash equivalents	11	17
Net result from deposit-accounted contracts	43	123
Deposits with ceding companies	227	223
Gross investment income	1 962	2 235
Investment expenses	-174	-204
Interest charged for funds held	-2	-8
Net investment income – non-participating business	1 786	2 023

Dividends received from investments accounted for using the equity method were USD 106 million and USD 82 million for the six months ended 30 June 2017 and 2018, respectively.

Share in earnings of equity-accounted investees included impairments of the carrying amount of equity-accounted investees of USD 11 million for the six months ended 30 June 2017.

Realised gains and losses

Realised gains and losses for fixed income securities, equity securities and other investments (excluding unit-linked and with-profit business) for the six months ended 30 June were as follows:

USD millions	2017	2018
Fixed income securities available-for-sale:		
Gross realised gains	291	256
Gross realised losses	-86	-129
Equity securities available-for-sale:		
Gross realised gains ¹	357	
Gross realised losses ¹	-15	
Other-than-temporary impairments	-30	-4
Net realised investment gains/losses on equity securities ¹		8
Change in net unrealised investment gains/losses on equity securities ¹		-201
Net realised investment gains/losses on trading securities	8	-35
Change in net unrealised investment gains/losses on trading securities	-32	-4
Net realised/unrealised gains/losses on other investments	49	-31
Net realised/unrealised gains/losses on insurance-related activities	31	32
Foreign exchange gains/losses	1	-120
Net realised investment gains/losses – non-participating business	574	-228

¹ Change due to ASU 2016-01. Please refer to Note 1 for more details.

Net realised/unrealised gains/losses on insurance-related activities included impairments of USD 1 million for the six months ended 30 June 2018.

Investment result – unit-linked and with-profit business

For unit-linked contracts, the investment risk is borne by the policyholder. For with-profit contracts, the majority of the investment risk is also borne by the policyholder, although there are certain guarantees that limit the downside risk for the policyholder, and a certain proportion of the returns may be retained by the Group (typically 10%).

Net investment result on unit-linked and with-profit business credited to policyholders for the six months ended 30 June was as follows:

USD millions	2017		2018	
	Unit-linked	With-profit	Unit-linked	With-profit
Investment income – fixed income securities	36	59	34	63
Investment income – equity securities	373	31	401	31
Investment income – other	8	4	6	6
Total investment income – unit-linked and with-profit business	417	94	441	100
Realised gains/losses – fixed income securities	-14	4	-31	-83
Realised gains/losses – equity securities	1 025	103	-68	16
Realised gains/losses – other	-8	1	5	5
Total realised gains/losses – unit-linked and with-profit business	1 003	108	-94	-62
Total net investment result – unit-linked and with-profit business	1 420	202	347	38

Impairment on fixed income securities related to credit losses

Other-than-temporary impairments for debt securities are bifurcated between credit and non-credit components, with the credit component recognised through earnings and the non-credit component recognised in other comprehensive income. The credit component of other-than-temporary impairments is defined as the difference between a security's amortised cost basis and the present value of expected cash flows. Methodologies for measuring the credit component of impairment are aligned to market observer forecasts of credit performance drivers. Management believes that these forecasts are representative of median market expectations.

For securitised products, cash flow projection analysis is conducted by integrating forward-looking evaluation of collateral performance drivers, including default rates, prepayment rates and loss severities, and deal-level features, such as credit enhancement and prioritisation among tranches for payments of principal and interest. Analytics are differentiated by asset class, product type and security-level differences in historical and expected performance. For corporate bonds and hybrid debt instruments, an expected loss approach based on default probabilities and loss severities expected in the current and forecasted economic environment is used for securities identified as credit-impaired to project probability-weighted cash flows. Expected cash flows resulting from these analyses are discounted, and the present value is compared to the amortised cost basis to determine the credit component of other-than-temporary impairments.

A reconciliation of other-than-temporary impairments related to credit losses recognised in earnings for the six months ended 30 June was as follows:

USD millions	2017	2018
Balance as of 1 January	97	91
Credit losses for which an other-than-temporary impairment was not previously recognised	10	
Reductions for securities sold during the period	-9	-9
Increase of credit losses for which an other-than-temporary impairment has been recognised previously, when the Group does not intend to sell, or more likely than not will not be required to sell before recovery	1	2
Impact of increase in cash flows expected to be collected	-3	-2
Impact of foreign exchange movements	2	-1
Balance as of 30 June	98	81

Financial statements

Notes to the Group financial statements

Investments available-for-sale

Amortised cost or cost, estimated fair values and other-than-temporary impairments of fixed income securities classified as available-for-sale as of 31 December 2017 and 30 June 2018 were as follows:

2017 USD millions	Amortised cost or cost	Gross unrealised gains	Gross unrealised losses	Other-than-temporary impairments recognised in other comprehensive income	Estimated fair value
Debt securities issued by governments and government agencies:					
US Treasury and other US government corporations and agencies	14 397	273	-152		14 518
US Agency securitised products	5 884	18	-66		5 836
States of the United States and political subdivisions of the states	1 620	108	-7		1 721
United Kingdom	8 699	1 378	-31		10 046
Canada	3 969	543	-30		4 482
Germany	3 193	239	-22		3 410
France	2 015	252	-10		2 257
Australia	2 065	16	-4		2 077
Other	7 655	318	-76		7 897
Total	49 497	3 145	-398		52 244
Corporate debt securities	39 510	3 218	-136		42 592
Mortgage- and asset-backed securities	4 271	162	-19	-2	4 412
Fixed income securities available-for-sale	93 278	6 525	-553	-2	99 248
Equity securities available-for-sale	3 544	365	-47		3 862

2018 USD millions	Amortised cost or cost	Gross unrealised gains	Gross unrealised losses	Other-than-temporary impairments recognised in other comprehensive income	Estimated fair value
Debt securities issued by governments and government agencies:					
US Treasury and other US government corporations and agencies	13 727	193	-219		13 701
US Agency securitised products	5 847	9	-147		5 709
States of the United States and political subdivisions of the states	1 603	65	-22		1 646
United Kingdom	7 781	1 251	-40		8 992
Canada	3 849	456	-28		4 277
Germany	2 707	227	-11		2 923
France	1 909	259	-5		2 163
Australia	1 734	15	-3		1 746
Other	8 236	256	-137		8 355
Total	47 393	2 731	-612		49 512
Corporate debt securities	38 724	2 005	-431		40 298
Mortgage- and asset-backed securities	4 192	134	-60	-1	4 265
Fixed income securities available-for-sale	90 309	4 870	-1 103	-1	94 075

The "Other-than-temporary impairments recognised in other comprehensive income" column includes only securities with a credit-related loss recognised in earnings. Subsequent recovery in fair value of securities previously impaired in other comprehensive income is also presented in the "Other-than-temporary impairments recognised in other comprehensive income" column.

Investments trading and at fair value through earnings

The carrying amounts of fixed income securities classified as trading and equity securities classified as trading and at fair value through earnings (excluding unit-linked and with-profit business) as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017	2018
Debt securities issued by governments and government agencies	2 414	2 923
Corporate debt securities	38	37
Mortgage- and asset-backed securities	86	67
Fixed income securities trading – non-participating business	2 538	3 027
Equity securities trading – non-participating business¹	3	
Equity securities at fair value through earnings – non-participating business¹		3 083

¹ Change due to ASU 2016-01. Please refer to Note 1 for more details.

Investments held for unit-linked and with-profit business

The carrying amounts of investments held for unit-linked and with-profit business as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017		2018	
	Unit-linked	With-profit	Unit-linked	With-profit
Fixed income securities trading	2 105	3 104	2 031	2 942
Equity securities trading ¹	26 582	2 201		
Equity securities at fair value through earnings ¹			25 359	2 134
Investment real estate	543	281	526	274
Other	286	64	458	22
Total investments for unit-linked and with-profit business	29 516	5 650	28 374	5 372

¹ Change due to ASU 2016-01. Please refer to Note 1 for more details.

Maturity of fixed income securities available-for-sale

The amortised cost or cost and estimated fair values of investments in fixed income securities available-for-sale by remaining maturity are shown below. Fixed maturity investments are assumed not to be called for redemption prior to the stated maturity date. As of 31 December 2017 and 30 June 2018, USD 17 742 million and USD 17 236 million, respectively, of fixed income securities available-for-sale were callable.

USD millions	2017		2018	
	Amortised cost or cost	Estimated fair value	Amortised cost or cost	Estimated fair value
Due in one year or less	7 399	7 410	8 522	8 505
Due after one year through five years	29 459	29 724	28 367	28 382
Due after five years through ten years	15 921	16 652	14 554	14 835
Due after ten years	36 550	41 370	35 039	38 454
Mortgage- and asset-backed securities with no fixed maturity	3 949	4 092	3 827	3 899
Total fixed-income securities available-for-sale	93 278	99 248	90 309	94 075

Financial statements

Notes to the Group financial statements

Assets pledged

As of 30 June 2018, investments with a carrying value of USD 7 180 million were on deposit with regulatory agencies in accordance with local requirements, of which USD 98 million were cash and cash equivalents, and investments with a carrying value of USD 12 346 million were placed on deposit or pledged to secure certain reinsurance liabilities, including pledged investments in subsidiaries, of which USD 337 million were cash and cash equivalents. Cash and cash equivalents pledged include some instances where cash is legally restricted from usage or withdrawal.

As of 31 December 2017 and 30 June 2018, securities of USD 15 740 million and USD 14 192 million, respectively, were transferred to third parties under securities lending transactions and repurchase agreements on a fully collateralised basis. Corresponding liabilities of USD 989 million and USD 2 119 million, respectively, were recognised in accrued expenses and other liabilities for the obligation to return collateral that the Group has the right to sell or repledge.

As of 30 June 2018, a real estate portfolio with a carrying value of USD 185 million serves as collateral for a credit facility, allowing the Group to withdraw funds up to CHF 500 million.

Collateral accepted which the Group has the right to sell or repledge

As of 31 December 2017 and 30 June 2018, the fair value of the equity securities, government and corporate debt securities received as collateral was USD 7 476 million and USD 6 623 million, respectively. Of this, the amount that was sold or repledged as of 31 December 2017 and 30 June 2018 was USD 1 981 million and USD 2 169 million, respectively. The sources of the collateral are securities borrowing, reverse repurchase agreements and derivative transactions.

Offsetting of derivatives, financial assets and financial liabilities

Offsetting of derivatives, financial assets and financial liabilities as of 31 December 2017 and 30 June 2018 was as follows:

2017 USD millions	Gross amounts of recognised financial assets	Collateral set-off in the balance sheet	Net amounts of financial assets presented in the balance sheet	Related financial instruments not set-off in the balance sheet	Net amount
Derivative financial instruments – assets	1 710	–1 176	534		534
Reverse repurchase agreements	6 053	–2 995	3 058	–3 058	0
Securities lending	1 589	–524	1 065	–1 065	0
Total	9 352	–4 695	4 657	–4 123	534

2017 USD millions	Gross amounts of recognised financial liabilities	Collateral set-off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	Related financial instruments not set-off in the balance sheet	Net amount
Derivative financial instruments – liabilities	–1 924	1 342	–582	49	–533
Repurchase agreements	–2 631	2 471	–160	160	0
Securities lending	–1 878	1 049	–829	765	–64
Total	–6 433	4 862	–1 571	974	–597

2018 USD millions	Gross amounts of recognised financial assets	Collateral set-off in the balance sheet	Net amounts of financial assets presented in the balance sheet	Related financial instruments not set-off in the balance sheet	Net amount
Derivative financial instruments – assets	1 684	–1 192	492		492
Reverse repurchase agreements	6 432	–2 977	3 455	–3 455	0
Securities lending	361	–163	198	–198	0
Total	8 477	–4 332	4 145	–3 653	492

2018 USD millions	Gross amounts of recognised financial liabilities	Collateral set-off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	Related financial instruments not set-off in the balance sheet	Net amount
Derivative financial instruments – liabilities	–1 676	1 245	–431	43	–388
Repurchase agreements	–2 802	2 505	–297	297	0
Securities lending	–2 457	635	–1 822	1 688	–134
Total	–6 935	4 385	–2 550	2 028	–522

Collateral pledged or received between two counterparties with a master netting arrangement in place, but not subject to balance sheet netting, is disclosed at fair value. The fair values represent the gross carrying value amounts at the reporting date for each financial instrument received or pledged by the Group. Management believes that master netting agreements provide for legally enforceable set-off in the event of default, which substantially reduces credit exposure. Upon occurrence of an event of default, the non-defaulting party may set off the obligation against collateral received regardless if it has been offset on balance sheet prior to the defaulting event. The net amounts of the financial assets and liabilities presented on the balance sheet were recognised in “Other invested assets”, “Investments for unit-linked and with-profit business” and “Accrued expenses and other liabilities”.

Financial statements

Notes to the Group financial statements

Recognised gross liability for the obligation to return collateral that the Group has the right to sell or repledge

As of 31 December 2017 and 30 June 2018, the gross amounts of liabilities related to repurchase agreements and securities lending by the class of securities transferred to third parties and by the remaining maturity are shown below. The liabilities are recognised for the obligation to return collateral that the Group has the right to sell or repledge.

2017 USD millions	Remaining contractual maturity of the agreements				Total
	Overnight and continuous	Up to 30 days	30–90 days	Greater than 90 days	
Repurchase agreements					
Debt securities issued by governments and government agencies	31	2 091	354	139	2 615
Corporate debt securities		16			16
Total repurchase agreements	31	2 107	354	139	2 631
Securities lending					
Debt securities issued by governments and government agencies	244	567	614	442	1 867
Corporate debt securities	6				6
Equity securities	5				5
Total securities lending	255	567	614	442	1 878
Gross amount of recognised liabilities for repurchase agreements and securities lending					4 509
2018					
USD millions	Remaining contractual maturity of the agreements				Total
	Overnight and continuous	Up to 30 days	30–90 days	Greater than 90 days	
Repurchase agreements					
Debt securities issued by governments and government agencies	76	2 528	188		2 792
Corporate debt securities	10				10
Total repurchase agreements	86	2 528	188	0	2 802
Securities lending					
Debt securities issued by governments and government agencies	257	270	1 520	401	2 448
Corporate debt securities	7				7
Equity securities	2				2
Total securities lending	266	270	1 520	401	2 457
Gross amount of recognised liabilities for repurchase agreements and securities lending					5 259

The programme is structured in a conservative manner within a clearly defined risk framework. Yield enhancement is conducted on a non-cash basis, thereby taking no re-investment risk.

Unrealised losses on securities available-for-sale

The following table shows the fair value and unrealised losses of the Group's fixed income securities, aggregated by investment category and length of time that individual securities were in a continuous unrealised loss position as of 31 December 2017 and 30 June 2018.

2017 USD millions	Less than 12 months		12 months or more		Total	
	Fair value	Unrealised losses	Fair value	Unrealised losses	Fair value	Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	9 742	113	1 825	39	11 567	152
US Agency securitised products	3 773	37	1 029	29	4 802	66
States of the United States and political subdivisions of the states	304	4	120	3	424	7
United Kingdom	1 161	18	301	13	1 462	31
Canada	1 766	29	276	1	2 042	30
Germany	722	19	44	3	766	22
France	214	8	7	2	221	10
Australia	1 118	3	74	1	1 192	4
Other	2 813	54	451	22	3 264	76
Total	21 613	285	4 127	113	25 740	398
Corporate debt securities	6 299	102	1 040	34	7 339	136
Mortgage- and asset-backed securities	1 617	14	421	7	2 038	21
Total	29 529	401	5 588	154	35 117	555

2018 USD millions	Less than 12 months		12 months or more		Total	
	Fair value	Unrealised losses	Fair value	Unrealised losses	Fair value	Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	8 762	149	1 677	70	10 439	219
US Agency securitised products	3 695	97	1 075	50	4 770	147
States of the United States and political subdivisions of the states	478	13	152	9	630	22
United Kingdom	953	20	402	20	1 355	40
Canada	1 723	24	237	4	1 960	28
Germany	499	8	56	3	555	11
France	270	4	13	1	283	5
Australia	1 046	2	16	1	1 062	3
Other	3 243	92	536	45	3 779	137
Total	20 669	409	4 164	203	24 833	612
Corporate debt securities	14 971	333	1 566	98	16 537	431
Mortgage- and asset-backed securities	2 394	50	364	11	2 758	61
Total	38 034	792	6 094	312	44 128	1 104

As of 31 December 2017, USD 40 million of the gross unrealised loss on equity securities available-for-sale relates to declines in value for less than 12 months and USD 7 million to declines in value for more than 12 months.

Financial statements

Notes to the Group financial statements

Mortgage, policy and other loans, and investment real estate

As of 31 December 2017 and 30 June 2018, the carrying and respective fair values of investments in mortgage, policy and other loans, and investment real estate (excluding unit-linked and with-profit business) were as follows:

USD millions	2017		2018	
	Carrying value	Fair value	Carrying value	Fair value
Policy loans	94	94	90	90
Mortgage loans	2 665	2 674	2 624	2 615
Other loans	1 351	1 367	1 500	1 511
Investment real estate	2 220	4 099	2 314	4 177

Depreciation expense related to investment real estate was USD 23 million and USD 27 million for the six months ended 30 June 2017 and 2018, respectively. Accumulated depreciation on investment real estate totalled USD 585 million and USD 601 million as of 31 December 2017 and 30 June 2018, respectively.

Substantially all mortgage, policy and other loan receivables are secured by buildings, land or the underlying policies.

Other financial assets and liabilities by measurement category

As of 31 December 2017 and 30 June 2018, "Other invested assets" and "Accrued expenses and other liabilities" by measurement category were as follows:

2017		Investments measured at net asset value as practical expedient	Amortised cost or cost	Equity-accounted	Not in scope ¹	Total
USD millions	Fair Value					
Other invested assets						
Derivative financial instruments	527					527
Reverse repurchase agreements			3 058			3 058
Securities lending	776		1 065			1 841
Equity accounted investments	446			2 446		2 892
Other	63	828	695			1 586
Other invested assets	1 812	828	4 818	2 446	0	9 904
Accrued expenses and other liabilities						
Derivative financial instruments	582					582
Repurchase agreements			160			160
Securities lending	778		51			829
Securities sold short	1 947					1 947
Other			461		3 211	3 672
Accrued expenses and other liabilities	3 307	0	672	0	3 211	7 190

2018		Investments measured at net asset value as practical expedient	Amortised cost or cost	Equity-accounted	Not in scope ¹	Total
USD millions	Fair Value					
Other invested assets						
Derivative financial instruments	486					486
Reverse repurchase agreements			3 455			3 455
Securities lending	1 787		198			1 985
Equity accounted investments	365			2 417		2 782
Other	78	843	793			1 714
Other invested assets	2 716	843	4 446	2 417	0	10 422
Accrued expenses and other liabilities						
Derivative financial instruments	431					431
Repurchase agreements			297			297
Securities lending	1 787		35			1 822
Securities sold short	2 175					2 175
Other			504		3 390	3 894
Accrued expenses and other liabilities	4 393	0	836	0	3 390	8 619

¹ Amounts do not relate to financial assets or liabilities.

8 Fair value disclosures

Fair value, as defined by the Fair Value Measurements and Disclosures Topic, is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The Fair Value Measurements and Disclosures Topic requires all assets and liabilities that are measured at fair value to be categorised within the fair value hierarchy. This three-level hierarchy is based on the observability of the inputs used in the fair value measurement. The levels of the fair value hierarchy are defined as follows:

Level 1 inputs are quoted prices in active markets for identical assets or liabilities that the Group has the ability to access. Level 1 inputs are the most persuasive evidence of fair value and are to be used whenever possible.

Level 2 inputs are market-based inputs that are directly or indirectly observable, but not considered level 1 quoted prices. Level 2 inputs consist of (i) quoted prices for similar assets or liabilities in active markets; (ii) quoted prices for identical assets or liabilities in non-active markets (eg markets which have few transactions and where prices are not current or price quotations vary substantially); (iii) inputs other than quoted prices that are observable (eg interest rates, yield curves, volatilities, prepayment speeds, credit risks and default rates); and (iv) inputs derived from, or corroborated by, observable market data.

Level 3 inputs are unobservable inputs. These inputs reflect the Group's own assumptions about market pricing using the best internal and external information available.

The types of instruments valued, based on unadjusted quoted market prices in active markets, include most US government and sovereign obligations, active listed equities and most money market securities. Such instruments are generally classified within level 1 of the fair value hierarchy.

The types of instruments that trade in markets that are not considered to be active, but are valued based on quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency, include most government agency securities, investment-grade corporate bonds, certain mortgage- and asset-backed products, less liquid listed equities, and state, municipal and provincial obligations. Such instruments are generally classified within level 2 of the fair value hierarchy.

Exchange-traded derivative instruments typically fall within level 1 or level 2 of the fair value hierarchy, depending on whether they are considered to be actively traded or not.

Certain financial instruments are classified within level 3 of the fair value hierarchy because they trade infrequently and therefore have little or no price transparency. Such instruments include private equity, less liquid corporate debt securities and certain asset-backed securities. Certain over-the-counter (OTC) derivatives trade in less liquid markets with limited pricing information, and the determination of fair value for these derivatives is inherently more difficult. Such instruments are classified within level 3 of the fair value hierarchy. Pursuant to the election of the fair value option, the Group classifies certain liabilities for life and health policy benefits in level 3 of the fair value hierarchy. When appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads and credit considerations. Such adjustments are generally based on available market evidence. In the absence of such evidence, management's best estimate is used.

The fair values of assets are adjusted to incorporate the counterparty risk of non-performance. Similarly, the fair values of liabilities reflect the risk of non-performance of the Group, captured by the Group's credit spread. These valuation adjustments from assets and liabilities measured at fair value using significant unobservable inputs are recognised in net realised gains and losses. For the six months ended 30 June 2018, these adjustments were not material. Whenever the underlying assets or liabilities are reported in a specific business segment, the valuation adjustment is allocated accordingly. Valuation adjustments not attributable to any business segment are reported in Group items.

In certain situations, the Group uses inputs to measure the fair value of asset or liability positions that fall into different levels of the fair value hierarchy. In these situations, the Group will determine the appropriate level based on the lowest level input that is significant to the determination of the fair value.

Valuation techniques

US government securities typically have quoted market prices in active markets and are categorised as level 1 instruments in the fair value hierarchy. Non-US government holdings are generally classified as level 2 instruments and are valued on the basis of the quotes provided by pricing services, which are subject to the Group's pricing validation reviews and pricing vendor challenge process. Valuations provided by pricing vendors are generally based on the actual trade information as substantially all of the Group's non-US government holdings are traded in a transparent and liquid market.

Corporate debt securities mainly include US and European investment-grade positions, which are priced on the basis of quotes provided by third-party pricing vendors and first utilise valuation inputs from actively traded securities, such as bid prices, bid spreads to Treasury securities, Treasury curves, and same or comparable issuer curves and spreads. Issuer spreads are determined from actual quotes and traded prices and incorporate considerations of credit/default, sector composition, and liquidity and call features. Where market data is not available, valuations are developed based on the modelling techniques that utilise observable inputs and option-adjusted spreads and incorporate considerations of the security's seniority, maturity and the issuer's corporate structure.

Values of mortgage- and asset-backed securities are obtained both from third-party pricing vendors and through quoted prices, some of which may be based on the prices of comparable securities with similar structural and collateral features. Values of certain asset-backed securities (ABS) for which there are no significant observable inputs are developed using benchmarks to similar transactions or indices. For both residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS), cash flows are derived based on the transaction-specific information, which incorporates priority in the capital structure, and are generally adjusted to reflect benchmark yields, market prepayment data, collateral performance (default rates and loss severity) for specific vintage and geography, credit enhancements and ratings. For certain RMBS and CMBS with low levels of market liquidity, judgements may be required to determine comparable securities based on the loan type and deal-specific performance. CMBS terms may also incorporate lock-out periods that restrict borrowers from prepaying the loans or provide disincentives to prepay and therefore reduce prepayment risk of these securities, compared to RMBS. The factors specifically considered in valuation of CMBS include borrower-specific statistics in a specific region, such as debt service coverage and loan-to-value ratios, as well as the type of commercial property. Mortgage- and asset-backed securities also includes debt securitised by credit card, student loan and auto loan receivables. Pricing inputs for these securities also focus on capturing, where relevant, collateral quality and performance, payment patterns and delinquencies.

The Group uses third-party pricing vendor data to value agency securitised products, which mainly include collateralised mortgage obligations (CMO) and mortgage-backed government agency securities. The valuations generally utilise observable inputs consistent with those noted above for RMBS and CMBS.

Equity securities held by the Group for proprietary investment purposes are mainly classified in level 1. Securities classified in level 1 are traded on public stock exchanges for which quoted prices are readily available.

The category "Other invested assets" includes the Group's private equity and hedge fund investments which are made directly or via ownership of funds. Valuation of direct private equity investments requires significant management judgement due to the absence of quoted market prices and the lack of liquidity. Initial valuation is based on the acquisition cost, and is further refined based on the available market information for the public companies that are considered comparable to the Group's holdings in the private companies being valued, and the private company-specific performance indicators, both historic and projected. Subsequent valuations also reflect business or asset appraisals, as well as market transaction data for private and public benchmark companies and the actual companies being valued, such as financing rounds and mergers and acquisitions activity. The Group's holdings in private equity and hedge funds are generally valued utilising net asset values (NAV), subject to adjustments, as deemed necessary, for restrictions on redemption (lock-up periods and amount limitations on redemptions). These investments are included under investments measured at net asset value as a practical expedient.

The Group holds both exchange-traded and OTC interest rate, foreign exchange, credit and equity derivative contracts for hedging and trading purposes. The fair values of exchange-traded derivatives measured using observable exchange prices are classified in level 1. Long-dated contracts may require adjustments to the exchange-traded prices which would trigger reclassification to level 2 in the fair value hierarchy. OTC derivatives are generally valued by the Group based on the internal models, which are consistent with industry standards and practices, and use both observable (dealer, broker or market consensus prices, spot and forward rates, interest rate and credit curves and volatility indices) and unobservable inputs (adjustments for liquidity, inputs derived from the observable data based on the Group's judgements and assumptions).

Financial statements

Notes to the Group financial statements

The Group's OTC interest rate derivatives primarily include interest rate swaps, futures, options, caps and floors, and are valued based on the cash flow discounting models which generally utilise as inputs observable market yield curves and volatility assumptions.

The Group's OTC foreign exchange derivatives primarily include forward, spot and option contracts and are generally valued based on the cash flow discounting models, utilising as main inputs observable foreign exchange forward curves.

The Group's investments in equity derivatives primarily include OTC equity option contracts on single or baskets of market indices and equity options on individual or baskets of equity securities, which are valued using internally developed models (such as the Black-Scholes type option pricing model and various simulation models) calibrated with the inputs, which include underlying spot prices, dividend curves, volatility surfaces, yield curves and correlations between underlying assets.

The Group's OTC credit derivatives can include index and single-name credit default swaps. Plain vanilla credit derivatives, such as index and single-name credit default swaps, are valued by the Group based on the models consistent with the industry valuation standards for these credit contracts, and primarily utilise observable inputs published by market data sources, such as credit spreads and recovery rates. These valuation techniques warrant classification of plain vanilla OTC derivatives as level 2 financial instruments in the fair value hierarchy.

Governance around level 3 fair valuation

The Asset Valuation Committee, endorsed by the Group Executive Committee, has a primary responsibility for governing and overseeing all of Group's asset and derivative valuation policies and operating parameters (including level 3 measurements). The Asset Valuation Committee delegates the responsibility for implementation and oversight of consistent application of the Group's pricing and valuation policies to the Pricing and Valuation Committee.

The Pricing and Valuation Committee, which is a joint Risk Management & Finance management control committee, is responsible for the implementation and consistent application of the pricing and valuation policies. Key functions of the Pricing and Valuation Committee include: oversight over the entire valuation process, approval of internal valuation methodologies, approval of external pricing vendors, monitoring of the independent price verification (IPV) process and resolution of significant or complex valuation issues.

A formal IPV process is undertaken monthly by members of the Valuation Risk Management team within a Financial Risk Management function. The process includes monitoring and in-depth analyses of approved pricing methodologies and valuations of the Group's financial instruments aimed at identifying and resolving pricing discrepancies.

The Risk Management function is responsible for independent validation and ongoing review of the Group's valuation models. The Product Control group within Finance is tasked with reporting of fair values through the vendor- and model-based valuations, the results of which are also subject to the IPV process.

This page intentionally left blank

Financial statements

Notes to the Group financial statements

Assets and liabilities measured at fair value on a recurring basis

As of 31 December 2017 and 30 June 2018, the fair values of assets and liabilities measured on a recurring basis by level of input were as follows:

2017 USD millions	Quoted prices in active markets for identical assets and liabilities (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Impact of netting ¹	Investments measured at net asset value as practical expedient	Total
Assets						
Fixed income securities held for proprietary investment purposes	14 013	86 420	1 353			101 786
Debt securities issued by US government and government agencies	14 013	2 392				16 405
US Agency securitised products		5 965				5 965
Debt securities issued by non-US governments and government agencies		32 285	3			32 288
Corporate debt securities		41 287	1 343			42 630
Mortgage- and asset-backed securities		4 491	7			4 498
Fixed income securities backing unit-linked and with-profit business		5 209				5 209
Equity securities held for proprietary investment purposes	3 856	5	4			3 865
Equity securities backing unit-linked and with-profit business	28 770	13				28 783
Short-term investments held for proprietary investment purposes	1 021	3 825				4 846
Short-term investments backing unit-linked and with-profit business		59				59
Derivative financial instruments	50	1 274	386	-1 176		534
Interest rate contracts	4	511	5			520
Foreign exchange contracts		307				307
Equity contracts	43	451	283			777
Credit contracts		1				1
Other contracts			98			98
Contracts backing unit-linked and with-profit business	3	4				7
Investment real estate			198			198
Other invested assets	765	12	509		828	2 114
Funds held by ceding companies		206				206
Total assets at fair value	48 475	97 023	2 450	-1 176	828	147 600
Liabilities						
Derivative financial instruments	-22	-1 423	-479	1 342		-582
Interest rate contracts	-2	-395	-1			-398
Foreign exchange contracts		-321				-321
Equity contracts	-19	-622	-31			-672
Credit contracts		-79				-79
Other contracts			-447			-447
Contracts backing unit-linked and with-profit business	-1	-6				-7
Liabilities for life and health policy benefits			-126			-126
Accrued expenses and other liabilities	-939	-1 785				-2 724
Total liabilities at fair value	-961	-3 208	-605	1 342		-3 432

¹The netting of derivative receivables and derivative payables is permitted when a legally enforceable master netting agreement exists between two counterparties. A master netting agreement provides for the net settlement of all contracts, as well as cash collateral, through a single payment, in a single currency, in the event of default or on the termination of any one contract.

2018 USD millions	Quoted prices in active markets for identical assets and liabilities (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Impact of netting ¹	Investments measured at net asset value as practical expedient	Total
Assets						
Fixed income securities held for proprietary investment purposes	13 184	82 577	1 341			97 102
Debt securities issued by US government and government agencies	13 184	2 232				15 416
US Agency securitised products		5 894				5 894
Debt securities issued by non-US governments and government agencies		31 122	3			31 125
Corporate debt securities		39 003	1 332			40 335
Mortgage- and asset-backed securities		4 326	6			4 332
Fixed income securities backing unit-linked and with-profit business		4 973				4 973
Equity securities held for proprietary investment purposes	3 073	10				3 083
Equity securities backing unit-linked and with-profit business	27 480	13				27 493
Short-term investments held for proprietary investment purposes	941	3 934				4 875
Short-term investments backing unit-linked and with-profit business		16				16
Derivative financial instruments	18	1 300	366	-1 192		492
Interest rate contracts	3	452	6			461
Foreign exchange contracts		380				380
Equity contracts	14	458	283			755
Credit contracts		5				5
Other contracts			77			77
Contracts backing unit-linked and with-profit business	1	5				6
Investment real estate			182			182
Other invested assets	1 683	105	442		843	3 073
Funds held by ceding companies		205				205
Total assets at fair value	46 379	93 133	2 331	-1 192	843	141 494
Liabilities						
Derivative financial instruments	-14	-1 263	-399	1 245		-431
Interest rate contracts	-3	-386	-5			-394
Foreign exchange contracts		-229				-229
Equity contracts	-9	-605	-31			-645
Credit contracts		-43				-43
Other contracts			-363			-363
Contracts backing unit-linked and with-profit business	-2					-2
Liabilities for life and health policy benefits			-124			-124
Accrued expenses and other liabilities	-1 747	-2 215				-3 962
Total liabilities at fair value	-1 761	-3 478	-523	1 245		-4 517

¹ The netting of derivative receivables and derivative payables is permitted when a legally enforceable master netting agreement exists between two counterparties. A master netting agreement provides for the net settlement of all contracts, as well as cash collateral, through a single payment, in a single currency, in the event of default or on the termination of any one contract.

Financial statements

Notes to the Group financial statements

Assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (level 3)

As of 31 December 2017 and 30 June 2018, the reconciliation of the fair values of assets and liabilities measured on a recurring basis using significant unobservable inputs was as follows:

2017 USD millions	Fixed income securities	Equity securities	Derivative assets	Investment real estate	Other invested assets	Total assets	Derivative liabilities	Liabilities for life and health policy benefits	Total liabilities
Assets and liabilities									
Balance as of 1 January	1 182	4	461	209	496	2 352	-664	-144	-808
Realised/unrealised gains/losses:									
Included in net income	-8	-2	23	19	34	66	202	19	221
Included in other comprehensive income	13	4			16	33			0
Purchases	264		26			290			0
Issuances						0	-84		-84
Sales	-59		-45	-49	-44	-197	83		83
Settlements	-84		-79		-6	-169	-1		-1
Transfers into level 3 ¹	45					45			0
Transfers out of level 3 ¹	-89	-2				-91			0
Impact of foreign exchange movements	89			19	13	121	-15	-1	-16
Closing balance as of 31 December	1 353	4	386	198	509	2 450	-479	-126	-605

¹ Transfers are recognised at the date of the event or change in circumstances that caused the transfer.

2018 USD millions	Fixed income securities	Equity securities	Derivative assets	Investment real estate	Other invested assets	Total assets	Derivative liabilities	Liabilities for life and health policy benefits	Total liabilities
Assets and liabilities									
Balance as of 1 January	1 353	4	386	198	509	2 450	-479	-126	-605
Realised/unrealised gains/losses:									
Included in net income			-3	6	9	12	77	2	79
Included in other comprehensive income	-23					-23			0
Purchases	95		4			99			0
Issuances						0	-49		-49
Sales	-8		-4	-17	-86	-115	22		22
Settlements	-28		-18			-46	29		29
Transfers into level 3 ¹			1		18	19	-3		-3
Transfers out of level 3 ¹	-19	-4				-23			0
Impact of foreign exchange movements	-29			-5	-8	-42	4		4
Closing balance as of 30 June	1 341	0	366	182	442	2 331	-399	-124	-523

¹ Transfers are recognised at the date of the event or change in circumstances that caused the transfer.

Gains and losses on assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (level 3)

The gains and losses relating to the assets and liabilities measured at fair value using significant unobservable inputs (level 3) for the six months ended 30 June were as follows:

USD millions	2017	2018
Gains/losses included in net income for the period	136	91
Whereof change in unrealised gains/losses relating to assets and liabilities still held at the reporting date	114	60

Financial statements

Notes to the Group financial statements

Quantitative information about level 3 fair value measurements

Unobservable inputs for major level 3 assets and liabilities as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017 Fair value	2018 Fair value	Valuation technique	Unobservable input	Range (weighted average)
Assets					
Corporate debt securities	1 343	1 332			
Infrastructure loans	778	842	Discounted Cash Flow Model	Valuation spread	99 bps–222 bps (170 bps)
Private placement corporate debt	428	377	Corporate Spread Matrix	Credit spread	74 bps–251 bps (179 bps)
Private placement credit tenant leases	46	43	Discounted Cash Flow Model	Illiquidity premium	75 bps–175 bps (133 bps)
Derivative equity contracts	283	283			
OTC equity option referencing correlated equity indices	283	283	Proprietary Option Model	Correlation	–39%–100% (30.5%) ¹
Investment real estate	198	182	Discounted Cash Flow Model	Discount rate	5% per annum
Liabilities					
Derivative equity contracts	–31	–31			
OTC equity option referencing correlated equity indices	–31	–31	Proprietary Option Model	Correlation	–39%–100% (30.5%) ¹
Other derivative contracts and liabilities for life and health policy benefits	–573	–487			
Variable annuity and fair valued GMDB contracts	–325	–286	Discounted Cash Flow Model	Risk margin Volatility Lapse Mortality adjustment Withdrawal rate	4% (n.a.) 4%–42% 0.5%–33% –10%–0% 0%–90%
Swap liability referencing real estate investments	–150	–138	Discounted Cash Flow Model	Discount rate	5% per annum
Weather contracts	–35	–18	Proprietary Option Model	Risk margin Correlation Volatility (power/gas) Volatility (temperature) Index value (temperature)	5%–11% (10.9%) –29%–79% (60.6%) 23%–92% (69.7%) 19–62 (31) HDD/CAT ² 21–2426 (725) HDD/CAT ²

¹ Represents average input value for the reporting period.

² Heating Degree Days (HDD); Cumulative Average Temperature (CAT).

Sensitivity of recurring level 3 measurements to changes in unobservable inputs

The significant unobservable input used in the fair value measurement of the Group's infrastructure loans is valuation spread. A significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement. The significant unobservable input used in the fair value measurement of the Group's private placement corporate debt securities is credit spread. A significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement. The significant unobservable input used in the fair value measurement of the Group's private placement credit tenant leases is illiquidity premium. A significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement.

The significant unobservable input used in the fair value measurement of the Group's OTC equity option referencing correlated equity indices is correlation. Where the Group is long correlation risk, a significant increase (decrease) in this input in isolation would result in a significantly higher (lower) fair value measurement. Where the Group is short correlation risk, a significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement.

The significant unobservable input used in the fair value measurement of the Group's investment real estate and swap liability referencing real estate investment is the rate used to discount future cash flows from property sales. A significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement.

The significant unobservable inputs used in the fair value measurement of the Group's variable annuity and fair valued guaranteed minimum death benefit (GMDB) contracts are: risk margin, volatility, lapse, mortality adjustment rate and withdrawal rate. A significant increase (decrease) in isolation in each of the following inputs: risk margin, volatility and withdrawal rate would result in a significantly higher (lower) fair value of the Group's obligation. A significant increase (decrease) in isolation in a lapse rate for in-the-money contracts would result in a significantly lower (higher) fair value of the Group's obligation, whereas for out-of-the-money contracts, an isolated increase (decrease) in a lapse assumption would increase (decrease) fair value of the Group's obligation. Changes in the mortality adjustment rate impact the fair value of the Group's obligation differently for living-benefit products, compared to death-benefit products. For the former, a significant increase (decrease) in the mortality adjustment rate (ie increase (decrease) in mortality, respectively) in isolation would result in a decrease (increase) in fair value of the Group's liability. For the latter, a significant increase (decrease) in the mortality adjustment rate in isolation would result in an increase (decrease) in fair value of the Group's liability.

The significant unobservable inputs used in the fair value measurement of the Group's weather contracts are risk margin, correlation, volatility and index value. Where the Group has a long position, a significant increase (decrease) in the risk margin input in isolation would result in a significantly higher (lower) fair value measurement. Where the Group has a long volatility or correlation position, a significant increase (decrease) in the correlation and volatility inputs would result in a significantly higher (lower) fair value measurement. Where the Group has a long index position, an increase (decrease) in the index value input in isolation would result in a significantly higher (lower) fair value measurement. Where the Group has a short position, a significant increase (decrease) in the risk margin input in isolation would result in a significantly lower (higher) fair value measurement. Where the Group has a short volatility or correlation position, a significant increase (decrease) in the correlation and volatility inputs would result in a significantly lower (higher) fair value measurement. Where the Group has a short index position, an increase (decrease) in the index value input in isolation would result in a significantly lower (higher) fair value measurement.

Financial statements

Notes to the Group financial statements

Other invested assets measured at net asset value

Other invested assets measured at net asset value as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017 Fair value	2018 Fair value	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Private equity funds	511	491	211	non-redeemable	n.a.
Hedge funds	128	207		redeemable ¹	45–95 days ²
Private equity direct	92	99		non-redeemable	n.a.
Real estate funds	97	46	32	non-redeemable	n.a.
Total	828	843	243		

¹ The redemption frequency varies by position.

² Cash distribution can be delayed for an extended period depending on the sale of the underlyings.

The hedge fund investments employ a variety of strategies, including relative value and event-driven across various asset classes.

The private equity direct portfolio consists of equity and equity-like investments directly in other companies. These investments have no contractual term and are generally held based on financial or strategic intent.

Private equity and real estate funds generally have limitations imposed on the amount of redemptions from the fund during the redemption period due to illiquidity of the underlying investments. Fees may apply for redemptions or transferring of interest to other parties. Distributions are expected to be received from these funds as the underlying assets are liquidated over the life of the fund, which is generally from 10 to 12 years.

The redemption frequency of hedge funds varies depending on the manager as well as the nature of the underlying product. Additionally, certain funds may impose lock-up periods and redemption gates as defined in the terms of the individual investment agreement.

Fair value option

The fair value option under the Financial Instruments Topic permits the choice to measure specified financial assets and liabilities at fair value on an instrument-by-instrument basis. The Group elected the fair value option for positions in the following line items:

Other invested assets

The Group elected the fair value option for certain investments classified as equity method investees within other invested assets in the balance sheet. The Group applied the fair value option, as the investments are managed on a fair value basis. The changes in fair value of these elected investments are recorded in earnings.

Funds held by ceding companies

For operational efficiencies, the Group elected the fair value option for funds held by the cedent under three of its reinsurance agreements. The assets are carried at fair value and changes in fair value are reported as a component of earnings.

Liabilities for life and health policy benefits

The Group elected the fair value option for existing GMDB reserves related to certain variable annuity contracts which are classified as universal-life-type contracts. The Group has applied the fair value option, as the equity risk associated with those contracts is managed on a fair value basis and it is economically hedged with derivative options in the market. The liability is carried at fair value and changes in fair value attributable to instrument-specific credit risk are reported in other comprehensive income and all other changes in fair value are reported as a component of earnings.

Other derivative liabilities

For operational efficiencies, the Group elected the fair value option on a hybrid financial instrument, where the host contract is a debt instrument and the embedded derivative is pegged to the performance of the fund's real estate portfolio. The liability is carried at fair value and changes in fair value are reported as a component of earnings. In the balance sheet and the following fair value disclosures, this item is included under "Accrued expenses and other liabilities".

Assets and liabilities measured at fair value pursuant to election of the fair value option

Pursuant to the election of the fair value option for the items described, the balances as of 31 December 2017 and 30 June 2018 were as follows:

USD millions	2017	2018
Assets		
Other invested assets	9 904	10 422
of which at fair value pursuant to the fair value option	446	365
Funds held by ceding companies	9 155	9 344
of which at fair value pursuant to the fair value option	206	205
Liabilities		
Liabilities for life and health policy benefits	-42 561	-41 451
of which at fair value pursuant to the fair value option	-126	-124
Accrued expenses and other liabilities	-7 190	-8 619
of which at fair value pursuant to the fair value option	-150	-138

Changes in fair values for items measured at fair value pursuant to election of the fair value option

Gains/losses included in earnings for items measured at fair value pursuant to election of the fair value option including foreign exchange impact for the six months ended 30 June were as follows:

USD millions	2017	2018
Other invested assets	15	12
Funds held by ceding companies	-2	-1
Liabilities for life and health policy benefits	15	2
Accrued expenses and other liabilities	17	-5
Total	45	8

Fair value changes from other invested assets and funds held by ceding companies are reported in "Net investment income – non-participating business". Fair value changes from the GMDDB reserves are shown in "Life and health benefits". Fair value changes from accrued expenses and other liabilities are reported in "Net realised investment gains/losses – non-participating business".

Financial statements

Notes to the Group financial statements

Assets and liabilities not measured at fair value but for which the fair value is disclosed

Assets and liabilities not measured at fair value but for which the fair value is disclosed as of 31 December 2017 and 30 June 2018 were as follows:

2017 USD millions	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets			
Policy loans		94	94
Mortgage loans		2 674	2 674
Other loans		1 367	1 367
Investment real estate		3 901	3 901
Total assets	0	8 036	8 036
Liabilities			
Debt	-7 607	-5 074	-12 681
Total liabilities	-7 607	-5 074	-12 681

2018 USD millions	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets			
Policy loans		90	90
Mortgage loans		2 615	2 615
Other loans		1 511	1 511
Investment real estate		3 995	3 995
Total assets	0	8 211	8 211
Liabilities			
Debt	-7 729	-4 272	-12 001
Total liabilities	-7 729	-4 272	-12 001

Policy loans, other loans and certain mortgage loans are classified as level 3 measurements, as they do not have an active exit market. Some of these positions need to be assessed in conjunction with the corresponding insurance business, whilst the fair value of some other positions does not differ materially from the carrying amount. Considering these circumstances for these positions, the Group presents the carrying amount as an approximation for the fair value. For certain commercial mortgage loans and infrastructure loans, which are included in mortgage loans and other loans respectively, the fair value can be estimated using discounted cash flow models which are based on discount curves and spread inputs that require management's judgement.

Investments in real estate are fair valued primarily by external appraisers based on proprietary discounted cash flow models that incorporate applicable risk premium adjustments to discount yields and projected market rental income streams based on market-specific data. These fair value measurements are classified in level 3 in the fair value hierarchy.

Debt positions, which are fair valued based on executable broker quotes or the discounted cash flow method using observable inputs, are classified as level 2 measurements. Fair value of the majority of the Group's level 3 debt positions is judged to approximate carrying value due to the highly tailored nature of the obligation and short-notice termination provisions.

This page intentionally left blank.

9 Derivative financial instruments

The Group uses a variety of derivative financial instruments including swaps, options, forwards, credit derivatives and exchange-traded financial futures in its trading and hedging strategies, in line with the Group's overall risk management strategy. The objectives include managing exposure to price, foreign currency and/or interest rate risk on planned or anticipated investment purchases, existing assets or liabilities, as well as locking in attractive investment conditions for future available funds.

The fair values represent the gross carrying value amounts at the reporting date for each class of derivative contract held or issued by the Group. The gross fair values are not an indication of credit risk, as many OTC transactions are contracted and documented under ISDA master agreements or their equivalent. Management believes that such agreements provide for legally enforceable set-off in the event of default, which substantially reduces credit exposure.

Fair values and notional amounts of derivative financial instruments

As of 31 December 2017 and 30 June 2018, the fair values and notional amounts of the derivatives outstanding were as follows:

2017 USD millions	Notional amount assets/liabilities	Fair value assets	Fair value liabilities	Carrying value assets/liabilities
Derivatives not designated as hedging instruments				
Interest rate contracts	36 386	524	-404	120
Foreign exchange contracts	16 592	206	-137	69
Equity contracts	17 049	780	-673	107
Credit contracts	4 194	1	-79	-78
Other contracts	12 432	98	-447	-349
Total	86 653	1 609	-1 740	-131
Derivatives designated as hedging instruments				
Foreign exchange contracts	12 362	101	-184	-83
Total	12 362	101	-184	-83
Total derivative financial instruments	99 015	1 710	-1 924	-214
Amount offset				
Where a right of set-off exists		-801	801	
Due to cash collateral		-375	541	
Total net amount of derivative financial instruments		534	-582	-48

2018 USD millions	Notional amount assets/liabilities	Fair value assets	Fair value liabilities	Carrying value assets/liabilities
Derivatives not designated as hedging instruments				
Interest rate contracts	43 124	467	-394	73
Foreign exchange contracts	20 720	206	-185	21
Equity contracts	14 829	755	-647	108
Credit contracts	2 874	5	-43	-38
Other contracts	11 971	77	-363	-286
Total	93 518	1 510	-1 632	-122
Derivatives designated as hedging instruments				
Foreign exchange contracts	11 643	174	-44	130
Total	11 643	174	-44	130
Total derivative financial instruments	105 161	1 684	-1 676	8
Amount offset				
Where a right of set-off exists		-774	774	
Due to cash collateral		-418	471	
Total net amount of derivative financial instruments		492	-431	61

The notional amounts of derivative financial instruments give an indication of the Group's volume of derivative activity. The fair value assets are included in "Other invested assets" and "Investments for unit-linked and with-profit business", and the fair value liabilities are included in "Accrued expenses and other liabilities". The fair value amounts that were not offset were nil as of 31 December 2017 and 30 June 2018.

Financial statements

Notes to the Group financial statements

Non-hedging activities

The Group primarily uses derivative financial instruments for risk management and trading strategies. Gains and losses of derivative financial instruments not designated as hedging instruments are recorded in "Net realised investment gains/losses – non-participating business" and "Net investment result – unit-linked and with-profit business" in the income statement. For the six months ended 30 June, the gains and losses of derivative financial instruments not designated as hedging instruments were as follows:

USD millions	2017	2018
Derivatives not designated as hedging instruments		
Interest rate contracts	67	-154
Foreign exchange contracts	376	72
Equity contracts	-129	7
Credit contracts	-1	8
Other contracts	125	77
Total gains/losses recognised in income	438	10

Hedging activities

The Group designates certain derivative financial instruments as hedging instruments. The designation of derivative financial instruments is primarily used for overall portfolio and risk management strategies. As of 30 June 2017 and 2018, the following hedging relationships were outstanding:

Fair value hedges

The Group enters into foreign exchange swaps to reduce the exposure to foreign exchange volatility for certain fixed income securities. These derivative instruments are designated as hedging instruments in qualifying fair value hedges. Gains and losses on derivative financial instruments designated as fair value hedging instruments are recorded in "Net realised investment gains/losses – non-participating business" in the income statement. For the six months ended 30 June, the gains and losses attributable to the hedged risks were as follows:

USD millions	2017		2018	
	Gains/losses on derivatives	Gains/losses on hedged items	Gains/losses on derivatives	Gains/losses on hedged items
Fair value hedging relationships				
Foreign exchange contracts	-325	325	211	-211
Total gains/losses recognised in income	-325	325	211	-211

Cash flow hedges

The Group entered into cross-currency swaps to reduce the exposure to foreign exchange volatility for a long-term debt instrument issued in the second quarter of 2016 and a portfolio of foreign currency denominated corporate bonds. These derivative instruments are designated as cash flow hedging instruments.

For the six months ended 30 June 2018, the Group recorded a gain of USD 8 million on derivatives in accumulated other comprehensive income. For the six months ended 30 June 2018, the Group reclassified a loss of USD 3 million from accumulated other comprehensive income into income.

As of 30 June 2018, the maximum length of time over which the Group hedged its exposure to the variability in future cash flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was eight years.

The Group believes that the net gains and losses associated with cash flow hedges expected to be reclassified from accumulated other comprehensive income within the next twelve months cannot be reasonably estimated as they relate to foreign exchange volatility.

Hedges of the net investment in foreign operations

The Group designates derivative and non-derivative monetary financial instruments as hedging the foreign currency exposure of its net investment in certain foreign operations.

For the year ended 31 December 2017 and the six months ended 30 June 2018, the Group recorded accumulated net unrealised foreign currency remeasurement gains of USD 1 552 million and USD 1 803 million, respectively, in shareholders' equity. These offset translation gains and losses on the hedged net investment.

Maximum potential loss

In consideration of the rights of set-off and the qualifying master netting arrangements with various counterparties, the maximum potential loss as of 31 December 2017 and 30 June 2018 was approximately USD 909 million and USD 910 million, respectively. The maximum potential loss is based on the positive market replacement cost assuming non-performance of all counterparties, excluding cash collateral.

Credit risk-related contingent features

Certain derivative instruments held by the Group contain provisions that require its debt to maintain an investment-grade credit rating. If the Group's credit rating were downgraded or no longer rated, the counterparties could request immediate payment, guarantee or an ongoing full overnight collateralisation on derivative instruments in net liability positions.

The total fair value of derivative financial instruments containing credit risk-related contingent features amounted to USD 102 million and USD 82 million as of 31 December 2017 and 30 June 2018, respectively. For derivative financial instruments containing credit risk-related contingent features, the Group posted collateral of nil as of 31 December 2017 and 30 June 2018. In the event of a reduction of the Group's credit rating to below investment grade, a fair value of USD 82 million additional collateral would have had to be posted as of 30 June 2018. The total equals the amount needed to settle the instruments immediately as of 30 June 2018.

10 Acquisitions

Bradesco Seguros, S.A.

On 3 July 2017, the Group and Bradesco Seguros, S.A. (Bradesco) entered into a partnership combining the large Commercial Risk business of Bradesco with Swiss Re Corporate Solutions Brasil Seguros S.A. (SRCSB). Upon closing this transaction, SRCSB became one of the leading insurers in the commercial large-risk insurance market in Brazil. The acquisition cost was BRL 210 million paid in cash and 40% shares of SRCSB. The transaction includes Bradesco's related operations, its team of experts and a business portfolio, including existing, new and renewal business.

This transaction strengthens the Group's position in the Brazilian commercial insurance market by combining two diversified portfolios and securing a sustainable and large distribution channel.

11 Debt and contingent capital instruments

The Group enters into long- and short-term debt arrangements to obtain funds for general corporate use and specific transaction financing. The Group defines short-term debt as debt having a maturity at the balance sheet date of not greater than one year and long-term debt as having a maturity of greater than one year. For subordinated debt positions, maturity is defined as the first optional redemption date (notwithstanding that optional redemption could be subject to regulatory consent). Interest expense is classified accordingly.

The Group's debt as of 31 December 2017 and 30 June 2018 was as follows:

USD millions	2017	2018
Senior financial debt	433	241
Subordinated financial debt		660
Short-term debt – financial and operational debt	433	901
Senior financial debt	3 781	3 471
Senior operational debt	390	393
Subordinated financial debt	3 607	2 879
Subordinated operational debt	2 370	2 218
Convertible debt		492
Long-term debt – financial and operational debt	10 148	9 453
Total carrying value	10 581	10 354
Total fair value	12 681	12 001

As of 31 December 2017 and 30 June 2018, operational debt, ie debt related to operational leverage, amounted to USD 2.8 billion (thereof USD 2.4 billion limited- or non-recourse) and USD 2.6 billion (thereof USD 2.2 billion limited- or non-recourse), respectively. Operational leverage is subject to asset/liability matching and is excluded from rating agency financial leverage calculations.

Interest expense on long-term debt and contingent capital instruments

Interest expense on long-term debt for the periods ended 30 June was as follows:

USD millions	2017	2018
Senior financial debt	58	50
Senior operational debt	6	5
Subordinated financial debt	81	82
Subordinated operational debt	55	60
Convertible debt		1
Total	200	198

In addition to the above, interest expense on contingent capital instruments classified as equity was USD 34 million and USD 24 million for the six months ended 30 June 2017 and 2018, respectively.

Long-term debt issued in 2018

In June 2018, Swiss Re Ltd issued a six-year senior unsecured exchangeable instrument with issuer stock settlement. The instrument has a face value of USD 500 million, with a fixed coupon of 3.25% per annum payable semi-annually in arrear until the maturity date (13 June 2024). In limited circumstances, the instrument may be redeemed early, in cash. Noteholders have a put option requiring the issuer to redeem the instrument at par if a delisting, nationalisation or change of control occurs. The higher of the par value and the fair market value of the instrument may be stock settled, at any time at the option of the issuer, by delivering Swiss Re Ltd shares at a prevailing share price which uses a forward-looking fifteen trading day volume-weighted average share price with a 1% discount. If the issuer stock settlement option is exercised at a time when the Group's, or the issuer's, regulatory solvency ratio calculated under the Swiss solvency test is less than 160%, the prevailing share price is subject to a share price floor of USD 44.3305. After year five, holders of the instrument have the unrestricted option (and prior to year five, a restricted option) to exchange the instrument for Swiss Re Ltd shares at the prevailing exchange price, which is initially set at USD 115.2593, representing a premium of 30% to the reference share price which used a forward-looking ten trading day volume-weighted average share price commencing on 7 June 2018. The issuer may elect to settle a noteholder exchange in cash or Swiss Re Ltd shares. The share price floor and the exchange price are subject to customary anti-dilution adjustments. To economically offset the settlement of a noteholder initiated exchange (in cash or in Swiss Re Ltd shares), Swiss Re purchased

Financial statements

Notes to the Group financial statements

matching call options on Swiss Re Ltd shares with a portion of the proceeds of the offering. Consequently, no new Swiss Re Ltd shares will be issued upon a noteholder initiated exchange.

In June 2018, Swiss Re ReAssure Limited entered into a GBP 550 million revolving credit facility with a syndicate of banks. The facility has an expiry date of 26 June 2021. At 29 June 2018, the amount drawn under the facility was GBP 468 235 294. This revolving credit facility replaces the previous GBP 550 million revolving credit facility that Swiss Re ReAssure Limited (formerly known as Swiss Re Admin Re Limited) had entered into in April 2016.

12 Earnings per share

Earnings per share for the six months ended 30 June were as follows:

USD millions (except share data)	2017	2018
Basic earnings per share		
Net income	1 244	1 037
Non-controlling interests	1	-7
Interest on contingent capital instruments ¹	-34	-24
Net income attributable to common shareholders	1 211	1 006
Weighted average common shares outstanding	321 651 373	310 385 586
Net income per share in USD	3.76	3.24
Net income per share in CHF²	3.75	3.13
Effect of dilutive securities		
Change in income available to common shares due to convertible debt and contingent capital instruments ¹	34	24
Change in average number of shares due to convertible debt and contingent capital instruments	35 745 192	24 565 392
Change in average number of shares due to employee options	892 848	458 165
Diluted earnings per share		
Net income assuming debt conversion and exercise of options	1 245	1 030
Weighted average common shares outstanding	358 289 413	335 409 143
Net income per share in USD	3.47	3.07
Net income per share in CHF²	3.46	2.96

¹ Please refer to Note 11, "Debt and contingent capital instruments".

² The translation from USD to CHF is shown for informational purposes only and has been calculated using the Group's average exchange rates.

Dividends are declared in Swiss francs. During the twelve months ended 31 December 2017 and the six months ended 30 June 2018, the Group paid dividends per share of CHF 4.85 and CHF 5.00, respectively.

At the 153rd Annual General Meeting held on 21 April 2017 and the 154th Annual General Meeting held on 20 April 2018, the Group's shareholders authorised the Group Board of Directors to repurchase up to a maximum CHF 1 billion purchase value of the Group's own shares by way of a public buy-back programme for cancellation purposes prior to the 2018 and 2019 Annual General Meetings, respectively.

The public share buy-back programme prior to the 154th Annual General Meeting was completed on 16 February 2018. The total number of shares repurchased amounted to 10.8 million, of which 6.3 million and 4.5 million shares were repurchased as of 31 December 2017 and between 1 January and 16 February 2018, respectively. On 20 April 2018, the 154th Annual General Meeting resolved the cancellation of the repurchased 10.8 million shares by way of share capital reduction. The share capital reduction was registered in the Commercial Register of the Canton of Zurich on 19 July 2018 and publication in the Swiss Commercial Gazette occurred on 24 July 2018.

The public share buy-back programme prior to the 155th Annual General Meeting commenced on 7 May 2018. The total number of shares repurchased as at 30 June 2018 amounted to 3.2 million.

13 Benefit plans

Net periodic benefit cost

Pension and post-retirement cost for the six months ended 30 June 2017 and 2018 were USD 75 million and USD 61 million, respectively. Pension and post-retirement cost is presented in "Operating expenses".

Employer's contribution for 2018

For the six months ended 30 June 2018, the Group contributed USD 60 million to its defined benefit pension plans and USD 9 million to other post-retirement plans, compared to USD 93 million and USD 9 million, respectively, in the same period of 2017.

The expected 2018 contributions to the defined benefit pension plans and to the post-retirement benefit plans, revised as of 30 June 2018 for the latest information, amount to USD 187 million and USD 18 million, respectively.

14 Variable interest entities

The Group enters into arrangements with variable interest entities (VIEs) in the normal course of business. The involvement ranges from being a passive investor to designing, structuring and managing the VIEs. The variable interests held by the Group arise primarily as a result of the Group's involvement in certain insurance-linked securitisations, life and health funding transactions, swaps in trusts, debt financing, investment, senior commercial mortgage and infrastructure loans as well as other entities, which meet the definition of a VIE.

When analysing whether the entity is a VIE, the Group mainly assesses if (1) the equity is sufficient to finance the entity's activities without additional subordinated financial support, (2) the equity holders have the right to make significant decisions affecting the entity's operations and (3) the holders of the voting rights substantively participate in the gains and losses of the entity.

When one of these criteria is not met, the entity is considered a VIE and is assessed for consolidation under the VIE section of the Consolidation Topic.

The party that has a controlling financial interest is called a primary beneficiary and consolidates the VIE. The party is deemed to have a controlling financial interest if it has both:

- the power to direct the activities of the VIE that most significantly impact the entity's economic performance; and
- the obligation to absorb the entity's losses that could potentially be significant to the VIE or the right to receive benefits from the entity that could potentially be significant to the VIE.

For all its variable interests in VIEs, the Group assesses whether it has a controlling financial interest in these entities and, thus, is the primary beneficiary. The Group identifies the activities that most significantly impact the entity's performance and determines whether the Group has the power to direct those activities. In conducting the analysis, the Group considers the purpose, the design and the risks that the entity was designed to create and pass through to its variable interest holders. Additionally, the Group assesses if it has the obligation to absorb losses or if it has the right to receive benefits of the VIE that could potentially be significant to the entity. If both criteria are met, the Group has a controlling financial interest in the VIE and consolidates the entity.

The Group monitors changes to the facts and circumstances of the existing involvement with legal entities to determine whether they require reconsideration of the entity's designation as a VIE or voting interest entity. For VIEs, the Group regularly reassesses the primary beneficiary determination.

Insurance-linked securitisations

The insurance-linked securitisations transfer pre-existing insurance risk to investors through the issuance of insurance-linked securities. In insurance-linked securitisations, the securitisation vehicle assumes the insurance risk from a sponsor through insurance or derivative contracts. The securitisation vehicle generally retains the issuance proceeds as collateral, which consists of investment-grade securities. The Group does not have potentially significant variable interest in these vehicles and therefore is not a primary beneficiary.

Typically, the variable interests held by the Group arise through ownership of insurance-linked securities, in which case the Group's maximum loss equals the principal amount of the securities held by the Group.

Life and health funding vehicles

The Group participates in certain structured transactions that retrocede longevity and mortality risks to captive reinsurers with an aim to provide regulatory capital credit to a transaction sponsor through creation of funding notes by a separate funding vehicle which is generally considered a VIE. The Group's participation in these transactions is generally limited to providing contingent funding support via a financial contract with a funding vehicle, which represents a potentially significant variable interest in the funding vehicle. The Group does not have power to direct activities of the funding vehicles and therefore is not a primary beneficiary of the funding vehicles in these transactions. The Group's maximum exposure in these transactions equals either the total contract notional or outstanding balance of the funding notes issued by the vehicle, depending on the specific contractual arrangements.

Financial statements

Notes to the Group financial statements

Swaps in trusts

The Group provides interest rate and foreign exchange risk hedges to certain asset securitisation trusts which qualify as VIEs. As the Group's involvement is limited to interest rate and foreign exchange derivatives, it does not have power to direct any activities of the trusts and therefore does not qualify as primary beneficiary of any of these trusts. These activities are in run-off.

Debt financing vehicles

The Group consolidates a debt-financing vehicle created to collateralise reinsurance coverage provided by the Group. The Group manages the asset portfolio in the vehicle and absorbs the variability of the investment return of the vehicle's portfolio, thereby satisfying both criteria for a controlling financial interest: power over activities most significant to the vehicle's economic performance and significant economic interest.

Investment vehicles

The Group consolidates a real estate investment entity, which holds real estate backing annuities business. The Group is its primary beneficiary, because it has both power over the entity's investment decisions, as well as a significant variable interest in the entity.

The Group's variable interests in investment partnerships arise through ownership of the limited partner interests. Many investment partnerships are VIEs because the limited partners as a group lack kick-out or participating rights. The Group does not hold the general partner interest in the limited partnerships and therefore does not direct investment activities of the entity. Therefore, the Group lacks power over the relevant activities of the vehicles and, consequently, does not qualify as the primary beneficiary. The Group is exposed to losses when the values of the investments held by the investment vehicles decrease. The Group's maximum exposure to loss equals the Group's share of the investment.

The Group is a passive investor in structured securitisation vehicles issuing residential and commercial mortgage-backed securities (RMBS and CMBS, respectively) and other asset-backed securities (ABS). The Group's investments in RMBS, CMBS and other ABS are passive in nature and do not obligate the Group to provide any financial or other support to the issuer entities. By design, RMBS, CMBS and ABS securitisation entities are not adequately capitalised and therefore considered VIEs. The Group is not the primary beneficiary, because it does not have power to direct most significant activities. These investments are accounted for as available-for-sale as described in the investment note and not included in the tables below.

The Group consolidates an investment vehicle, because the Group holds the entire interest in the entity and makes investment decisions related to the entity. The investment vehicle is a VIE because it is structured as an umbrella company comprised of multiple sub-funds. The majority of the investments held in this vehicle are accounted for as available-for-sale and are disclosed in the investment note and not included in the tables below.

Investment vehicles for unit-linked business

Additionally, the Group invests on behalf of the policyholders as a passive investor in a variety of investment funds across various jurisdictions. By design, many of these funds meet a VIE definition. While the Group may have a potentially significant variable interest in some of these entities due to its share of the fund's total net assets, it never has power over the fund's investment decisions, or unilateral kick-out rights relative to the decision maker.

The Group is not exposed to losses in the aforementioned investment vehicles, as the investment risk is borne by the policyholder.

Senior commercial mortgage and infrastructure loans

The Group also invests in structured commercial mortgage and infrastructure loans, which are held for investment.

The commercial mortgage loans are made to non-recourse special purpose entities collateralised with commercial real estate. The entities are adequately capitalised and generally structured as voting interest entities. Occasionally, the borrower entities can be structured as limited partnerships where the limited partners do not have kick-out or participating rights, which results in the VIE designation.

The infrastructure loans are made to non-recourse special purpose entities collateralised with infrastructure project assets. Some borrower entities may have insufficient equity investment at risk, which results in the VIE designation.

The Group does not have power over the activities most significant to the aforementioned borrower entities designated as VIEs and therefore does not consolidate them.

The Group's maximum exposure to loss from its investments equals the loan outstanding amount.

Other

The Group consolidates a vehicle providing reinsurance to its members, because it serves as a decision maker over the entity's investment and underwriting activities, as well as provides retrocession for the majority of the vehicle's insurance risk and receives performance-based fees. Additionally, the Group is obligated to provide the vehicle with loans in case of a deficit. The vehicle is a VIE, primarily because its total equity investment at risk is insufficient and the members lack decision-making rights.

The Group did not provide financial or other support to any VIEs during 2018 that it was not previously contractually required to provide.

Financial statements

Notes to the Group financial statements

Consolidated VIEs

The following table shows the total assets and liabilities in the Group's balance sheet related to VIEs of which the Group is the primary beneficiary as of 31 December 2017 and 30 June 2018:

USD millions	2017	2018
Fixed-income securities available-for-sale	3 974	3 626
Investment real estate	198	182
Short-term investments	62	56
Cash and cash equivalents	14	34
Accrued investment income	34	32
Premiums and other receivables	29	36
Deferred acquisition costs	4	3
Deferred tax assets	41	81
Other assets	15	18
Total assets	4 371	4 068
Unpaid claims and claim adjustment expenses	84	86
Liabilities for life and health policy benefits	1	1
Unearned premiums	12	11
Reinsurance balances payable	17	17
Deferred and other non-current tax liabilities	133	147
Accrued expenses and other liabilities	174	158
Long-term debt	2 369	2 218
Total liabilities	2 790	2 638

The assets of the consolidated VIEs may only be used to settle obligations of these VIEs and to settle any investors' ownership liquidation requests. There is no recourse to the Group for the consolidated VIEs' liabilities. The assets of the consolidated VIEs are not available to the Group's creditors.

Non-consolidated VIEs

The following table shows the total assets and liabilities on the Group's balance sheet related to VIEs in which the Group held a variable interest but was not the primary beneficiary as of 31 December 2017 and 30 June 2018:

USD millions	2017	2018
Fixed income securities available-for-sale	587	745
Equity securities available-for-sale	700	
Equity securities at fair value through earnings		308
Policy loans, mortgages and other loans	1 035	1 214
Other invested assets	1 831	1 866
Investments for unit-linked and with-profit business	9 223	8 793
Total assets	13 376	12 926
Accrued expenses and other liabilities	67	59
Total liabilities	67	59

The following table shows the Group's assets, liabilities and maximum exposure to loss related to VIEs in which the Group held a variable interest but was not the primary beneficiary as of 31 December 2017 and 30 June 2018:

USD millions	Total assets	Total liabilities	2017 Maximum exposure to loss ¹	Total assets	Total liabilities	2018 Maximum exposure to loss ¹
Insurance-linked securitisations	311		314	356		355
Life and health funding vehicles	27	1	2 052	25	1	2 113
Swaps in trusts	25	66	- ²	60	58	- ²
Investment vehicles	2 493		2 494	2 103		2 103
Investment vehicles for unit-linked business	9 223			8 793		
Senior commercial mortgage and infrastructure loans	1 297		1 297	1 589		1 589
Total	13 376	67	-²	12 926	59	-²

¹ Maximum exposure to loss is the loss the Group would absorb from a variable interest in a VIE in the event that all of the assets of the VIE are deemed worthless.

² The maximum exposure to loss for swaps in trusts cannot be meaningfully quantified due to their derivative character.

The assets and liabilities for the swaps in trusts represent the positive and negative fair values of the derivatives the Group has entered into with the trusts.

Cautionary note on forward-looking statements

Certain statements and illustrations contained herein are forward-looking. These statements (including as to plans, objectives, targets, and trends) and illustrations provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to a historical fact or current fact.

Forward-looking statements typically are identified by words or phrases such as “anticipate”, “assume”, “believe”, “continue”, “estimate”, “expect”, “foresee”, “intend”, “may increase”, “may fluctuate” and similar expressions, or by future or conditional verbs such as “will”, “should”, “would” and “could”. These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the Group’s actual results of operations, financial condition, solvency ratios, capital or liquidity positions or prospects to be materially different from any future results of operations, financial condition, solvency ratios, capital or liquidity positions or prospects expressed or implied by such statements or cause Swiss Re to not achieve its published targets. Such factors include, among others:

- the frequency, severity and development of insured claim events, particularly natural catastrophes, man-made disasters, pandemics, acts of terrorism and acts of war;
- mortality, morbidity and longevity experience;
- the cyclical nature of the insurance and reinsurance sectors;
- instability affecting the global financial system;
- deterioration in global economic conditions;
- the effect of market conditions, including the global equity and credit markets, and the level and volatility of equity prices, interest rates, credit spreads, currency values and other market indices, on the Group’s investment assets;
- changes in the Group’s investment result as a result of changes in the Group’s investment policy or the changed composition of the Group’s investment assets, and the impact of the timing of any such changes relative to changes in market conditions;
- the Group’s ability to maintain sufficient liquidity and access to capital markets, including sufficient liquidity to cover potential recapture of reinsurance agreements, early calls of debt or debt-like arrangements and collateral calls due to actual or perceived deterioration of the Group’s financial strength or otherwise;
- any inability to realise amounts on sales of securities on the Group’s balance sheet equivalent to their values recorded for accounting purposes;
- changes in legislation and regulation, and the interpretations thereof by regulators and courts, affecting us or the Group’s ceding companies, including as a result of shifts away from multilateral approaches to regulation of global operations;
- the outcome of tax audits, the ability to realise tax loss carryforwards, the ability to realise deferred tax assets (including by reason of the mix of earnings in a jurisdiction or deemed change of control), which could negatively impact future earnings, and the overall impact of changes in tax regimes on business models;
- failure of the Group’s hedging arrangements to be effective;
- the lowering or loss of one of the financial strength or other ratings of one or more Swiss Re companies, and developments adversely affecting the Group’s ability to achieve improved ratings;

- uncertainties in estimating reserves;
- policy renewal and lapse rates;
- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes and certain large man-made losses, as significant uncertainties may be involved in estimating losses from such events and preliminary estimates may be subject to change as new information becomes available;
- extraordinary events affecting the Group's clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- legal actions or regulatory investigations or actions, including those in respect of industry requirements or business conduct rules of general applicability;
- changes in accounting standards;
- significant investments, acquisitions or dispositions, and any delays, unexpected costs, lower-than expected benefits, or other issues experienced in connection with any such transactions;
- changing levels of competition, including from new entrants into the market; and
- operational factors, including the efficacy of risk management and other internal procedures in managing the foregoing risks and the ability to manage cybersecurity risks.

These factors are not exhaustive. The Group operates in a continually changing environment and new risks emerge continually. Readers are cautioned not to place undue reliance on forward-looking statements. Swiss Re undertakes no obligation to publicly revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

This communication is not intended to be a recommendation to buy, sell or hold securities and does not constitute an offer for the sale of, or the solicitation of an offer to buy, securities in any jurisdiction, including the United States. Any such offer will only be made by means of a prospectus or offering memorandum, and in compliance with applicable securities laws.

Note on risk factors

General impact of adverse market conditions

The operations of Swiss Re Ltd ("Swiss Re") and its subsidiaries (collectively, the "Group") as well as its investment returns are subject to market volatility and macro-economic factors, which are outside of the Group's control and are often inter-related.

Growth forecasts among the principal global economies remain uneven and uncertain in an environment of elevated political uncertainty. The forming of a new government in Italy consisting of the anti-European parties had stirred fears of a resurfacing of a Eurozone crisis. The planned withdrawal of the United Kingdom from the EU has created uncertainty not only for the United Kingdom but for the rest of the EU, and negotiations over withdrawal will likely continue to contribute to volatility and pose significant challenges for the EU and the United Kingdom. The long-term effects of a withdrawal of the United Kingdom from the EU will depend in part on any agreements the United Kingdom makes to retain access to the single market within the European Economic Area (EEA) following such withdrawal, the scope and nature of which currently remain highly uncertain. As China's economy undergoes structural changes, recent near-term growth stabilisation may be reversed in the context of a broader economic slowdown were it to occur. The foregoing may be exacerbated by geopolitical tensions, fears over security and migration, and uncertainty created generally by the policy pronouncements that have been, and may in the coming months be, announced by the US administration on a range of trade, security, foreign policy, environmental protection and other issues having global implications, as well as by the consequences of the implementation of such policy pronouncements, including in particular trade wars.

With fewer options available to policymakers and concerns generally over the absence of realistic confidence-building measures, and with heightened risk that volatility or depressed conditions in one sector, one market, one country or one region could have far broader implications, volatility can be expected to continue. Further adverse developments or the continuation of adverse trends that, in turn, have a negative impact on financial markets and economic conditions could limit the Group's ability to access the capital markets and bank funding markets, could adversely affect the ability of counterparties to meet their obligations to the Group and could adversely affect the confidence of the ultimate buyers of insurance and reinsurance.

Any of the foregoing factors, developments and trends could have an adverse effect on the Group's investment results, which in the current low interest rate environment and soft insurance cycle could have a material adverse effect on the Group's overall results, make it difficult to determine the value of certain assets in the Group's portfolio, make it more difficult to acquire suitable investments to meet its risk and return criteria and otherwise have a material adverse effect on its business and operations.

Regulatory changes

Swiss Re and its subsidiaries operate in a highly regulated environment. The regulatory regimes to which members of the Group are subject have changed significantly in recent years and are expected to continue to evolve. During this period, there has been a noticeable trend to extend the scope of reforms and oversight, which initially targeted banks, beyond such institutions to cover insurance and reinsurance operations.

While some regulation is national in scope, the global nature of the Group's business means that its operations are subject in effect to a patchwork of global, national and regional standards. Swiss Re and its subsidiaries are subject to group supervision and Swiss Re's subsidiaries are also subject to applicable regulation in each of the jurisdictions in which they conduct business, particularly Switzerland, the United States, the United Kingdom, Luxembourg and Germany. The Group is subject to the Swiss Solvency Test and, through its legal entities organised in the EEA, Solvency II.

While certain regulatory processes are designed in part to foster convergence and achieve recognition of group supervisory schemes, the Group continues to face risks of extra-territorial application of regulations, particularly as to group supervision and group solvency requirements. In addition, regulators in jurisdictions beyond those where the Group has core operations increasingly are playing a far greater oversight role, requiring more localised resources and, despite a predominantly local focus, also raise issues of a cross-border nature. Furthermore, evolving regulatory schemes and requirements may be inconsistent or may conflict with each other, thereby subjecting the Group, particularly in light of the increasing focus on legal entities in isolation,

to higher compliance and legal costs, as well as the possibility of higher operational, capital and liquidity costs. The effect of these trends could be exacerbated to the extent that the current political environment results in a return to more bilateral, and less harmonised, cross-border regulatory efforts.

While in recent years there has been an evolving focus on classifying certain insurance companies as systemically important, it is unclear whether and, if so, in what form reforms will be enacted. The Group could be designated as a global systemically important financial institution ("SIFI") under the framework for SIFIs developed by the Financial Stability Board, or as a systemically important insurer by the Financial Stability Oversight Council ("FSOC") in the United States. The International Association of Insurance Supervisors, an international body that represents insurance regulators and supervisors, has published and since refined its methodology for identifying global systemically important insurers ("G-SIIs"). Were the Group to be designated as a G-SII, it could be subject to one or both of the resulting regimes, including capital standards (the basic capital requirement for G-SIIs), which would have various implications for the Group, including additional compliance costs, reporting obligations and capital costs (in the form of capital charges or high loss absorption capacity), as well as heightened regulatory scrutiny in various jurisdictions. In addition, the Group ultimately will be subject to oversight of its Swiss regulator in respect of recovery and resolution planning.

The Group cannot predict which legislative and/or regulatory initiatives will be enacted or promulgated, what the scope and content of these initiatives ultimately will be, when they will be effective and what the implications will be for the industry, in general, and for the Group, in particular. The Group may be subject to changes in views of its regulators in respect of the models that the Group uses for capital and solvency purposes, and could be adversely affected if, for example, it is required to use standard models rather than internal models. Generally, legal and regulatory changes could have a material impact on the Group's business. Uncertainty regarding the future relationship between the UK and the EU could also impact the legislative and/or regulatory regimes to which the Group is subject, both in the United Kingdom and in the European Union.

In addition, regulatory changes could occur in areas of broader application, such as competition policy and tax laws. Changes in tax laws, for example, could increase the taxes the Group pays, the attractiveness of products offered by the Group, the Group's investment activities and the value of deferred tax assets. Any number of these changes could apply to the Group and its operations. Changes to the US tax regime enacted in early 2018 prompted us to consider modifications to our operating model for our US business. These changes, or inconsistencies between the various regimes that apply to the Group, could increase the costs of doing business (including due to increased capital requirements), reduce access to liquidity, limit the scope of current or future business or affect the competitive balance, or could make reinsurance less attractive to primary insurers.

Market risk

Volatility and disruption in the global financial markets could expose the Group to significant financial and capital markets risk, including changes in interest rates, credit spreads, equity prices and foreign currency exchange rates, which may adversely impact the Group's financial condition, results of operations, liquidity and capital position. The Group's exposure to interest rate risk is primarily related to the market price and cash flow variability associated with changes in interest rates. In general, a low interest rate environment, such as the one experienced in recent years, poses significant challenges to the insurance and reinsurance industries, with earnings capacity under stress unless lower investment returns from fixed income assets can be offset by lower combined ratios or higher returns from other asset classes. Exposure to credit spreads primarily relates to market price and cash flow variability associated with changes in credit spreads. When credit spreads widen, the net unrealised loss position of the Group's investment portfolio can increase, as could other-than-temporary impairments.

The Group is exposed to changes in the level and volatility of equity prices, as they affect the value of equity securities themselves as well as the value of securities or instruments that derive their value from a particular equity security, a basket of equity securities or a stock index. The Group is also subject to equity price risk to the extent that the values of life-related benefits under certain products and life contracts, most notably variable annuity business, are tied to financial market values; to the extent market values fall, the financial exposure on guarantees related to these contracts would increase to the extent this exposure is not hedged. While the Group has an extensive hedging programme covering its existing variable annuity business that it believes is sufficient, certain risks cannot be hedged, including actuarial, basis and correlation risks. Exposure to foreign exchange risk arises from exposures to changes in spot prices and forward prices as well as to volatile movements in exchange rates.

These risks can have a significant effect on investment returns and market values of securities positions, which in turn may affect both the Group's results of operations and financial condition. The Group continues to focus on asset-liability management for its investment portfolio, but pursuing even this strategy has its risks – including possible mismatch – that in turn can lead to reinvestment risk. The Group seeks to manage the risks inherent in its investment portfolio by repositioning the portfolio from time to time, as needed, and to reduce risk and fluctuations through the use of hedges and other risk management tools.

Credit risk

If the credit markets were again to deteriorate and further asset classes were to be impacted, the Group could experience losses. Changes in the market value of the underlying securities and other factors impacting their price could give rise to market value losses. If the credit markets were to deteriorate again, the Group could also face write-downs in other areas of its portfolio, including other structured instruments, and the Group and its counterparties could face difficulties in valuing credit-related instruments. Differences in opinion with respect to valuations of credit-related instruments could result in legal disputes among the Group and its counterparties as to their respective obligations, the outcomes of which are difficult to predict and could be material.

The Group is also subject to credit and other risks in its credit business, including reliance on banks that underwrite and monitor facilities in which the Group participates and potential default by borrowers under those facilities.

Liquidity risks

The Group's business requires, and its clients expect, that it has sufficient capital and sufficient liquidity to meet its re/insurance obligations, and that this would continue to be the case following the occurrence of any foreseeable event or series of events, including extreme catastrophes, that would trigger insurance or reinsurance coverage obligations. The Group's uses of funds include obligations arising in its insurance and reinsurance businesses (including claims and other payments as well as insurance provision repayments due to portfolio transfers, securitisations and commutations), which may include large and unpredictable claims (including catastrophe claims), funding of capital requirements and operating costs, payment of principal and interest on outstanding indebtedness and funding of acquisitions. The Group also has unfunded capital commitments in its private equity and hedge fund investments, which could result in funding obligations at a time when it is subject to liquidity constraints. In addition, the Group has potential collateral requirements in connection with a number of reinsurance arrangements, the amounts of which may be material and the meeting of which could require the Group to liquidate cash equivalents or other securities.

The Group manages liquidity and funding risks by focusing on the liquidity stress that is likely to result from extreme capital markets scenarios or from extreme loss events or combinations of the two. Generally, the ability to meet liquidity needs could be adversely impacted by factors that the Group cannot control, such as market dislocations or interruptions, adverse economic conditions, severe disruption in the financial and worldwide credit markets and the related increased constraints on the availability of credit; changes in interest rates, foreign exchange rates and credit spreads; or by perceptions among market participants of the extent of the Group's liquidity needs.

Unexpected liquidity needs (including to meet collateral calls) could require the Group to incur indebtedness or liquidate investments or other assets. The Group may not be able to secure new sources of liquidity or funding, should projected or actual liquidity fall below levels it requires. The ability to meet liquidity needs through asset sales may be constrained by market conditions and the related stress on valuations, and through third-party funding may be limited by constraints on the general availability of credit and willingness of lenders to lend. In addition, the Group's ability to meet liquidity needs may also be constrained by regulatory requirements that require regulated entities to maintain or increase regulatory capital, or that restrict intra-group transactions, the timing of dividend payments from subsidiaries or the fact that certain assets may be encumbered or otherwise non-tradable. Failure to meet covenants in lending arrangements could give rise to collateral-posting or defaults, and further constrain access to liquidity. Finally, any adverse ratings action could trigger a need for further liquidity (for example, by triggering termination provisions or collateral delivery requirements in contracts to which the Group is a party) at a time when the Group's ability to obtain liquidity from external sources is limited by such ratings action.

Counterparty risks

The Group is exposed to the risk of defaults, or concerns about defaults, by its counterparties. Securities trading counterparties, counterparties under swaps and other derivative contracts, and financial intermediaries may default on their obligations due to bankruptcy, insolvency, lack of liquidity, adverse economic conditions, operational failure, fraud or other reasons, which could have a material adverse effect on the Group.

The Group could also be adversely affected by the insolvency of, or other credit constraints affecting, counterparties in its insurance and reinsurance operations. Moreover, the Group could be adversely affected by liquidity issues at ceding companies or at third parties to whom the Group has retroceded risk, and such risk could be exacerbated to the extent any such exposures are concentrated.

Risks relating to credit rating downgrades

Ratings are an important factor in establishing the competitive position of reinsurance companies. Third-party rating agencies assess and rate the financial strength of reinsurers and insurers. These ratings are intended to measure a company's ability to repay its obligations and are based upon criteria established by the rating agencies. Ratings may be revised downward or revoked at the sole discretion of the rating agencies.

The Group's ratings reflect the current opinion of the relevant rating agencies. One or more of its ratings could be downgraded or withdrawn in the future, and market conditions could increase the risk of downgrade. Rating agencies may increase the frequency and scope of ratings reviews, revise their criteria or take other actions that may negatively impact the Group's ratings. In addition, changes to the process or methodology of issuing ratings, or the occurrence of events or developments affecting the Group, could make it more difficult for the Group to achieve improved ratings which it would otherwise have expected.

As claims paying and financial strength ratings are key factors in establishing the competitive position of reinsurers, a decline in ratings alone could make reinsurance provided by the Group less attractive to clients relative to reinsurance from competitors with similar or stronger ratings. A decline in ratings could also cause the loss of clients who are required by policy or regulation to purchase reinsurance only from reinsurers with certain ratings. Certain larger reinsurance contracts contain terms that would allow the ceding companies to cancel the contract if the Group's ratings or those of its subsidiaries are downgraded beyond a certain threshold. Moreover, a decline in ratings could impact the availability and terms of unsecured financing and obligate the Group to provide collateral or other guarantees in the course of its business or trigger early termination of funding arrangements, potentially resulting in a need for additional liquidity. As a ratings decline could also have a material adverse impact on the Group's costs of borrowing or ability to access the capital markets, the adverse implications of a downgrade could be more severe. These same factors could also impact the Group's insurance business.

Legal and regulatory risks

In the ordinary course of business, the Group is involved in lawsuits, arbitrations and other formal and informal dispute resolution procedures, the outcomes of which determine rights and obligations under insurance, reinsurance and other contractual agreements. From time to time, the Group may institute, or be named as a defendant in, legal proceedings, and the Group may be a claimant or respondent in arbitration proceedings. These proceedings could involve coverage or other disputes with ceding companies, disputes with parties to which the Group transfers risk under reinsurance arrangements, disputes with other counterparties or other matters. The Group cannot predict the outcome of any of the foregoing, which could be material for the Group.

The Group is also involved, from time to time, in investigations and regulatory proceedings, which could result in adverse judgments, settlements, fines and other outcomes. The number of these investigations and proceedings involving the financial services industry has increased in recent years, and the potential scope of these investigations and proceedings has also increased, not only in respect of matters covered by the Group's direct regulators, but also in respect of compliance with broader business conduct rules, including those in respect of market abuse, bribery, money laundering, trade sanctions and data protection and privacy. The Group also is subject to audits and challenges from time to time by tax authorities, which could result in increases in tax costs, changes to internal structures and interest and penalties. Tax authorities may also actively pursue additional taxes based on retroactive changes to tax laws. The Group could be subject to risks arising from alleged, or actual, violations of any of the foregoing, and could also be subject to risks arising from potential employee misconduct, including non-compliance with internal policies and procedures and malfeasance, such as undertaking or facilitating cyber attacks on internal systems. Substantial legal liability could materially adversely affect the Group's business, financial condition or results of operations or could cause significant reputational harm, which could seriously affect its business.

Insurance, operational and other risks

As part of the Group's ordinary course operations, the Group is subject to a variety of risks, including risks that reserves may not adequately cover future claims and benefits; risks that catastrophic events (including hurricanes, windstorms, floods, earthquakes, acts of terrorism, man-made disasters such as industrial accidents, explosions, and fires, and pandemics) may expose the Group to unexpected large losses (and related uncertainties in estimating future claims in respect of such events); changes in the insurance industry that affect ceding companies, particularly those that further increase their sensitivity to counterparty risk; competitive conditions (including as a result of consolidation and the availability of significant levels of alternative capacity); cyclicalities of the industry; risks related to emerging claims and coverage issues; macro developments giving rise to emerging risks, such as climate change and technological developments (including greater exposure to cyber risks, which could have a range of consequences from operational disruption, to loss of proprietary or customer data, to greater regulatory burdens and potential liability); risks arising from the Group's dependence on policies, procedures and expertise of ceding companies; risks related to investments in emerging markets; and risks related to the failure of, or attacks directed at, the Group's operational systems and infrastructure, including its information technology networks and systems. Any of the foregoing, as well as the occurrence of future risks that the Group's risk management procedures fail to identify or anticipate, could have a material adverse effect on the Group, and could also give rise to reputational risk.

Use of models; accounting matters

The Group is subject to risks relating to the preparation of estimates and assumptions that management uses, including as part of its risk models as well as those that affect the reported amounts of assets, liabilities, revenues and expenses in the Group's financial statements, including assumed and ceded business. For example, the Group estimates premiums pending receipt of actual data from ceding companies, which actual data could deviate from the estimates. In addition, particularly with respect to large natural catastrophes, it may be difficult to estimate losses, and preliminary estimates may be subject to a high degree of uncertainty and change as new information becomes available. Deterioration in market conditions could have an adverse impact on assumptions used for financial reporting purposes, which could affect possible impairment of present value of future profits, fair value of assets and liabilities, deferred acquisition costs or goodwill. Moreover, regulators could require the use of standard models instead of permitting the use of internal models. To the extent that management's estimates or assumptions prove to be incorrect, it could have a material impact on underwriting results (in the case of risk models) or on reported financial condition or results of operations, and such impact could be material.

The Group's results may be impacted by changes in accounting standards, or changes in the interpretation of accounting standards. Changes in accounting standards could impact future reported results or require restatement of past reported results. The Group's results may also be impacted if regulatory authorities take issue with any conclusions the Group may reach in respect of accounting matters.

The Group uses non-GAAP financial measures in its external financial reporting, including in this report. These measures are not prepared in accordance with US GAAP or any other comprehensive set of accounting rules or principles, and should not be viewed as substitutes for measures prepared in accordance with US GAAP. Moreover, these may be different from, or otherwise inconsistent with, non-GAAP financial measures used by other companies. These measures have inherent limitations, are not required to be uniformly applied and are not audited.

The Group includes in its annual report a section in respect of its results, including financial statements, prepared in accordance with the Group's proprietary economic value management ("EVM") principles ("EVM report"). Financial information included in the EVM report contains non-GAAP financial measures. The EVM principles differ significantly from US GAAP and, accordingly, the Group's results prepared in accordance with US GAAP will differ from its EVM results, and those differences could be material. The Group's annual EVM results can be more volatile than the US GAAP results because, among other things, assets and liabilities are measured on a market-consistent basis, profit recognition on new contracts is recognised at inception rather than over the life time of the contract, and life and health actuarial assumptions are on a best estimate basis as opposed to generally being locked-in. The Group's EVM financial statements should not be viewed as a substitute for the Group's US GAAP financial statements.

Risks related to the Swiss Re corporate structure

Swiss Re is a holding company, a legal entity separate and distinct from its subsidiaries, including Swiss Reinsurance Company Ltd. As a holding company with no operations of its own, Swiss Re is dependent upon dividends and other payments from Swiss Reinsurance Company Ltd and its other principal operating subsidiaries. The Group expects that, over time, its structure will continue to evolve, and in the future it may elect again (having accepted an equity investment within its Life Capital Business Unit from a third party) to partner with minority investors in or within one or more of the Group's Business Units or sub-groups within its Business Units, which could alter historical approaches taken in respect of capital, liquidity, funding and/or dividends, as well as other governance matters, including strategy for such Business Unit or sub-group.

Contacts

Investor Relations

Telephone +41 43 285 4444
Fax +41 43 282 4444
investor_relations@swissre.com

Media Relations

Telephone +41 43 285 7171
Fax +41 43 282 7171
media_relations@swissre.com

Share Register

Telephone +41 43 285 6810
Fax +41 43 282 6810
share_register@swissre.com

Corporate calendar

1 November 2018

Nine months 2018 key financial data

21 February 2019

2018 annual results

14 March 2019

Publication of Annual Report 2018

17 April 2019

155th Annual General Meeting

©2018 Swiss Re. All rights reserved.

Title:
Swiss Re Group
2018 Half-Year Report

Production:
Swiss Re Corporate Real Estate & Services/
Media Production, Zurich

printed in
switzerland



The web version of
the 2018 Half-Year Report is available at:
www.swissre.com/investors

Order no: 1492019_18_EN

CCHCC, 08/18



Swiss Re Ltd
Mythenquai 50/60
P.O. Box
8022 Zurich
Switzerland

Telephone +41 43 285 2121
Fax +41 43 285 2999
www.swissre.com