Swiss Re

Swiss Reinsurance Company Consolidated

First Quarter 2016 Report

Content

Income statement

For the three months ended 31 March

USD millions	Note	2015	2016
Revenues			
Gross premiums written	4	9 522	**10 686**
Net premiums written	4	9 118	**10 228**
Change in unearned premiums		–2 645	**–3 337**
Premiums earned	3	6 473	**6 891**
Fee income from policyholders	3	44	**34**
Net investment income – non-participating business	6	748	**668**
Net realised investment gains/losses – non-participating business[1]	6	588	**502**
Net investment result – unit-linked and with-profit business	6	75	**–63**
Other revenues		13	**15**
Total revenues		7 941	**8 047**
Expenses			
Claims and claim adjustment expenses	3	–1 962	**–2 374**
Life and health benefits	3	–2 130	**–2 218**
Return credited to policyholders		–174	**–21**
Acquisition costs	3	–1 414	**–1 690**
Operating expenses[2]		–605	**–501**
Total expenses before interest expenses		–6 285	**–6 804**
Income before interest and income tax expense		1 656	**1 243**
Interest expenses[2]		–155	**–144**
Income before income tax expense		1 501	**1 099**
Income tax expense		–229	**–225**
Net income before attribution of non-controlling interests		1 272	**874**
Income attributable to non-controlling interests			**–3**
Net income after attribution of non-controlling interests		1 272	**871**
Interest on contingent capital instruments		–17	**–17**
Net income attributable to common shareholder		1 255	**854**

[1] Total impairments for the three months ended 31 March were USD 5 million in 2015 and USD 28 million in 2016, of which USD 5 million and USD 28 million, respectively, were recognised in earnings.
[2] Letter of credit fees of USD 14 million in 2015 have been reclassified from "Operating expenses" to "Interest expenses".

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

Statement of comprehensive income

For the three months ended 31 March

USD millions	2015	2016
Net income before attribution of non-controlling interests	1 272	**874**
Other comprehensive income, net of tax:		
Change in unrealised investment gains/losses	1 012	**1 208**
Change in other-than-temporary impairment	1	**4**
Change in foreign currency translation	–853	**110**
Change in adjustment for pension benefits	26	**8**
Other comprehensive income attributable to non-controlling interests		**26**
Total comprehensive income before attribution of non-controlling interests	1 458	**2 230**
Interest on contingent capital instruments	–17	**–17**
Comprehensive income attributable to non-controlling interests		**–29**
Total comprehensive income attributable to common shareholder	1 441	**2 184**

Reclassification out of accumulated other comprehensive income

For the three months ended 31 March

2015 USD millions	Unrealised investment gains/losses[1]	Other-than-temporary impairment[1]	Foreign currency translation[1,2]	Adjustment from pension benefits[3]	Accumulated other comprehensive income
Balance as of 1 January	3 462	–3	–4 261	–762	–1 564
Change during the period	1 579	2	–740	20	861
Amounts reclassified out of accumulated other comprehensive income	–216			15	–201
Tax	–351	–1	–113	–9	–474
Balance as of period end	4 474	–2	–5 114	–736	–1 378

2016 USD millions	Unrealised investment gains/losses[1]	Other-than-temporary impairment[1]	Foreign currency translation[1,2]	Adjustment from pension benefits[3]	**Accumulated other comprehensive income**
Balance as of 1 January	1 619	–10	–5 137	–953	**–4 481**
Change during the period	2 083	5	–3	–4	**2 081**
Amounts reclassified out of accumulated other comprehensive income	–389	1		16	**–372**
Tax	–486	–2	113	–4	**–379**
Balance as of period end	**2 827**	**–6**	**–5 027**	**–945**	**–3 151**

[1] Reclassification adjustment included in net income is presented in the ''Net realised investment gains/losses – non-participating business'' line.
[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 the ''Operating expenses'' line.

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

Balance sheet

Assets

USD millions	Note	31.12.2015	31.03.2016
Investments	6, 7, 8		
Fixed income securities:			
Available-for-sale (including 10 839 in 2015 and 10 049 in 2016 subject to securities lending and repurchase agreements) (amortised cost: 2015: 59 137; 2016: 62 666)		61 134	**66 398**
Trading (including 1 729 in 2015 and 1 815 in 2016 subject to securities lending and repurchase agreements)		2 896	**2 799**
Equity securities:			
Available-for-sale (including 439 in 2015 and 486 in 2016 subject to securities lending and repurchase agreements) (cost: 2015: 2 876; 2016: 2 737)		3 091	**2 964**
Trading		68	**88**
Policy loans, mortgages and other loans		3 832	**3 930**
Investment real estate		1 550	**1 574**
Short-term investments (including 417 in 2015 and 922 in 2016 subject to securities lending and repurchase agreements)		4 662	**5 357**
Other invested assets		7 861	**8 868**
Investments for unit-linked and with-profit business (equity securities trading: 818 in 2015 and 628 in 2016)		818	**628**
Total investments		85 912	**92 606**
Cash and cash equivalents (including 181 in 2015 and 367 in 2016 subject to securities lending)		5 398	**6 270**
Accrued investment income		670	**601**
Premiums and other receivables		9 747	**13 509**
Reinsurance recoverable on unpaid claims and policy benefits	3	4 523	**4 477**
Funds held by ceding companies		10 668	**9 676**
Deferred acquisition costs	5	5 084	**5 807**
Acquired present value of future profits	5	1 721	**1 688**
Goodwill		3 756	**3 796**
Income taxes recoverable		112	**107**
Deferred tax assets		5 269	**5 478**
Other assets		2 331	**3 018**
Total assets		135 191	**147 033**

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

Liabilities and equity

USD millions	Note	31.12.2015	31.03.2016
Liabilities			
Unpaid claims and claim adjustment expenses		49 718	**51 597**
Liabilities for life and health policy benefits	7	16 779	**17 148**
Policyholder account balances		5 358	**5 469**
Unearned premiums		8 044	**11 602**
Funds held under reinsurance treaties		3 041	**3 299**
Reinsurance balances payable		1 858	**1 918**
Income taxes payable		272	**182**
Deferred and other non-current tax liabilities		6 771	**7 421**
Short-term debt	9	4 105	**3 058**
Accrued expenses and other liabilities		8 964	**14 926**
Long-term debt	9	9 674	**9 701**
Total liabilities		114 584	**126 321**
Equity			
Contingent capital instruments	9	1 102	**1 102**
Common shares CHF 0.10 par value			
2015: 344 052 565; 2016: 344 052 565 shares authorised and issued		32	**32**
Additional paid-in capital		8 730	**8 708**
Shares in Swiss Re Ltd, net of tax		–21	**–24**
Accumulated other comprehensive income:			
Net unrealised investment gains/losses, net of tax		1 619	**2 827**
Other-than-temporary impairment, net of tax		–10	**–6**
Foreign currency translation, net of tax		–5 137	**–5 027**
Adjustment for pension and other post-retirement benefits, net of tax		–953	**–945**
Total accumulated other comprehensive income		–4 481	**–3 151**
Retained earnings		15 222	**13 089**
Shareholder's equity		20 584	**19 756**
Non-controlling interests		23	**956**
Total equity		20 607	**20 712**
Total liabilities and equity		135 191	**147 033**

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

Statement of shareholder's equity

For the twelve months ended 31 December and the three months ended 31 March

USD millions	2015	2016
Contingent capital instruments		
Balance as of 1 January	1 102	**1 102**
Issued		
Balance as of period end	1 102	**1 102**
Common shares		
Balance as of 1 January	32	**32**
Issue of common shares		
Balance as of period end	32	**32**
Additional paid-in capital		
Balance as of 1 January	8 823	**8 730**
Share-based compensation	16	**–45**
Realised gains/losses on treasury shares	–109	**23**
Balance as of period end	8 730	**8 708**
Shares in Swiss Re Ltd, net of tax		
Balance as of 1 January	–10	**–21**
Change of shares in Swiss Re Ltd	–11	**–3**
Balance as of period end	–21	**–24**
Net unrealised investment gains/losses, net of tax		
Balance as of 1 January	3 462	**1 619**
Changes during the period	–1 843	**1 208**
Balance as of period end	1 619	**2 827**
Other-than-temporary impairment, net of tax		
Balance as of 1 January	–3	**–10**
Changes during the period	–7	**4**
Balance as of period end	–10	**–6**
Foreign currency translation, net of tax		
Balance as of 1 January	–4 261	**–5 137**
Changes during the period	–876	**110**
Balance as of period end	–5 137	**–5 027**
Adjustment for pension and other post-retirement benefits, net of tax		
Balance as of 1 January	–762	**–953**
Changes during the period	–191	**8**
Balance as of period end	–953	**–945**
Retained earnings		
Balance as of 1 January	14 421	**15 222**
Net income after attribution of non-controlling interests	3 824	**871**
Interest on contingent capital instruments, net of tax	–68	**–17**
Dividends on common shares and dividends-in-kind	–2 955	**–2 987**
Balance as of period end	15 222	**13 089**
Shareholder's equity	20 584	**19 756**
Non-controlling interests		
Balance as of 1 January	22	**23**
Change during the period[1]		**866**
Transactions with non-controlling interests		**38**
Income attributable to non-controlling interests	1	**3**
Comprehensive income		**26**
Balance as of period end	23	**956**
Total equity	20 607	**20 712**

[1] As of 1 January 2016 the Group adopted the new accounting guidance, ASU 2015-02 "Amendments to the Consolidation Analysis", which required the additional inclusion of non-controlling interests of USD 866 million.

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

Statement of cash flow

For the three months ended 31 March

USD millions	2015	2016
Cash flows from operating activities		
Net income attributable to common shareholder	1 255	**854**
Add net income attributable to non-controlling interests		**3**
Adjustments to reconcile net income to net cash provided/used by operating activities:		
Depreciation, amortisation and other non-cash items	107	**100**
Net realised investment gains/losses	–660	**–437**
Income from equity-accounted investees, net of dividends received	–13	**32**
Change in:		
Technical provisions and other reinsurance assets and liabilities, net[1]	–163	**626**
Funds held by ceding companies and under reinsurance treaties	132	**1 329**
Reinsurance recoverable on unpaid claims and policy benefits	185	**101**
Other assets and liabilities, net	–230	**260**
Income taxes payable/recoverable	–323	**–13**
Trading positions, net	139	**–94**
Net cash provided/used by operating activities	429	**2 761**
Cash flows from investing activities		
Fixed income securities:		
Sales	11 343	**8 484**
Maturities	925	**567**
Purchases	–14 305	**–10 004**
Net purchases/sales/maturities of short-term investments	1 687	**–456**
Equity securities:		
Sales	239	**402**
Purchases	–993	**–397**
Securities purchased/sold under agreement to resell/repurchase, net	981	**633**
Net purchases/sales/maturities of other investments	1 725	**–70**
Net purchases/sales/maturities of investments held for unit-linked and with profit business[1]		**104**
Net cash provided/used by investing activities	1 602	**–737**
Cash flows from financing activities		
Policyholder account balances, unit-linked and with-profit business:[1]		
Deposits	5	**10**
Withdrawals	–8	**–117**
Issuance/repayment of long-term debt	240	**–36**
Issuance/repayment of short-term debt	–430	**–1 051**
Purchase/sale of shares in Swiss Re Ltd	–2	**–3**
Dividends paid to parent		**–104**
Net cash provided/used by financing activities	–195	**–1 301**
Total net cash provided/used	1 836	**723**
Effect of foreign currency translation	–217	**149**
Change in cash and cash equivalents	1 619	**872**
Cash and cash equivalents as of 1 January	5 855	**5 398**
Cash and cash equivalents as of 31 March	7 474	**6 270**

[1] The Group changed the presentation of its investments related to unit-linked and with-profit business, and related deposits and withdrawals were reclassified from "Technical provisions, net" in the operating cash flow to "Policyholder account balances, unit-linked and with-profit business" in the financing cash flow. Comparative information for 2015 has been restated accordingly.

Interest paid was USD 81 million and USD 99 million (thereof USD 15 and 13 million for letter of credit fees) for the three months ended 31 March 2015 and 2016, respectively.

Tax paid was USD 535 million and USD 241 million for the three months ended 31 March 2015 and 2016, respectively.

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 Reinsurance Company Ltd ("SRZ") and its subsidiaries (collectively, the "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 and public sector clients.

SRZ is a wholly owned subsidiary of Swiss Re Ltd. Swiss Re Ltd is the ultimate parent company of the Swiss Re Group, which consists of four business segments: Property & Casualty Reinsurance, Life & Health Reinsurance, Corporate Solutions and Life Capital. The presentation of each segment's balance sheet is closely aligned with the segment legal entity structure.

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) and comply with Swiss law. 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 Reinsurance Company Group's audited financial statements for the year ended 31 December 2015.

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 analyses, 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 31 March 2016, the Group had 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 28 April 2016. This is the date on which the financial statements are available to be issued.

Recent accounting guidance
In August 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-13, "Measuring the Financial Assets and the Financial Liabilities of a Consolidated Collateralized Financing Entity – a consensus of the FASB Emerging Issues Task Force", an update to topic 810, "Consolidation". The ASU applies to entities that are required to consolidate a collateralised financing entity (CFE) under the VIE consolidation guidance when the entity measures all financial assets and financial liabilities of the CFE at fair value, with changes in fair value recorded in earnings. Before the ASU became effective, if an entity would measure the fair value of assets and liabilities separately following applicable US GAAP rules, the aggregate fair value might have differed. The new guidance allows the use of the more observable of the fair value of the financial assets or the fair value of the financial liabilities of the CFE to measure both. The Group adopted ASU 2014-13 on 1 January 2016. The adoption did not have a material effect on the Group's financial statements.

In November 2014, the FASB issued ASU 2014-16, "Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity – a consensus of the FASB Emerging Issues Task Force", an update to topic 815, "Derivatives and Hedging". The ASU provides guidance on how to assess whether or not a derivative embedded in an instrument in the legal form of a share must be bifurcated and accounted for separately from its host contract. Entities are required to use "the whole instrument approach" to determine whether the nature of the host contract in a hybrid instrument issued in the form of a share is more akin to debt or to equity. Under this approach, an issuer or investor considers all stated and implied substantive terms and features of a hybrid instrument when determining the nature of the host contract. No single term or feature will necessarily determine the nature of the host contract. The Group adopted ASU 2014-16 on 1 January 2016. The adoption did not have a material effect on the Group's financial statements.

In January 2015, the FASB issued ASU 2015-01, "Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items", an update to subtopic 225-20, "Income Statement–Extraordinary and Unusual Items". The ASU eliminates the separate presentation of extraordinary items, net of tax and the related earnings per share. Extraordinary items were events and transactions that were distinguished by their unusual nature and by the infrequency of their occurrence. The ASU does not affect the requirement to disclose material items that are unusual in nature or infrequently occurring. The Group adopted ASU 2015-01 on 1 January 2016 on a prospective basis. The adoption did not have a material effect on the Group's financial statements.

In February 2015, the FASB issued ASU 2015-02, "Consolidation: Amendments to the Consolidation Analysis", an amendment to topic 810, "Consolidation". ASU 2015-02 (i) eliminates the indefinite deferral of the consolidation requirements for certain investment companies and similar entities, (ii) modifies how to evaluate partnerships and other entities under the variable interest entity (VIE) framework, (iii) eliminates the presumption that a general partner should consolidate a limited partnership, (iv) modifies consolidation analysis, particularly for decision-maker fee arrangements and related party relationships, (v) excludes from the scope of consolidation assessment the entities that are, or operate similar to, money market funds registered under the US Investment Company Act of 1940. The Group adopted ASU 2015-2 on 1 January 2016 following the modified retrospective method. The modified retrospective method does not require the restatement of prior periods. The adoption did not have a material effect on the Group's financial statements; however, it led to an increase in VIEs disclosed in Note 10 Variable interest entities.

In April 2015, the FASB issued ASU 2015-03, "Simplifying the Presentation of Debt Issuance Costs", an update to subtopic 835-30, "Interest—Imputation of Interest". The ASU changes the presentation of debt issuance costs in financial statements by requiring that an entity presents such costs in the balance sheet as a direct deduction from the related debt liability rather than as an asset. Amortisation of the costs is reported as interest expense. The Group adopted ASU 2015-03 on 1 January 2016 on a prospective basis. The adoption did not have an impact on the Group's financial statements.

In May 2015, the FASB issued ASU 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)", an amendment to topic 820, "Fair Value Measurement". ASU 2015-07 removes the requirement to categorise within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The amendments also remove the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. The Group adopted ASU

2015-07 on 1 January 2016 and applies the amendments retrospectively. The retrospective approach requires that an investment for which fair value is measured using the net asset value per share practical expedient gets removed from the fair value hierarchy in all periods presented in an entity's financial statements. The amended disclosures are provided in Note 7 Fair value disclosures.

In May 2015, the FASB issued ASU 2015-09, "Disclosures about Short-Duration Contracts", an update to topic 944, "Financial Services — Insurance". ASU 2015-09 requires an insurance entity to provide additional information about insurance liabilities, including information on the nature, amount, timing, and uncertainty of future cash flows related to insurance liabilities and the effect of those cash flows on the statement of comprehensive income. Requirements include disaggregated incurred and paid claims development information by accident year, on a net basis after risk mitigation, for at least the most recent 10 years with the periods preceding the current period considered required supplementary information. In addition, for each accident year presented in the claims development tables, an insurer has to provide disaggregated information about claim frequency (unless impracticable) and the amounts of incurred but not reported (IBNR) liabilities plus the expected development on reported claims. Required disclosures also include a description of the methods for determining both IBNR and expected development on reported claims as well as information about any significant changes in methods and assumptions used in the computation of the liability for unpaid claims and claim adjustment expenses, including reasons for the changes and the impact of the changes on the most recent reporting period in the financial statements. All aforementioned disclosures have to be provided on an annual basis. In addition, insurance entities must disclose the roll-forward of the liability for unpaid claims and claims adjustment expenses in both interim and annual periods. The Group will adopt the annual disclosure requirements for the annual reporting period ending on 31 December 2016, and the interim disclosure requirements for the quarter ending on 31 March 2017. The Group has set up a project to implement the new requirements.

In September 2015, the FASB issued ASU 2015-16, "Simplifying the Accounting for Measurement-Period Adjustments", an amendment to topic 805, "Business Combinations". ASU 2015-16 is on adjustments to provisional amounts from business combinations during the measurement periods. It requires that an acquirer recognises such adjustments in the reporting period in which the adjustment amounts are determined. Further, the ASU requires that the acquirer records, in the same period's financial statements, the effect on earnings of changes in depreciation, amortisation, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. The Group adopted this guidance on 1 January 2016. The adoption did not have an effect 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 an entity to carry investments in equity securities, including other ownership interests and limited liability companies at fair value through net income, with the exception of equity method investments, investments that result in consolidation or investments for which the entity has elected the practicability exception to fair value measurement. The practicability exception can only be applied by certain entities and only to equity investments without a readily determinable fair value. Investments under the practicability exception will be subject to an indicator-based impairment test. For financial liabilities to which the fair value option has been applied, the ASU also 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. Specific exceptions apply to this requirement. 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 AFS in combination with the entity's other DTAs rather than separately from other DTAs. The ASU also introduces changes to disclosure requirements for financial instruments not measured at fair value and introduces new requirements for equity instruments where the practicability exception to fair value measurement is applied. The new requirements are effective for annual and interim periods beginning after 15 December 2017 with early adoption permitted for requirements relating to the presentation of the impact of instrument-specific credit risk on qualifying financial liabilities in other comprehensive income. The Group is currently assessing the impact of the new requirements.

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 new requirements are effective for the Group for annual and interim periods beginning after 15 December 2018. Early application of the Update is permitted. The Group is currently assessing the impact of the new requirements.

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 two core operating business segments: Property & Casualty Reinsurance and Life & Health Reinsurance. 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.

As of 1 January 2016, the primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. This reflects the announcement in the 3rd Quarter 2015 news release to combine the existing business areas managing life insurance books, currently reported in Life & Health Reinsurance, under the Swiss Re Life Capital Business Unit. In line with the segment definition in the Swiss Re Group financial statements this business is therefore reported in the segment "Other". Comparative information for 2015 has been restated accordingly.

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 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. As well as traditional reinsurance solutions, the business unit 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.

Other

Items not allocated to the business segments are included in the "Other" column which encompasses non-core activities. The "Other" column includes mainly certain costs not allocated to the Reinsurance business segments, certain Treasury activities as well as the remaining non-core activities which have been in run-off since November 2007.

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. In the periods presented, significant intra-group transactions related to intra-group reinsurance arrangements and certain treasury-related activities are included.

a) Business segments – income statement

For the three months ended 31 March

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Consolidation	Total
Revenues					
Gross premium written	6 205	3 101	400	–184	9 522
Net premiums written	6 128	2 779	211		9 118
Change in unearned premiums	–2 361	–187	–97		–2 645
Premiums earned	3 767	2 592	114		6 473
Fee income from policyholders		15	29		44
Net investment income – non-participating business	279	334	135		748
Net realised investment gains/losses – non-participating business	197	159	232		588
Net investment result – unit-linked and with-profit business		75			75
Other revenues	13	2	–1	–1	13
Total revenues	4 256	3 177	509	–1	7 941
Expenses					
Claims and claim adjustment expenses	–1 962				–1 962
Life and health benefits		–1 974	–156		–2 130
Return credited to policyholders		–83	–91		–174
Acquisition costs	–917	–481	–16		–1 414
Operating expenses[2]	–297	–190	–118		–605
Total expenses before interest expenses	–3 176	–2 728	–381	0	–6 285
Income/loss before interest and income tax expense	1 080	449	128	–1	1 656
Interest expenses[2]	–63	–88	–5	1	–155
Income before income tax expense	1 017	361	123	0	1 501
Income tax expense/benefit	–204	–72	47		–229
Net income before attribution of non-controlling interests	813	289	170	0	1 272
Income attributable to non-controlling interests					0
Net income after attribution of non-controlling interests	813	289	170	0	1 272
Interest on contingent capital instruments	–5	–12			–17
Net income attributable to common shareholder	808	277	170	0	1 255
Claims ratio in %	52.1				
Expense ratio in %	32.2				
Combined ratio in %	84.3				
Management expense ratio in %		6.5			
Net operating margin in %	25.4	14.5	25.1		21.1

[1] The primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.
[2] Letter of credit fees of USD 11 million in Life & Health Reinsurance and USD 3 million in Property & Casualty Reinsurance have been reclassified from "Operating expenses" to "Interest expenses".

Business segments – income statement
For the three months ended 31 March

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Consolidation	Total
Revenues					
Gross premium written	7 011	3 405	466	–196	10 686
Net premiums written	6 948	3 081	199		10 228
Change in unearned premiums	–2 992	–258	–87		–3 337
Premiums earned	3 956	2 823	112		6 891
Fee income from policyholders		12	22		34
Net investment income – non-participating business	237	333	104	–6	668
Net realised investment gains/losses – non-participating business	296	107	99		502
Net investment result – unit-linked and with-profit business		–63			–63
Other revenues	11	5	–1		15
Total revenues	**4 500**	**3 217**	**336**	**–6**	**8 047**
Expenses					
Claims and claim adjustment expenses	–2 374				–2 374
Life and health benefits		–2 074	–144		–2 218
Return credited to policyholders		60	–81		–21
Acquisition costs	–1 037	–640	–13		–1 690
Operating expenses	–280	–165	–56		–501
Total expenses before interest expenses	**–3 691**	**–2 819**	**–294**	**0**	**–6 804**
Income/loss before interest and income tax expense	**809**	**398**	**42**	**–6**	**1 243**
Interest expenses	–69	–78	–3	6	–144
Income before income tax expense	**740**	**320**	**39**	**0**	**1 099**
Income tax expense/benefit	–148	–64	–13		–225
Net income before attribution of non-controlling interests	**592**	**256**	**26**	**0**	**874**
Income attributable to non-controlling interests			–3		–3
Net income after attribution of non-controlling interests	**592**	**256**	**23**	**0**	**871**
Interest on contingent capital instruments	–5	–12			–17
Net income attributable to common shareholder	**587**	**244**	**23**	**0**	**854**
Claims ratio in %	60.0				
Expense ratio in %	33.3				
Combined ratio in %	93.3				
Management expense ratio in %		5.2			
Net operating margin in %	18.0	12.1	12.5		15.3

Business segments – balance sheet
As of 31 December

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Consolidation	Total
Total assets	78 176	55 311	12 851	–11 147	135 191

[1] The primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.

As of 31 March

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Consolidation	Total
Total assets	87 679	57 476	14 086	–12 208	147 033

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

For the three months ended 31 March

2015 USD millions	Property	Casualty	Specialty	Unallocated	Total
Revenues					
Gross premiums written	2 847	2 220	1 138		6 205
Net premiums written	2 814	2 215	1 099		6 128
Change in unearned premiums	–1 295	–562	–504		–2 361
Premiums earned	1 519	1 653	595		3 767
Net investment income				279	279
Net realised investment gains/losses				197	197
Other revenues				13	13
Total revenues	1 519	1 653	595	489	4 256
Expenses					
Claims and claim adjustment expenses	–654	–1 072	–236		–1 962
Acquisition costs	–290	–493	–134		–917
Operating expenses[1]	–166	–94	–37		–297
Total expenses before interest expenses	–1 110	–1 659	–407	0	–3 176
Income/loss before interest and income tax expense	409	–6	188	489	1 080
Interest expenses[1]				–63	–63
Income/loss before income tax expense	409	–6	188	426	1 017
Claims ratio in %	43.1	64.9	39.7		52.1
Expense ratio in %	30.0	35.5	28.7		32.2
Combined ratio in %	73.1	100.4	68.4		84.3

[1] Letter of credit fees of USD 3 million in Property & Casualty Reinsurance have been reclassified from "Operating expenses" to "Interest expenses".

Property & Casualty Reinsurance business segment – by line of business
For the three months ended 31 March

2016 USD millions	Property	Casualty	Specialty	Unallocated	Total
Revenues					
Gross premiums written	2 653	3 255	1 103		7 011
Net premiums written	2 599	3 251	1 098		6 948
Change in unearned premiums	–1 067	–1 427	–498		–2 992
Premiums earned	1 532	1 824	600		3 956
Net investment income				237	237
Net realised investment gains/losses				296	296
Other revenues				11	11
Total revenues	**1 532**	**1 824**	**600**	**544**	**4 500**
Expenses					
Claims and claim adjustment expenses	–754	–1 331	–289		–2 374
Acquisition costs	–331	–570	–136		–1 037
Operating expenses	–155	–90	–35		–280
Total expenses before interest expenses	**–1 240**	**–1 991**	**–460**	**0**	**–3 691**
Income/loss before interest and income tax expense	**292**	**–167**	**140**	**544**	**809**
Interest expenses				–69	–69
Income/loss before income tax expense	**292**	**–167**	**140**	**475**	**740**
Claims ratio in %	49.2	73.0	48.2		60.0
Expense ratio in %	31.7	36.2	28.5		33.3
Combined ratio in %	80.9	109.2	76.7		93.3

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

For the three months ended 31 March

2015 USD millions	Life	Health	Unallocated	Total[1]
Revenues				
Gross premium written	2 045	1 056		3 101
Net premiums written	1 745	1 034		2 779
Change in unearned premiums	–52	–135		–187
Premiums earned	1 693	899		2 592
Fee income from policyholders	15			15
Net investment income – non-participating business	216	118		334
Net realised investment gains/losses – non-participating business	10	–1	150	159
Net investment result – unit-linked and with-profit business	75			75
Other revenues	2			2
Total revenues	2 011	1 016	150	3 177
Expenses				
Life and health benefits	–1 324	–650		–1 974
Return credited to policyholders	–83			–83
Acquisition costs	–305	–176		–481
Operating expenses[2]	–140	–50		–190
Total expenses before interest expenses	–1 852	–876	0	–2 728
Income before interest and income tax expense	159	140	150	449
Interest expenses[2]			–88	–88
Income before income tax expense	159	140	62	361
Management expense ratio in %	7.3	4.9		6.5
Net operating margin[3] in %	8.2	13.8		14.5

[1] The primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment.
[2] Letter of credit fees of USD 11 million in Life & Health Reinsurance have been reclassified from "Operating expenses" to "Interest expenses".
[3] Net operating margin is calculated as income/loss 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 three months ended 31 March

2016 USD millions	Life	Health	Unallocated	Total
Revenues				
Gross premium written	2 237	1 168		3 405
Net premiums written	1 935	1 146		3 081
Change in unearned premiums	–63	–195		–258
Premiums earned	1 872	951		2 823
Fee income from policyholders	12			12
Net investment income – non-participating business	218	115		333
Net realised investment gains/losses – non-participating business			107	107
Net investment result – unit-linked and with-profit business	–63			–63
Other revenues	5			5
Total revenues	**2 044**	**1 066**	**107**	**3 217**
Expenses				
Life and health benefits	–1 385	–689		–2 074
Return credited to policyholders	60			60
Acquisition costs	–451	–189		–640
Operating expenses	–116	–49		–165
Total expenses before interest expenses	**–1 892**	**–927**	**0**	**–2 819**
Income before interest and income tax expense	**152**	**139**	**107**	**398**
Interest expenses			–78	–78
Income before income tax expense	**152**	**139**	**29**	**320**
Management expense ratio in %	5.5	4.6		5.2
Net operating margin[1] in %	7.2	13.0		12.1

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

3 Insurance information

For the three months ended 31 March

Premiums earned and fees assessed against policyholders

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Total
Premiums earned, thereof:				
Direct		10	172	182
Reinsurance	3 898	2 819	33	6 750
Intra-group transactions (assumed and ceded)		86	–86	0
Premiums earned before retrocession to external parties	3 898	2 915	119	6 932
Retrocession to external parties	–131	–323	–5	–459
Net premiums earned	3 767	2 592	114	6 473
Fee income from policyholders, thereof:				
Direct			5	5
Reinsurance		15	24	39
Net fee income	0	15	29	44

Claims and claim adjustment expenses

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Total
Claims paid, thereof:				
Gross claims paid to external parties	–2 057	–2 298	–103	–4 458
Intra-group transactions (assumed and ceded)		–56	56	0
Claims before receivables from retrocession to external parties	–2 057	–2 354	–47	–4 458
Retrocession to external parties	190	323	4	517
Net claims paid	–1 867	–2 031	–43	–3 941
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:				
Gross - with external parties	72	74	–120	26
Intra-group transactions (assumed and ceded)		–7	7	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties	72	67	–113	26
Retrocession to external parties	–167	–10		–177
Net unpaid claims and claim adjustment expenses; life and health benefits	–95	57	–113	–151
Claims and claim adjustment expenses; life and health benefits	–1 962	–1 974	–156	–4 092

Acquisition costs

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Total
Acquisition costs, thereof:				
Gross acquisition costs with external parties	–950	–519	–36	–1 505
Intra-group transactions (assumed and ceded)		–20	20	0
Acquisition costs before impact of retrocession to external parties	–950	–539	–16	–1 505
Retrocession to external parties	33	58		91
Net acquisition costs	–917	–481	–16	–1 414

[1] As of 1 January 2016, the primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.

For the three months ended 31 March

Premiums earned and fees assessed against policyholders

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Total
Premiums earned, thereof:				
Direct		10	190	200
Reinsurance	4 040	3 041	33	7 114
Intra-group transactions (assumed and ceded)		97	–97	0
Premiums earned before retrocession to external parties	4 040	3 148	126	7 314
Retrocession to external parties	–84	–325	–14	–423
Net premiums earned	**3 956**	**2 823**	**112**	**6 891**
Fee income from policyholders, thereof:				
Direct				0
Reinsurance		12	22	34
Net fee income	**0**	**12**	**22**	**34**

Claims and claim adjustment expenses

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Total
Claims paid, thereof:				
Gross claims paid to external parties	–2 093	–3 029	–208	–5 330
Intra-group transactions (assumed and ceded)		–63	63	0
Claims before receivables from retrocession to external parties	–2 093	–3 092	–145	–5 330
Retrocession to external parties	139	343	1	483
Net claims paid	**–1 954**	**–2 749**	**–144**	**–4 847**
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:				
Gross – with external parties	–329	705	–30	346
Intra-group transactions (assumed and ceded)		–18	18	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties	–329	687	–12	346
Retrocession to external parties	–91	–12	12	–91
Net unpaid claims and claim adjustment expenses; life and health benefits	**–420**	**675**	**0**	**255**
Claims and claim adjustment expenses; life and health benefits	**–2 374**	**–2 074**	**–144**	**–4 592**

Acquisition costs

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Total
Acquisition costs, thereof:				
Gross acquisition costs with external parties	–1 052	–675	–35	–1 762
Intra-group transactions (assumed and ceded)		–20	20	0
Acquisition costs before impact of retrocession to external parties	–1 052	–695	–15	–1 762
Retrocession to external parties	15	55	2	72
Net acquisition costs	**–1 037**	**–640**	**–13**	**–1 690**

Reinsurance assets and liabilities

The reinsurance assets and liabilities as of 31 December 2015 and 31 March 2016 were as follows:

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Consolidation	Total
Assets					
Reinsurance recoverable on unpaid claims and policy benefits	2 872	1 652	188	–189	4 523
Deferred acquisition costs	2 051	3 020	13		5 084
Liabilities					
Unpaid claims and claim adjustment expenses	39 366	9 468	1 073	–189	49 718
Liabilities for life and health policy benefits		15 472	1 308	–1	16 779
Policyholder account balances		1 368	3 990		5 358

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Consolidation	Total
Assets					
Reinsurance recoverable on unpaid claims and policy benefits	2 829	1 637	227	–216	4 477
Deferred acquisition costs	2 569	3 219	19		5 807
Liabilities					
Unpaid claims and claim adjustment expenses	40 311	10 365	1 137	–216	51 597
Liabilities for life and health policy benefits		15 901	1 247		17 148
Policyholder account balances		1 411	4 058		5 469

[1] As of 1 January 2016, the primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.

Reinsurance receivables

Reinsurance receivables as of 31 December 2015 and 31 March 2016 were as follows:

USD millions	2015	**2016**
Premium receivables invoiced	1103	1 492
Receivables invoiced from ceded re/insurance business	126	300
Assets arising from the application of the deposit method of accounting and meeting the definition of financing receivables	169	104
Recognised allowance	–36	–32

4 Premiums written

For the three months ended 31 March

2015 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance[1]	Other[1]	Consolidation	Total
Gross premiums written, thereof:					
Direct		10	367		377
Reinsurance	6 205	2 907	33		9 145
Intra-group transactions (assumed)		184		–184	0
Gross premiums written	6 205	3 101	400	–184	9 522
Intra-group transactions (ceded)			–184	184	0
Gross premiums written before retrocession to external parties	6 205	3 101	216		9 522
Retrocession to external parties	–77	–322	–5		–404
Net premiums written	6 128	2 779	211	0	9 118

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Consolidation	Total
Gross premiums written, thereof:					
Direct		10	433		443
Reinsurance	7 011	3 199	33		10 243
Intra-group transactions (assumed)		196		–196	0
Gross premiums written	7 011	3 405	466	–196	10 686
Intra-group transactions (ceded)			–196	196	0
Gross premiums written before retrocession to external parties	7 011	3 405	270		10 686
Retrocession to external parties	–63	–324	–71		–458
Net premiums written	**6 948**	**3 081**	**199**	**0**	**10 228**

[1] As of 1 January 2016, the primary life and health insurance business (individual and group) is reported in the segment "Other" instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.

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

As of 31 December 2015 and 31 March 2016, the DAC were as follows:

2015 USD millions	Property & Casualty Reinsurance[1]	Life & Health Reinsurance	Other[1]	Total
Opening balance as of 1 January	1 756	2 723	1	4 480
Effect of change in Group structure[1]		–12	12	0
Deferred	4 132	1 018	35	5 185
Effect of acquisitions/disposals and retrocessions	7	2		9
Amortisation	–3 793	–560	–34	–4 387
Effect of foreign currency translation	–51	–151	–1	–203
Closing balance	2 051	3 020	13	5 084

2016 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Other	Total
Opening balance as of 1 January	2 051	3 020	13	5 084
Deferred	1 503	258	13	1 774
Amortisation	–1 024	–101	–8	–1 133
Effect of foreign currency translation	39	42	1	82
Closing balance	**2 569**	**3 219**	**19**	**5 807**

[1] As of 1 January 2016, the primary life and health insurance business (individual and group) is reported in the "Other" segment instead of the Life & Health Reinsurance segment. Comparative information for 2015 has been restated accordingly.

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 2015 and 31 March 2016, the PVFP was as follows:

			2015			**2016**
USD millions	Life & Health Reinsurance	Other	Total	Life & Health Reinsurance	Other	Total
Opening balance as of 1 January	1 294	605	1 899	1 134	587	1 721
Amortisation	–159	–28	–187	–30	–3	–33
Interest accrued on unamortised PVFP	40	1	41	9		9
Effect of foreign currency translation	–41		–41	–8		–8
Effect of change in unrealised gains/losses		9	9		–1	–1
Closing balance	1 134	587	1 721	**1 105**	**583**	**1 688**

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.

6 Investments

Investment income

Net investment income by source (excluding unit-linked and with-profit business) for the three months ended 31 March was as follows:

USD millions	2015	**2016**
Fixed income securities	499	467
Equity securities	10	15
Policy loans, mortgages and other loans	36	35
Investment real estate	36	44
Short-term investments	20	17
Other current investments	18	31
Share in earnings of equity-accounted investees	44	–3
Cash and cash equivalents	10	6
Net result from deposit-accounted contracts	11	14
Deposits with ceding companies	140	118
Gross investment income	824	**744**
Investment expenses	–75	–75
Interest charged for funds held	–1	–1
Net investment income – non-participating business	748	**668**

Dividends received from investments accounted for using the equity method were USD 31 million and USD 29 million for the three months ended 31 March 2015 and 2016, respectively.

Realised gains and losses

Realised gains and losses for fixed income equity securities and other investments (excluding unit-linked and with-profit business) for the three months ended 31 March were as follows:

USD millions	2015	**2016**
Fixed income securities available-for-sale:		
Gross realised gains	276	258
Gross realised losses	–36	–107
Equity securities available-for-sale:		
Gross realised gains	45	45
Gross realised losses	–12	–42
Other-than-temporary impairments	–5	–28
Net realised investment gains/losses on trading securities	39	58
Change in net unrealised investment gains/losses on trading securities	27	66
Net realised/unrealised gains/losses other investments	–76	–55
Net realised/unrealised gains/losses on insurance-related activities	–4	1
Foreign exchange gains/losses	334	306
Net realised investment gains/losses – non-participating business	**588**	**502**

Investment result – unit-linked and with-profit business

The net investment result on unit-linked and with-profit business credited to policyholders amounted to gains of USD 75 million and to losses of USD 63 million for the three months ended 31 March 2015 and 2016, respectively, mainly originating from gains/losses on equity securities.

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 three months ended 31 March was as follows:

USD millions	2015	**2016**
Balance as of 1 January	131	129
Credit losses for which an other-than-temporary impairment was not previously recognised		12
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	4	7
Impact of increase in cash flows expected to be collected	–2	–2
Impact of foreign exchange movements	–4	
Balance as of 31 March	120	**137**

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 2015 and 31 March 2016 were as follows:

2015 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	9 981	507	–94		10 394
US Agency securitised products	2 761	28	–27		2 762
States of the United States and political subdivisions of the states	913	39	–11		941
United Kingdom	4 462	486	–43		4 905
Canada	3 730	518	–13		4 235
Germany	2 789	232	–27		2 994
France	1 861	189	–16		2 034
Other	7 023	190	–143		7 070
Total	33 520	2 189	–374		35 335
Corporate debt securities	21 287	621	–482	–10	21 416
Mortgage- and asset-backed securities	4 330	88	–32	–3	4 383
Fixed income securities available-for-sale	59 137	2 898	–888	–13	61 134
Equity securities available-for-sale	2 876	375	–160		3 091

2016 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	10 015	710	–5		10 720
US Agency securitised products	3 428	54	–10		3 472
States of the United States and political subdivisions of the states	981	69	–5		1 045
United Kingdom	4 333	638	–25		4 946
Canada	3 970	596	–5		4 561
Germany	2 945	381	–8		3 318
France	1 918	316	–3		2 231
Other	7 675	337	–70		7 942
Total	35 265	3 101	–131		38 235
Corporate debt securities	22 843	936	–241	–1	23 537
Mortgage- and asset-backed securities	4 558	99	–26	–5	4 626
Fixed income securities available-for-sale	**62 666**	**4 136**	**–398**	**–6**	**66 398**
Equity securities available-for-sale	**2 737**	**365**	**–138**		**2 964**

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

The carrying amounts of fixed income securities and equity securities classified as trading (excluding unit-linked and with-profit business) as of 31 December 2015 and 31 March 2016 were as follows:

USD millions	2015	2016
Debt securities issued by governments and government agencies	2 710	2 615
Corporate debt securities	52	56
Mortgage- and asset-backed securities	134	128
Fixed income securities trading – non-participating business	2 896	**2 799**
Equity securities trading – non-participating business	68	**88**

Investments held for unit-linked and with-profit business

The carrying amounts of investments held for unit-linked business consist of equity securities trading. As of 31 December 2015 and 31 March 2016, these amounted to USD 818 million and USD 628 million, respectively.

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 2015 and 31 March 2016, USD 10 893 million and USD 12 697 million, respectively, of fixed income securities available-for-sale were callable.

		2015		2016
USD millions	Amortised cost or cost	Estimated fair value	Amortised cost or cost	Estimated fair value
Due in one year or less	3 261	3 309	4 760	4 808
Due after one year through five years	14 508	14 695	14 719	15 003
Due after five years through ten years	13 039	13 364	14 722	15 445
Due after ten years	24 246	25 631	24 193	26 803
Mortgage- and asset-backed securities with no fixed maturity	4 083	4 135	4 272	4 339
Total fixed income securities available-for-sale	59 137	61 134	**62 666**	**66 398**

Assets pledged

As of 31 March 2016, investments with a carrying value of USD 6 262 million were on deposit with regulatory agencies in accordance with local requirements, and investments with a carrying value of USD 9 936 million were placed on deposit or pledged to secure certain reinsurance liabilities, including pledged investments in subsidiaries.

As of 31 December 2015 and 31 March 2016, securities of USD 13 605 million and USD 13 639 million, respectively, were transferred to third parties under securities lending transactions and repurchase agreements on a fully collateralised basis. Corresponding liabilities of USD 995 million and USD 2 383 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 31 March 2016, a real estate portfolio with a carrying value of USD 232 million serves as collateral for a credit facility allowing the Group to withdraw funds up to CHF 650 million.

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

As of 31 December 2015 and 31 March 2016, the fair value of the equity securities, government debt securities and corporate debt received as collateral was USD 10 732 million and USD 9 650 million, respectively. Of this, the amount that was sold or repledged as of 31 December 2015 and 31 March 2016 was USD 6 125 million and USD 6 077 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 2015 and 31 March 2016 was as follows:

2015 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	2752	–1953	799	–34	765
Reverse repurchase agreements	6358	–3000	3358	–3351	7
Securities borrowing	452		452	–452	0
Total	9562	–4953	4609	–3837	772

2015 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	–2090	1477	–613	77	–536
Repurchase agreements	–2844	2475	–369	369	0
Securities lending	–1151	525	–626	582	–44
Total	–6085	4477	–1608	1028	–580

2016 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	3230	–2348	882	–4	**878**
Reverse repurchase agreements	5713	–1626	4087	–4086	**1**
Securities borrowing	359		359	–359	**0**
Total	**9302**	**–3974**	**5328**	**–4449**	**879**

2016 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	–2786	1973	–813	96	**–717**
Repurchase agreements	–2622	1101	–1521	1521	**0**
Securities lending	–1387	525	–862	775	**–87**
Total	**–6795**	**3599**	**–3196**	**2392**	**–804**

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 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" and "Accrued expenses and other liabilities", respectively.

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

As of 31 December 2015 and 31 March 2016, 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.

2015 USD millions	Remaining contractual maturity of the agreements Overnight and continuous	Up to 30 days	30–90 days	Greater than 90 days	Total
Repurchase agreements					
Debt securities issued by governments and government agencies	370	2 136	176	135	2 817
Corporate debt securities	3	24			27
Total repurchase agreements	**373**	**2 160**	**176**	**135**	**2 844**
Securities lending					
Debt securities issued by governments and government agencies	217		501	433	1 151
Total securities lending	**217**	**0**	**501**	**433**	**1 151**
Gross amount of recognised liabilities for repurchase agreements and securities lending					3 995

2016 USD millions	Remaining contractual maturity of the agreements Overnight and continuous	Up to 30 days	30–90 days	Greater than 90 days	Total
Repurchase agreements					
Debt securities issued by governments and government agencies	1 166	1 044	161	135	2 506
Corporate debt securities	116				116
Total repurchase agreements	**1 282**	**1 044**	**161**	**135**	**2 622**
Securities lending					
Debt securities issued by governments and government agencies	131		672	451	1 254
Corporate debt securities			107		107
Equity securities	26				26
Total securities lending	**157**	**0**	**779**	**451**	**1 387**
Gross amount of recognised liabilities for repurchase agreements and securities lending					4 009

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 reinvestment 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 2015 and 31 March 2016. As of 31 December 2015 and 31 March 2016, USD 126 million and USD 119 million, respectively, of the gross unrealised loss on equity securities available-for-sale relates to declines in value for less than 12 months and USD 34 million and USD 19 million, respectively, to decline in value for more than 12 months.

2015 USD millions	Less than 12 months Fair value	Less than 12 months Unrealised losses	12 months or more Fair value	12 months or more Unrealised losses	Total Fair value	Total Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	4 516	93	6	1	4 522	94
US Agency securitised products	1 408	22	226	5	1 634	27
States of the United States and political subdivisions of the states	339	10	6	1	345	11
United Kingdom	1 067	42	14	1	1 081	43
Canada	930	11	10	2	940	13
Germany	825	25	113	2	938	27
France	500	13	16	3	516	16
Other	3 067	107	194	36	3 261	143
Total	12 652	323	585	51	13 237	374
Corporate debt securities	9 201	426	383	66	9 584	492
Mortgage- and asset-backed securities	2 150	27	187	8	2 337	35
Total	24 003	776	1 155	125	25 158	901

2016 USD millions	Less than 12 months Fair value	Less than 12 months Unrealised losses	12 months or more Fair value	12 months or more Unrealised losses	Total Fair value	Total Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	1 565	5			1 565	5
US Agency securitised products	749	7	201	3	950	10
States of the United States and political subdivisions of the states	101	5			101	5
United Kingdom	629	16	44	9	673	25
Canada	1 013	4	7	1	1 020	5
Germany	113	8	123	0	236	8
France	38	3			38	3
Other	2 194	52	174	18	2 368	70
Total	6 402	100	549	31	6 951	131
Corporate debt securities	4 825	210	268	32	5 093	242
Mortgage- and asset-backed securities	1 251	20	191	11	1 442	31
Total	**12 478**	**330**	**1 008**	**74**	**13 486**	**404**

Mortgages, loans and real estate

As of 31 December 2015 and 31 March 2016, the carrying values of investments in mortgages, policy and other loans, and real estate (excluding unit-linked and with-profit business) were as follows:

USD millions	2015	**2016**
Policy loans	80	80
Mortgage loans	1 389	1 417
Other loans	2 363	2 433
Investment real estate	1 550	1 574

The fair value of the real estate as of 31 December 2015 and 31 March 2016 was USD 3 205 million and USD 3 303 million, respectively. The carrying value of policy loans, mortgages and other loans approximates fair value.

Depreciation expense related to income-producing properties was USD 7 million and USD 9 million for the three months ended 31 March 2015 and 2016, respectively. Accumulated depreciation on investment real estate totalled USD 504 million and USD 527 million as of 31 December 2015 and 31 March 2016, respectively.

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

7 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 (e.g. 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 (e.g. 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 three months ended 31 March 2016, 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 Other.

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 transparent and liquid markets.

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 practical expedient.

The Group holds both exchange-traded and over-the-counter (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 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).

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, as well as more complex structured credit derivatives. 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 the 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 the 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.

Assets and liabilities measured at fair value on a recurring basis

As of 31 December 2015 and 31 March 2016, the fair values of assets and liabilities measured on a recurring basis by level of input were as follows:

2015 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]	Total
Assets					
Fixed income securities held for proprietary investment purposes	10 695	52 997	338		64 030
Debt securities issued by US government and government agencies	10 695	1 450			12 145
US Agency securitised products		2 776			2 776
Debt securities issued by non-US governments and government agencies		23 124			23 124
Corporate debt securities		21 143	325		21 468
Mortgage- and asset-backed securities		4 504	13		4 517
Equity securities held for proprietary investment purposes	3 148		11		3 159
Equity securities backing unit-linked and with-profit business	818				818
Short-term investments held for proprietary investment purposes	1 795	2 867			4 662
Derivative financial instruments	22	2 266	464	–1 953	799
Interest rate contracts	6	1 304			1 310
Foreign exchange contracts		319			319
Equity contracts	16	617	334		967
Credit contracts		1	1		2
Other contracts		25	129		154
Other invested assets	579	49	1 013		1 641
Funds held by ceding companies		245			245
Total assets at fair value	17 057	58 424	1 826	–1 953	75 354
Liabilities					
Derivative financial instruments	–17	–1 576	–497	1 477	–613
Interest rate contracts	–5	–789			–794
Foreign exchange contracts		–201			–201
Equity contracts	–12	–582	–38		–632
Credit contracts			–19		–19
Other contracts		–4	–440		–444
Liabilities for life and health policy benefits			–165		–165
Accrued expenses and other liabilities	–812	–2 524	–1 474		–4 810
Total liabilities at fair value	–829	–4 100	–2 136	1 477	–5 588

[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.

2016 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 a practical expedient	Total
Assets						
Fixed income securities held for proprietary investment purposes	10 776	58 087	334			69 197
Debt securities issued by US government and government agencies	10 776	1 623				12 399
US Agency securitised products		3 485				3 485
Debt securities issued by non-US governments and government agencies		24 966				24 966
Corporate debt securities		23 271	322			23 593
Mortgage- and asset-backed securities		4 742	12			4 754
Equity securities held for proprietary investment purposes	3 051		1			3 052
Equity securities backing unit-linked and with-profit business	628					628
Short-term investments held for proprietary investment purposes	2 466	2 891				5 357
Derivative financial instruments	23	2 655	552	–2 348		882
Interest rate contracts	8	1 640				1 648
Foreign exchange contracts		443				443
Equity contracts	15	567	406			988
Credit contracts		1	1			2
Other contracts		4	145			149
Other invested assets	302	537	168		820	1 827
Funds held by ceding companies		244				244
Total assets at fair value	**17 246**	**64 414**	**1 055**	**–2 348**	**820**	**81 187**
Liabilities						
Derivative financial instruments	–21	–2 129	–636	1 973		–813
Interest rate contracts	–8	–1 142				–1 150
Foreign exchange contracts		–422				–422
Equity contracts	–13	–565	–48			–626
Credit contracts			–17			–17
Other contracts			–571			–571
Liabilities for life and health policy benefits			–176			–176
Accrued expenses and other liabilities	–617	–2 862	–1 438			–4 917
Total liabilities at fair value	**–638**	**–4 991**	**–2 250**	**1 973**	**0**	**–5 906**

[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.

Assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (level 3)
As of 31 December 2015 and 31 March 2016, the reconciliation of the fair values of assets and liabilities measured on a recurring basis using significant unobservable inputs was as follows:

2015 USD millions	Fixed income securities	Equity securities	Derivative assets	Other invested assets	Total assets	Derivative liabilities	Liabilities for life and health policy benefits	Accrued expenses and other liabilities	Total liabilities
Assets and liabilities									
Balance as of 1 January	388	4	537	1 289	2 218	–717	–187	–1 559	–2 463
Realised/unrealised gains/losses:									
Included in net income	4		–20	45	29	165	22		187
Included in other comprehensive income	–14	–1		–71	–86				0
Purchases	9		7	134	150				0
Issuances					0	–10			–10
Sales	–46		–3	–441	–490	1			1
Settlements	–35		–72		–107	65			65
Transfers into level 3[1]	33	8	15	70	126	–1			–1
Transfers out of level 3[1]					0				0
Impact of foreign exchange movements	–1			–13	–14			85	85
Closing balance as of 31 December	338	11	464	1 013	1 826	–497	–165	–1 474	–2 136

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

2016 USD millions	Fixed income securities	Equity securities	Derivative assets	Other invested assets	**Total assets**	Derivative liabilities	Liabilities for life and health policy benefits	Accrued expenses and other liabilities	**Total liabilities**
Assets and liabilities									
Balance as of 1 January	338	11	464	1 013	**1 826**	–497	–165	–1 474	**–2 136**
Impact of Accounting Standards Updates[2]				–895	**–895**				**0**
Realised/unrealised gains/losses:									
Included in net income	3		88	–3	**88**	–113	–12		**–125**
Included in other comprehensive income					**0**				**0**
Purchases	27		2	37	**66**				**0**
Issuances					**0**	–3			**–3**
Sales	–32		–3		**–35**	7			**7**
Settlements	–2		–5		**–7**	–25			**–25**
Transfers into level 3[1]			6	10	**16**	–5			**–5**
Transfers out of level 3[1]		–10			**–10**				**0**
Impact of foreign exchange movements				6	**6**		1	36	**37**
Closing balance as of 31 March	**334**	**1**	**552**	**168**	**1 055**	**–636**	**–176**	**–1 438**	**–2 250**

[1] Transfers are recognised at the date of the event or change in circumstances that caused the transfer.
[2] Impact of ASU 2015 - 07. Please refer to Note 1 for more details.

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 three months ended 31 March were as follows:

USD millions	2015	**2016**
Gains/losses included in net income for the period	–10	–37
Whereof change in unrealised gains/losses relating to assets and liabilities still held at the reporting date	13	–64

Quantitative information about level 3 fair value measurements

Unobservable inputs for major level 3 assets and liabilities as of 31 December 2015 and 31 March 2016 were as follows:

USD millions	2015 Fair value	**2016 Fair value**	Valuation technique	Unobservable input	Range (weighted average)
Assets					
Corporate debt securities	325	**322**			
Private placement corporate debt	241	236	Corporate Spread Matrix	Credit spread	96 bps–760 bps (259 bps)
Private placement credit tenant leases	51	51	Discounted Cash Flow Model	Illiquidity premium	75 bps–175 bps (132 bps)
Infrastructure loan	32	33	Discounted Cash Flow Model	Valuation spread	181 bps (n.a.)
Derivative equity contracts	334	**406**			
OTC equity option referencing correlated equity indices	334	406	Proprietary Option Model	Correlation	–60%–100% (20%)[1]
Liabilities					
Derivative equity contracts	–38	**–48**			
OTC equity option referencing correlated equity indices	–38	–48	Proprietary Option Model	Correlation	–60%–100% (20%)[1]
Other derivative contracts and liabilities for life and health policy benefits	–605	**–747**			
Variable annuity and fair valued GMDB contracts	–567	–695	Discounted Cash Flow Model	Risk margin	4% (n.a.)
				Volatility	4%–42%
				Lapse	0.5%–33%
				Mortality adjustment	–10%–0%
				Withdrawal rate	0%–90%

[1] Represents average input value for the reporting period.

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 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 infrastructure loan 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 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 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 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 (i.e. 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.

Other invested assets measured at net asset value

Other invested assets measured at net asset value as of 31 December 2015 and 31 March 2016, respectively, were as follows:

USD millions	2015 Fair value	2016 Fair value	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Private equity funds	550	492	141	non-redeemable	n.a.
Hedge funds	135	134		redeemable[1]	45-95 days[2]
Private equity direct	31	1		non-redeemable	n.a.
Real estate funds	203	193	93	non-redeemable	n.a.
Total	919	**820**	**234**		

[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 global macro, relative value, event-driven and long/short equity 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 in the balance sheet:

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.

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 2015 and 31 March 2016 were as follows:

USD millions	2015	2016
Assets		
Other invested assets	7 861	8 868
of which at fair value pursuant to the fair value option	92	126
Funds held by ceding companies	10 668	9 676
of which at fair value pursuant to the fair value option	245	244
Liabilities		
Liabilities for life and health policy benefits	–16 779	–17 148
of which at fair value pursuant to the fair value option	–165	–176

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 three months ended 31 March were as follows:

USD millions	2015	2016
Other invested assets	2	–3
Funds held by ceding companies	3	–1
Liabilities for life and health policy benefits	13	–12
Total	18	**–16**

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 GMDB reserves are shown in “Life and health benefits”.

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 2015 and 31 March 2016 were as follows:

2015 USD millions	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets			
Policy loans		80	80
Mortgage loans		1 389	1 389
Other loans		2 363	2 363
Investment real estate		3 205	3 205
Total assets	0	7 037	7 037
Liabilities			
Debt	–8 190	–7 137	–15 327
Total liabilities	–8 190	–7 137	–15 327

2016 USD millions	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Assets			
Policy loans		80	80
Mortgage loans		1 417	1 417
Other loans		2 433	2 433
Investment real estate		3 303	3 303
Total assets	**0**	**7 233**	**7 233**
Liabilities			
Debt	–8 371	–6 339	–14 710
Total liabilities	**–8 371**	**–6 339**	**–14 710**

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. Considering these circumstances, the Group presents the carrying amount as an approximation for the fair value.

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 based on 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.

8 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 over-the-counter 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 2015 and 31 March 2016, the fair values and notional amounts of the derivatives outstanding were as follows:

2015 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	66787	1310	–794	516
Foreign exchange contracts	14273	282	–201	81
Equity contracts	16374	967	–632	335
Credit contracts	188	2	–19	–17
Other contracts	17842	154	–444	–290
Total	115464	2715	–2090	625
Derivatives designated as hedging instruments				
Foreign exchange contracts	2151	37		37
Total	2151	37	0	37
Total derivative financial instruments	117615	2752	–2090	662
Amount offset				
Where a right of set-off exists		–1162	1162	
Due to cash collateral		–791	315	
Total net amount of derivative financial instruments		799	–613	186

2016 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	80172	1648	–1150	498
Foreign exchange contracts	22858	441	–222	219
Equity contracts	16578	988	–626	362
Credit contracts	198	2	–17	–15
Other contracts	18254	149	–571	–422
Total	**138060**	**3228**	**–2586**	**642**
Derivatives designated as hedging instruments				
Foreign exchange contracts	6714	2	–200	–198
Total	**6714**	**2**	**–200**	**–198**
Total derivative financial instruments	**144774**	**3230**	**–2786**	**444**
Amount offset				
Where a right of set-off exists		–1590	1590	
Due to cash collateral		–758	383	
Total net amount of derivative financial instruments		**882**	**–813**	**69**

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 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 2015 and 31 March 2016.

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" in the income statement. For the three months ended 31 March, the gains and losses of derivative financial instruments not designated as hedging instruments were as follows:

USD millions	2015	2016
Derivatives not designated as hedging instruments		
Interest rate contracts	–26	131
Foreign exchange contracts	219	125
Equity contracts	–99	–134
Credit contracts	–1	2
Other contracts	14	–84
Total gain/loss recognised in income	107	**40**

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 31 March, 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 of its issued debt positions and 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 three months ended 31 March, the gains and losses attributable to the hedged risks were as follows:

		2015		2016
USD millions	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	119	–119	–205	205
Total gain/loss recognised in income	119	–119	**–205**	**205**

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 2015 and the three months ended 31 March 2016, the Group recorded an accumulated net unrealised foreign currency remeasurement gain of USD 1 075 million and a gain of USD 773 million, respectively, in shareholder's 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 2015 and 31 March 2016 was approximately USD 1 590 million and USD 1 640 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 51 million and USD 89 million as of 31 December 2015 and 31 March 2016, respectively. For derivative financial instruments containing credit risk-related contingent features, the Group posted collateral of nil as of 31 December 2015 and 31 March 2016, respectively. In the event of a reduction of the Group's credit rating to below investment grade, a fair value of USD 89 million additional collateral would have had to be posted as of 31 March 2016. The total equals the amount needed to settle the instruments immediately as of 31 March 2016.

9 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 (not withstanding that optional redemption could be subject to regulatory consent). Interest expense is classified accordingly.

The Group's debt as of 31 December 2015 and 31 March 2016 was as follows:

USD millions	2015	**2016**
Senior financial debt	2 285	1 484
Senior operational debt	751	489
Subordinated financial debt	1 069	1 085
Short-term debt – financial and operational debt	4 105	**3 058**
Senior financial debt	2 880	2 923
Senior operational debt	467	422
Subordinated financial debt	3 607	3 689
Subordinated operational debt	2 720	2 667
Long-term debt – financial and operational debt	9 674	**9 701**
Total carrying value	13 779	**12 759**
Total fair value	15 327	**14 710**

Interest expense on long-term debt and contingent capital instruments

Interest expense on long-term debt for the periods ended 31 March was as follows:

USD millions	2015	**2016**
Senior financial debt	26	26
Senior operational debt	3	3
Subordinated financial debt	67	44
Subordinated operational debt	34	32
Total	130	**105**

In addition to the above, interest expense on contingent capital instruments classified as equity was USD 17 million and USD 17 million for the three months ended 31 March 2015 and 2016, respectively.

Long-term debt issued in 2016

No long-term debt was issued in the first quarter 2016.

10 Variable interest entities

The adoption of ASU 2015-2 as of 1 January 2016 led to an increase in the number of variable interest entities (VIEs), mainly due to the evaluation of partnerships and investment funds.

The Group enters into arrangements with 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 involvements 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 of the following:

- 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 involvements 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 reassesses regularly 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.

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's variable interests in investment partnerships arise through ownership of the limited partner interests. Many investment partnerships are VIEs under ASU 2015-2, 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 6 and are 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 under ASU 2015-2, because it is structured as an umbrella company comprised of multiple sub-funds. Majority of the investments held in this vehicle are accounted for as available for sale and are disclosed in the investment note 6 and not included in the tables below.

Investment vehicles (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 born 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 2016 that it was not previously contractually required to provide.

Consolidated VIEs

The following table shows the total assets and liabilities on the Group's balance sheet relating to the VIEs of which the Group is the primary beneficiary as of 31 December 2015 and 31 March 2016:

USD millions	2015	2016
Fixed income securities available-for-sale	3 876	4 092
Short-term investments	88	257
Other invested assets	26	
Cash and cash equivalents	147	42
Accrued investment income	42	49
Premiums and other receivables	34	48
Deferred acquisition costs	9	12
Deferred tax assets	38	47
Other assets	8	14
Total assets	**4 268**	**4 561**
Unpaid claims and claim adjustment expenses	53	67
Liabilities for life and health policy benefits		2
Unearned premiums	26	32
Reinsurance balances payable	2	13
Deferred and other non-current tax liabilities	96	145
Accrued expenses and other liabilities	17	14
Long-term debt	2 720	2 667
Total liabilities	**2 914**	**2 940**

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 in the Group's balance sheet related to the VIEs in which the Group held a variable interest but was not the primary beneficiary as of 31 December 2015 and 31 March 2016:

USD millions	2015	2016
Fixed income securities available-for-sale	52	326
Equity securities available-for-sale		542
Policy loans, mortgages and other loans	1	737
Other invested assets	918	1 734
Investments for unit-linked and with-profit business		186
Other assets		1
Total assets	**971**	**3 526**
Accrued expenses and other liabilities	45	66
Total liabilities	**45**	**66**

The following table shows the Group's assets, liabilities representing variable interests and maximum exposure to loss related to the VIEs in which the Group held a variable interest but was not the primary beneficiary as of 31 December 2015 and 31 March 2016:

				2015				2016
USD millions	Total assets	Total liabilities	Maximum exposure to loss[1]	Difference between exposure and liabilities	Total assets	Total liabilities	Maximum exposure to loss[1]	Difference between exposure and liabilities
Insurance-linked securitisations	52		52	52	294		294	294
Life and health funding vehicles	2	1	1 777	1 776	3	1	1 804	1 803
Swaps in trusts	146	44	–[2]	–	108	65	–[2]	–
Investment vehicles	771		773	773	2 168		2 168	2 168
Investment vehicles for unit-linked and with-profit business					186		–	–
Commercial mortgage / infrastructure loans					767		767	767
Total	**971**	**45**	**–**	**–**	**3 526**	**66**	**–**	**–**

[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.

11 Benefit plans

Net periodic benefit cost

Pension and post-retirement cost for the Group and affiliated companies for the three months ended 31 March 2015 and 2016 were USD 29 million and USD 29 million, respectively.

Employers' contributions for 2016

For the three months ended 31 March 2016, the Group and affiliated companies contributed USD 44 million to its defined benefit pension plans and USD 4 million to other post-retirement plans, compared to USD 51 million and USD 4 million, respectively, in the same period of 2015.

The expected 2016 contributions to the defined benefit pension plans and to the post-retirement benefit plans, revised as of 31 March 2016 for the latest information, amount to USD 148 million and USD 16 million, respectively.

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" and "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. Such factors include, among others:

- instability affecting the global financial system and developments related thereto;
- deterioration in global economic 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;
- 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 its investment policy or the changed composition of its investment assets, and the impact of the timing of any such changes relative to changes in market conditions;
- uncertainties in valuing credit default swaps and other credit-related instruments;
- possible inability to realise amounts on sales of securities on the Group's balance sheet equivalent to their mark-to-market values recorded for accounting purposes;
- the outcome of tax audits, the ability to realise tax loss carryforwards and 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;
- the possibility that the Group's hedging arrangements may not be effective;
- the lowering or loss of financial strength or other ratings of one or more Group companies, and developments adversely affecting the Group's ability to achieve improved ratings;
- the cyclicality of the reinsurance industry;
- uncertainties in estimating reserves;

- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes, 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;
- the frequency, severity and development of insured claim events;
- acts of terrorism and acts of war;
- mortality, morbidity and longevity experience;
- policy renewal and lapse rates;
- extraordinary events affecting the Group's clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- current, pending and future legislation and regulation affecting the Group or its ceding companies;
- 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 or other issues experienced in connection with any such transactions;
- changing levels of competition; and
- operational factors, including the efficacy of risk management and other internal procedures in managing the foregoing 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. The Group undertakes no obligation to publicly revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

Note on risk factors

General impact of adverse market conditions

The operations of Swiss Reinsurance Company Ltd ("Swiss Re") and its subsidiaries (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.

Despite signs of moderate increase in global growth forecasts and positive macro-economic trends in the United States, growth forecasts among the principal global economies remain uneven and uncertain, and that uncertainty has been compounded by significant volatility in equity, currency and commodities markets. Slower growth rates in China, together with the actions taken on its currency, and drastic reductions in the price of oil, together with volatility in foreign currency and investment markets caused by interest rate action in the United States; continued concerns over the implications of austerity-driven economic policies in Europe and the ability of the European Union to address significant ongoing structural challenges; concerns over a possible exit of the United Kingdom from the European Union; deceleration in GDP growth and other negative trends in emerging markets; and geopolitical instability, reflecting the political and military situations in the Middle East and North Africa, the rise of the Islamic State, concerns over further terrorist attacks across the globe and the political, economic and social crises caused by massive waves of migration into and through Europe, have contributed to downward pressure on the capital markets and, in turn, on market capitalisation of many listed companies, call into question the likelihood of continued recovery of the global economies and are beginning to raise the spectre of another global recession.

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 our ability to access the capital markets and bank funding markets, could adversely affect the ability of counterparties to meet their obligations to us and could adversely affect the confidence of the ultimate buyers of insurance. Any such developments and trends could also 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 and/or make it difficult to acquire suitable investments to meet the Group's risk and return criteria.

Regulatory changes

Swiss Re and its subsidiaries operate in a highly regulated environment and are 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 regulatory regimes to which members of the Group are subject have changed significantly in recent years and are expected to continue to evolve as a result of global efforts following the credit crisis.

Although early regulatory efforts following the credit crisis were focused primarily on banking institutions, there has been a noticeable trend in recent years to extend the scope of reforms and oversight beyond such institutions to cover insurance and reinsurance operations. Legislative initiatives directly impacting the Group's industry include the establishment of a pan-European regulator for insurance companies, the European Insurance and Occupational Pensions Authority (the "EIOPA"), which has the power to overrule national regulators in certain circumstances. In addition, Swiss Re is subject to the Swiss Solvency Test, and, through its legal entities organized in the European Economic Area, Solvency II, which entered into force on 1 January 2016. The Group is also monitoring the impact of the Swiss Federal Act on Financial Market Infrastructure (which became effective 1 January 2016 and introduced new regulations for over-the-counter derivatives trading in line with international standards) and the proposed Swiss Federal Financial Services Act and Financial Institutions Act (which contain rules for financial services providers that are based on the EU Markets in Financial Instruments Directive ("MiFID") regulations). In the United States, as a possible step towards federal oversight of insurance, the US Congress created the Federal Insurance Office within the Department of Treasury. In addition, provisions of the Wall Street Reform and Consumer Protection Act of 2010, as well as provisions in the proposed European Market Infrastructure Regulation and proposed changes to MiFID, in respect of derivatives could have a significant impact on the Group.

Other changes are focused principally on banking institutions, but some could have direct applicability to insurance or reinsurance operations and others could have a general impact on the regulatory landscape for financial institutions, which might indirectly impact capital requirements and/or required reserve levels or have other direct or indirect effects on the Group or its securities. Changes are particularly likely to impact financial institutions designated as "systemically important," a designation which is expected to result in enhanced regulatory supervision and heightened capital, liquidity and diversification requirements under evolving reforms.

There is an emerging focus on classifying certain insurance companies as systemically important as well. The Group could be designated as a global systemically important financial institution (SIFI) under the framework for systemically important financial institutions developed by the Financial Stability Board, or as a systemically important non-bank financial company by the Financial Stability Oversight Council (the FSOC) in the United States. Separately, the International Association of Insurance Supervisors, an international body that represents insurance regulators and supervisors, published a methodology for identifying global systemically important insurers ("G-SIIs") and on a framework for supervision of internationally active insurance groups. Initial designation of insurers as G-SIIs took place in July 2013, and initial designation of reinsurers as G-SIIs has been postponed pending further development of the methodology due by November 2015, to be applied in 2016. If and when reinsurers are included in the list of G-SIIs, the Group could be so designated. Were the Group to be designated as a G-SII, it could be subject to one or both of the resulting regimes, once implemented, including capital standards under both regimes (the Basic Capital Requirement for G-SIIs and the Insurance Capital Standard for Internationally Active Insurance Groups ("IAIGs")). In addition, the Group ultimately will be subject to oversight of its Swiss Regulator in respect of recovery and resolution planning.

Significant policy decisions on a range of regulatory changes that could affect the Group and its operations remain undecided. The Group cannot predict which legislative and regulatory initiatives ultimately 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. Certain of these initiatives could have a material impact on the Group's business.

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. These changes, or inconsistencies between the various regimes that apply to the Group, could increase the costs of doing business, reduce access to liquidity, limit the scope of 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 can 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. Economic weakness, fiscal tightening and monetary policies are keeping government yields low, which impacts investment yields and affects the profitability of life savings products with interest rate guarantees. 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 discontinued writing new variable annuity business and has an extensive hedging programme covering its existing variable annuity business that it believes is sufficient, certain risks cannot be hedged, including actuarial risks, basis risk and correlation risk. 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 further 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 further write-downs in other areas of its portfolio, including other structured instruments, and the Group and its counterparties could once again 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.

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 reinsurance business (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.

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 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, and market conditions could increase the risk of downgrade. 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.

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. 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 either 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 reinsurance 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.

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, certain of which could result in adverse judgements, 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 is also 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. 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); cyclicality of the industry; risks related to emerging claims and coverage issues (including, for example, trends to establish stricter building standards, which can lead to higher industry losses for earthquake cover based on higher replacement values); 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. Any of the foregoing, as well 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, for example, 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. 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. 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. Changes in accounting standards could impact future reported results or require restatement of past reported results.

The Group uses non-GAAP financial measures in its external 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 a substitute 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.

Risks related to the Swiss Re corporate structure
Following the realignment of the corporate structure of Swiss Re Ltd ("SRL") in 2012, the asset base, liquidity position, capital profile and other characteristics of the Group of relevance to its counterparties changed. Swiss Re is a wholly owned subsidiary of SRL, and the Group represents only two of the four principal operating segments of the SRL group. Capital, funding, reserve and cost allocations are made at the SRL level across the four operating segments based principally on business plans as measured against U.S. GAAP and Economic Value Management metrics. Decisions at the SRL level in respect of the broader group could have an adverse impact on the Group's financial condition, including its capital and liquidity levels, as well as on its SST ratio. As part of SRL's focus on efficient capital allocation, the Group expects to be paying dividends to SRL. Decisions on dividends payable by each of the operating segments, including the Group, are made at the SRL level based on legal, capital and liquidity considerations.

While further changes to the overall SRL group structure may not have a financial statement impact on an SRL consolidated basis, they would impact the Group to the extent that operations are transferred into or from the Group, or as a result of intra-group transactions to the extent the Group is a counterparty to any such transactions. The process of optimizing the structure as between SRL and its operating segments will continue to evolve over time.

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