# Income statement

## For the years ended 31 December

| USD millions | Note | 2019 | 2020 |
|---|---|---|---|
| **Revenues** | | | |
| Gross premiums written | 4 | 42 228 | **42 951** |
| Net premiums written | 4 | 39 649 | **39 827** |
| Change in unearned premiums | | –1 675 | **494** |
| **Premiums earned** | 3 | 37 974 | **40 321** |
| Fee income from policyholders | 3 | 620 | **449** |
| Net investment income – non-participating business[1] | 7 | 4 171 | **2 988** |
| Net realised investment gains/losses – non-participating business[2] | 7 | 1 580 | **1 730** |
| Net investment result – unit-linked and with-profit business | 7 | 4 939 | **–2 187** |
| Other revenues | | 30 | **37** |
| **Total revenues** | | 49 314 | **43 338** |
| | | | |
| **Expenses** | | | |
| Claims and claim adjustment expenses | 3 | –18 683 | **–19 838** |
| Life and health benefits | 3 | –13 087 | **–13 929** |
| Return credited to policyholders | | –4 633 | **1 760** |
| Acquisition costs | 3 | –7 834 | **–8 236** |
| Operating expenses | | –3 579 | **–3 597** |
| **Total expenses before interest expenses** | | –47 816 | **–43 840** |
| | | | |
| **Income/loss before interest and income tax expense** | | 1 498 | **–502** |
| Interest expenses | | –589 | **–588** |
| **Income/loss before income tax expense** | | 909 | **–1 090** |
| Income tax expense/benefit | 14 | –140 | **266** |
| **Net income/loss before attribution of non-controlling interests** | | 769 | **–824** |
| | | | |
| Income/loss attributable to non-controlling interests | | –42 | **–54** |
| **Net income/loss attributable to common shareholders** | | 727 | **–878** |
| | | | |
| **Earnings per share in USD** | | | |
| Basic | 13 | 2.46 | **–3.04** |
| Diluted | 13 | 2.39 | **–3.04** |
| **Earnings per share in CHF[3]** | | | |
| Basic | 13 | 2.46 | **-2.97** |
| Diluted | 13 | 2.40 | **–2.97** |

[1] Total impairments for the years ended 31 December of USD 80 million in 2019 and of USD 5 million in 2020, respectively, were fully recognised in earnings.
[2] Total impairments for the years ended 31 December of USD 10 million in 2019 and of USD 29 million in 2020, respectively, were fully recognised in earnings.
[3] The translation from USD to CHF is shown for informational purposes only and has been calculated using the Group's average exchange rates.

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

# Statement of comprehensive income

**For the years ended 31 December**

| USD millions | 2019 | 2020 |
|---|---|---|
| Net income/loss before attribution of non-controlling interests | 769 | **–824** |
| Other comprehensive income, net of tax: | | |
| Change in net unrealised investment gains/losses | 3 375 | **2 741** |
| Change in other-than-temporary impairment | 2 | |
| Change in cash flow hedges | –9 | **2** |
| Change in foreign currency translation | 46 | **52** |
| Change in adjustment for pension benefits | –29 | **–24** |
| Change in credit risk of financial liabilities at fair value option | –2 | **1** |
| Transactions with non-controlling interests | –56 | |
| Disposal of ReAssure | | **–2 080** |
| Other comprehensive income/loss attributable to non-controlling interests | 341 | **127** |
| **Total comprehensive income/loss before attribution of non-controlling interests** | 4 437 | **–5** |
| | | |
| Comprehensive income/loss attributable to non-controlling interests | –383 | **–181** |
| **Total comprehensive income/loss attributable to common shareholders** | 4 054 | **–186** |

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

## Reclassification out of accumulated other comprehensive income
### For the years ended 31 December

| 2019<br>USD millions | Net unrealised investment gains/losses[1] | Other-than-temporary impairment[1] | Cash flow hedges[1] | Foreign currency translation[1, 2] | Adjustment for pension benefits[3] | Credit risk of financial liabilities at fair value option | Accumulated other comprehensive income |
|---|---|---|---|---|---|---|---|
| Balance as of 1 January | 1 905 | –3 | 6 | –5 904 | –828 | 5 | –4 819 |
| Transactions with non-controlling interests | –128 | | 1 | 64 | 7 | | –56 |
| Change during the period | 5 668 | | –57 | | –93 | –2 | 5 516 |
| Amounts reclassified out of accumulated other comprehensive income | –1 491 | | 48 | 135 | 46 | | –1 262 |
| Tax | –802 | 2 | | –89 | 18 | | –871 |
| **Balance as of period end** | 5 152 | –1 | –2 | –5 794 | –850 | 3 | –1 492 |

| **2020**<br>USD millions | Net unrealised investment gains/losses[1] | Other-than-temporary impairment[1] | Cash flow hedges[1] | Foreign currency translation[1, 2] | Adjustment for pension benefits[3] | Credit risk of financial liabilities at fair value option | **Accumulated other comprehensive income** |
|---|---|---|---|---|---|---|---|
| Balance as of 1 January | 5 152 | –1 | –2 | –5 794 | –850 | 3 | **–1 492** |
| Amounts reclassified on disposal of ReAssure | –2 133 | | | –13 | 66 | | **–2 080** |
| Change during the period | 5 634 | | 17 | –166 | –166 | 1 | **5 320** |
| Amounts reclassified out of accumulated other comprehensive income | –2 263 | | –15 | 18 | 137 | | **–2 123** |
| Tax | –630 | | | 200 | 5 | | –425 |
| **Balance as of period end** | **5 760** | **–1** | **0** | **–5 755** | **–808** | **4** | **–800** |

[1] Reclassification adjustment included in net income is presented in "Net realised investment gains/losses – non-participating business".
[2] Reclassification adjustment is limited to translation gains and losses realised upon sale or upon complete or substantially complete liquidation of an investment in a foreign entity.
[3] Reclassification adjustment included in net income is presented in "Operating expenses".

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

This page is intentionally left blank.

# Balance sheet

## Assets
### As of 31 December

| USD millions | Note | 2019 | 2020 |
|---|---|---|---|
| **Investments** | 7, 8, 9 | | |
| Fixed income securities: | | | |
| Available-for-sale (including 14 175 in 2019 and 7 435 in 2020 subject to securities lending and repurchase agreements) (amortised cost: 2019: 74 780; 2020: 73 862) | | 79 163 | **81 080** |
| Trading (including 1 911 in 2019 and 1 551 in 2020 subject to securities lending and repurchase agreements) | | 2 410 | **1 938** |
| Equity securities at fair value through earnings (including 186 in 2019 and 59 in 2020 subject to securities lending and repurchase agreements) | | 2 993 | **4 899** |
| Policy loans, mortgages and other loans | | 3 021 | **3 315** |
| Investment real estate | | 2 528 | **2 602** |
| Short-term investments (including 1 157 in 2019 and 3 969 in 2020 subject to securities lending and repurchase agreements) | | 5 768 | **16 082** |
| Other invested assets | | 7 343 | **10 314** |
| Investments for unit-linked and with-profit business (including equity securities at fair value through earnings: 520 in 2019 and 463 in 2020) | | 520 | **463** |
| **Total investments** | | 103 746 | **120 693** |
| Cash and cash equivalents (including 1 257 in 2019 and 773 in 2020 subject to securities lending, and 4 in 2019 and 3 in 2020 backing unit-linked and with-profit contracts) | | 7 562 | **5 470** |
| Accrued investment income | | 673 | **626** |
| Premiums and other receivables | | 15 271 | **15 934** |
| Reinsurance recoverable on unpaid claims and policy benefits | | 5 898 | **5 892** |
| Funds held by ceding companies | | 9 472 | **10 726** |
| Deferred acquisition costs | 6 | 7 838 | **8 230** |
| Acquired present value of future profits | 6 | 1 042 | **928** |
| Goodwill | | 3 945 | **4 021** |
| Income taxes recoverable | | 466 | **337** |
| Deferred tax assets | 14 | 4 726 | **6 079** |
| Other assets | | 3 489 | **3 686** |
| Assets held for sale[1] | 10 | 74 439 | |
| **Total assets** | | 238 567 | **182 622** |

[1] Please refer to Note 10 "Acquisitions and disposals" for more details.

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

## Liabilities and Equity

| USD millions | Note | 2019 | 2020 |
|---|---|---|---|
| **Liabilities** | | | |
| Unpaid claims and claim adjustment expenses | 5 | 72 373 | **81 258** |
| Liabilities for life and health policy benefits | 8 | 19 836 | **22 456** |
| Policyholder account balances | | 5 405 | **5 192** |
| Unearned premiums | | 13 365 | **13 309** |
| Funds held under reinsurance treaties | | 3 521 | **5 146** |
| Reinsurance balances payable | | 889 | **1 097** |
| Income taxes payable | | 378 | **336** |
| Deferred and other non-current tax liabilities | 14 | 5 663 | **6 740** |
| Short-term debt | 11 | 185 | **153** |
| Accrued expenses and other liabilities | 7 | 7 191 | **8 093** |
| Long-term debt | 11 | 10 138 | **11 584** |
| Liabilities held for sale[1] | 10 | 68 586 | |
| **Total liabilities** | | 207 530 | **155 364** |
| | | | |
| **Equity** | | | |
| Common shares, CHF 0.10 par value | | | |
| 2019: 327 404 704; 2020: 317 497 306 shares authorised and issued | | 31 | **30** |
| Additional paid-in capital | | 256 | **251** |
| Treasury shares, net of tax | | –2 220 | **–1 396** |
| Accumulated other comprehensive income: | | | |
| Net unrealised investment gains/losses, net of tax | | 5 152 | **5 760** |
| Other-than-temporary impairment, net of tax | | –1 | **–1** |
| Cash flow hedges, net of tax | | –2 | |
| Foreign currency translation, net of tax | | –5 794 | **–5 755** |
| Adjustment for pension and other post-retirement benefits, net of tax | | –850 | **–808** |
| Credit risk of financial liabilities at fair value option, net of tax | | 3 | **4** |
| Total accumulated other comprehensive income | | –1 492 | **–800** |
| | | | |
| Retained earnings | | 32 676 | **29 050** |
| **Shareholders' equity** | | 29 251 | **27 135** |
| | | | |
| Non-controlling interests | | 1 786 | **123** |
| **Total equity** | | 31 037 | **27 258** |
| | | | |
| **Total liabilities and equity** | | 238 567 | **182 622** |

[1] Please refer to Note 10 "Acquisitions and disposals" for more details.

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

# Statement of shareholders' equity

## For the years ended 31 December

| USD millions | 2019 | 2020 |
|---|---|---|
| **Common shares** | | |
| Balance as of 1 January | 32 | 31 |
| Cancellation of shares bought back | –1 | –1 |
| Balance as of period end | 31 | 30 |
| **Additional paid-in capital** | | |
| Balance as of 1 January | 496 | 256 |
| Transactions with non-controlling interests[1] | –241 | 9 |
| Cancellation of shares bought back | –23 | –27 |
| Share-based compensation | –9 | –1 |
| Realised gains/losses on treasury shares | 33 | 14 |
| Balance as of period end | 256 | 251 |
| **Treasury shares, net of tax** | | |
| Balance as of 1 January | –2 291 | –2 220 |
| Purchase of treasury shares | –1 041 | –228 |
| Cancellation of shares bought back | 1 020 | 1 011 |
| Issuance of treasury shares, including share-based compensation to employees | 92 | 41 |
| Balance as of period end | –2 220 | –1 396 |
| **Net unrealised investment gains/losses, net of tax** | | |
| Balance as of 1 January | 1 905 | 5 152 |
| Transactions with non-controlling interests[1] | –128 | |
| Disposal of ReAssure[2] | | –2 133 |
| Changes during the period | 3 375 | 2 741 |
| Balance as of period end | 5 152 | 5 760 |
| **Other-than-temporary impairment, net of tax** | | |
| Balance as of 1 January | –3 | –1 |
| Changes during the period | 2 | |
| Balance as of period end | –1 | –1 |
| **Cash flow hedges, net of tax** | | |
| Balance as of 1 January | 6 | –2 |
| Transactions with non-controlling interests[1] | 1 | |
| Changes during the period | –9 | 2 |
| Balance as of period end | –2 | 0 |

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

| USD millions | 2019 | 2020 |
|---|---|---|
| **Foreign currency translation, net of tax** | | |
| Balance as of 1 January | –5 904 | **–5 794** |
| Transactions with non-controlling interests[1] | 64 | |
| Disposal of ReAssure[2] | | **–13** |
| Changes during the period | 46 | **52** |
| Balance as of period end | –5 794 | **–5 755** |
| **Adjustment for pension and other post-retirement benefits, net of tax** | | |
| Balance as of 1 January | –828 | **–850** |
| Transactions with non-controlling interests[1] | 7 | |
| Disposal of ReAssure[2] | | **66** |
| Changes during the period | –29 | **–24** |
| Balance as of period end | –850 | **–808** |
| **Credit risk of financial liabilities at fair value option, net of tax** | | |
| Balance as of 1 January | 5 | **3** |
| Changes during the period | –2 | **1** |
| Balance as of period end | 3 | **4** |
| **Retained earnings** | | |
| Balance as of 1 January | 34 512 | **32 676** |
| Net income/loss after attribution of non-controlling interests | 727 | **–878** |
| Dividends on common shares | –1 659 | **–1 765** |
| Cancellation of shares bought back | –996 | **–983** |
| Impact of ASU 2016-02[3] | 92 | |
| Balance as of period end | 32 676 | **29 050** |
| **Shareholders' equity** | 29 251 | **27 135** |
| | | |
| **Non-controlling interests** | | |
| Balance as of 1 January | 797 | **1 786** |
| Transactions with non-controlling interests[1] | 606 | **4** |
| Income/loss attributable to non-controlling interests | 42 | **54** |
| Other comprehensive income attributable to non-controlling interests: | | |
| Change in net unrealised investment gains/losses | 380 | **179** |
| Change in foreign currency translation | –25 | **–53** |
| Other | –14 | **1** |
| Disposal of ReAssure[2] | | **–1 848** |
| Balance as of period end | 1 786 | **123** |
| **Total equity** | 31 037 | **27 258** |

[1] In 2019, MS&AD Insurance Group Holdings, Inc. (MS&AD) acquired a 10% stake in ReAssure Group Plc. (ReAssure), then a subsidiary of the Group, increasing its total non-controlling interest to 25%. In the fourth quarter of 2019, the Group agreed to reacquire the 25% stake in ReAssure in connection with the agreement to sell ReAssure to Phoenix Group Holdings Plc. (Phoenix). In the third quarter of 2020, the Group completed the agreed sale.
[2] In the third quarter of 2020, the Group completed the sale of ReAssure to Phoenix.
[3] Impact of Accounting Standards Update in 2019. Please refer to the Annual Report 2019 for more details.

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

# Statement of cash flows

## For the years ended 31 December

| USD millions | 2019 | 2020 |
|---|---|---|
| **Cash flows from operating activities** | | |
| Net income/loss attributable to common shareholders | 727 | **–878** |
| Add income/loss attributable to non-controlling interests | 42 | **54** |
| Adjustments to reconcile net income to net cash provided/used by operating activities: | | |
| Depreciation, amortisation and other non-cash items | 538 | **617** |
| Net realised investment gains/losses | –5 515 | **972** |
| Income from equity-accounted investees, net of dividends received | –283 | **175** |
| Change in: | | |
| Technical provisions and other reinsurance assets and liabilities, net | 10 659 | **4 736** |
| Funds held by ceding companies and under reinsurance treaties | –5 | **393** |
| Reinsurance recoverable on unpaid claims and policy benefits | –571 | **214** |
| Other assets and liabilities, net | –472 | **–281** |
| Income taxes payable/recoverable | –471 | **–630** |
| Trading positions, net | –252 | **22** |
| **Net cash provided/used by operating activities** | 4 397 | **5 394** |
| | | |
| **Cash flows from investing activities** | | |
| Fixed income securities: | | |
| Sales | 51 008 | **50 302** |
| Maturities | 7 732 | **7 333** |
| Purchases | –58 240 | **–52 212** |
| Net purchases/sales/maturities of short-term investments | –405 | **–9 681** |
| Equity securities: | | |
| Sales | 2 225 | **1 782** |
| Purchases | –1 495 | **–1 749** |
| Securities purchased/sold under agreement to resell/repurchase, net | –869 | **–1 587** |
| Cash paid/received for acquisitions/disposals and reinsurance transactions, net | 340 | **–2 535** |
| Net purchases/sales/maturities of other investments | 581 | **–1 262** |
| Net purchases/sales/maturities of investments held for unit-linked and with-profit business | 1 584 | **1 888** |
| **Net cash provided/used by investing activities** | 2 461 | **–7 721** |
| | | |
| **Cash flows from financing activities** | | |
| Policyholder account balances, unit-linked and with-profit business: | | |
| Deposits | 551 | **215** |
| Withdrawals | –2 629 | **–1 630** |
| Issuance/repayment of long-term debt | 3 614 | **1 071** |
| Issuance/repayment of short-term debt | –2 205 | **–190** |
| Purchase/sale of treasury shares | –946 | **–199** |
| Dividends paid to shareholders | –1 659 | **–1 765** |
| Transactions with non-controlling interests | 634 | |
| **Net cash provided/used by financing activities** | –2 640 | **–2 498** |

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

| USD millions | 2019 | 2020 |
|---|---|---|
| **Total net cash provided/used** | 4 218 | **–4 825** |
| Effect of foreign currency translation | 88 | **4** |
| **Change in cash and cash equivalents** | 4 306 | **–4 821** |
| Cash and cash equivalents as of 1 January | 5 985 | **7 562** |
| Cash and cash equivalents as of 1 January classified as assets held for sale | | **2 729** |
| Reclassified to assets held for sale | –2 729 | |
| **Cash and cash equivalents as of 31 December** | 7 562 | **5 470** |

Interest paid was USD 572 million and USD 563 million (thereof USD 24 million and USD 7 million for letter of credit fees) for 2019 and 2020, respectively. Tax paid was USD 611 million and USD 364 million for 2019 and 2020, respectively.

Non-cash investing activities for 2020 amounted to USD 1.1 billion. USD 1.4 billion reflects the receipt of shares in Phoenix as part of the sales consideration for ReAssure to Phoenix. This is reduced by USD 0.3 billion representing the transaction with MS&AD. Please refer to Note 10 "Acquisitions and disposals" for more details.

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

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

This page is intentionally left blank.

# Notes to the Group financial statements

## 1 Organisation and summary of significant accounting policies

**Nature of operations**

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

**Basis of presentation**

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (US GAAP) and comply with Swiss law. All significant intra-group transactions and balances have been eliminated on consolidation.

On 22 July 2020, the Group completed the sale of ReAssure to Phoenix. Subsequently, the subject business was deconsolidated as of that date. Further details on the transaction are provided in Note 10 "Acquisitions and disposals".

The Board of Directors of Swiss Re Ltd has decided that as of 1 January 2024 the Group's consolidated financial statements will be prepared in accordance with International Financial Reporting Standards (IFRS). Financial statements for periods ending on or prior to 31 December 2023 will continue to be prepared in accordance with US GAAP.

**Principles of consolidation**

The Group's financial statements include the consolidated financial statements of Swiss Re Ltd and its subsidiaries. Voting entities which Swiss Re Ltd directly or indirectly controls through holding a majority of the voting rights are consolidated in the Group's accounts. Variable interest entities (VIEs) are consolidated when the Swiss Re Group is the primary beneficiary. The Group is the primary beneficiary when it has power over the activities that impact the VIE's economic performance and at the same time has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. Companies which the Group does not control, but over which it directly or indirectly exercises significant influence, are accounted for using the equity method or the fair value option and are included in other invested assets. The Swiss Re Group's share of net profit or loss in investments accounted for under the equity method is included in net investment income. Equity and net income of these companies are adjusted as necessary to be in line with the Group's accounting policies. The results of consolidated subsidiaries and investments accounted for using the equity method are included in the financial statements for the period commencing from the date of acquisition.

**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 disclosure, including contingent assets and liabilities. The Swiss Re 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.

**Foreign currency remeasurement and translation**

Transactions denominated in foreign currencies are remeasured to the respective subsidiary's functional currency at average exchange rates. Monetary assets and liabilities are remeasured to the functional currency at closing exchange rates, whereas non-monetary assets and liabilities are remeasured to the functional currency at historical rates. Remeasurement gains and losses on monetary assets and liabilities and trading securities are reported in earnings. Remeasurement gains and losses on available-for-sale securities, investments in consolidated subsidiaries and investments accounted for using the equity method are reported in shareholders' equity.

For consolidation purposes, assets and liabilities of subsidiaries with functional currencies other than US dollars are translated from the functional currency to US dollars at closing rates. Revenues and expenses are translated at average exchange rates. Translation adjustments are reported in shareholders' equity.

## 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 by incorporating 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 a manner consistent with the aforementioned approach, with consideration given to 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 investment 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 inputs 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 related to 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 December 2020, the Group had not provided any collateral on financial instruments in excess of its own market value estimates.

## Investments

The Group's investments in fixed income securities are classified as available-for-sale (AFS) or trading. Fixed income securities AFS are carried at fair value, based on quoted market prices, with the difference between the applicable measure of cost and fair value being recognised in shareholders' equity. Trading fixed income securities are carried at fair value with unrealised gains and losses recognised in earnings. A trading classification is used for securities that are bought and held principally for the purpose of selling them in the near term.

For fixed income securities AFS that are other-than-temporary impaired and for which there is not an intention to sell, the impairment is separated into (i) the estimated amount relating to credit loss, and (ii) the amount relating to all other factors. The estimated credit loss amount is recognised in earnings, with the remainder of the loss amount recognised in other comprehensive income. In cases where there is an intention or requirement to sell and the fair value is lower than cost expressed in functional currency terms, the cost of fixed income securities AFS is reduced to fair value, with a corresponding charge to realised investment losses. Subsequent recoveries are not recognised in earnings.

Equity investments are carried at fair value with unrealised gains and losses recognised in earnings, with the exception of equity method investments and investments that result in consolidation.

Interest on fixed income securities is recorded in net investment income when earned and is adjusted for the amortisation of any purchase premium or discount. Dividends on equity securities are recognised as investment income on the ex-dividend date. Realised gains and losses on sales are included in earnings and are calculated using the specific identification method.

Policy loans, mortgages and other loans are carried at amortised cost. Interest income is recognised in accordance with the effective yield method.

Investment in real estate that the Group intends to hold for the production of income is carried at depreciated cost, net of any write-downs for impairment in value. Depreciation on buildings is recognised on a straight-line basis over the estimated useful life of the asset. Land is recognised at cost and not depreciated. Impairment in value is recognised if the sum of the estimated future undiscounted cash flows from the use of the real estate is lower than its carrying value. The impairment loss is measured as the amount by which the asset's carrying amount exceeds its fair value and is recognised in realised investment losses. Depreciation and other related charges or credits are included in net investment income. Investment in real estate held for sale is carried at the lower of cost or fair value, less estimated selling costs, and is not depreciated. Reductions in the carrying value of real estate held for sale are included in realised investment losses.

Short-term investments are measured at fair value with changes in fair value recognised in net income. The Group considers highly liquid investments with a remaining maturity at the date of acquisition of one year or less, but greater than three months, to be short-term investments.

Other invested assets include affiliated companies, equity accounted companies, derivative financial instruments, collateral receivables, securities purchased under agreement to resell, deposits and time deposits, and investments without readily determinable fair value (including limited partnership investments). Investments in limited partnerships where the Group's interest equals or exceeds 3% are accounted for using the equity method. Investments in limited partnerships where the Group's interest is below 3% and equity investments in corporate entities which are not publicly traded are accounted for at estimated fair value with changes in fair value recognised in earnings.

The Group enters into securities lending arrangements under which it loans certain securities in exchange for collateral and receives securities lending fees. The Group's policy is to require collateral, consisting of cash or securities, equal to at least 102% of the carrying value of the securities loaned. In certain arrangements, the Group may accept collateral of less than 102% if the structure of the overall transaction offers an equivalent level of security. Cash received as collateral is recognised along with an obligation to return the cash. Securities received as collateral that can be sold or repledged are also recognised along with an obligation to return those securities. Securities lending fees are recognised over the term of the related loans.

### Derivative financial instruments and hedge accounting

The Group uses a variety of derivative financial instruments including swaps, options, forwards and exchange-traded financial futures for the Group's trading and hedging strategy in line with the overall risk management strategy. Derivative financial instruments are primarily used as a means of managing exposure to price, foreign currency and/or interest rate risk on planned or anticipated investment purchases, existing assets or existing liabilities and also to lock in attractive investment conditions for funds which become available in the future. The Group recognises all of its derivative instruments on the balance sheet at fair value. Changes in fair value on derivatives that are not designated as hedging instruments are recorded in income.

If the derivative is designated as a hedge of the fair value of assets or liabilities, changes in the fair value of the derivative are recognised in earnings, together with changes in the fair value of the related hedged item. If the derivative is designated as a hedge of the variability in expected future cash flows related to a particular risk, changes in the fair value of the derivative are reported in other comprehensive income until the hedged item is recognised in earnings. The ineffective portion of the hedge is recognised in earnings. When hedge accounting is discontinued on a cash flow hedge, the net gain or loss remains in accumulated other comprehensive income and is reclassified to earnings in the period in which the formerly hedged transaction is reported in earnings. When the Group discontinues hedge accounting because it is no longer probable that a forecasted transaction will occur within the required time period, the derivative continues to be carried on the balance sheet at fair value, and gains and losses that were previously recorded in accumulated other comprehensive income are recognised in earnings.

The Group recognises separately derivatives that are embedded within other host instruments if the economic characteristics and risks are not clearly and closely related to the economic characteristics and risks of the host contract and if it meets the definition of a derivative if it were a free-standing contract.

Derivative financial instrument assets are generally included in other invested assets and derivative financial instrument liabilities are generally included in accrued expenses and other liabilities.

The Group also designates non-derivative and derivative monetary financial instruments as hedges of the foreign currency exposure of its net investment in certain foreign operations. From the inception of the hedging relationship, remeasurement gains and losses on the designated non-derivative and derivative monetary financial instruments and translation gains and losses on the hedged net investment are reported as translation gains and losses in shareholders' equity.

### Cash and cash equivalents

Cash and cash equivalents include cash on hand, short-term deposits, certain short-term investments in money market funds and highly liquid debt instruments with a remaining maturity at the date of acquisition of three months or less.

### Deferred acquisition costs

The Group incurs costs in connection with acquiring new and renewal reinsurance and insurance business. Some of these costs, which consist primarily of commissions, are deferred as they are directly related to the successful acquisition of such business.

Deferred acquisition costs for short-duration contracts are amortised in proportion to premiums earned. Future investment income is considered in determining the recoverability of deferred acquisition costs for short-duration contracts. Deferred acquisition costs for long-duration contracts are amortised over the life of underlying contracts. Deferred acquisition costs for universal-life and similar products are amortised based on the present value of estimated gross profits. Estimated gross profits are updated quarterly.

### Modifications of insurance and reinsurance contracts

The Group accounts for modifications of insurance and reinsurance contracts that result in a substantially unchanged contract as a continuation of the replaced contract. The associated deferred acquisition costs and present value of future profits (PVFP) will continue to be amortised. The Group accounts for modifications of insurance and reinsurance contracts that result in a substantially changed contract as an extinguishment of the replaced contract. The associated deferred acquisition costs or PVFP are written off immediately through income and any new deferrable costs associated with the replacement contract are deferred.

### Business combinations

The Group applies the acquisition method of accounting for business combinations. This method allocates the cost of the acquired entity to the assets and liabilities assumed based on their estimated fair values at the date of acquisition.

Life Capital closed blocks of business can be acquired in different legal forms, either through an acquisition of an entity's share capital or through a reinsurance transaction. The Group's policy is to treat these transactions consistently regardless of the legal form of the acquisition. Accordingly, the Group records the acquired assets and liabilities directly to the balance sheet. Premiums, life and health benefits and other income statement items are not recorded in the income statement on the date of the acquisition.

The underlying assets and liabilities acquired are subsequently accounted for according to the relevant US GAAP guidance. This includes specific requirements applicable to subsequent accounting for assets and liabilities recognised as part of the acquisition method of accounting, including present value of future profits, goodwill and other intangible assets.

### Acquired present value of future profits
The acquired present value of future profits (PVFP) of business in force is recorded in connection with the acquisition of life and health business. The initial value is calculated as the difference between established reserves, which are set up in line with US GAAP accounting policies and assumptions of the Group, and their fair value at the acquisition date. The resulting PVFP, which could be positive or negative, is amortised on a constant yield basis over the expected revenue recognition period of the business acquired, generally over periods ranging up to 30 years, with the accrual of interest added to the unamortised balance at the earned rate. Amortisation and accrual of interest are recognised in acquisition costs. The earned rate corresponds to either the current earned rate or the original earned rate depending on the business written. The rate is consistently applied for the entire life of the applicable business. For universal-life and similar products, PVFP is amortised in line with estimated gross profits, which are updated quarterly. The carrying value of PVFP is reviewed periodically for indicators of impairment in value. Adjustments to PVFP reflecting impairment in value are recognised in acquisition costs during the period in which the determination of impairment is made, or in other comprehensive income for shadow loss recognition.

### Goodwill
The excess of the purchase price of acquired businesses over the estimated fair value of net assets acquired is recorded as goodwill, which is reviewed periodically for indicators of impairment in value. Adjustments to reflect impairment in value are recognised in earnings in the period in which the determination of impairment is made.

### Other assets
Other assets include deferred expenses on retroactive reinsurance, prepaid reinsurance premiums, receivables related to investing activities, real estate for own use, other classes of property, plant and equipment, lease right-of-use asset, accrued income, certain intangible assets and prepaid assets.

The excess of estimated liabilities for claims and claim adjustment expenses payable over consideration received in respect of retroactive property and casualty reinsurance contracts is recorded as a deferred expense. The deferred expense on retroactive reinsurance contracts is amortised through earnings over the expected claims-paying period.

Real estate for own use as well as other classes of property, plant and equipment are carried at depreciated cost. Depreciation on buildings is recognised on a straight-line basis over the estimated useful life. Land is recognised at cost and not depreciated.

### Leases
The Group recognises for finance and operating leases 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. The lease right-of-use asset is included in "other assets" and the lease liability is included in "accrued expenses and other liabilities" on the balance sheet. Lease expense for lease payments is recognised on a straight-line basis over the lease term.

Additional disclosures are provided in Note 12 "Leases".

### Capitalised software costs
External direct costs of materials and services incurred to develop or obtain software for internal use, payroll and payroll-related costs for employees directly associated with software development and interest cost incurred while developing software for internal use are capitalised and amortised on a straight-line basis through earnings over the estimated useful life.

### Income taxes
Deferred income tax assets and liabilities are recognised based on the difference between financial statement carrying amounts and the corresponding income tax bases of assets and liabilities using enacted income tax rates and laws. A valuation allowance is recorded against deferred tax assets when it is deemed more likely than not that some or all of the deferred tax assets may not be realised.

The Group recognises the effect of income tax positions only if sustaining those positions is more likely than not. Changes in recognition or measurement are reflected in the period in which a change in judgement occurs.

The Group releases stranded tax effects for unrealised gains/losses on AFS securities to earnings on a straight-line basis over the average duration of the relevant AFS portfolio as an approximation of when the individual securities within the portfolio are sold or mature. For adjustment for pension and other post-retirement benefits, stranded tax effects are released to earnings when the relevant pension plan is terminated. For foreign currency translation, stranded tax effects are released to earnings in line with the recycling of the underlying foreign currency translation amounts.

### Unpaid claims and claim adjustment expenses
Liabilities for unpaid claims and claim adjustment expenses for property and casualty and for life and health insurance and reinsurance contracts are accrued when insured events occur and are based on the estimated ultimate cost of settling the claims, using reports and individual case estimates received from ceding companies. Reserves also are established for claims incurred but not reported, which are developed on the basis of past experience adjusted for current trends and other factors that modify past experience. The establishment of the appropriate level of reserves is an inherently uncertain process involving estimates and judgements made by management, and therefore there can be no assurance that ultimate claims and claim adjustment expenses will not exceed the loss reserves currently established by the Group. These estimates are regularly reviewed, and adjustments for differences between estimates and actual payments for claims and for changes in estimates are reflected in income in the period in which the estimates are changed or payments are made.

The COVID-19 pandemic has created additional uncertainty, both in respect of estimation of claims across the insurance and reinsurance industry and assessments of the wider potential global health and economic impacts. This uncertainty has been compounded by the evolving nature of the pandemic, including the spread of new strains of the virus, and is driven, among other factors, by lack of definitive answers about the impacts of the pandemic and related mitigation efforts on economies and societies across the globe, the efficacy of vaccines and other treatments, and the long-term health and social impacts of the pandemic on populations, as well as by evolving responses of governments and regulators, responses of businesses and outcomes of legal actions that have already been brought or may in the future be brought. The Group has recorded its best estimate of claims and claim adjustment expenses incurred as a result of the pandemic as at 31 December 2020, which best estimate reflects the Group's expectations based on current facts and circumstances. However, the Group may, as a result of the myriad uncertainties, need to change its estimates for claims incurred and additional future claims over time as underlying facts develop.

The Group does not discount liabilities arising from prospective property and casualty insurance and reinsurance contracts, including liabilities which are discounted for US statutory reporting purposes. Liabilities arising from property and casualty insurance and reinsurance contracts acquired in a business combination are initially recognised at fair value in accordance with the acquisition method of accounting.

The Group does not discount life and health claim reserves except for disability income claims in payment and mortality claims paid out in the form of an annuity. These claims are recognised at the estimated present value of the remaining ultimate net costs of the incurred claims.

Experience features which are directly linked to a reinsurance asset or liability are classified in a manner that is consistent with the presentation of that asset or liability.

### Liabilities for life and health policy benefits
Liabilities for life and health policy benefits from reinsurance business are generally calculated using the net level premium method, based on assumptions as to investment yields, mortality, withdrawals, lapses and policyholder dividends. Assumptions are set at the time the contract is issued or, in the case of contracts acquired by purchase, at the purchase date. The assumptions are based on projections from past experience, making allowance for possible adverse deviation. Interest rate assumptions for life and health (re)insurance benefit liabilities are based on estimates of expected investment yields. Assumed mortality rates are generally based on experience multiples applied to the actuarial select and ultimate tables based on industry experience.

Liabilities for life and health policy benefits are increased with a charge to earnings if it is determined that future cash flows, including investment income, are insufficient to cover future benefits and expenses. Where assets backing liabilities for policy benefits are held as AFS, these liabilities for policyholder benefits are increased by a shadow adjustment, with a charge to other comprehensive income, where future cash flows at market rates are insufficient to cover future benefits and expenses.

### Policyholder account balances
Policyholder account balances relate to universal-life-type contracts and investment contracts.

Universal-life-type contracts are long-duration insurance contracts, providing either death or annuity benefits, with terms that are not fixed and guaranteed.

Investment contracts are long-duration contracts that do not incorporate significant insurance risk, ie there is no mortality and morbidity risk, or the mortality and morbidity risk associated with the insurance benefit features offered in the contract is of insignificant amount or remote probability. Amounts received as payment for investment contracts are reported as policyholder account balances. Related assets are included in general account assets except for investments for unit-linked and with-profit business, which are presented in a separate line item on the face of the balance sheet.

Amounts assessed against policyholders for mortality, administration and surrender are shown as fee income. Amounts credited to policyholders are shown as interest credited to policyholders. Investment income and realised investment gains and losses allocable to policyholders are included in net investment income and net realised investment gains/losses except for unit-linked and with-profit business, which is presented in a separate line item on the face of the income statement.

Unit-linked and with-profit business are presented together as they are similar in nature. For unit-linked contracts, the investment risk is borne by the policyholder. For with-profit contracts, the majority of the investment risk is also borne by the policyholder, although there are certain guarantees that limit the downside risk for the policyholder, and a certain proportion of the returns may be retained by Swiss Re Group (typically 10%). Additional disclosures are provided in Note 7 "Investments".

### Funds held assets and liabilities

On the asset side, funds held by ceding companies consist mainly of amounts retained by the ceding company for business written on a funds withheld basis. In addition, the account also includes amounts arising from the application of the deposit method of accounting to ceded retrocession or reinsurance contracts.

On the liability side, funds held under reinsurance treaties consist mainly of amounts arising from the application of the deposit method of accounting to inward insurance and reinsurance contracts. In addition, the account also includes amounts retained from ceded business written on a funds withheld basis.

Funds withheld assets are assets that would normally be paid to the Group but are withheld by the cedent to reduce a potential credit risk or to retain control over investments. In case of funds withheld liabilities, it is the Group that withholds assets related to ceded business in order to reduce its credit risk or retain control over the investments.

The deposit method of accounting is applied to insurance and reinsurance contracts that do not indemnify the ceding company or the Group against loss or liability relating to insurance risk. Under the deposit method of accounting, the deposit asset or liability is initially measured based on the consideration paid or received. For contracts that transfer neither significant timing nor underwriting risk, and contracts that transfer only significant timing risk, changes in estimates of the timing or amounts of cash flows are accounted for by recalculating the effective yield. The deposit is then adjusted to the amount that would have existed had the new effective yield been applied since the inception of the contract. The revenue and expense recorded for such contracts is included in net investment income. For contracts that transfer only significant underwriting risk, once a loss is incurred, the deposit is adjusted by the present value of the incurred loss. At each subsequent balance sheet date, the portion of the deposit attributable to the incurred loss is recalculated by discounting the estimated future cash flows. The resulting changes in the carrying amount of the deposit are recognised in claims and claim adjustment expenses.

Funds withheld balances are presented together with assets and liabilities arising from the application of the deposit method because of their common deposit-type character.

### Shadow adjustments

Shadow adjustments are recognised in other comprehensive income reflecting the offset of adjustments to deferred acquisition costs and PVFP, typically related to universal-life-type contracts, and policyholder liabilities. The purpose is to reflect the fact that certain amounts recorded as unrealised investment gains and losses within shareholders' equity will ultimately accrue to policyholders and not shareholders.

Shadow loss recognition testing becomes relevant in low interest rate environments. The test considers whether the hypothetical sale of AFS securities and the reinvestment of proceeds at lower yields would lead to negative operational earnings in future periods, thereby causing a loss recognition event. For shadow loss recognition testing, the Group uses current market yields to determine best estimate US GAAP reserves rather than using locked-in or current book yields. If the unlocked best estimate US GAAP reserves based on current market rates are in excess of reserves based on locked-in or current book yields, a shadow loss recognition reserve is set up. These reserves are recognised in other comprehensive income and do not impact net income. In addition, shadow loss recognition reserves can reverse up to the amount of losses recognised due to past loss events.

### Premiums

Property and casualty reinsurance premiums are recorded when written and include an estimate for written premiums receivable at period end. Premiums earned are generally recognised in income over the contract period in proportion to the amount of reinsurance provided. Unearned premiums consist of the unexpired portion of reinsurance provided. Life reinsurance premiums are earned when due. Related policy benefits are recorded in relation to the associated premium or gross profits so that profits are recognised over the expected lives of the contracts.

Life and health reinsurance premiums for group coverages are generally earned over the term of the coverage. For group contracts that allow experience adjustments to premiums, such premiums are recognised as the related experience emerges.

Reinstatement premiums are due where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. The recognition of reinstatement premiums as written depends on individual contract features. Reinstatement premiums are either recognised as written at the time a loss event occurs or in line with the recognition pattern of premiums written of the underlying contract. The accrual of reinstatement premiums is based on actuarial estimates of ultimate losses. Reinstatement premiums are generally earned in proportion to the amount of reinsurance provided.

### Insurance and reinsurance ceded
The Group uses retrocession arrangements to increase its aggregate underwriting capacity, to diversify its risk and to reduce the risk of catastrophic loss on reinsurance assumed. The ceding of risks to retrocessionaires does not relieve the Group of its obligations to its ceding companies. The Group regularly evaluates the financial condition of its retrocessionaires and monitors the concentration of credit risk to minimise its exposure to financial loss from retrocessionaires' insolvency. Premiums and losses ceded under retrocession contracts are reported as reductions of premiums earned and claims and claim adjustment expenses. Amounts recoverable for ceded short- and long-duration contracts, including universal-life-type and investment contracts, are reported as assets in the accompanying consolidated balance sheet.

The Group provides reserves for uncollectible amounts on reinsurance balances ceded, based on management's assessment of the collectability of the outstanding balances.

### Receivables
Premium and claims receivables which have been invoiced are accounted for at face value. Together with assets arising from the application of the deposit method of accounting that meet the definition of financing receivables they are regularly assessed for impairment. Evidence of impairment is the age of the receivable and/or any financial difficulties of the counterparty. Allowances are set up on the net balance, meaning all balances related to the same counterparty are considered. The amount of the allowance is set up in relation to the time a receivable has been due and any financial difficulties of the debtor and can be as high as the outstanding net balance.

### Pensions and other post-retirement benefits
The Group accounts for its pension and other post-retirement benefit costs using the accrual method of accounting. Amounts charged to expense are based on periodic actuarial determinations.

### Share-based payment transactions
As of 31 December 2020, the Group has a Leadership Performance Plan, restricted shares and a Global Share Participation Plan. These plans are described in more detail in Note 16 "Share-based payments". The Group accounts for share-based payment transactions with employees using the fair value method. Under the fair value method, the fair value of the awards is recognised in earnings over the vesting period.

For share-based compensation plans which are settled in cash, compensation costs are recognised as liabilities, whereas for equity-settled plans, compensation costs are recognised as an accrual to additional paid-in capital within shareholders' equity.

### Treasury shares
Treasury shares are reported at cost in shareholders' equity.

### Earnings per common share
Basic earnings per common share are determined by dividing net income available to shareholders by the weighted average number of common shares entitled to dividends during the year. Diluted earnings per common share reflect the effect on earnings and average common shares outstanding associated with dilutive securities.

### Subsequent events
Subsequent events for the current reporting period have been evaluated up to 17 March 2021. This is the date on which the financial statements are available to be issued.

### Adoption of new accounting standards
In August 2018, the FASB issued ASU 2018-13, "Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement", an update to Topic 820, "Fair Value Measurement". The amendments in this ASU add, remove and modify some disclosure requirements on fair value measurement. The Group adopted the standard retrospectively on 1 January 2020 with the exception of the amendments which require prospective adoption. The applicable amendments of ASU 2018-13 are reflected in Note 8 "Fair value disclosures".

In August 2018, the FASB issued ASU 2018-14, "Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans", an update to Subtopic 715-20, "Compensation – Retirement Benefits – Defined Benefit Plans – General". The amendments in this Update remove, clarify and add disclosure requirements related to defined benefit pension and other postretirement plans. The Group adopted the annual disclosure requirements retrospectively as of year-end 2020, which are provided in Note 15 "Benefit plans".

In August 2018, the FASB issued ASU 2018-15, "Customer's Accounting for Implementation Cost Incurred in a Cloud Computing Arrangement That Is a Service Contract", a consensus of the FASB Emerging Issues Task Force (EITF) to Subtopic 350-40, "Internal-Use Software". The amendments in this ASU align the requirements for capitalising implementation costs incurred in a cloud computing arrangement (CCA) that is a service contract with the requirements for capitalising implementation costs incurred to develop or obtain internal use software. The update requires that implementation costs related to a CCA that is a service contract need to be capitalised based on the phase and nature of the costs. The Group adopted ASU 2018-15 prospectively on 1 January 2020. The adoption did not have a material impact on the Group's financial statements.

In October 2018, the FASB issued ASU 2018-17, "Targeted Improvements to Related Party Guidance for Variable Interest Entities", an update to Topic 810, "Consolidation". The standard requires that indirect interests held through related parties in common control arrangements should be considered on a proportional basis for determining whether fees paid to decision makers and service providers are variable interests. The Group adopted the ASU retrospectively on 1 January 2020. The adoption did not have an impact on the Group's financial statements.

In November 2018, the FASB issued ASU 2018-18, "Clarifying the Interaction between Topic 808 and Topic 606", an update to Topic 808, "Collaborative Arrangements". The amendments in this ASU provide guidance on whether certain transactions between collaborative arrangement participants should be accounted for with revenue under Topic 606 "Revenue from Contracts with Customers". In particular, the update requires that in a transaction with a collaborative arrangement participant that is not directly related to sales to third parties, the presentation of the transaction together with revenue recognised under Topic 606 is precluded. The Group adopted ASU 2018-18 on 1 January 2020 retrospectively to the date of initial application of Topic 606. The adoption did not have an impact on the Group's financial statements.

In April 2019, the FASB issued ASU 2019-04, "Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments". The ASU provides selective clarifications and corrections of guidance on credit losses, hedging, and recognising and measuring financial instruments. The Group adopted the standard on 1 January 2020 with the exception of the guidance relating to ASU 2016-13 "Measurement of Credit Losses". The adoption did not have an impact on the Group's financial statements. The amendments related to credit losses will be adopted together with ASU 2016-13 as required by the standard.

In March 2020, the FASB issued ASU 2020-03, "Codification Improvements to Financial Instruments". The amendments in this ASU address seven specific issues identified related to financial instruments with the aim to improve and clarify the Codification, correct unintended application of current guidance and eliminate inconsistencies. The Group adopted issues 1, 2, 3, 4 and 5 on 9 March 2020, which is the issuance date of the ASU. The adoption did not have an impact on the Group's financial statements. Issues 6 and 7 will be adopted together with ASU 2016-13 "Measurement of Credit Losses" as required by the standard.

In March 2020, the FASB issued ASU 2020-04, "Facilitation of the Effects of Reference Rate Reform on Financial Reporting", an update to Topic 848, "Reference Rate Reform". In response to concerns about structural risks of interbank offered rates (IBORs) and, particularly, the risk of cessation of the London Interbank Offered Rate (LIBOR), regulators in several jurisdictions around the world have undertaken reference rate reform initiatives to identify alternative reference rates. The amendments in this update provide optional expedients and exceptions for applying US GAAP accounting principles to contracts, hedging relationships and other transactions that reference LIBOR or another reference rate expected to be discontinued because of these reference rate reform initiatives. The Group adopted ASU 2020-04 on 12 March 2020, which is the issuance date of the standard. There is a choice to apply the guidance by Topic or industry Subtopic at any time prospectively during the effective period from 12 March 2020 through 31 December 2022. As of 31 December 2020, the Group applied the guidance to Topic 815 related to changes to the critical terms of a hedging relationship due to reference rate reform as well as to Topic 944 related to changes resulting from the replacement of discontinued reference rates included in contracts within the scope of Topic 944, "Financial Services – Insurance". While these elections did not have a material impact on the Consolidated Financial Statements, they ease the administrative burden of accounting for contracts impacted by the reference rate reform.

**Future adoption of new accounting standards**

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses", an update to Topic 326, "Financial Instruments – Credit Losses". ASU 2016-13 replaces the incurred loss impairment methodology in current US GAAP with a methodology that reflects expected credit losses. The standard is applicable to all financial assets such as financial instruments that are measured at amortised cost, available-for-sale debt securities and reinsurance recoverables. The objective of the expected credit loss model is that a reporting entity recognises its estimate of expected credit losses incorporating forward-looking information in a valuation allowance for financial assets in scope. As amended by ASU 2019-10 "Effective Dates", ASU 2016-13 is effective for annual and interim periods beginning after 15 December 2022. For most affected financial assets, the ASU must be adopted using a modified retrospective approach, with a cumulative effect adjustment recorded to opening retained earnings on the adoption date. The Group is currently assessing the impact of the new requirements.

In January 2017, the FASB issued ASU 2017-04, "Simplifying the Test for Goodwill Impairment", an update to Topic 350, "Intangibles – Goodwill and Other". This ASU simplifies the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity has to perform procedures to determine the fair value of its assets and liabilities (including unrecognised assets and liabilities) at the impairment testing date following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under the amendments in this update, an entity should perform its regular goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognise an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognised should not exceed the total amount of goodwill allocated to that reporting unit. As amended by ASU 2019-10 "Effective Dates", ASU 2017-04 is effective for goodwill impairment tests in annual and interim periods beginning after 15 December 2022. Early application of the ASU is permitted. The Group is currently assessing the impact of the new requirements.

In August 2018, the FASB issued ASU 2018-12, "Targeted Improvements to the Accounting for Long-Duration Contracts", an update to Topic 944, "Financial Services – Insurance". This ASU requires that the cash flows and net premium ratio will be updated for changes in insurance assumptions (eg mortality, morbidity, terminations) when measuring the liability for future policy benefits for nonparticipating traditional and limited-payment insurance and reinsurance contracts. There will no longer be a provision for adverse deviation. In addition, the discount rate used to reflect the time value of money in the calculation of the liability for future policy benefits will be standardised. Further, the ASU requires deferred acquisition costs (DAC) relating to most long-duration contracts to be amortised on a constant basis over the expected term of the contract. As amended by ASU 2020-11 "Effective Date and Early Application", ASU 2018-12 is effective for annual periods beginning after 15 December 2024, and interim periods beginning after 15 December 2025. Due to the decision of the Board of Directors of Swiss Re Ltd to prepare the Group's consolidated financial statements in accordance with IFRS beginning 1 January 2024, the Group does not plan to adopt ASU 2018-12.

# 2 Information on business segments

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

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

Accounting policies applied by the business segments are in line with those described in the summary of significant accounting policies (please refer to Note 1). Cross-segmental dividends and gains and losses on certain one-off transfers and transactions between segments are accounted for through segmental shareholders' equity.

The Group operating segments are outlined below.

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

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

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

**Life Capital**
In the fourth quarter of 2019, the Group entered into an agreement to sell its subsidiary ReAssure, previously within the Life Capital business segment, to Phoenix. On 22 July 2020, the Group successfully completed the sale of ReAssure to Phoenix, following the receipt of all required regulatory and anti-trust approvals. The sale effectively led to the deconsolidation of ReAssure from the Group financial statements in the third quarter of 2020. For more details on the transaction, please refer to Note 10 "Acquisitions and disposals".

Life Capital manages Swiss Re's primary life and health business as well as its primary retail property and casualty business. It encompasses the closed and open life and health insurance books, including the ReAssure business sold in 2020 and the business comprising elipsLife and iptiQ.

Through ReAssure, Swiss Re acquired closed blocks of inforce life and health insurance business, either through reinsurance or corporate acquisition, and typically assumed responsibility for administering the underlying policies. The administration of the business was managed directly or, where appropriate, in partnership with a third party. In the open books business, elipsLife, the Group life and health insurance business, offers solutions to pension funds, corporates and affinity groups through an intermediated business to business to consumer ("B2B2C") model. The iptiQ business partners with distributors and enables individuals to address their protection needs on a white labelled basis.

As announced on 19 June 2020, the segmental disclosures will be revised to reflect the way the Group will manage its business activities going forward. As of 1 January 2021, the Life Capital reporting segment ceases to be managed as a separate Business Unit. iptiQ becomes a stand-alone division, and is reported as part of the Group items reporting segment. elipsLife moves to the Corporate Solutions reporting segment.

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

### Consolidation

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

## a) Business segments – income statement

For the year ended 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | |
| Gross premiums written | 21 562 | 14 452 | 4 974 | 2 831 | | –1 591 | 42 228 |
| Net premiums written | 20 882 | 12 734 | 4 253 | 1 780 | | | 39 649 |
| Change in unearned premiums | –1 607 | 101 | –87 | –82 | | | –1 675 |
| **Premiums earned** | 19 275 | 12 835 | 4 166 | 1 698 | | | 37 974 |
| Fee income from policyholders | | 169 | | 451 | | | 620 |
| Net investment income – non-participating business | 1 419 | 1 207 | 234 | 1 193 | 552 | –434 | 4 171 |
| Net realised investment gains/losses – non-participating business | 883 | 628 | 162 | 18 | –111 | | 1 580 |
| Net investment result – unit-linked and with-profit business | | 118 | | 4 821 | | | 4 939 |
| Other revenues | 18 | 4 | 5 | 1 | 414 | –412 | 30 |
| **Total revenues** | 21 595 | 14 961 | 4 567 | 8 182 | 855 | –846 | 49 314 |
| | | | | | | | |
| **Expenses** | | | | | | | |
| Claims and claim adjustment expenses | –14 783 | | –3 900 | | | | –18 683 |
| Life and health benefits | | –10 587 | | –2 500 | | | –13 087 |
| Return credited to policyholders | | –162 | | –4 471 | | | –4 633 |
| Acquisition costs | –4 810 | –1 975 | –640 | –409 | | | –7 834 |
| Operating expenses | –1 189 | –746 | –788 | –721 | –547 | 412 | –3 579 |
| **Total expenses before interest expenses** | –20 782 | –13 470 | –5 328 | –8 101 | –547 | 412 | –47 816 |
| | | | | | | | |
| **Income/loss before interest and income tax expense/benefit** | 813 | 1 491 | –761 | 81 | 308 | –434 | 1 498 |
| Interest expenses | –352 | –445 | –40 | –72 | –114 | 434 | –589 |
| **Income/loss before income tax expense/benefit** | 461 | 1 046 | –801 | 9 | 194 | 0 | 909 |
| Income tax expense/benefit | –65 | –147 | 143 | –133 | 62 | | –140 |
| **Net income/loss before attribution of non-controlling interests** | 396 | 899 | –658 | –124 | 256 | 0 | 769 |
| | | | | | | | |
| Income/loss attributable to non-controlling interests | | | 11 | –53 | | | –42 |
| **Net income/loss attributable to common shareholders** | 396 | 899 | –647 | –177 | 256 | 0 | 727 |
| | | | | | | | |
| Claims ratio in % | 76.7 | | 93.6 | | | | 79.7 |
| Expense ratio in % | 31.1 | | 34.3 | | | | 31.7 |
| Combined ratio in % | 107.8 | | 127.9 | | | | 111.4 |
| Management expense ratio[1] in % | | 5.2 | | | | | |
| Net operating margin[2] in % | 3.8 | 10.0 | –16.7 | 2.4 | | | 3.4 |

[1] Management expense ratio is calculated as "Operating expenses" divided by "Total revenues" excluding "Net realised investment gains/losses – non-participating business" and "Net investment result – unit-linked and with-profit business".
[2] Net operating margin is calculated as "Income before interest and income tax expense" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

### Business segments – income statement
For the year ended 31 December

| 2020<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | |
| Gross premiums written | 21 512 | 15 067 | 4 839 | 2 533 | 24 | –1 024 | 42 951 |
| Net premiums written | 20 636 | 13 657 | 3 824 | 1 686 | 24 | | 39 827 |
| Change in unearned premiums | 196 | 68 | 223 | 7 | | | 494 |
| **Premiums earned** | 20 832 | 13 725 | 4 047 | 1 693 | 24 | | 40 321 |
| Fee income from policyholders | | 158 | | 291 | | | 449 |
| Net investment income – non-participating business | 1 178 | 1 140 | 140 | 827 | 20 | –317 | 2 988 |
| Net realised investment gains – non-participating business | 683 | 445 | 74 | 243 | 285 | | 1 730 |
| Net investment result – unit-linked and with-profit business | | –32 | | –2 155 | | | –2 187 |
| Other revenues | 26 | 4 | 5 | 1 | 407 | –406 | 37 |
| **Total revenues** | **22 719** | **15 440** | **4 266** | **900** | **736** | **–723** | **43 338** |
| | | | | | | | |
| **Expenses** | | | | | | | |
| Claims and claim adjustment expenses | –16 403 | | –3 433 | –2 | | | –19 838 |
| Life and health benefits | | –12 204 | | –1 716 | –9 | | –13 929 |
| Return credited to policyholders | | 5 | | 1 755 | | | 1 760 |
| Acquisition costs | –5 104 | –1 999 | –592 | –527 | –14 | | –8 236 |
| Operating expenses | –1 200 | –786 | –690 | –613 | –714 | 406 | –3 597 |
| **Total expenses before interest expenses** | **–22 707** | **–14 984** | **–4 715** | **–1 103** | **–737** | **406** | **–43 840** |
| | | | | | | | |
| **Income/loss before interest and income tax expense/benefit** | **12** | **456** | **–449** | **–203** | **–1** | **–317** | **–502** |
| Interest expenses | –321 | –367 | –31 | –55 | –131 | 317 | –588 |
| **Income/loss before income tax expense/benefit** | **–309** | **89** | **–480** | **–258** | **–132** | **0** | **–1 090** |
| Income tax expense/benefit | 62 | –18 | 136 | 41 | 45 | | 266 |
| **Net income/loss before attribution of non-controlling interests** | **–247** | **71** | **–344** | **–217** | **–87** | **0** | **–824** |
| | | | | | | | |
| Income attributable to non-controlling interests | | | –6 | –48 | | | –54 |
| **Net income/loss attributable to common shareholders** | **–247** | **71** | **–350** | **–265** | **–87** | **0** | **–878** |
| | | | | | | | |
| Claims ratio in % | 78.7 | | 84.8 | | | | 79.7 |
| Expense ratio in % | 30.3 | | 31.7 | | | | 30.5 |
| Combined ratio in % | 109.0 | | 116.5 | | | | 110.2 |
| Management expense ratio[1] in % | | 5.2 | | | | | |
| Net operating margin[2] in % | 0.1 | 2.9 | –10.5 | –6.6 | | | –1.1 |

[1] Management expense ratio is calculated as "Operating expenses" divided by "Total revenues" excluding "Net realised investment gains/losses – non-participating business" and "Net investment result – unit-linked and with-profit business".
[2] Net operating margin is calculated as "Income before interest and income tax expense" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

## Business segments – balance sheet
As of 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Assets** | | | | | | | |
| Fixed income securities | 38 877 | 32 008 | 7 473 | 3 088 | 127 | | 81 573 |
| Equity securities | 1 749 | 620 | 172 | 57 | 395 | | 2 993 |
| Other investments | 14 606 | 4 871 | 147 | 865 | 5 009 | –12 606 | 12 892 |
| Short-term investments | 3 283 | 1 678 | 380 | 377 | 50 | | 5 768 |
| Investments for unit-linked and with-profit business | | 520 | | | | | 520 |
| Cash and cash equivalents | 3 674 | 1 694 | 1 698 | 494 | 2 | | 7 562 |
| Deferred acquisition costs | 2 613 | 4 529 | 483 | 213 | | | 7 838 |
| Acquired present value of future profits | | 577 | | 465 | | | 1 042 |
| Reinsurance recoverable | 2 325 | 4 887 | 7 058 | 3 111 | | –11 483 | 5 898 |
| Other reinsurance assets | 12 524 | 8 471 | 2 667 | 5 951 | 3 | –4 873 | 24 743 |
| Goodwill | 1 895 | 1 846 | 204 | | | | 3 945 |
| Other | 7 723 | 5 325 | 2 342 | 658 | 2 256 | –8 950 | 9 354 |
| Assets held for sale[1] | | | | 74 983 | | –544 | 74 439 |
| **Total assets** | 89 269 | 67 026 | 22 624 | 90 262 | 7 842 | –38 456 | 238 567 |
| | | | | | | | |
| **Liabilities** | | | | | | | |
| Unpaid claims and claim adjustment expenses | 49 963 | 13 094 | 12 881 | 2 489 | | –6 054 | 72 373 |
| Liabilities for life and health policy benefits | | 20 679 | 728 | 4 250 | | –5 821 | 19 836 |
| Policyholder account balances | | 1 401 | | 4 004 | | | 5 405 |
| Other reinsurance liabilities | 12 899 | 2 904 | 4 987 | 2 034 | 2 | –5 051 | 17 775 |
| Short-term debt | 915 | 1 500 | | 66 | 60 | –2 356 | 185 |
| Long-term debt | 5 511 | 11 225 | 798 | 838 | 494 | –8 728 | 10 138 |
| Other | 11 662 | 7 970 | 1 093 | 1 015 | 1 900 | –10 408 | 13 232 |
| Liabilities held for sale[1] | | | | 68 624 | | –38 | 68 586 |
| **Total liabilities** | 80 950 | 58 773 | 20 487 | 83 320 | 2 456 | –38 456 | 207 530 |
| | | | | | | | |
| **Shareholders' equity** | 8 318 | 8 253 | 2 005 | 5 289 | 5 386 | 0 | 29 251 |
| | | | | | | | |
| Non-controlling interests | 1 | | 132 | 1 653 | | | 1 786 |
| **Total equity** | 8 319 | 8 253 | 2 137 | 6 942 | 5 386 | 0 | 31 037 |
| | | | | | | | |
| **Total liabilities and equity** | 89 269 | 67 026 | 22 624 | 90 262 | 7 842 | –38 456 | 238 567 |

[1] Please refer to Note 10 "Acquisitions and disposals" for more details.

## Business segments – balance sheet
As of 31 December

| 2020<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Assets** | | | | | | | |
| Fixed income securities | 39 691 | 32 958 | 7 024 | 3 244 | 101 | | 83 018 |
| Equity securities | 1 518 | 641 | 204 | 110 | 2 426 | | 4 899 |
| Other investments | 19 345 | 3 502 | 144 | 817 | 5 018 | –12 595 | 16 231 |
| Short-term investments | 9 216 | 4 275 | 1 865 | 535 | 191 | | 16 082 |
| Investments for unit-linked and with-profit business | | 463 | | | | | 463 |
| Cash and cash equivalents | 2 941 | 1 625 | 558 | 294 | 52 | | 5 470 |
| Deferred acquisition costs | 2 576 | 4 900 | 413 | 285 | 56 | | 8 230 |
| Acquired present value of future profits | | 510 | | 418 | | | 928 |
| Reinsurance recoverable | 2 030 | 2 042 | 6 733 | 258 | | –5 171 | 5 892 |
| Other reinsurance assets | 13 003 | 7 883 | 2 491 | 4 469 | 9 | –1 195 | 26 660 |
| Goodwill | 1 958 | 1 869 | 194 | | | | 4 021 |
| Other | 8 769 | 7 705 | 2 366 | 1 193 | 4 580 | –13 885 | 10 728 |
| **Total assets** | **101 047** | **68 373** | **21 992** | **11 623** | **12 433** | **–32 846** | **182 622** |
| | | | | | | | |
| **Liabilities** | | | | | | | |
| Unpaid claims and claim adjustment expenses | 55 267 | 14 863 | 13 560 | 2 727 | 9 | –5 168 | 81 258 |
| Liabilities for life and health policy benefits | | 20 207 | 746 | 1 495 | 9 | –1 | 22 456 |
| Policyholder account balances | | 1 303 | | 3 889 | | | 5 192 |
| Other reinsurance liabilities | 14 570 | 1 399 | 4 137 | 887 | 74 | –1 515 | 19 552 |
| Short-term debt | 435 | 1 500 | | 66 | 60 | –1 908 | 153 |
| Long-term debt | 4 771 | 12 304 | 498 | | 2 400 | –8 389 | 11 584 |
| Other | 16 834 | 9 416 | 909 | 808 | 3 067 | –15 865 | 15 169 |
| **Total liabilities** | **91 877** | **60 992** | **19 850** | **9 872** | **5 619** | **–32 846** | **155 364** |
| | | | | | | | |
| **Shareholders' equity** | **9 168** | **7 381** | **2 021** | **1 751** | **6 814** | **0** | **27 135** |
| | | | | | | | |
| Non-controlling interests | 2 | | 121 | | | | 123 |
| **Total equity** | **9 170** | **7 381** | **2 142** | **1 751** | **6 814** | **0** | **27 258** |
| | | | | | | | |
| **Total liabilities and equity** | **101 047** | **68 373** | **21 992** | **11 623** | **12 433** | **–32 846** | **182 622** |

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

For the year ended 31 December

| 2019<br>USD millions | Property | Casualty | Specialty | Unallocated | Total |
|---|---|---|---|---|---|
| **Revenues** | | | | | |
| Gross premiums written | 7 927 | 10 497 | 3 138 | | 21 562 |
| Net premiums written | 7 329 | 10 452 | 3 101 | | 20 882 |
| Change in unearned premiums | –122 | –1 166 | –319 | | –1 607 |
| **Premiums earned** | 7 207 | 9 286 | 2 782 | | 19 275 |
| Net investment income | | | | 1 419 | 1 419 |
| Net realised investment gains/losses | | | | 883 | 883 |
| Other revenues | | | | 18 | 18 |
| **Total revenues** | 7 207 | 9 286 | 2 782 | 2 320 | 21 595 |
| | | | | | |
| **Expenses** | | | | | |
| Claims and claim adjustment expenses | –5 328 | –7 675 | –1 780 | | –14 783 |
| Acquisition costs | –1 365 | –2 758 | –687 | | –4 810 |
| Operating expenses | –610 | –395 | –184 | | –1 189 |
| **Total expenses before interest expenses** | –7 303 | –10 828 | –2 651 | 0 | –20 782 |
| | | | | | |
| **Income/loss before interest and income tax expense** | –96 | –1 542 | 131 | 2 320 | 813 |
| Interest expenses | | | | –352 | –352 |
| **Income/loss before income tax expense** | –96 | –1 542 | 131 | 1 968 | 461 |
| | | | | | |
| Claims ratio in % | 73.9 | 82.6 | 64.0 | | 76.7 |
| Expense ratio in % | 27.4 | 34.0 | 31.3 | | 31.1 |
| Combined ratio in % | 101.3 | 116.6 | 95.3 | | 107.8 |

**Property & Casualty Reinsurance business segment – by line of business**
For the year ended 31 December

| 2020<br>USD millions | Property | Casualty | Specialty | Unallocated | Total |
|---|---|---|---|---|---|
| **Revenues** | | | | | |
| Gross premiums written | 9 001 | 9 445 | 3 066 | | 21 512 |
| Net premiums written | 8 278 | 9 364 | 2 994 | | 20 636 |
| Change in unearned premiums | –28 | 245 | –21 | | 196 |
| **Premiums earned** | 8 250 | 9 609 | 2 973 | | 20 832 |
| Net investment income | | | | 1 178 | 1 178 |
| Net realised investment gains/losses | | | | 683 | 683 |
| Other revenues | | | | 26 | 26 |
| **Total revenues** | **8 250** | **9 609** | **2 973** | **1 887** | **22 719** |
| | | | | | |
| **Expenses** | | | | | |
| Claims and claim adjustment expenses | –6 785 | –7 570 | –2 048 | | –16 403 |
| Acquisition costs | –1 640 | –2 732 | –732 | | –5 104 |
| Operating expenses | –604 | –443 | –153 | | –1 200 |
| **Total expenses before interest expenses** | **–9 029** | **–10 745** | **–2 933** | **0** | **–22 707** |
| | | | | | |
| **Income/loss before interest and income tax expense** | **–779** | **–1 136** | **40** | **1 887** | **12** |
| Interest expenses | | | | –321 | –321 |
| **Income/loss before income tax expense** | **–779** | **–1 136** | **40** | **1 566** | **–309** |
| | | | | | |
| Claims ratio in % | 82.2 | 78.8 | 68.9 | | 78.7 |
| Expense ratio in % | 27.2 | 33.0 | 29.8 | | 30.3 |
| Combined ratio in % | 109.4 | 111.8 | 98.7 | | 109.0 |

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

For the year ended 31 December

| 2019<br>USD millions | Life | Health | Unallocated | Total |
|---|---|---|---|---|
| **Revenues** | | | | |
| Gross premiums written | 10 123 | 4 329 | | 14 452 |
| Net premiums written | 8 522 | 4 212 | | 12 734 |
| Change in unearned premiums | 126 | –25 | | 101 |
| **Premiums earned** | 8 648 | 4 187 | | 12 835 |
| Fee income from policyholders | 169 | | | 169 |
| Net investment income – non-participating business | 912 | 295 | | 1 207 |
| Net realised investment gains/losses – non-participating business | –24 | | 652 | 628 |
| Net investment result – unit-linked and with-profit business | 118 | | | 118 |
| Other revenues | 3 | 1 | | 4 |
| **Total revenues** | 9 826 | 4 483 | 652 | 14 961 |
| | | | | |
| **Expenses** | | | | |
| Life and health benefits | –7 316 | –3 271 | | –10 587 |
| Return credited to policyholders | –162 | | | –162 |
| Acquisition costs | –1 295 | –680 | | –1 975 |
| Operating expenses | –472 | –274 | | –746 |
| **Total expenses before interest expenses** | –9 245 | –4 225 | 0 | –13 470 |
| | | | | |
| **Income before interest and income tax expense** | 581 | 258 | 652 | 1 491 |
| Interest expenses | | | –445 | –445 |
| **Income before income tax expense** | 581 | 258 | 207 | 1 046 |
| | | | | |
| Management expense ratio[1] in % | 4.8 | 6.1 | | 5.2 |
| Net operating margin[2] in % | 6.0 | 5.8 | | 10.0 |

[1] Management expense ratio is calculated as "Operating expenses" divided by "Total revenues" excluding "Net realised investment gains/losses – non-participating business" and "Net investment result – unit-linked and with-profit business".
[2] Net operating margin is calculated as "Income before interest and income tax expense" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

## Life & Health Reinsurance business segment – by line of business

For the year ended 31 December

| 2020<br>USD millions | Life | Health | Unallocated | Total |
|---|---|---|---|---|
| **Revenues** | | | | |
| Gross premiums written | 10 291 | 4 776 | | 15 067 |
| Net premiums written | 9 156 | 4 501 | | 13 657 |
| Change in unearned premiums | 36 | 32 | | 68 |
| **Premiums earned** | 9 192 | 4 533 | | 13 725 |
| Fee income from policyholders | 158 | | | 158 |
| Net investment income – non-participating business | 870 | 270 | | 1 140 |
| Net realised investment gains/losses – non-participating business | 54 | –12 | 403 | 445 |
| Net investment result – unit-linked and with-profit business | –32 | | | –32 |
| Other revenues | 3 | 1 | | 4 |
| **Total revenues** | **10 245** | **4 792** | **403** | **15 440** |
| | | | | |
| **Expenses** | | | | |
| Life and health benefits | –8 587 | –3 617 | | –12 204 |
| Return credited to policyholders | 5 | | | 5 |
| Acquisition costs | –1 309 | –690 | | –1 999 |
| Operating expenses | –522 | –264 | | –786 |
| **Total expenses before interest expenses** | **–10 413** | **–4 571** | **0** | **–14 984** |
| | | | | |
| **Income/loss before interest and income tax expense** | **–168** | **221** | **403** | **456** |
| Interest expenses | | | –367 | –367 |
| **Income/loss before income tax expense** | **–168** | **221** | **36** | **89** |
| | | | | |
| Management expense ratio[1] in % | 5.1 | 5.5 | | 5.2 |
| Net operating margin[2] in % | -1.6 | 4.6 | | 2.9 |

[1] Management expense ratio is calculated as "Operating expenses" divided by "Total revenues" excluding "Net realised investment gains/losses – non-participating business" and "Net investment result – unit-linked and with-profit business".
[2] 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".

### d) Net premiums earned and fee income from policyholders by geography

Net premiums earned and fee income from policyholders by region for the years ended 31 December

| USD millions | 2019 | 2020 |
|---|---|---|
| Americas | 18 158 | 19 462 |
| Europe (including Middle East and Africa) | 12 017 | 12 889 |
| Asia-Pacific | 8 419 | 8 419 |
| **Total** | 38 594 | **40 770** |

Net premiums earned and fee income from policyholders by country for the years ended 31 December

| USD millions | 2019 | 2020 |
|---|---|---|
| United States | 15 804 | 17 130 |
| United Kingdom | 3 593 | 3 793 |
| China | 2 136 | 2 133 |
| Australia | 2 026 | 1 865 |
| Japan | 1 620 | 1 677 |
| Canada | 1 205 | 1 341 |
| Germany | 1 330 | 1 336 |
| Netherlands | 913 | 1 325 |
| Switzerland | 1 071 | 1 205 |
| France | 941 | 968 |
| Ireland | 709 | 757 |
| Other | 7 246 | 7 240 |
| **Total** | 38 594 | **40 770** |

Net premiums earned and fee income from policyholders are allocated by country, based on the underlying contract.

# 3 Insurance information

## Premiums earned and fees assessed against policyholders

For the years ended 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Premiums earned, thereof:** | | | | | | |
| Direct | | 14 | 3 837 | 2 211 | | 6 062 |
| Reinsurance | 19 577 | 13 836 | 910 | 95 | | 34 418 |
| Intra-group transactions (assumed and ceded) | 265 | 205 | –265 | –205 | | 0 |
| **Premiums earned before retrocession to external parties** | 19 842 | 14 055 | 4 482 | 2 101 | | 40 480 |
| Retrocession to external parties | –567 | –1 220 | –316 | –403 | | –2 506 |
| **Net premiums earned** | 19 275 | 12 835 | 4 166 | 1 698 | 0 | 37 974 |
| | | | | | | |
| **Fee income from policyholders, thereof:** | | | | | | |
| Direct | | | | 360 | | 360 |
| Reinsurance | | 170 | | 91 | | 261 |
| **Gross fee income before retrocession to external parties** | | 170 | | 451 | | 621 |
| Retrocession to external parties | | –1 | | | | –1 |
| **Net fee income** | 0 | 169 | 0 | 451 | 0 | 620 |

| **2020**<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Premiums earned, thereof:** | | | | | | |
| Direct | | | 3 896 | 2 427 | 10 | 6 333 |
| Reinsurance | 21 152 | 14 794 | 940 | 67 | 14 | 36 967 |
| Intra-group transactions (assumed and ceded) | 418 | 343 | –411 | –350 | | 0 |
| **Premiums earned before retrocession to external parties** | 21 570 | 15 137 | 4 425 | 2 144 | 24 | 43 300 |
| Retrocession to external parties | –738 | –1 412 | –378 | –451 | | –2 979 |
| **Net premiums earned** | **20 832** | **13 725** | **4 047** | **1 693** | **24** | **40 321** |
| | | | | | | |
| **Fee income from policyholders, thereof:** | | | | | | |
| Direct | | | | 205 | | 205 |
| Reinsurance | | 159 | | 86 | | 245 |
| **Gross fee income before retrocession to external parties** | | 159 | | 291 | | 450 |
| Retrocession to external parties | | –1 | | | | –1 |
| **Net fee income** | **0** | **158** | **0** | **291** | **0** | **449** |

## Claims and claim adjustment expenses
For the year ended 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Claims paid, thereof:** | | | | | | |
| Gross claims paid to external parties | –12 453 | –10 077 | –3 836 | –3 481 | | –29 847 |
| Intra-group transactions (assumed and ceded) | –585 | –165 | 585 | 165 | | 0 |
| **Claims before receivables from retrocession to external parties** | –13 038 | –10 242 | –3 251 | –3 316 | | –29 847 |
| Retrocession to external parties | 352 | 1 049 | 264 | 472 | | 2 137 |
| **Net claims paid** | –12 686 | –9 193 | –2 987 | –2 844 | 0 | –27 710 |
| | | | | | | |
| **Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:** | | | | | | |
| Gross – with external parties | –2 151 | –1 394 | –1 143 | 409 | | –4 279 |
| Intra-group transactions (assumed and ceded) | –25 | –8 | 25 | 8 | | 0 |
| **Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties** | –2 176 | –1 402 | –1 118 | 417 | | –4 279 |
| Retrocession to external parties | 79 | 8 | 205 | –73 | | 219 |
| **Net unpaid claims and claim adjustment expenses; life and health benefits** | –2 097 | –1 394 | –913 | 344 | 0 | –4 060 |
| | | | | | | |
| **Claims and claim adjustment expenses; life and health benefits** | –14 783 | –10 587 | –3 900 | –2 500 | 0 | –31 770 |

## Acquisition costs
For the year ended 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Acquisition costs, thereof:** | | | | | | |
| Gross acquisition costs with external parties | –4 875 | –2 148 | –729 | –458 | | –8 210 |
| Intra-group transactions (assumed and ceded) | –28 | –4 | 28 | 4 | | 0 |
| **Acquisition costs before impact of retrocession to external parties** | –4 903 | –2 152 | –701 | –454 | | –8 210 |
| Retrocession to external parties | 93 | 177 | 61 | 45 | | 376 |
| **Net acquisition costs** | –4 810 | –1 975 | –640 | –409 | 0 | –7 834 |

## Claims and claim adjustment expenses

For the year ended 31 December

| 2020<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Claims paid, thereof:** | | | | | | |
| Gross claims paid to external parties | –12 225 | –11 813 | –3 221 | –2 791 | –7 | –30 057 |
| Intra-group transactions (assumed and ceded) | –553 | –222 | 553 | 222 | | 0 |
| **Claims before receivables from retrocession to external parties** | –12 778 | –12 035 | –2 668 | –2 569 | –7 | –30 057 |
| Retrocession to external parties | 416 | 1 228 | 225 | 414 | | 2 283 |
| **Net claims paid** | **–12 362** | **–10 807** | **–2 443** | **–2 155** | **–7** | **–27 774** |
| | | | | | | |
| **Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:** | | | | | | |
| Gross – with external parties | –4 087 | –1 474 | –646 | 428 | –2 | –5 781 |
| Intra-group transactions (assumed and ceded) | 278 | –88 | –284 | 94 | | 0 |
| **Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties** | –3 809 | –1 562 | –930 | 522 | –2 | –5 781 |
| Retrocession to external parties | –232 | 165 | –60 | –85 | | –212 |
| **Net unpaid claims and claim adjustment expenses; life and health benefits** | **–4 041** | **–1 397** | **–990** | **437** | **–2** | **–5 993** |
| | | | | | | |
| **Claims and claim adjustment expenses; life and health benefits** | **–16 403** | **–12 204** | **–3 433** | **–1 718** | **–9** | **–33 767** |

## Acquisition costs

For the year ended 31 December

| 2020<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| **Acquisition costs, thereof:** | | | | | | |
| Gross acquisition costs with external parties | –5 142 | –2 243 | –712 | –599 | –14 | –8 710 |
| Intra-group transactions (assumed and ceded) | –68 | –24 | 66 | 26 | | 0 |
| **Acquisition costs before impact of retrocession to external parties** | –5 210 | –2 267 | –646 | –573 | –14 | –8 710 |
| Retrocession to external parties | 106 | 268 | 54 | 46 | | 474 |
| **Net acquisition costs** | **–5 104** | **–1 999** | **–592** | **–527** | **–14** | **–8 236** |

### Reinsurance recoverable on unpaid claims and policy benefits

As of 31 December 2019 and 2020, the Group had a reinsurance recoverable of USD 5 898 million and USD 5 892 million, respectively. The concentration of credit risk is regularly monitored and evaluated. The reinsurance programme with Berkshire Hathaway and subsidiaries accounted for 33% and 30% of the Group's reinsurance recoverable as of year-end 2019 and 2020, respectively.

### Reinsurance receivables

Reinsurance receivables as of 31 December were as follows:

| USD millions | 2019 | **2020** |
|---|---|---|
| Premium receivables invoiced | 3 589 | 3 960 |
| Receivables invoiced from ceded re/insurance business | 444 | 468 |
| Assets arising from the application of the deposit method of accounting and meeting the definition of financing receivables | 249 | 649 |
| Recognised allowance | –56 | –73 |

### Policyholder dividends

Policyholder dividends are recognised as an element of policyholder benefits. The relative percentage of participating insurance of the life and health policy benefits in 2019 and 2020 was 10% and 0%, respectively. The amount of policyholder dividend expense in 2019 and 2020 was USD 165 million and USD 42 million, respectively.

This page is intentionally left blank.

# 4 Premiums written

For the years ended 31 December

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Gross premiums written, thereof:** | | | | | | | |
| Direct | | 14 | 3 869 | 2 230 | | | 6 113 |
| Reinsurance | 21 189 | 13 794 | 1 037 | 95 | | | 36 115 |
| Intra-group transactions (assumed) | 373 | 644 | 68 | 506 | | –1 591 | 0 |
| **Gross premiums written** | 21 562 | 14 452 | 4 974 | 2 831 | | –1 591 | 42 228 |
| Intra-group transactions (ceded) | –68 | –506 | –373 | –644 | | 1 591 | 0 |
| **Gross premiums written before retrocession to external parties** | 21 494 | 13 946 | 4 601 | 2 187 | | | 42 228 |
| Retrocession to external parties | –612 | –1 212 | –348 | –407 | | | –2 579 |
| **Net premiums written** | 20 882 | 12 734 | 4 253 | 1 780 | 0 | 0 | 39 649 |

| 2020<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Consolidation | Total |
|---|---|---|---|---|---|---|---|
| **Gross premiums written, thereof:** | | | | | | | |
| Direct | | | 3 883 | 2 466 | 10 | | 6 359 |
| Reinsurance | 20 871 | 14 732 | 908 | 67 | 14 | | 36 592 |
| Intra-group transactions (assumed) | 641 | 335 | 48 | | | –1 024 | 0 |
| **Gross premiums written** | 21 512 | 15 067 | 4 839 | 2 533 | 24 | –1 024 | 42 951 |
| Intra-group transactions (ceded) | –48 | | –589 | –387 | | 1 024 | 0 |
| **Gross premiums written before retrocession to external parties** | 21 464 | 15 067 | 4 250 | 2 146 | 24 | | 42 951 |
| Retrocession to external parties | –828 | –1 410 | –426 | –460 | | | –3 124 |
| **Net premiums written** | **20 636** | **13 657** | **3 824** | **1 686** | **24** | **0** | **39 827** |

# 5 Unpaid claims and claim adjustment expenses

A reconciliation of the opening and closing reserve balances for unpaid claims and claim adjustment expenses for the years ended 31 December is presented as follows:

| USD millions | 2019 | **2020** |
|---|---|---|
| Balance as of 1 January | 67 446 | 72 373 |
| Balance as of 1 January classified as held for sale | | 497 |
| Reinsurance recoverable | −3 606 | −3 732 |
| Deferred expense on retroactive reinsurance | −169 | −168 |
| **Net balance as of 1 January** | 63 671 | **68 970** |
| Incurred related to: | | |
| Current year | 29 338 | 34 064 |
| Prior year | 2 231 | 166 |
| Amortisation of deferred expense on retroactive reinsurance and impact of commutations | −23 | −36 |
| Total incurred | 31 546 | **34 194** |
| Paid related to: | | |
| Current year | −9 702 | −10 329 |
| Prior year | −18 008 | −17 445 |
| Total paid | −27 710 | **−27 774** |
| Foreign exchange | 161 | 2 149 |
| Effect of acquisitions, disposals, new retroactive reinsurance and other items | 1 302 | −108 |
| **Net balance as of period end** | 68 970 | **77 431** |
| Reinsurance recoverable | 3 732 | 3 636 |
| Deferred expense on retroactive reinsurance | 168 | 191 |
| Reclassified to liabilities held for sale | −497 | |
| **Balance as of period end** | 72 373 | **81 258** |

### Prior-year development
Non-life claims development in the year ended 31 December 2020 on prior years is mainly driven by favourable property experience largely offset by adverse casualty experience. Development in property is principally due to reserve releases related to natural catastrophe events in Asia. The deterioration for casualty mostly comes from adverse claims experience for liability in North America, partially offset by favourable development for accident & health and motor. Specialty was impacted by adverse claims experience in engineering and large losses for credit and surety, partly offset by positive claims experience and reduction of large losses for marine.

For life and health lines of business, development on prior years' unpaid claims is unfavourable. For health business, adverse experience in disability portfolios in Australia and the US led to unfavourable claims development. Claims development related to prior years for disability portfolios also includes an element of interest accretion for unpaid claims reported at an estimated present value. For life business, favourable development in the US, driven by positive experience, is partly offset by unfavourable development in Latin America and the UK due to adverse experience.

A summary of prior year net claims and claim adjustment expenses development by lines of business for the years ended 31 December is shown below[1]:

| USD millions | 2019 | **2020** |
|---|---|---|
| Line of business: | | |
| Property | 367 | –582 |
| Casualty | 1 425 | 456 |
| Specialty | 105 | 26 |
| Life and health | 334 | 266 |
| **Total** | 2 231 | **166** |

[1] Adverse development is shown as positive numbers, and represents a charge to the income statement. Favourable development is shown as negative, and represents a credit to the income statement.

### US asbestos and environmental claims exposure
The Group's obligation for claims payments and claims settlement charges also includes obligations for long-latent injury claims arising out of policies written prior to 1986, in particular in the area of US asbestos and environmental liability.

At the end of 2020, the Group carried net reserves for US asbestos and environmental liabilities equal to USD 1 428 million. During 2020, the Group incurred net losses of USD 18 million and net paid losses of USD 80 million in relation to these liabilities.

Estimating ultimate asbestos and environmental liabilities is particularly complex for a number of reasons relating in part to the long period between exposure and manifestation of claims, and in part to other factors, which include risks and lack of predictability inherent in complex litigation, changes in projected costs to resolve, and in the projected number of, asbestos and environmental claims, the effect of bankruptcy protection, insolvencies, and changes in the legal, legislative and regulatory environment. As a result, the Group believes that projection of exposures for asbestos and environmental claims is subject to far less predictability relative to non-environmental and non-asbestos exposures. Management believes that its reserves for asbestos and environmental claims are appropriately established based upon known facts and the current state of the law. However, reserves are subject to revision as new information becomes available and as claims develop. Additional liabilities may arise for amounts in excess of reserves, and the Group's estimate of claims and claim adjustment expenses may change. Any such additional liabilities or increases in estimates cannot be reasonably estimated in advance but could result in charges that could be material to operating results.

### Short duration contract unpaid claims and claim adjustment expenses

**Basis of presentation for claims development information**

This section of the note provides claims development information and information on reserves for claims relating to insured events that have occurred but have not yet been reported ("IBNR").

Claims development information and IBNR are presented on an accident year basis and by line of business for individually significant categories. Additional aggregation or disaggregation is provided where appropriate, necessary and practicable ("disaggregation categories"). For instance, Reinsurance liability and motor lines of business are further disaggregated into proportional and non-proportional treaty types to provide more specific information on claims development. Amounts shown in the claims development tables are on a nominal basis, including cases where the Group discounts claims liabilities for measurement under US GAAP, and are net of external retrocession and retrocession between business segments to the extent that a retrocession programme can be allocated to a disaggregation category. Ceded retroactive reinsurance is not included in the claims development table if it cannot be allocated on a reasonable basis to the disaggregation categories used to present claims development information.

In the Property & Casualty Reinsurance and Corporate Solutions segments, all contracts that transfer significant insurance risk are included in scope to the extent they can be allocated to a disaggregation category. For many reinsurance contracts, proportional contracts in particular, ceding companies do not report losses by accident year. In these cases, the Group has allocated reported losses by underwriting year to accident year to produce the accident year tables. Similarly, IBNR is calculated on an underwriting year basis and then the liabilities are allocated to accident year.

In the Life & Health Reinsurance segment, contracts classified as short duration include group life business, certain types of disability and long-term care contracts, group accident, health coverage including critical illness and medical expenses. The Group provides claims development information for Life & Health Reinsurance where reported accident year information is available and there is potential for claims development. This primarily applies to the group disability business in Australia and the UK. This business is generally considered to have relatively higher claims estimation uncertainty than other life and health lines such as group life, due to longer claims development periods.

In the Life Capital segment, short duration contracts include mainly disability medical expenses business. The Group provides no claims development information for Life Capital as its short duration reserves are not material.

The number of years shown in the claims development tables differs by business segment.

For Property & Casualty Reinsurance and Life & Health Reinsurance, the Group discloses data for ten accident years and reporting periods.

The Corporate Solutions business segment was created in 2012. Therefore, nine accident years and reporting periods are shown for this business unit. Corporate Solutions related business written in Property & Casualty Reinsurance prior to 2012 is included in the net claims development information reported by this segment. All but an immaterial portion of claims arising from accident years prior to 2012 relate to accident years which are over ten years ago and therefore out of the required range of disclosure.

The current reporting period estimate of net claims liabilities for accident years older than the number of years shown in the claims development tables is presented as a total after disclosure of cumulative paid claims.

The information presented in claims development tables is presented at current balance sheet foreign exchange rates as of the date of these financial statements to permit an analysis of claims development excluding the impact of foreign exchange movements.

Some of the information provided in the following tables is Required Supplementary Information (RSI) under US GAAP and does not form part of these consolidated audited financial statements. Claims development information for all periods except the current reporting period and any information derived from it – including average annual percentage payout of claims incurred – is considered RSI and is identified as RSI in the tables presented.

**Methodology for determining the presented amounts of liabilities for IBNR claims**
The liability for unpaid claims and claim adjustment expenses is based on an estimate of the ultimate cost of settling the claims based on both information reported to us by ceding companies and internal estimates.

Non-life re/insurance contracts
The Group develops and recognises its own estimate of IBNR claims, which includes circumstances in which cedents have not reported any claims to the Group or where the Group's estimate of reserves needed to cover reported claims differs from the amounts reported by cedents. For reinsurance business, case reserves and estimated IBNR are reported by cedents and this IBNR is presented together with the Group's own estimate as IBNR in the claims development tables. For insurance business, reserving is performed similarly, except that estimates for case reserves and IBNR are performed by the Group.

Reserving is done on portfolio or contract level depending on the features of the contract. For business reviewed on a portfolio level, the expected ultimate losses are set for most lines and types of business based on analysis performed using standard actuarial techniques. In general, contracts are aggregated into portfolios by combining contracts with similar features.

In most cases, these standard actuarial techniques encompass a number of loss development factor techniques applied to claim tables of paid and reported losses. Other actuarial techniques may be applicable to specific categories. For instance, the analysis of frequency and severity could be applied in all disaggregation categories. Life contingency techniques for projecting regular payments related to bodily injury claims are applied to motor proportional, motor non-proportional, liability proportional, liability non-proportional, accident and health and similar Corporate Solutions lines, where the information is available. In some cases, techniques specific to the projection of future payments for specific risks such as asbestos or pollution claims are applied to both proportional and non-proportional liability claims, also in Corporate Solutions (see also separate section "US asbestos and environmental claims exposure" on page 220).

Contract-level reserving is based on standard actuarial techniques but requires more detailed contract, pricing, claim and exposure information than required for the business reviewed on a portfolio level.

In addition, the following applies to all non-life re/insurance business:

- For the most recent underwriting years, reliance may be made on the Group's costing and underwriting functions for the initial estimates of claims, although the initial reserving estimates may differ from these pricing estimates if there is good reason to believe losses are likely to emerge higher or lower, and in light of the limited claims experience to date. Reviews of those initial estimates are performed regularly, forming a basis for adjustments on both the current and prior underwriting years.

- The reserving process considers any information available in respect of either a specific case or a large loss event and the impact of any unusual features in the technical accounting of information provided by cedents.

Life and health re/insurance contracts
For the Life & Health Reinsurance business, liability for IBNR claims includes provision for "not yet reported claims" expected to have been incurred in respect of both already processed and not yet processed reinsurance accounts and generally includes provisions for the cost of claims on disability contracts that currently are within their deferred period. The IBNR reserving calculations have been made using appropriate techniques, such as chain ladder and/or Bornhuetter-Ferguson approaches, depending upon the level of detail available and the assumed level of development of the claim. For certain lines of business, IBNR claims reserves include reported but not admitted claims, allowing for expected rates of decline for these claims.

**Claims frequency information**
Claims frequency information is not available for the disaggregation categories of Property & Casualty Reinsurance, as cedents do not report claims frequency information to the Group for most of the assumed reinsurance contract types. These contracts are to be found in all disaggregation categories presented.

Life & Health Reinsurance reports claims frequency information based on individual incidence. The number of reported claims is the actual number of claims booked. For disability business, claims with multiple payments in a year are counted as one claim. Claims that are reported but not admitted are included in the claim count.

For Corporate Solutions, claims frequency is displayed for direct business only, as individual claims information is generally not available for assumed and ceded business. Claims are counted individually per contract to produce the claims frequency table. For some direct business, summary reports are received and multiple claims are booked under a single claim code; this is usually done at a programme, policy year, state, country and/or line of business level of detail. This approach may be applied to business which has a high volume of claim counts, but with only minor claims dollars associated with each claim.

### Property & Casualty Reinsurance – Property

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *4 513* | *4 586* | *4 399* | *4 463* | *4 414* | *4 409* | *4 428* | *4 468* | *4 470* | 4 482 | 23 |
| 2012 | | *2 772* | *2 597* | *2 393* | *2 349* | *2 318* | *2 303* | *2 303* | *2 297* | 2 294 | 5 |
| 2013 | | | *3 255* | *3 267* | *3 087* | *2 999* | *2 974* | *2 958* | *2 954* | 2 947 | –2 |
| 2014 | | | | *2 808* | *2 642* | *2 458* | *2 426* | *2 423* | *2 411* | 2 423 | 9 |
| 2015 | | | | | *2 914* | *2 840* | *2 667* | *2 634* | *2 592* | 2 573 | 9 |
| 2016 | | | | | | *4 030* | *3 752* | *3 446* | *3 440* | 3 411 | 10 |
| 2017 | | | | | | | *6 132* | *6 041* | *5 802* | 5 771 | 53 |
| 2018 | | | | | | | | *4 799* | *5 294* | 5 019 | 74 |
| 2019 | *RSI* | | | | | | | | *5 351* | 5 268 | 555 |
| 2020 | | | | | | | | | | 7 363 | 4 385 |
| Total | | | | | | | | | | **41 551** | **5 121** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *704* | *2 524* | *3 371* | *3 835* | *4 140* | *4 248* | *4 376* | *4 401* | *4 416* | 4 425 |
| 2012 | | *236* | *1 639* | *2 040* | *2 163* | *2 208* | *2 228* | *2 239* | *2 248* | 2 250 |
| 2013 | | | *550* | *2 076* | *2 601* | *2 802* | *2 865* | *2 887* | *2 904* | 2 918 |
| 2014 | | | | *469* | *1 755* | *2 146* | *2 279* | *2 325* | *2 342* | 2 362 |
| 2015 | | | | | *472* | *1 696* | *2 229* | *2 402* | *2 482* | 2 506 |
| 2016 | | | | | | *653* | *2 283* | *2 932* | *3 151* | 3 239 |
| 2017 | | | | | | | *1 002* | *3 736* | *4 845* | 5 187 |
| 2018 | | | | | | | | *642* | *3 557* | 4 175 |
| 2019 | *RSI* | | | | | | | | *944* | 3 332 |
| 2020 | | | | | | | | | | 1 330 |
| Total | | | | | | | | | | **31 724** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 205 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **10 032** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Property (RSI) | *16.8%* | *50.3%* | *17.7%* | *6.7%* | *3.1%* | *1.1%* | *1.2%* | *0.5%* | *0.2%* | *0.2%* |

The liability for unpaid claims and claim adjustment expenses for property in Property & Casualty Reinsurance shows positive development on most recent accident years. Claims in accident year 2011 were at a high level due to several large natural catastrophes including the earthquake and tsunami in Japan, the earthquakes in Christchurch, New Zealand, and floods in Thailand. The 2017 accident year claims incurred are higher due to natural catastrophes which also affected 2018-2020 accident years. In addition, the current accident year was impacted by COVID-19.

## Property & Casualty Reinsurance – Liability, proportional

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *650* | *708* | *731* | *678* | *636* | *632* | *606* | *599* | *598* | 588 | 54 |
| 2012 | | *531* | *615* | *571* | *542* | *514* | *523* | *514* | *528* | 526 | 58 |
| 2013 | | | *741* | *764* | *772* | *766* | *770* | *760* | *757* | 760 | 87 |
| 2014 | | | | *1 009* | *1 000* | *1 013* | *1 002* | *990* | *1 028* | 1 036 | 157 |
| 2015 | | | | | *1 280* | *1 329* | *1 418* | *1 493* | *1 564* | 1 548 | 267 |
| 2016 | | | | | | *1 732* | *1 738* | *1 737* | *1 842* | 1 892 | 573 |
| 2017 | | | | | | | *1 985* | *2 096* | *2 239* | 2 420 | 869 |
| 2018 | | | | | | | | *1 916* | *2 095* | 2 241 | 1 245 |
| 2019 | *RSI* | | | | | | | | *2 744* | 3 115 | 2 204 |
| 2020 | | | | | | | | | | 2 999 | 2 692 |
| Total | | | | | | | | | | **17 125** | **8 206** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *2* | *110* | *185* | *255* | *341* | *387* | *422* | *446* | *468* | 472 |
| 2012 | | *12* | *120* | *188* | *247* | *301* | *360* | *396* | *432* | 436 |
| 2013 | | | *13* | *131* | *238* | *354* | *437* | *513* | *567* | 599 |
| 2014 | | | | *24* | *162* | *298* | *438* | *575* | *672* | 755 |
| 2015 | | | | | *35* | *214* | *431* | *662* | *915* | 1 094 |
| 2016 | | | | | | *47* | *94* | *395* | *665* | 906 |
| 2017 | | | | | | | *50* | *257* | *551* | 1 015 |
| 2018 | | | | | | | | *52* | *314* | 597 |
| 2019 | *RSI* | | | | | | | | *84* | 426 |
| 2020 | | | | | | | | | | 114 |
| Total | | | | | | | | | | **6 414** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 1 165 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **11 876** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Liability, proportional (RSI) | *2.2%* | *12.6%* | *13.4%* | *14.3%* | *13.0%* | *10.0%* | *7.0%* | *5.0%* | *2.3%* | *0.7%* |

The increase in the incurred losses for accident years 2013 to 2020 is driven by volume increases of business being written. The increases in the incurred losses in reporting year 2020 for accident years 2016 to 2019 are driven by US business. The current accident year was impacted by COVID-19.

In line with the Group's policy, cash flows under loss portfolio transfers are reported through claims paid. For longer-tailed lines and depending on the business volume written, timing of cash flows can lead to net inward payments across the whole portfolio in the first development year of the contract for some accident years.

**Property & Casualty Reinsurance – Liability, non-proportional**
Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *415* | *444* | *482* | *441* | *397* | *363* | *355* | *341* | *342* | 347 | 31 |
| 2012 | | *340* | *358* | *317* | *288* | *267* | *256* | *232* | *227* | 219 | 36 |
| 2013 | | | *421* | *402* | *365* | *309* | *283* | *260* | *261* | 255 | 56 |
| 2014 | | | | *446* | *451* | *418* | *375* | *345* | *365* | 364 | 107 |
| 2015 | | | | | *1 860* | *1 901* | *1 869* | *1 886* | *1 910* | 1 886 | 129 |
| 2016 | | | | | | *608* | *591* | *620* | *667* | 720 | 162 |
| 2017 | | | | | | | *500* | *517* | *600* | 649 | 213 |
| 2018 | | | | | | | | *459* | *464* | 483 | 265 |
| 2019 | *RSI* | | | | | | | | *2 424* | 2 395 | 543 |
| 2020 | | | | | | | | | | 849 | 815 |
| Total | | | | | | | | | | **8 167** | **2 357** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *1* | *10* | *66* | *114* | *141* | *149* | *162* | *176* | *194* | 212 |
| 2012 | | *–4* | *11* | *35* | *53* | *85* | *100* | *115* | *130* | 139 |
| 2013 | | | *–2* | *11* | *37* | *60* | *84* | *109* | *133* | 145 |
| 2014 | | | | *–2* | *8* | *40* | *71* | *101* | *142* | 169 |
| 2015 | | | | | *0* | *94* | *204* | *337* | *490* | 596 |
| 2016 | | | | | | *14* | *224* | *250* | *303* | 365 |
| 2017 | | | | | | | *–2* | *18* | *48* | 124 |
| 2018 | | | | | | | | *–1* | *21* | 72 |
| 2019 | *RSI* | | | | | | | | *211* | 499 |
| 2020 | | | | | | | | | | 10 |
| Total | | | | | | | | | | **2 331** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 3 856 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **9 692** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Liability, non-proportional (RSI) | *0.9%* | *7.9%* | *8.8%* | *9.4%* | *9.5%* | *7.2%* | *6.9%* | *5.2%* | *4.6%* | *5.2%* |

The increase in incurred losses for accident year 2015 compared to other years is due to an increase in volume of business written in that year. Accident year 2019 includes an Adverse Development Cover and a Loss Portfolio Transfer written with Corporate Solutions. Liabilities before 2011 include reserves for historic US Asbestos and Environmental losses. The current accident year was impacted by COVID-19.

In line with the Group’s policy, cash flows under Loss Portfolio Transfers are reported through claims paid. For longer-tailed lines and depending on the business volume written, timing of cash flows can lead to net inward payments across the whole portfolio in the first development year of the contract for some accident years.

## Property & Casualty Reinsurance – Accident & Health

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *233* | *253* | *248* | *240* | *243* | *237* | *237* | *233* | *232* | 228 | 21 |
| 2012 | | *338* | *346* | *331* | *321* | *318* | *311* | *309* | *304* | 297 | 22 |
| 2013 | | | *354* | *360* | *346* | *336* | *328* | *326* | *321* | 309 | 32 |
| 2014 | | | | *306* | *340* | *331* | *320* | *308* | *307* | 292 | 42 |
| 2015 | | | | | *439* | *436* | *414* | *404* | *395* | 375 | 45 |
| 2016 | | | | | | *597* | *631* | *625* | *589* | 583 | 129 |
| 2017 | | | | | | | *737* | *771* | *732* | 723 | 206 |
| 2018 | | | | | | | | *730* | *818* | 814 | 187 |
| 2019 | *RSI* | | | | | | | | *807* | 799 | 242 |
| 2020 | | | | | | | | | | 901 | 533 |
| Total | | | | | | | | | | **5 321** | **1 459** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *48* | *122* | *143* | *154* | *163* | *168* | *177* | *180* | *183* | 185 |
| 2012 | | *81* | *186* | *213* | *229* | *240* | *249* | *252* | *256* | 258 |
| 2013 | | | *56* | *144* | *185* | *209* | *222* | *230* | *236* | 242 |
| 2014 | | | | *30* | *104* | *147* | *175* | *193* | *208* | 215 |
| 2015 | | | | | *62* | *139* | *192* | *225* | *244* | 257 |
| 2016 | | | | | | *74* | *179* | *273* | *328* | 358 |
| 2017 | | | | | | | *96* | *235* | *336* | 395 |
| 2018 | | | | | | | | *98* | *316* | 458 |
| 2019 | *RSI* | | | | | | | | *113* | 332 |
| 2020 | | | | | | | | | | 122 |
| Total | | | | | | | | | | **2 822** |
| All liabilities before 2011 | | | | | | | | | | 2 924 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **5 423** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Accident & Health (RSI) | *15.9%* | *26.0%* | *13.5%* | *7.7%* | *4.7%* | *3.3%* | *2.3%* | *1.5%* | *1.0%* | *0.9%* |

The increase in incurred losses from accident year 2015 onwards is due to an increase in the volume of workers' compensation written on a proportional basis with the current year impacted by COVID-19. The 2010 and prior accident years include the run-off of business written by entities acquired as part of the acquisition of General Electric Insurance Solutions during 2006. This business, which generally had a longer payment pattern, was not renewed.

**Property & Casualty Reinsurance – Motor, proportional**

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *1 048* | *1 042* | *1 012* | *967* | *968* | *967* | *966* | *956* | *960* | 963 | –13 |
| 2012 | | *1 573* | *1 562* | *1 545* | *1 532* | *1 521* | *1 520* | *1 517* | *1 516* | 1 520 | 24 |
| 2013 | | | *1 628* | *1 601* | *1 607* | *1 579* | *1 572* | *1 567* | *1 567* | 1 568 | 12 |
| 2014 | | | | *2 085* | *2 045* | *2 044* | *2 026* | *2 015* | *2 013* | 2 011 | –7 |
| 2015 | | | | | *1 983* | *1 979* | *1 982* | *1 986* | *1 986* | 1 994 | 15 |
| 2016 | | | | | | *2 557* | *2 675* | *2 725* | *2 727* | 2 732 | 39 |
| 2017 | | | | | | | *2 438* | *2 455* | *2 441* | 2 453 | 136 |
| 2018 | | | | | | | | *2 089* | *2 124* | 2 102 | 225 |
| 2019 | *RSI* | | | | | | | | *2 090* | 2 066 | 416 |
| 2020 | | | | | | | | | | 1 916 | 1 015 |
| Total | | | | | | | | | | **19 325** | **1 862** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *277* | *702* | *893* | *927* | *947* | *957* | *965* | *968* | *971* | 971 |
| 2012 | | *501* | *1 167* | *1 337* | *1 388* | *1 421* | *1 443* | *1 456* | *1 467* | 1 473 |
| 2013 | | | *599* | *1 225* | *1 415* | *1 462* | *1 494* | *1 510* | *1 520* | 1 529 |
| 2014 | | | | *767* | *1 530* | *1 787* | *1 867* | *1 904* | *1 925* | 1 938 |
| 2015 | | | | | *823* | *1 486* | *1 736* | *1 840* | *1 886* | 1 912 |
| 2016 | | | | | | *844* | *1 872* | *2 229* | *2 414* | 2 520 |
| 2017 | | | | | | | *776* | *1 560* | *1 901* | 2 078 |
| 2018 | | | | | | | | *636* | *1 364* | 1 613 |
| 2019 | *RSI* | | | | | | | | *674* | 1 320 |
| 2020 | | | | | | | | | | 630 |
| Total | | | | | | | | | | **15 984** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 340 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **3 681** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Motor, proportional (RSI) | *33.8%* | *37.2%* | *13.4%* | *4.7%* | *2.4%* | *1.2%* | *0.7%* | *0.5%* | *0.4%* | *0.0%* |

The increase in the incurred losses from accident years 2012 to 2016 is driven by new business volume across all regions, with the current accident year impacted by COVID-19. Proportional motor business includes both longer-tailed liability business and shorter-tailed hull business.

The negative IBNRs are due to overstated case reserves, mainly on the German business, and accident year 2011 includes the effects of an outwards proportional contract in inwards non-proportional business.

## Property & Casualty Reinsurance – Motor, non-proportional

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *430* | *471* | *450* | *447* | *432* | *425* | *413* | *441* | *434* | 430 | 99 |
| 2012 | | *350* | *367* | *345* | *329* | *330* | *311* | *320* | *315* | 318 | 60 |
| 2013 | | | *456* | *479* | *481* | *462* | *448* | *454* | *453* | 459 | 68 |
| 2014 | | | | *428* | *461* | *457* | *456* | *449* | *426* | 423 | 66 |
| 2015 | | | | | *404* | *426* | *463* | *458* | *470* | 468 | 83 |
| 2016 | | | | | | *488* | *609* | *571* | *564* | 550 | 123 |
| 2017 | | | | | | | *605* | *636* | *623* | 629 | 177 |
| 2018 | | | | | | | | *510* | *553* | 560 | 212 |
| 2019 | *RSI* | | | | | | | | *1 231* | 1 243 | 330 |
| 2020 | | | | | | | | | | 536 | 444 |
| Total | | | | | | | | | | **5 616** | **1 662** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Accident year** | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *-11* | *21* | *58* | *82* | *107* | *122* | *138* | *150* | *157* | 179 |
| 2012 | | *2* | *25* | *50* | *86* | *113* | *139* | *161* | *173* | 181 |
| 2013 | | | *7* | *90* | *156* | *202* | *229* | *256* | *273* | 288 |
| 2014 | | | | *4* | *63* | *108* | *148* | *193* | *223* | 243 |
| 2015 | | | | | *–1* | *34* | *94* | *160* | *206* | 236 |
| 2016 | | | | | | *9* | *67* | *129* | *184* | 244 |
| 2017 | | | | | | | *9* | *60* | *128* | 205 |
| 2018 | | | | | | | | *4* | *36* | 97 |
| 2019 | *RSI* | | | | | | | | *93* | 310 |
| 2020 | | | | | | | | | | 3 |
| Total | | | | | | | | | | **1 986** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 2 876 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **6 506** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Motor, non-proportional (RSI) | *1.2%* | *10.7%* | *10.9%* | *10.4%* | *8.6%* | *6.2%* | *4.8%* | *3.3%* | *2.1%* | *5.1%* |

Claims development in non-proportional motor business is considered long-tailed as it is dominated by liability exposures leading to bodily injury claims which pay out for the lifetime of the claimant.

For accident year 2011, negative claims paid in the first year are due to the commutation of an external retrocession on acquired retroactive business. The increase in incurred losses for accident year 2019 compared to other years is due to an increase in volume of business written, with the current accident year impacted by COVID-19.

In line with the Group's policy, cash flows under Loss Portfolio Transfers are reported through claims paid. For longer-tailed lines and depending on the business volume written, timing of cash flows can lead to net inward payments across the whole portfolio in the first development year of the contract for some accident years.

## Property & Casualty Reinsurance – Specialty

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** |
| 2011 | *1 327* | *1 316* | *1 226* | *1 139* | *1 184* | *1 178* | *1 193* | *1 177* | *1 175* | 1 175 | 2 |
| 2012 | | *977* | *1 036* | *1 056* | *1 036* | *1 034* | *1 021* | *1 018* | *1 014* | 1 006 | 7 |
| 2013 | | | *1 131* | *1 054* | *1 011* | *974* | *963* | *941* | *929* | 932 | 22 |
| 2014 | | | | *1 138* | *1 124* | *1 022* | *995* | *980* | *984* | 966 | 32 |
| 2015 | | | | | *1 278* | *1 252* | *1 235* | *1 225* | *1 224* | 1 246 | 47 |
| 2016 | | | | | | *1 317* | *1 305* | *1 255* | *1 255* | 1 238 | 91 |
| 2017 | | | | | | | *1 643* | *1 565* | *1 434* | 1 400 | 125 |
| 2018 | | | | | | | | *1 685* | *1 777* | 1 744 | 467 |
| 2019 | *RSI* | | | | | | | | *1 785* | 1 950 | 662 |
| 2020 | | | | | | | | | | 1 867 | 1 161 |
| Total | | | | | | | | | | **13 524** | **2 616** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2011 | *170* | *577* | *799* | *904* | *956* | *991* | *1 056* | *1 078* | *1 095* | 1 104 |
| 2012 | | *132* | *458* | *698* | *791* | *848* | *891* | *926* | *945* | 952 |
| 2013 | | | *154* | *432* | *621* | *734* | *789* | *826* | *850* | 863 |
| 2014 | | | | *181* | *422* | *607* | *706* | *764* | *802* | 826 |
| 2015 | | | | | *139* | *400* | *711* | *876* | *980* | 1 036 |
| 2016 | | | | | | *146* | *491* | *740* | *909* | 1 000 |
| 2017 | | | | | | | *186* | *592* | *879* | 1 046 |
| 2018 | | | | | | | | *189* | *663* | 984 |
| 2019 | *RSI* | | | | | | | | *284* | 716 |
| 2020 | | | | | | | | | | 307 |
| Total | | | | | | | | | | **8 834** |
| | | | | | | | | | | |
| All liabilities before 2011 | | | | | | | | | | 625 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **5 315** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Specialty (RSI) | *14.1%* | *27.7%* | *20.8%* | *11.3%* | *6.3%* | *3.9%* | *3.5%* | *1.7%* | *1.1%* | *0.8%* |

This category contains several individual large losses on marine, aviation and space lines, including the Costa Concordia event in accident year 2012. From 2017 to 2020 accident years, claims incurred is higher due to natural catastrophes, with the current accident year impacted by COVID-19. Accident year 2019 has increased this year due to aviation and engineering but is partially offset by marine decreases.

## Corporate Solutions

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** | **thereof IBNR** | **Cumulative number of reported claims (in nominals)** |
| 2012 | *1 311* | *1 237* | *1 162* | *1 129* | *1 127* | *1 184* | *1 165* | *1 210* | 1 207 | 39 | 13 004 |
| 2013 | | *1 613* | *1 593* | *1 523* | *1 439* | *1 436* | *1 427* | *1 399* | 1 412 | 87 | 26 338 |
| 2014 | | | *1 855* | *1 799* | *1 728* | *1 732* | *1 702* | *1 631* | 1 610 | 165 | 21 671 |
| 2015 | | | | *1 907* | *2 080* | *2 144* | *2 115* | *1 932* | 1 894 | 198 | 18 252 |
| 2016 | | | | | *2 037* | *2 124* | *2 162* | *2 153* | 2 146 | 308 | 17 439 |
| 2017 | | | | | | *3 036* | *3 268* | *3 016* | 3 037 | 367 | 20 609 |
| 2018 | | | | | | | *2 734* | *2 673* | 2 704 | 320 | 25 472 |
| 2019 | *RSI* | | | | | | | *2 835* | 2 678 | 788 | 20 509 |
| 2020 | | | | | | | | | 3 401 | 1 949 | 10 662 |
| Total | | | | | | | | | **20 089** | **4 221** | **173 956** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions | Reporting year | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Accident year | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
| 2012 | *184* | *562* | *724* | *819* | *908* | *980* | *1 014* | *1 044* | 1 067 |
| 2013 | | *275* | *673* | *946* | *1 106* | *1 175* | *1 252* | *1 300* | 1 327 |
| 2014 | | | *276* | *841* | *1 137* | *1 284* | *1 375* | *1 473* | 1 491 |
| 2015 | | | | *354* | *914* | *1 316* | *1 514* | *1 650* | 1 740 |
| 2016 | | | | | *373* | *1 150* | *1 405* | *1 676* | 1 750 |
| 2017 | | | | | | *385* | *1 520* | *2 131* | 2 388 |
| 2018 | | | | | | | *421* | *1 447* | 1 932 |
| 2019 | *RSI* | | | | | | | *534* | 1 247 |
| 2020 | | | | | | | | | 580 |
| Total | | | | | | | | | **13 522** |
| All liabilities before 2012 | | | | | | | | | 416 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | **6 983** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Corporate Solutions (RSI) | *17.0%* | *32.8%* | *17.5%* | *10.0%* | *5.7%* | *5.6%* | *2.4%* | *2.2%* | *1.9%* |

The increase in current accident year claims is driven by COVID-19-related losses and reserves and a number of large natural catastrophe losses, impacting mainly the property line of business. Decrease across prior accident years is driven by favourable reserve development on accident year 2019, mainly due to lower large man-made claims activity.

Reserves on the US liability line of business on accident years 2012-2019 were reduced by a Loss Portfolio Transfer to P&C Reinsurance of USD 1.2bn in the financial year 2019. In addition, the impact of unfavourable development across all lines of business for accident years 2012-2018 was reduced by recoveries under an Adverse Development Cover with P&C Reinsurance in place since the second half of the financial year 2019. For the financial year 2020, there were immaterial movements under both the Loss Portfolio Transfer and the Adverse Development Cover.

P&C Reinsurance reports both the Adverse Development Cover and the Loss Portfolio Transfer under accident year 2019 (see "Property & Casualty Reinsurance – Liability, non-proportional" on page 225).

### Life & Health Reinsurance, long tail

Incurred claims and allocated claim adjustment expenses, net of reinsurance

| USD millions Accident year | Reporting year 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | thereof IBNR | Cumulative number of reported claims (in nominals) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 229 | 240 | 303 | 316 | 331 | 308 | 301 | 302 | 309 | 308 | 28 | 6 945 |
| 2012 | | 284 | 380 | 383 | 409 | 371 | 374 | 370 | 386 | 387 | 26 | 9 525 |
| 2013 | | | 512 | 503 | 501 | 463 | 462 | 464 | 489 | 489 | 29 | 12 168 |
| 2014 | | | | 502 | 457 | 435 | 437 | 461 | 486 | 495 | 38 | 14 227 |
| 2015 | | | | | 428 | 463 | 448 | 449 | 481 | 491 | 40 | 17 140 |
| 2016 | | | | | | 449 | 465 | 451 | 483 | 498 | 87 | 14 667 |
| 2017 | | | | | | | 458 | 465 | 488 | 512 | 124 | 17 303 |
| 2018 | | | | | | | | 426 | 461 | 477 | 164 | 16 491 |
| 2019 | RSI | | | | | | | | 396 | 484 | 217 | 12 806 |
| 2020 | | | | | | | | | | 184 | 158 | 2 295 |
| Total | | | | | | | | | | **4 325** | **911** | **123 567** |

Cumulative claims paid and allocated claim adjustment expenses, net of reinsurance

| USD millions Accident year | Reporting year 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 20 | 65 | 105 | 132 | 153 | 175 | 191 | 206 | 217 | 228 |
| 2012 | | 29 | 92 | 147 | 188 | 222 | 246 | 266 | 283 | 298 |
| 2013 | | | 39 | 128 | 195 | 259 | 302 | 330 | 353 | 374 |
| 2014 | | | | 34 | 114 | 208 | 274 | 312 | 342 | 369 |
| 2015 | | | | | 38 | 112 | 198 | 251 | 291 | 327 |
| 2016 | | | | | | 14 | 91 | 167 | 223 | 268 |
| 2017 | | | | | | | 13 | 79 | 171 | 246 |
| 2018 | | | | | | | | 12 | 78 | 171 |
| 2019 | RSI | | | | | | | | 13 | 83 |
| 2020 | | | | | | | | | | 5 |
| Total | | | | | | | | | | **2 369** |
| All liabilities before 2011 | | | | | | | | | | 294 |
| **Liabilities for claims and claim adjustment expenses, net of reinsurance** | | | | | | | | | | **2 250** |

Average annual percentage payout of incurred claims by age, net of reinsurance

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Life & Health Reinsurance, long tail (RSI) | 5.0% | 15.2% | 16.3% | 11.8% | 8.2% | 6.5% | 5.1% | 4.5% | 3.7% | 3.6% |

The increase in incurred losses from accident year 2013 onwards is due to an increase in volume of group disability business in Australia. Disability business volume written in Australia has reduced since 2019.

**Reconciliation of gross liability for unpaid claims and claim adjustment expenses**
The following table reconciles the Group's net outstanding liabilities to the gross liabilities for unpaid claims and claim adjustment expenses.

The net outstanding liabilities correspond to the total liabilities for unpaid claims and claim adjustment expenses, net of reinsurance for each disaggregation category.

Other short duration contract lines include reserves for business that is not material to the Group and where accident year information is not available. For Life & Health Reinsurance, in certain markets, cedents do not provide sufficient information to reinsurers to split claims incurred and claims paid by accident year. This is based on existing market practice. For these markets, an assessment of available information from other sources was made along with investigating approximations that could be used to provide claims development information by accident year. However, these alternate sources and estimates, based on currently available data and methods, could not be used to generate meaningful and representative accident year information and therefore have been excluded from disclosure. Other short duration contract lines also contain other treaties from Property & Casualty Reinsurance and Corporate Solutions which could not be allocated on a consistent basis to disaggregation categories or specific accident years.

For details on consolidation please refer to Note 2 "Information on business segments".

As of 31 December

| USD millions | 2020 |
|---|---|
| **Net outstanding liabilities** | |
| Property & Casualty Reinsurance | |
| Property | 10 032 |
| Liability, proportional | 11 876 |
| Liability, non-proportional | 9 692 |
| Accident & Health | 5 423 |
| Motor, proportional | 3 681 |
| Motor, non-proportional | 6 506 |
| Specialty | 5 315 |
| Corporate Solutions | 6 983 |
| Life & Health Reinsurance, long tail | 2 250 |
| **Total net undiscounted outstanding liabilities excluding other short duration contract lines and before unallocated reinsurance recoverable** | 61 758 |
| Discounting impact on (Life & Health Reinsurance) short duration contracts | –311 |
| Impact of acquisition accounting | –435 |
| **Total net discounted outstanding liabilities excluding other short duration contract lines and before unallocated reinsurance recoverable** | 61 012 |
| Other short duration contract lines | 4 131 |
| **Total net discounted outstanding short duration liabilities** | **65 143** |
| | |
| Allocated reinsurance recoverables on unpaid claims: | |
| Property & Casualty Reinsurance | |
| Property | 572 |
| Liability, proportional | 245 |
| Liability, non-proportional | 239 |
| Accident & Health | 238 |
| Motor, proportional | 52 |
| Motor, non-proportional | 220 |
| Specialty | 506 |
| Corporate Solutions | 5 217 |
| Consolidation | –4 986 |
| Impact of acquisition accounting | –79 |
| Other short duration contract lines | 523 |
| **Total short duration reinsurance recoverable on outstanding liabilities** | **2 747** |
| | |
| Exclusions: | |
| Unallocated claim adjustment expenses | 1 242 |
| Long duration contracts | 12 126 |
| **Total other reconciling items** | **13 368** |
| | |
| **Total unpaid claims and claim adjustment expenses** | **81 258** |

**Discounting information**

The following disclosure covers the discounting impact for the disaggregation categories included in the claims development information. Discounting information for Life & Health Reinsurance long tail as of 31 December was as follows:

| USD millions | 2019 | **2020** |
|---|---|---|
| Carrying amount of discounted claims | 1 318 | 1 374 |
| Aggregate amount of the discount | –305 | –311 |
| Interest accretion[1] | 28 | 29 |
| Range of interest rates | 3.0–3.4% | 3.0–3.2% |

[1] Interest accretion is shown as part of "Life and health benefits" in the income statement.

Please refer to Note 1 ″Organisation and summary of significant accounting policies″ for more details about the Group′s discounting approach for unpaid claims and claim adjustment expenses.

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

As of 31 December, the DAC were as follows:

| 2019<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| Opening balance as of 1 January | 2 156 | 4 784 | 488 | 789 | | 8 217 |
| Deferred | 5 269 | 434 | 621 | 229 | | 6 553 |
| Effect of acquisitions/disposals and retrocessions | | −256 | | 68 | | −188 |
| Amortisation | −4 809 | −445 | −626 | −240 | | −6 120 |
| Effect of foreign currency translation and other changes | −3 | 12 | | 24 | | 33 |
| Reclassified to held for sale | | | | −657 | | −657 |
| **Closing balance** | 2 613 | 4 529 | 483 | 213 | 0 | 7 838 |

| **2020**<br>USD millions | Property & Casualty Reinsurance | Life & Health Reinsurance | Corporate Solutions | Life Capital | Group Items | Total |
|---|---|---|---|---|---|---|
| Opening balance as of 1 January | 2 613 | 4 529 | 483 | 213 | | 7 838 |
| Opening balance as of 1 January classified as held for sale | | | | 657 | | 657 |
| Deferred | 5 016 | 619 | 504 | 211 | | 6 350 |
| Effect of acquisitions/disposals and retrocessions | | −2 | | −593[2] | | −595 |
| Amortisation | −5 103 | −417 | −579 | −166 | −14 | −6 279 |
| Effect of foreign currency translation and other changes | 50 | 171 | 5 | −37 | 70 | 259 |
| **Closing balance** | **2 576** | **4 900** | **413** | **285** | **56** | **8 230** |

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, the PVFP was as follows:

| 2019<br>USD millions | Life & Health Reinsurance | Life Capital<br>Positive PVFP | Life Capital<br>Negative PVFP | Life Capital<br>Total | Total |
|---|---|---|---|---|---|
| Opening balance as of 1 January | 804 | 1 505 | –491 | 1 014 | 1 818 |
| Effect of acquisitions/disposals and retrocessions | –161[1] | 203[2] | | 203 | 42 |
| Amortisation | –108 | –220 | 46 | –174 | –282 |
| Interest accrued on unamortised PVFP | 32 | 103 | –15 | 88 | 120 |
| Effect of change in unrealised gains/losses | | –13 | | –13 | –13 |
| Effect of foreign currency translation | 10 | 43 | –16 | 27 | 37 |
| Reclassified to held for sale | | –1 156 | 476 | –680 | –680 |
| **Closing balance** | 577 | 465 | 0 | 465 | 1 042 |

| **2020**<br>USD millions | Life & Health Reinsurance | Life Capital<br>Positive PVFP | Life Capital<br>Negative PVFP | Life Capital<br>Total | **Total** |
|---|---|---|---|---|---|
| Opening balance as of 1 January | 577 | 465 | | 465 | 1 042 |
| Opening balance as of 1 January classified as held for sale | | 1 156 | –476 | 680 | 680 |
| Effect of acquisitions/disposals and retrocessions[2] | | –914 | 444 | –470 | –470 |
| Amortisation | –99 | –328 | 33 | –295 | –394 |
| Interest accrued on unamortised PVFP | 28 | 73 | –10 | 63 | 91 |
| Effect of change in unrealised gains/losses | | –8 | | –8 | –8 |
| Effect of foreign currency translation | 4 | –26 | 9 | –17 | –13 |
| **Closing balance** | **510** | **418** | **0** | **418** | **928** |

[1] Impact from termination of a reinsurance arrangement included.
[2] Please refer to Note 10 "Acquisitions and disposals".

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.

The percentage of PVFP which is expected to be amortised in each of the next five years is 16%, 15%, 14%, 13% and 12%.

# 7 Investments

## Investment income

Net investment income by source (excluding unit-linked and with-profit business) was as follows:

| USD millions | 2019[1] | 2020 |
|---|---|---|
| Fixed income securities | 2 889 | 2 251 |
| Equity securities | 66 | 92 |
| Policy loans, mortgages and other loans | 162 | 127 |
| Investment real estate | 226 | 241 |
| Short-term investments | 93 | 36 |
| Other current investments | 97 | 103 |
| Share in earnings of equity-accounted investees | 387 | –51 |
| Cash and cash equivalents | 75 | 25 |
| Net result from deposit-accounted contracts | 149 | 128 |
| Deposits with ceding companies | 452 | 421 |
| **Gross investment income** | 4 596 | **3 373** |
| Investment expenses | –412 | –378 |
| Interest charged for funds held | –13 | –7 |
| **Net investment income – non-participating business** | 4 171 | **2 988** |

[1] The Group revised its allocation of net investment income. The revision has no impact on the income statement or balance sheet of the Group. Comparative information for 2019 has been adjusted accordingly.

Dividends received from investments accounted for using the equity method were USD 104 million and USD 124 million for 2019 and 2020, respectively.

Share in earnings of equity-accounted investees included impairments of the carrying amount of equity-accounted investees of USD 80 million and USD 5 million for 2019 and 2020, respectively.

## Realised gains and losses

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

| USD millions | 2019 | 2020 |
|---|---|---|
| Fixed income securities available-for-sale: | | |
| Gross realised gains | 1 590 | 1 676 |
| Gross realised losses | –143 | –256 |
| Other-than-temporary impairments | –5 | –29 |
| Net realised investment gains/losses on equity securities | 200 | –87 |
| Change in net unrealised investment gains/losses on equity securities | 478 | 782 |
| Net realised investment gains/losses on trading securities | 153 | 86 |
| Change in net unrealised investment gains/losses on trading securities | –26 | –33 |
| Net realised/unrealised gains/losses on other investments | –197 | –41 |
| Net realised/unrealised gains/losses on insurance-related activities | 108 | 40 |
| Foreign exchange gains/losses | –348 | –163 |
| Loss related to sale of ReAssure | –230 | –245 |
| **Net realised investment gains/losses – non-participating business** | 1 580 | **1 730** |

Net realised/unrealised gains/losses on insurance-related activities included impairments of USD 5 million and nil for 2019 and 2020, respectively.

## Investment result – unit-linked and with-profit business

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

Net investment result on unit-linked and with-profit business credited to policyholders was as follows:

| USD millions | Unit-linked | 2019 With-profit | Unit-linked | 2020 With-profit |
|---|---|---|---|---|
| Investment income – fixed income securities | 58 | 101 | 29 | 50 |
| Investment income – equity securities | 733 | 76 | 401 | 27 |
| Investment income – other | 25 | 11 | 5 | 3 |
| **Total investment income – unit-linked and with-profit business** | 816 | 188 | **435** | **80** |
| Realised gains/losses – fixed income securities | 89 | 135 | 92 | 72 |
| Realised gains/losses – equity securities | 3 333 | 279 | –2 566 | –283 |
| Realised gains/losses – other | 90 | 9 | –8 | –9 |
| **Total realised gains/losses – unit-linked and with-profit business** | 3 512 | 423 | **–2 482** | **–220** |
| **Total net investment result – unit-linked and with-profit business** | 4 328 | 611 | **–2 047** | **–140** |

## 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 was as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Balance as of 1 January | 80 | 61 |
| Credit losses for which an other-than-temporary impairment was not previously recognised | 5 | 18 |
| Reductions for securities sold during the period | –24 | –32 |
| 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 | 2 | |
| Impact of increase in cash flows expected to be collected | –3 | –2 |
| Impact of foreign exchange movements | 1 | 1 |
| **Balance as of 31 December** | 61 | **46** |

## 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 were as follows:

| 2019<br>USD millions | Amortised cost or cost | Gross unrealised gains | Gross unrealised losses | Other-than-temporary impairments recognised in other comprehensive income | Estimated fair value |
|---|---|---|---|---|---|
| Debt securities issued by governments and government agencies: | | | | | |
| US Treasury and other US government corporations and agencies | 14 192 | 377 | –31 | | 14 538 |
| US Agency securitised products | 7 034 | 104 | –14 | | 7 124 |
| States of the United States and political subdivisions of the states | 1 783 | 168 | –3 | | 1 948 |
| United Kingdom | 7 936 | 1 309 | –26 | | 9 219 |
| Germany | 2 870 | 298 | –35 | | 3 133 |
| France | 2 095 | 343 | –13 | | 2 425 |
| Canada | 2 256 | 139 | –4 | | 2 391 |
| Japan | 2 028 | 98 | –2 | | 2 124 |
| Other | 10 589 | 583 | –33 | | 11 139 |
| Total | 50 783 | 3 419 | –161 | | 54 041 |
| Corporate debt securities | 37 293 | 3 749 | –46 | | 40 996 |
| Mortgage- and asset-backed securities | 4 397 | 195 | –14 | –2 | 4 576 |
| Reclassified to assets held for sale | –17 693 | –2 785 | 28 | | –20 450 |
| **Fixed income securities available-for-sale** | 74 780 | 4 578 | –193 | –2 | 79 163 |

| 2020<br>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 | 10 915 | 693 | –18 | | 11 590 |
| US Agency securitised products | 6 575 | 214 | –10 | | 6 779 |
| States of the United States and political subdivisions of the states | 1 444 | 248 | | | 1 692 |
| United Kingdom | 4 206 | 841 | –5 | | 5 042 |
| Germany | 3 038 | 494 | –1 | | 3 531 |
| France | 2 551 | 570 | –1 | | 3 120 |
| Canada | 2 179 | 223 | –13 | | 2 389 |
| Japan | 2 086 | 56 | –24 | | 2 118 |
| Other | 10 189 | 788 | –20 | | 10 957 |
| Total | 43 183 | 4 127 | –92 | | 47 218 |
| Corporate debt securities | 27 538 | 3 084 | –35 | | 30 587 |
| Mortgage- and asset-backed securities | 3 141 | 157 | –22 | –1 | 3 275 |
| **Fixed income securities available-for-sale** | 73 862 | 7 368 | –149 | –1 | 81 080 |

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.

## 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 2019 and 2020.

| 2019<br>USD millions | Less than 12 months<br>Fair value | Unrealised losses | 12 months or more<br>Fair value | Unrealised losses | Total<br>Fair value | Unrealised losses |
|---|---|---|---|---|---|---|
| Debt securities issued by governments and government agencies: | | | | | | |
| US Treasury and other US government corporations and agencies | 2 357 | 31 | 97 | 0 | 2 454 | 31 |
| US Agency securitised products | 1 842 | 7 | 654 | 7 | 2 496 | 14 |
| States of the United States and political subdivisions of the states | 39 | 1 | 30 | 2 | 69 | 3 |
| United Kingdom | 1 297 | 22 | 83 | 4 | 1 380 | 26 |
| Germany | 669 | 34 | 17 | 1 | 686 | 35 |
| France | 340 | 12 | 16 | 1 | 356 | 13 |
| Canada | 863 | 3 | 62 | 1 | 925 | 4 |
| Japan | 443 | 1 | 2 | 1 | 445 | 2 |
| Other | 1 492 | 17 | 315 | 16 | 1 807 | 33 |
| Total | 9 342 | 128 | 1 276 | 33 | 10 618 | 161 |
| Corporate debt securities | 2 562 | 18 | 531 | 28 | 3 093 | 46 |
| Mortgage- and asset-backed securities | 730 | 5 | 404 | 11 | 1 134 | 16 |
| Reclassified to assets held for sale | –1 071 | –8 | –301 | –20 | –1 372 | –28 |
| **Total** | 11 563 | 143 | 1 910 | 52 | 13 473 | 195 |

| **2020**<br>USD millions | Less than 12 months<br>Fair value | Unrealised losses | 12 months or more<br>Fair value | Unrealised losses | Total<br>Fair value | Unrealised losses |
|---|---|---|---|---|---|---|
| Debt securities issued by governments and government agencies: | | | | | | |
| US Treasury and other US government corporations and agencies | 1 315 | 18 | | | 1 315 | 18 |
| US Agency securitised products | 382 | 10 | 9 | 0 | 391 | 10 |
| States of the United States and political subdivisions of the states | 8 | 0 | | | 8 | 0 |
| United Kingdom | 230 | 5 | | | 230 | 5 |
| Germany | 13 | 0 | 27 | 1 | 40 | 1 |
| France | 41 | 0 | 28 | 1 | 69 | 1 |
| Canada | 61 | 8 | 66 | 5 | 127 | 13 |
| Japan | 841 | 24 | | | 841 | 24 |
| Other | 1 539 | 11 | 108 | 9 | 1 647 | 20 |
| Total | 4 430 | 76 | 238 | 16 | 4 668 | 92 |
| Corporate debt securities | 1 072 | 31 | 147 | 4 | 1 219 | 35 |
| Mortgage- and asset-backed securities | 402 | 9 | 173 | 14 | 575 | 23 |
| **Total** | **5 904** | **116** | **558** | **34** | **6 462** | **150** |

## 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 2019 and 2020, USD 20 188 million and USD 20 219 million, respectively, of fixed income securities available-for-sale were callable.

| USD millions | 2019<br>Amortised cost or cost | Estimated fair value | **2020**<br>Amortised cost or cost | Estimated fair value |
|---|---|---|---|---|
| Due in one year or less | 7 294 | 7 324 | 8 806 | 8 863 |
| Due after one year through five years | 27 559 | 28 083 | 18 298 | 19 040 |
| Due after five years through ten years | 15 994 | 17 115 | 14 512 | 15 696 |
| Due after ten years | 37 865 | 43 144 | 29 942 | 35 035 |
| Mortgage- and asset-backed securities with no fixed maturity | 3 761 | 3 947 | 2 304 | 2 446 |
| Reclassified to assets held for sale | –17 693 | –20 450 | | |
| **Total fixed income securities available-for-sale** | 74 780 | 79 163 | **73 862** | **81 080** |

### Investments trading and at fair value through earnings

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

| USD millions | 2019 | 2020 |
|---|---|---|
| Debt securities issued by governments and government agencies | 2 358 | 1 907 |
| Mortgage- and asset-backed securities | 52 | 31 |
| **Fixed income securities trading – non-participating business** | 2 410 | **1 938** |
| **Equity securities at fair value through earnings – non-participating business** | 2 993 | **4 899** |

### Investments held for unit-linked and with-profit business

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

| | | 2019 | | 2020 |
|---|---|---|---|---|
| USD millions | Unit-linked | With-profit | Unit-linked | With-profit |
| Fixed income securities trading | 1 963 | 2 717 | | |
| Equity securities at fair value through earnings | 35 528 | 2 078 | 463 | |
| Investment real estate | 512 | 200 | | |
| Other | 692 | 3 | | |
| Reclassified to assets held for sale | –38 175 | –4 998 | | |
| **Total investments for unit-linked and with-profit business** | 520 | 0 | **463** | **0** |

### Mortgage, policy and other loans, and investment real estate

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

| | | 2019 | | 2020 |
|---|---|---|---|---|
| USD millions | Carrying value[1] | Fair value | Carrying value | Fair value |
| Policy loans | 50 | 50 | 43 | 43 |
| Mortgage loans | 2 104 | 2 144 | 1 410 | 1 458 |
| Other loans | 2 314 | 2 376 | 1 862 | 1 906 |
| Investment real estate | 2 674 | 4 706 | 2 602 | 5 118 |

[1] Policy loans, mortgages and other loans include a total of USD 1 447 million which were reclassified to assets held for sale. Investment real estate of USD 146 million was reclassified to assets held for sale.

Depreciation expense related to investment real estate was USD 61 million and USD 67 million for 2019 and 2020, respectively. Accumulated depreciation on investment real estate totalled USD 660 million and USD 779 million as of 31 December 2019 and 2020, respectively. Investment real estate held by the Group includes residential and commercial investment real estate.

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

### Maturity of lessor cash flows

As of 31 December 2020, the total undiscounted cash flows to be received from operating leases of investment real estate for the next five years and thereafter were as follows:

| USD millions | Operating leases |
|---|---|
| Less than one year | 203 |
| Between one year and two years | 182 |
| Between two years and three years | 158 |
| Between three years and four years | 125 |
| Between four years and five years | 97 |
| After five years | 412 |
| **Total cash flows** | 1 177 |

The Group manages risk associated with the residual value of its leased properties through careful property selection as well as diversification by geographical region and property type. Lease contracts for residential real estate in Switzerland and Germany are usually open-ended. Cash flows for such contracts have been projected taking into consideration the average turnover rate in the region. Lease contracts for residential real estate in the US with a lease term of one year or less have been excluded from the projected cash flows in the table above. Rental income for those leases for the year ended 31 December 2019 and 2020 was USD 28 million and USD 27 million, respectively.

### Other financial assets and liabilities by measurement category

As of 31 December 2019 and 2020, "Other invested assets" and "Accrued expenses and other liabilities" by measurement category were as follows:

| 2019<br>USD millions | Fair value | Investments measured at net asset value as practical expedient | Amortised cost or cost | Equity-accounted | Not in scope[1] | Total |
|---|---|---|---|---|---|---|
| Other invested assets | | | | | | |
| Derivative financial instruments | 472 | | | | | 472 |
| Reverse repurchase agreements | | | 2 089 | | | 2 089 |
| Securities lending/borrowing | 457 | | 21 | | | 478 |
| Equity-accounted investments | 335 | | | 2 580 | | 2 915 |
| Other | 76 | 913 | 905 | | | 1 894 |
| Reclassified to liabilities held for sale | –60 | | –445 | | | –505 |
| **Other invested assets** | 1 280 | 913 | 2 570 | 2 580 | 0 | 7 343 |
| | | | | | | |
| Accrued expenses and other liabilities | | | | | | |
| Derivative financial instruments | 692 | | | | | 692 |
| Repurchase agreements | | | 678 | | | 678 |
| Securities lending | 458 | | 115 | | | 573 |
| Securities sold short | 1 764 | | | | | 1 764 |
| Other | | | 1 653 | | 2 512 | 4 165 |
| Reclassified to liabilities held for sale | –161 | | –329 | | –191 | –681 |
| **Accrued expenses and other liabilities** | 2 753 | 0 | 2 117 | 0 | 2 321 | 7 191 |

| 2020<br>USD millions | Fair value | Investments measured at net asset value as practical expedient | Amortised cost or cost | Equity-accounted | Not in scope[1] | Total |
|---|---|---|---|---|---|---|
| Other invested assets | | | | | | |
| Derivative financial instruments | 266 | | | | | 266 |
| Reverse repurchase agreements | | | 3 002 | | | 3 002 |
| Securities lending/borrowing | 1 636 | | 282 | | | 1 918 |
| Equity-accounted investments | 287 | | | 2 503 | | 2 790 |
| Other | 302 | 1 026 | 1 010 | | | 2 338 |
| **Other invested assets** | **2 491** | **1 026** | **4 294** | **2 503** | **0** | **10 314** |
| | | | | | | |
| Accrued expenses and other liabilities | | | | | | |
| Derivative financial instruments | 495 | | | | | 495 |
| Repurchase agreements | | | 248 | | | 248 |
| Securities lending | 1 638 | | 84 | | | 1 722 |
| Securities sold short | 1 353 | | | | | 1 353 |
| Other | | | 1 959 | | 2 316 | 4 275 |
| **Accrued expenses and other liabilities** | **3 486** | **0** | **2 291** | **0** | **2 316** | **8 093** |

[1] Amounts do not relate to financial assets or liabilities.

## Offsetting of derivatives, financial assets and financial liabilities

Offsetting of derivatives, financial assets and financial liabilities as of 31 December was as follows:

| 2019<br>USD millions | Gross amounts of recognised financial assets | Amounts set-off in the balance sheet | Net amounts of financial assets presented in the balance sheet | Related financial instruments not set-off in the balance sheet | Net amount |
|---|---|---|---|---|---|
| Derivative financial instruments – assets | 1 662 | –1 184 | 478 | –2 | 476 |
| Reverse repurchase agreements | 5 185 | –3 096 | 2 089 | –2 061 | 28 |
| Securities borrowing | 171 | –150 | 21 | –20 | 1 |
| **Total** | 7 018 | –4 430 | 2 588 | –2 083 | 505 |

| 2019<br>USD millions | Gross amounts of recognised financial liabilities | Amounts set-off in the balance sheet | Net amounts of financial liabilities presented in the balance sheet | Related financial instruments not set-off in the balance sheet | Net amount |
|---|---|---|---|---|---|
| Derivative financial instruments – liabilities | –1 750 | 1 058 | –692 | 75 | –617 |
| Repurchase agreements | –3 352 | 2 674 | –678 | 653 | –25 |
| Securities lending | –1 145 | 572 | –573 | 524 | –49 |
| **Total** | –6 247 | 4 304 | –1 943 | 1 252 | –691 |

| **2020**<br>USD millions | Gross amounts of recognised financial assets | Amounts set-off in the balance sheet | Net amounts of financial assets presented in the balance sheet | Related financial instruments not set-off in the balance sheet | Net amount |
|---|---|---|---|---|---|
| Derivative financial instruments – assets | 1 609 | –1 343 | 266 | –3 | **263** |
| Reverse repurchase agreements | 4 945 | –1 943 | 3 002 | –3 002 | **0** |
| Securities borrowing | 292 | –10 | 282 | –280 | **2** |
| **Total** | **6 846** | **–3 296** | **3 550** | **–3 285** | **265** |

| **2020**<br>USD millions | Gross amounts of recognised financial liabilities | Amounts set-off in the balance sheet | Net amounts of financial liabilities presented in the balance sheet | Related financial instruments not set-off in the balance sheet | Net amount |
|---|---|---|---|---|---|
| Derivative financial instruments – liabilities | –1 775 | 1 280 | –495 | 303 | **–192** |
| Repurchase agreements | –1 891 | 1 643 | –248 | 248 | **0** |
| Securities lending | –2 032 | 310 | –1 722 | 1 652 | **–70** |
| **Total** | **–5 698** | **3 233** | **–2 465** | **2 203** | **–262** |

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

## Assets pledged

As of 31 December 2019 and 2020, investments with a carrying value of USD 5 239 million and USD 5 858 million, respectively, were on deposit with regulatory agencies in accordance with local requirements, of which USD 223 million and USD 249 million, respectively, were cash and cash equivalents. As of 31 December 2019 and 2020, investments with a carrying value of USD 14 659 million and USD 15 424 million, respectively, were placed on deposit or pledged to secure certain reinsurance liabilities, including pledged investments in subsidiaries, of which USD 485 million and USD 259 million, respectively, were cash and cash equivalents. Cash and cash equivalents pledged include some instances where cash is legally restricted from usage or withdrawal.

As of 31 December 2019 and 2020, securities of USD 18 686 million and USD 13 787 million, respectively, were transferred to third parties under securities lending transactions and repurchase agreements on a fully collateralised basis. Corresponding liabilities of USD 1 251 million and USD 1 970 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 reuse.

As of 31 December 2019 and 2020, a real estate portfolio with a carrying value of USD 188 million and USD 200 million, respectively, served as collateral for a credit facility, allowing the Group to withdraw funds up to CHF 500 million.

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

As of 31 December 2019 and 2020, the fair value of the equity securities, government and corporate debt securities received as collateral was USD 5 477 million and USD 4 837 million, respectively. Of this, the amount that was sold or repledged as of 31 December 2019 and 2020 was USD 2 025 million and USD 1 341 million, respectively. The sources of the collateral are securities borrowing, reverse repurchase agreements and derivative transactions.

### Recognised gross liability for the obligation to return collateral (from repurchase agreements and securities lending)

As of 31 December 2019 and 2020, 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.

| 2019<br>USD millions | Remaining contractual maturity of the agreements<br>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 | 30 | 3 312 | | | 3 342 |
| Corporate debt securities | 3 | 7 | | | 10 |
| **Total repurchase agreements** | 33 | 3 319 | 0 | 0 | 3 352 |
| | | | | | |
| **Securities lending** | | | | | |
| Debt securities issued by governments and government agencies | 295 | | 493 | 299 | 1 087 |
| Corporate debt securities | 58 | | | | 58 |
| **Total securities lending** | 353 | 0 | 493 | 299 | 1 145 |
| | | | | | |
| **Gross amount of recognised liabilities for repurchase agreements and securities lending** | | | | | 4 497 |

| 2020<br>USD millions | Remaining contractual maturity of the agreements<br>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 | 197 | 1 490 | 54 | | 1 741 |
| Corporate debt securities | 2 | 148 | | | 150 |
| **Total repurchase agreements** | **199** | **1 638** | **54** | **0** | **1 891** |
| | | | | | |
| **Securities lending** | | | | | |
| Debt securities issued by governments and government agencies | 1 099 | | 303 | 551 | 1 953 |
| Corporate debt securities | 79 | | | | 79 |
| **Total securities lending** | **1 178** | **0** | **303** | **551** | **2 032** |
| | | | | | |
| **Gross amount of recognised liabilities for repurchase agreements and securities lending** | | | | | **3 923** |

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

# 8 Fair value disclosures

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

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

Level 1 inputs are unadjusted, 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. The types of instruments include most US government and sovereign obligations, active listed equities, certain exchange-traded derivative instruments and most money market securities.

Level 2 inputs are market-based inputs that are directly or indirectly observable, but not considered level 1 quoted prices. Level 2 inputs consist of (i) quoted prices for similar assets or liabilities in active markets; (ii) quoted prices for identical assets or liabilities in non-active markets (eg markets which have few transactions and where prices are not current or price quotations vary substantially); (iii) inputs other than quoted prices that are observable (eg interest rates, yield curves, volatilities, prepayment speeds, credit risks and default rates); (iv) inputs derived from, or corroborated by, observable market data; and (v) quoted prices provided by third party brokers. The types of instruments that trade in markets that are not considered to be active include most government agency securities, investment-grade corporate bonds, certain mortgage- and asset-backed products, certain exchange-traded derivative instruments, catastrophe bonds, less liquid listed equities and state, municipal and provincial obligations.

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. 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 (ABS). 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. 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.

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 2020, these adjustments were not material. Whenever the underlying assets or liabilities are reported in a specific business segment, the valuation adjustment is allocated accordingly. Valuation adjustments not attributable to any business segment are reported in Group items.

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

### Valuation techniques

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

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

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

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

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

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

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

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

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

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

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

## Assets and liabilities measured at fair value on a recurring basis

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

| 2019<br>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] | Reclassified to assets held for sale | Total |
|---|---|---|---|---|---|---|
| **Assets** | | | | | | |
| Fixed income securities held for proprietary investment purposes | 14 057 | 86 270 | 1 696 | | –20 450 | 81 573 |
| Debt securities issued by US government and government agencies | 14 057 | 2 510 | | | –121 | 16 446 |
| US Agency securitised products | | 7 175 | | | | 7 175 |
| Debt securities issued by non-US governments and government agencies | | 32 654 | 3 | | –5 283 | 27 374 |
| Corporate debt securities | | 39 303 | 1 693 | | –14 671 | 26 325 |
| Mortgage- and asset-backed securities | | 4 628 | | | –375 | 4 253 |
| Fixed income securities backing unit-linked and with-profit business | | 4 680 | | | –4 680 | 0 |
| Equity securities held for proprietary investment purposes | 2 992 | 1 | | | | 2 993 |
| Equity securities backing unit-linked and with-profit business | 37 550 | 56 | | | –37 086 | 520 |
| Short-term investments held for proprietary investment purposes | 1 098 | 4 812 | | | –142 | 5 768 |
| Derivative financial instruments | 11 | 1 426 | 225 | –1 184 | –65 | 413 |
| Interest rate contracts | | 492 | | | –8 | 484 |
| Foreign exchange contracts | | 381 | | | –51 | 330 |
| Equity contracts | 2 | 530 | 186 | | | 718 |
| Credit contracts | | 17 | | | | 17 |
| Other contracts | 6 | 3 | 39 | | | 48 |
| Contracts backing unit-linked and with-profit business | 3 | 3 | | | –6 | 0 |
| Investment real estate | | | 143 | | –143 | 0 |
| Other invested assets | 317 | 140 | 411 | | | 868 |
| Funds held by ceding companies | | 174 | | | | 174 |
| **Total assets at fair value** | 56 025 | 97 559 | 2 475 | –1 184 | –62 566 | 92 309 |
| | | | | | | |
| **Liabilities** | | | | | | |
| Derivative financial instruments | –5 | –1 280 | –465 | 1 058 | 161 | –531 |
| Interest rate contracts | | –415 | –2 | | 50 | –367 |
| Foreign exchange contracts | | –296 | | | 1 | –295 |
| Equity contracts | –5 | –506 | –20 | | | –531 |
| Credit contracts | | –63 | | | | –63 |
| Other contracts | | | –443 | | 111 | –332 |
| Contracts backing unit-linked and with-profit business | | | | | –1 | –1 |
| Liabilities for life and health policy benefits | | | –91 | | | –91 |
| Accrued expenses and other liabilities | –340 | –1 882 | | | | –2 222 |
| **Total liabilities at fair value** | –345 | –3 162 | –556 | 1 058 | 161 | –2 844 |

[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.

| 2020<br>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 | 11 264 | 70 571 | 1 183 | | 83 018 |
| Debt securities issued by US government and government agencies | 11 264 | 2 194 | | | 13 458 |
| US Agency securitised products | | 7 021 | | | 7 021 |
| Debt securities issued by non-US governments and government agencies | | 28 646 | | | 28 646 |
| Corporate debt securities | | 29 404 | 1 183 | | 30 587 |
| Mortgage- and asset-backed securities | | 3 306 | | | 3 306 |
| Equity securities held for proprietary investment purposes | 4 899 | | | | 4 899 |
| Equity securities backing unit-linked and with-profit business | 463 | | | | 463 |
| Short-term investments held for proprietary investment purposes | 6 846 | 9 236 | | | 16 082 |
| Derivative financial instruments | 5 | 1 372 | 232 | –1 343 | 266 |
| Interest rate contracts | | 494 | | | 494 |
| Foreign exchange contracts | | 215 | | | 215 |
| Equity contracts | 4 | 653 | 201 | | 858 |
| Credit contracts | | 10 | | | 10 |
| Other contracts | 1 | | 31 | | 32 |
| Other invested assets | 551 | 1 085 | 588 | | 2 224 |
| Funds held by ceding companies | | 172 | | | 172 |
| **Total assets at fair value** | **24 028** | **82 436** | **2 003** | **–1 343** | **107 124** |
| | | | | | |
| **Liabilities** | | | | | |
| Derivative financial instruments | –12 | –1 422 | –341 | 1 280 | –495 |
| Interest rate contracts | | –444 | –2 | | –446 |
| Foreign exchange contracts | | –410 | | | –410 |
| Equity contracts | –10 | –331 | –23 | | –364 |
| Credit contracts | | –237 | | | –237 |
| Other contracts | –2 | | –316 | | –318 |
| Liabilities for life and health policy benefits | | | –98 | | –98 |
| Accrued expenses and other liabilities | –891 | –2 099 | | | –2 990 |
| **Total liabilities at fair value** | **–903** | **–3 521** | **–439** | **1 280** | **–3 583** |

[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, the reconciliations of the fair values of assets and liabilities measured on a recurring basis using significant unobservable inputs were as follows:

| 2019<br>USD millions | Fixed income securities | Equity securities | Derivative assets | Investment real estate | Other invested assets | Total assets | Derivative liabilities | Liabilities for life and health policy benefits | Total liabilities |
|---|---|---|---|---|---|---|---|---|---|
| **Assets and liabilities** | | | | | | | | | |
| Balance as of 1 January | 1 378 | 0 | 404 | 166 | 364 | 2 312 | –517 | –119 | –636 |
| Realised/unrealised gains/losses: | | | | | | | | | |
| Included in net income[1] | 4 | | –151 | 16 | 20 | –111 | 120 | 32 | 152 |
| Included in other comprehensive income[2] | 73 | | | | | 73 | | –4 | –4 |
| Purchases | 417 | | 16 | | 20 | 453 | | | 0 |
| Issuances | | | | | | 0 | –147 | | –147 |
| Sales | –56 | | –9 | –46 | –2 | –113 | 24 | | 24 |
| Settlements | –82 | | –37 | | | –119 | 60 | | 60 |
| Transfers into level 3 | | | | | 2 | 2 | | | 0 |
| Transfers out of level 3 | –76 | | | | | –76 | | | 0 |
| Disposals | | | | | | | | | |
| Impact of foreign exchange movements | 38 | | 2 | 7 | 7 | 54 | –5 | | –5 |
| **Closing balance as of 31 December** | 1 696 | 0 | 225 | 143 | 411 | 2 475 | –465 | –91 | –556 |

[1] Fair value changes are reported in "Net realised investment gains/losses – non-participating business".
[2] Fair value changes from fixed income securities are reported in "Net unrealised investment gains/losses". Fair value changes from liabilities for life and health policy benefits are reported in "Credit risk of financial liabilities at fair value option".

| **2020**<br>USD millions | Fixed income securities | Equity securities | Derivative assets | Investment real estate | Other invested assets | **Total assets** | Derivative liabilities | Liabilities for life and health policy benefits | **Total liabilities** |
|---|---|---|---|---|---|---|---|---|---|
| **Assets and liabilities** | | | | | | | | | |
| Balance as of 1 January | 1 696 | 0 | 225 | 143 | 411 | **2 475** | –465 | –91 | **–556** |
| Realised/unrealised gains/losses: | | | | | | | | | |
| Included in net income[1] | 79 | | 14 | 1 | –9 | **85** | –8 | –8 | **–16** |
| Included in other comprehensive income[2] | –2 | | | | | **–2** | | 1 | **1** |
| Purchases | 367 | | | | 19 | **386** | | | **0** |
| Issuances | | | | | | **0** | –102 | | **–102** |
| Sales | –7 | | | –14 | –47 | **–68** | 6 | | **6** |
| Settlements | –48 | | –11 | | | **–59** | 127 | | **127** |
| Transfers into level 3 | | 204 | 3 | | 211 | **418** | | | **0** |
| Transfers out of level 3 | | | | | | **0** | | | **0** |
| Disposals | –945 | –204 | | –134 | | **–1 283** | 104 | | **104** |
| Impact of foreign exchange movements | 43 | | 1 | 4 | 3 | **51** | –3 | | **–3** |
| **Closing balance as of 31 December** | **1 183** | **0** | **232** | **0** | **588** | **2 003** | **–341** | **–98** | **–439** |

[1] Fair value changes are reported in "Net realised investment gains/losses – non-participating business".
[2] Fair value changes from fixed income securities are reported in "Net unrealised investment gains/losses". Fair value changes from liabilities for life and health policy benefits are reported in "Credit risk of financial liabilities at fair value option".

### 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 years ended 31 December were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Gains/losses included in net income for the period | 41 | 69 |
| Whereof change in unrealised gains/losses relating to assets and liabilities still held at the reporting date | –45 | –16 |

### Quantitative information about level 3 fair value measurements

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

| USD millions | 2019 Fair value | 2020 Fair value | Valuation technique | Unobservable input | Range (weighted average[1]) |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| Corporate debt securities | 1 693 | **1 183** | | | |
| Infrastructure loans | 1 147 | 701 | Discounted cash flow model | Valuation spread | 84–526 bps (199 bps) |
| Private placement corporate debt | 504 | 440 | Corporate spread matrix | Credit spread | 214–236 bps (112 bps) |
| Private placement credit tenant leases | 42 | 42 | Discounted cash flow model | Illiquidity premium | 125–150 bps (146 bps) |
| Derivative equity contracts | 186 | **201** | | | |
| OTC equity option referencing correlated equity indices | 186 | 201 | Proprietary option model | Correlation | –30–55% (30%) |
| Investment real estate | 143 | | | | |
| **Liabilities** | | | | | |
| Derivative equity contracts | –20 | **–23** | | | |
| OTC equity option referencing correlated equity indices | –20 | –23 | Proprietary option model | Correlation | –30–95% (42%) |
| Other derivative contracts and liabilities for life and health policy benefits | –534 | **–414** | | | |
| Variable annuity and fair valued GMDB contracts | –311 | –355 | Discounted cash flow model | Risk margin | 4% (n/a) |
| | | | | Volatility | 12.8–63.8% |
| | | | | Lapse | 1.5–15% |
| | | | | Mortality improvement | 0–1.5% |
| | | | | Withdrawal rate | 0–90% |
| Swap liability referencing real estate investments | –110 | | | | |
| Weather contracts | –76 | –30 | Proprietary option model | Risk margin | 6–11% (7.9%) |
| | | | | Correlation | –49–45% (12.1%) |
| | | | | Volatility (power/gas) | 27–65% (56.4%) |
| | | | | Volatility (temperature) | 34–385 (164) HDD/CAT[2] |
| | | | | Index value (temperature) | 441–7586 (2315) HDD/CAT[2] |

[1] Unobservable inputs were weighted by the relative fair value of the instruments. For Derivative equity contracts, the weighted average correlation is derived by computing an absolute piecewise correlation impact and is not weighted by the relative fair value.
[2] Heating Degree Days (HDD); Cumulative Average Temperature (CAT).

### Uncertainty of recurring level 3 measurements from the use of significant unobservable inputs

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

The significant unobservable input used in the fair value measurement of the Group's investment real estate and swap liability referencing real estate investment is the rate used to discount future cash flows from property sales. A significant increase (decrease) in this input in isolation would have resulted 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 improvement rate and withdrawal rate. A significant increase (decrease) in isolation in each of the following inputs: risk margin, volatility and withdrawal rate would have resulted in a significantly lower (higher) fair value of the Group's obligation. A significant increase (decrease) in isolation in lapse rate would, in general, have resulted in a significantly higher (lower) fair value of the Group's obligation due to the maturity of the contracts. Changes in the mortality improvement rate impact the fair value of the Group's obligation differently for living-benefit products, compared to death-benefit products. For the former, a significant increase (decrease) in the mortality improvement rate (ie decrease (increase) in mortality) in isolation would have resulted in a decrease (increase) in fair value of the Group's liability. For the latter, a significant increase (decrease) in the mortality improvement rate in isolation would have resulted in an increase (decrease) in fair value of the Group's liability.

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

## Other invested assets measured at net asset value

Other invested assets measured at net asset value as of 31 December were as follows:

| USD millions | 2019 Fair value | 2020 Fair value | Unfunded commitments | Redemption frequency (if currently eligible) | Redemption notice period |
|---|---|---|---|---|---|
| Private equity funds | 565 | 763 | 589 | non-redeemable | n/a |
| Hedge funds | 208 | 2 | | redeemable[1] | 45–95 days[2] |
| Private equity direct | 128 | 259 | 72 | non-redeemable | n/a |
| Real estate funds | 12 | 2 | 15 | non-redeemable | n/a |
| **Total** | 913 | **1 026** | **676** | | |

[1] The redemption frequency varies by position.
[2] Cash distribution can be delayed for an extended period depending on the sale of the underlyings.

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

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

Private equity and real estate funds generally have limitations imposed on the amount of redemptions from the fund during the redemption period due to illiquidity of the underlying investments. Fees may apply for redemptions or transferring of interest to other parties. Distributions are expected to be received from these funds as the underlying assets are liquidated. The period of time over which the underlying assets are expected to be liquidated is indeterminate as investees provide liquidation notices.

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

## Fair value option

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

### Other invested assets

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

### Funds held by ceding companies

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

### Liabilities for life and health policy benefits

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

### Other derivative liabilities

For operational efficiencies, the Group elected the fair value option on a hybrid financial instrument, where the host contract is a debt instrument and the embedded derivative is pegged to the performance of the fund's real estate portfolio. The liability was carried at fair value and changes in fair value were reported as a component of earnings. In the balance sheet and the following fair value disclosures, this item was included under "Liabilities held for sale" for the year ended 31 December 2019.

### 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 were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| **Assets** | | |
| Other invested assets | 7 343 | 10 314 |
| of which at fair value pursuant to the fair value option | 335 | 287 |
| Funds held by ceding companies | 9 472 | 10 726 |
| of which at fair value pursuant to the fair value option | 174 | 172 |
| **Liabilities** | | |
| Liabilities for life and health policy benefits | –19 836 | –22 456 |
| of which at fair value pursuant to the fair value option | –91 | –98 |
| Liabilities held for sale | –68 586 | |
| of which at fair value pursuant to the fair value option | –110 | |

### 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 years ended 31 December were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Other invested assets | 16 | –24 |
| Funds held by ceding companies | 11 | 6 |
| Liabilities for life and health policy benefits | 32 | –8 |
| Liabilities held for sale | –10 | |
| **Total** | 49 | **–26** |

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". Fair value changes from accrued expenses and other liabilities are reported in "Net realised investment gains/losses – non-participating business".

**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 were as follows:

| 2019<br>USD millions | Significant other observable inputs (level 2) | Significant unobservable inputs (level 3) | Total |
|---|---|---|---|
| **Assets** | | | |
| Policy loans | | 50 | 50 |
| Mortgage loans | | 2 144 | 2 144 |
| Other loans | | 2 376 | 2 376 |
| Investment real estate | | 4 563 | 4 563 |
| **Total assets** | 0 | 9 133 | 9 133 |
| | | | |
| **Liabilities** | | | |
| Debt | –10 639 | –3 565 | –14 204 |
| **Total liabilities** | –10 639 | –3 565 | –14 204 |

| **2020**<br>USD millions | Significant other observable inputs (level 2) | Significant unobservable inputs (level 3) | Total |
|---|---|---|---|
| **Assets** | | | |
| Policy loans | | 43 | 43 |
| Mortgage loans | | 1 458 | 1 458 |
| Other loans | | 1 906 | 1 906 |
| Investment real estate | | 5 118 | 5 118 |
| **Total assets** | **0** | **8 525** | **8 525** |
| | | | |
| **Liabilities** | | | |
| Debt | –10 735 | –4 014 | –14 749 |
| **Total liabilities** | **–10 735** | **–4 014** | **–14 749** |

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

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

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

# 9 Derivative financial instruments

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

The fair values represent the gross carrying value amounts at the reporting date for each class of derivative contract held or issued by the Group. The gross fair values are not an indication of credit risk, as many 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, the fair values and notional amounts of the derivatives outstanding were as follows:

| 2019<br>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 | 27 544 | 494 | –395 | 99 |
| Foreign exchange contracts | 26 256 | 291 | –108 | 183 |
| Equity contracts | 16 089 | 721 | –531 | 190 |
| Credit contracts | 3 283 | 17 | –63 | –46 |
| Other contracts | 10 290 | 48 | –443 | –395 |
| **Total** | 83 462 | 1 571 | –1 540 | 31 |
| **Derivatives designated as hedging instruments** | | | | |
| Interest rate contracts | 1 403 | 1 | –22 | –21 |
| Foreign exchange contracts | 15 038 | 90 | –188 | –98 |
| **Total** | 16 441 | 91 | –210 | –119 |
| **Total derivative financial instruments** | 99 903 | 1 662 | –1 750 | –88 |
| **Amount offset** | | | | |
| Where a right of set-off exists | | –675 | 675 | |
| Due to cash collateral | | –509 | 383 | |
| **Total net amount of derivative financial instruments** | | 478 | –692 | –214 |

| **2020**<br>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 | 21 315 | 485 | –436 | 49 |
| Foreign exchange contracts | 27 311 | 195 | –186 | 9 |
| Equity contracts | 21 583 | 858 | –364 | 494 |
| Credit contracts | 9 755 | 10 | –237 | –227 |
| Other contracts | 10 128 | 32 | –318 | –286 |
| **Total** | **90 092** | **1 580** | **–1 541** | **39** |
| **Derivatives designated as hedging instruments** | | | | |
| Interest rate contracts | 3 990 | 9 | –10 | –1 |
| Foreign exchange contracts | 18 258 | 20 | –224 | –204 |
| **Total** | **22 248** | **29** | **–234** | **–205** |
| **Total derivative financial instruments** | **112 340** | **1 609** | **–1 775** | **–166** |
| **Amount offset** | | | | |
| Where a right of set-off exists | | –653 | 653 | |
| Due to cash collateral | | –690 | 627 | |
| **Total net amount of derivative financial instruments** | | **266** | **–495** | **–229** |

The notional amounts of derivative financial instruments give an indication of the Group's volume of derivative activity. The fair value assets are included in "Other invested assets" and "Investments for unit-linked and with-profit business". 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 2019 and 2020.

## Non-hedging activities

The Group primarily uses derivative financial instruments for risk management and trading strategies. Gains and losses of derivative financial instruments not designated as hedging instruments are recorded in "Net realised investment gains/losses — non-participating business" and "Net investment result — unit-linked and with-profit business" in the income statement.

For the years ended 31 December, the gains and losses of derivative financial instruments not designated as hedging instruments were as follows:

| USD millions | 2019[1] | **2020** |
|---|---|---|
| **Derivatives not designated as hedging instruments** | | |
| Interest rate contracts | –116 | 145 |
| Foreign exchange contracts | –123 | 970 |
| Equity contracts | –183 | –114 |
| Credit contracts | –51 | –93 |
| Other contracts | 112 | |
| **Total gains/losses recognised in income** | –361 | **908** |

[1] The Group has revised the scope of its non-hedging derivative activities. The revision had no impact on net income or shareholders' equity. Comparative information for 2019 has been adjusted accordingly.

## 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 December 2019 and 2020, the following hedging relationships were outstanding:

### Fair value hedges

The Group enters into foreign exchange and interest rate swaps to reduce the exposure to foreign exchange and interest rate volatility for certain fixed income securities and its issued long-term debt positions. These derivative instruments are designated as hedging instruments in qualifying fair value hedges.

For the years ended 31 December, the gains and losses attributable to the hedged risks were as follows:

| | | | 2019 | | | **2020** |
|---|---|---|---|---|---|---|
| USD millions | Net realised investment gains/losses — non-participating business | Interest expenses | Other comprehensive income - Net unrealised investment gains/losses[1] | Net realised investment gains/losses — non-participating business | Interest expenses | Other comprehensive income - Net unrealised investment gains/losses[1] |
| **Total amounts of income and expense line items** | 1 580 | –589 | 3 375 | 1 730 | –588 | 2 741 |
| **Foreign exchange contracts** | | | | | | |
| Gains/losses on derivatives | 40 | | | –852 | | |
| Gains/losses on hedged items | –40 | | | 852 | | |
| Amounts excluded from the effectiveness assessment | | | –2 | | | |
| **Interest rate contracts** | | | | | | |
| Gains/losses on derivatives | | –18 | | | 30 | |
| Gains/losses on hedged items | | 20 | | | –30 | |

[1] Represents the net change in accumulated other comprehensive income, reflecting the revised presentation of gains/losses recorded in AOCI. Comparative information for 2019 has been adjusted accordingly.

As of 31 December, the carrying values of the hedged assets and liabilities, and the cumulative amounts of fair value hedging adjustments included therein, recognised in the balance sheet, were as follows:

| | | 2019 | | **2020** |
|---|---|---|---|---|
| USD millions | Carrying value | Cumulative basis adjustment | Carrying value | Cumulative basis adjustment |
| **Assets** | | | | |
| Fixed income securities available-for-sale | 9 555 | | 13 083 | |
| **Liabilities** | | | | |
| Long-term debt | –1 355 | 20 | –3 968 | –10 |

### Cash flow hedges

The Group entered into cross-currency swaps to reduce the exposure to foreign exchange volatility for a long-term debt instrument issued in the second quarter of 2016. These derivative instruments were designated as cash flow hedging instruments, until the hedge was discontinued in the second quarter of 2020.

For the years ended 31 December, the gains and losses recorded in accumulated other comprehensive income, and reclassified into income were as follows:

| | | 2019 | | **2020** |
|---|---|---|---|---|
| USD millions | Net realised investment gains/losses — non-participating business | Other comprehensive income - Cash flow hedges[1] | Net realised investment gains/losses — non-participating business | Other comprehensive income - Cash flow hedges[1] |
| **Total amounts of income and expense line items** | 1 580 | –9 | 1 730 | 2 |
| **Foreign exchange contracts** | | | | |
| Gains/losses on derivatives | –48 | –9 | 15[2] | 2 |

[1] Represents the net change in accumulated other comprehensive income, reflecting the revised presentation of gains/losses recorded in AOCI. Comparative information for 2019 has been adjusted accordingly.
[2] Includes a loss of USD 11 million that was reclassified into earnings, as a result of cash flow hedge discontinuance.

### 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.

As of 31 December 2019 and 2020, the Group recorded an accumulated net unrealised foreign currency remeasurement gain of USD 1 895 million and USD 248 million, respectively, in "Other comprehensive income - Foreign currency translation". 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 2019 and 2020 was approximately USD 987 million and USD 956 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 75 million and USD 71 million as of 31 December 2019 and 2020, respectively. For derivative financial instruments containing credit risk-related contingent features, the Group posted collateral of nil and USD 48 million as of 31 December 2019 and 2020, respectively. In the event of a reduction of the Group's credit rating to below investment grade, a fair value of USD 25 million additional collateral would have had to be posted as of 31 December 2020. The total equals the amount needed to settle the instruments immediately as of 31 December 2020.

# 10 Acquisitions and disposals

**Disposal of ReAssure Group Plc.**
On the 22 July 2020, the Group completed the sale of ReAssure Group Plc. (ReAssure) to Phoenix Group Holdings Plc. (Phoenix), following the receipt of all required regulatory and anti-trust approvals. The agreement to sell the subsidiary was entered into in the fourth quarter of 2019.

The principal products administered by ReAssure, formerly part of the Life Capital business segment, are long-term life and pension products, permanent health insurance, critical illness products and retirement annuities.

Swiss Re received a cash payment of USD 1.6 billion, shares in Phoenix representing a 13.3% stake and is entitled to a seat on the Board of Directors of Phoenix. ReAssure's minority shareholder, MS&AD Insurance Group Holdings, Inc. received shares in Phoenix representing a 14.5% stake. Phoenix is not considered a related party of Swiss Re preceding or following the transaction.

The transaction resulted in a net loss of USD 245 million in the Life Capital business segment for the year 2020, which has been reflected in the "Net realised investment gains/losses" line in the income statement. In 2019, USD 139 million of the estimated loss was allocated against the goodwill held by ReAssure in 2019, reducing its carrying amount to zero, and for the remainder of USD 91 million, an additional liability was established within "Liabilities held for sale". The Group reassessed goodwill based on the agreement to sell ReAssure to Phoenix.

For the year ended 31 December 2019 and for the period ended 22 July 2020, ReAssure reported a pre-tax income, including the loss on sale, of USD 120 million and a pre-tax loss of USD 69 million, of which a net income of USD 32 million and a net loss of USD 113 million were attributable to the Swiss Re Group, respectively.

The major classes of assets and liabilities held for sale as of 31 December 2019 and disposed on 22 July 2020 are listed below.

| USD millions | 2019 | 2020 |
|---|---|---|
| **Assets** | | |
| Fixed income securities | 20 450 | 19 797 |
| Short-term and other investments | 2 240 | 2 287 |
| Investments for unit-linked and with-profit business | 43 173 | 37 885 |
| Cash and cash equivalents | 2 729 | 4 171 |
| Reinsurance recoverable | 3 134 | 2 031 |
| Deferred acquisition costs | 657 | 595 |
| Acquired present value of future profits | 680 | 468 |
| Other assets | 1 376 | 1 752 |
| **Total Assets disposed** | 74 439 | **68 986** |
| | | |
| **Liabilities** | | |
| Unpaid claims and claim adjustment expenses | 497 | 512 |
| Liabilities for life and health policy benefits | 22 624 | 21 300 |
| Policyholder account balances | 41 459 | 36 177 |
| Accrued expenses and other liabilities | 4 006 | 4 430 |
| **Total Liabilities disposed** | 68 586 | **62 419** |

**Acquisition of Old Mutual Wealth Life Assurance Limited**
On 31 December 2019, the Group through its ReAssure subsidiary acquired 100% of the UK closed book business of Quilter plc, consisting of Old Mutual Wealth Life Assurance Limited and its subsidiary Old Mutual Wealth Pensions Trustees Limited, including around 300 employees. The business acquired provides pension schemes, protection products, investment solutions and savings offerings, predominantly to the UK retail market.

The transaction was consistent with ReAssure's strategy to grow its closed-book business and added approximately 0.2 million customer policies, increasing ReAssure's total policy count to 3.2 million. The acquisition was funded from ReAssure's internal resources. The total consideration paid was USD 591 million in cash. As the business was acquired by ReAssure, it was recognised as held for sale upon acquisition and deconsolidated as part of the ReAssure assets and liabilities set out above on disposal.

# 11 Debt and contingent capital instruments

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

The Group's debt as of 31 December was as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Senior operational debt | | 153 |
| Contingent capital instruments classified as financial debt | 185 | |
| **Short-term debt** | 185 | **153** |
| | | |
| Senior financial debt | 2 809 | 2 919 |
| Senior operational debt | 244 | 95 |
| Subordinated financial debt | 5 993 | 6 147 |
| Subordinated operational debt | 1 918 | 1 927 |
| Contingent capital instruments classified as financial debt | 494 | 496 |
| Reclassified to liabilities held for sale | –1 320 | |
| **Long-term debt** | 10 138 | **11 584** |
| | | |
| **Total carrying value** | 10 323 | **11 737** |
| **Total fair value** | 14 204 | **14 749** |

As of 31 December 2019 and 2020, operational debt, ie debt related to operational leverage, amounted to USD 2.2 billion (thereof USD 1.9 billion limited- or non-recourse) and USD 2.2 billion (thereof USD 1.9 billion limited- or non-recourse), respectively. Operational leverage is subject to asset/liability matching and is excluded from rating agency financial leverage calculations.

### Maturity of long-term debt

As of 31 December, long-term debt as reported above had the following maturities:

| USD millions | 2019 | 2020 |
|---|---|---|
| Due in 2021 | 152 | |
| Due in 2022 | 804 | 856 |
| Due in 2023 | 840 | 916 |
| Due in 2024 | 2 573 | 2 271 |
| Due in 2025 | 802 | 1 157 |
| Due after 2025 | 6 287 | 6 384 |
| Reclassified to liabilities held for sale | –1 320 | |
| **Total carrying value** | 10 138 | **11 584** |

## Senior long-term debt

| Maturity | Instrument | Issued in | Currency | Nominal in millions | Interest rate | Book value in USD millions |
|---|---|---|---|---|---|---|
| 2022 | Senior notes | 2012 | USD | 250 | 2.88% | 250 |
| 2023 | Senior notes | 2016 | EUR | 750 | 1.38% | 913 |
| 2024 | EMTN | 2014 | CHF | 250 | 1.00% | 282 |
| 2026 | Senior notes[1] | 1996 | USD | 397 | 7.00% | 453 |
| 2027 | EMTN | 2015 | CHF | 250 | 0.75% | 284 |
| 2030 | Senior notes[1] | 2000 | USD | 193 | 7.75% | 246 |
| 2042 | Senior notes | 2012 | USD | 500 | 4.25% | 491 |
| Various | Payment undertaking agreements | various | USD | 85 | various | 95 |
| **Total senior long-term debt as of 31 December 2020** | | | | | | **3 014** |
| Total senior long-term debt as of 31 December 2019 | | | | | | 3 053 |

[1] Assumed in the acquisition of GE Insurance Solutions.

## Subordinated long-term debt

| Maturity | Instrument | Issued in | Currency | Nominal in millions | Interest rate | First call in | Book value in USD millions |
|---|---|---|---|---|---|---|---|
| 2035 | Subordinated fixed rate resettable callable loan note | 2020 | SGD | 350 | 3.13% | 2025 | 263 |
| 2042 | Subordinated fixed-to-floating rate callable loan note | 2012 | EUR | 500 | 6.63% | 2022 | 606 |
| 2044 | Subordinated fixed rate resettable callable loan note | 2014 | USD | 500 | 4.50% | 2024 | 498 |
| 2049 | Subordinated fixed rate reset step-up callable loan note | 2019 | USD | 1 000 | 5.00% | 2029 | 992 |
| 2050 | Subordinated fixed rate reset step-up callable loan note | 2019 | EUR | 750 | 2.53% | 2030 | 913 |
| 2052 | Subordinated fixed rate reset step-up callable loan note | 2020 | EUR | 800 | 2.71% | 2032 | 990 |
| 2057 | Subordinated private placement (amortising, limited recourse) | 2007 | GBP | 1 409 | 6.16% | | 1 927 |
| Perpetual | Perpetual subordinated fixed-to-floating rate callable loan note | 2015 | EUR | 750 | 2.60% | 2025 | 892 |
| Perpetual | Perpetual subordinated fixed spread callable note | 2019 | USD | 1 000 | 4.25% | 2024 | 993 |
| **Total subordinated long-term debt as of 31 December 2020** | | | | | | | **8 074** |
| Total subordinated long-term debt as of 31 December 2019 | | | | | | | 7 911 |

## Contingent capital instruments classified as long-term debt

| Maturity | Instrument | Issued in | Currency | Nominal in millions | Interest rate | Book value in USD millions |
|---|---|---|---|---|---|---|
| 2024 | Senior unsecured exchangeable instrument with issuer stock settlement | 2018 | USD | 500 | 3.25% | 496 |
| **Total contingent capital instruments classified as long-term debt as of 31 December 2020** | | | | | | **496** |
| Total contingent capital instruments classified as long-term debt as of 31 December 2019 | | | | | | 494 |

### Interest expense on long-term debt and contingent capital instruments

Interest expense on long-term debt for the years ended 31 December was as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Senior financial debt | 87 | 88 |
| Senior operational debt | 10 | 7 |
| Subordinated financial debt[1] | 194 | 263 |
| Subordinated operational debt | 111 | 112 |
| Contingent capital instruments classified as financial debt | 22 | 17 |
| **Total** | 424 | **487** |

[1] The Group has revised the presentation of interest expense on subordinated financial debt to exclude the change in fair value of the hedged long-term debt positions in addition to the change in fair value of the swap. The change has no impact on total interest expenses as shown in the income statement. Comparative information for 2019 has been amended accordingly.

The Group hedges the interest rate risk on some of its long-term debt positions. The net impact of the change in the fair value of the debt and interest rate swap is reflected in the interest expense line in the income statement but not in the table above. For more details on the hedging, please refer to Note 9 "Derivative financial instruments".

### Long-term debt issued in 2020

In June 2020, Swiss Re Finance (UK) Plc., a subsidiary of Swiss Re Ltd, issued 32-year guaranteed subordinated fixed rate reset step-up callable notes, which are callable after 12 years. The notes have an aggregate face value of EUR 800 million, with a fixed coupon of 2.714% until the first optional redemption date (4 June 2032). The notes are guaranteed on a subordinated basis by Swiss Re Ltd.

In July 2020, Swiss Re Finance (UK) Plc., a subsidiary of Swiss Re Ltd, issued 15-year guaranteed subordinated fixed rate reset callable notes, which are callable after 5 years. The notes have an aggregate face value of SGD 350 million, with a fixed coupon of 3.125% until the first optional redemption date (3 July 2025). The notes are guaranteed on a subordinated basis by Swiss Re Ltd.

# 12 Leases

As part of its normal business operations, the Group as a lessee enters into a number of lease agreements mainly for office space. Certain lease agreements include rental payments adjusted periodically for inflation. Renewal or termination options that are reasonably certain of exercise by the lessee are included in the lease term. The lease agreements do not contain any material residual value guarantees or material restrictive covenants.

### Lease liabilities and right-of-use assets

Lease liabilities and right-of-use assets for operating leases as of 31 December were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Operating lease right-of-use assets | 485 | 471 |
| Operating lease liabilities | 531 | 524 |

Operating lease right-of-use assets are included in "Other assets" and operating lease liabilities are included in "Accrued expenses and other liabilities" on the balance sheet.

### Maturity of lease liabilities

As of 31 December, the total undiscounted cash flows due to operating leases for the next five years and thereafter were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Less than one year | 89 | 90 |
| Between one year and two years | 77 | 80 |
| Between two years and three years | 69 | 73 |
| Between three years and four years | 61 | 63 |
| Between four years and five years | 55 | 51 |
| After five years | 239 | 232 |
| **Total undiscounted cash flows** | 590 | **589** |
| Less imputed interest | –59 | –65 |
| **Total lease liability** | 531 | **524** |

As of 31 December 2020, undiscounted sublease cash flows over the next eleven years were USD 39 million.

The discount rates used to determine the lease liability reflect the collateralised borrowing rates for the Group, where the underlying collateral is assumed to be real estate.

The weighted average discount rate for operating leases as of 31 December 2019 and 2020 was 2.5% and 2.4%, respectively. The weighted average remaining lease term for operating leases as of 31 December 2019 and 2020 was 8.9 years and 9.3 years, respectively.

### Lease cost

The composition of total lease cost for all operating leases for the year ended 31 December was as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Fixed operating lease cost | 87 | 89 |
| Other lease cost[1] | 3 | 5 |
| **Total operating lease cost** | 90 | **94** |
| Less sublease income from operating leases | –9 | –10 |
| **Total lease cost** | 81 | **84** |

[1] "Other lease cost" includes variable lease cost.

### Other information

For the year ended 31 December 2019 and 2020, cash paid for amounts included in the measurement of operating lease liabilities was USD 91 million and USD 93 million, respectively. Right-of-use assets obtained in exchange for new operating lease liabilities in 2019 and 2020 were USD 68 million and USD 51 million, respectively.

# 13 Earnings per share

Earnings per share for the years ended 31 December were as follows:

| USD millions (except share data) | 2019 | 2020 |
|---|---|---|
| **Basic earnings per share** | | |
| Net income/loss | 769 | –824 |
| Non-controlling interests | –42 | –54 |
| Net income/loss attributable to common shareholders | 727 | **–878** |
| Weighted average common shares outstanding | 295 660 059 | 289 126 570 |
| **Net income/loss per share in USD** | 2.46 | **–3.04** |
| **Net income/loss per share in CHF[1]** | 2.46 | **–2.97** |
| | | |
| **Effect of dilutive securities** | | |
| Change in income available to common shares due to convertible debt | 14 | |
| Change in average number of shares due to convertible debt | 13 143 130 | |
| Change in average number of shares due to employee options | 704 411 | |
| | | |
| **Diluted earnings per share** | | |
| Net income assuming debt conversion and exercise of options | 741 | |
| Weighted average common shares outstanding | 309 507 600 | |
| **Net income/loss per share in USD** | 2.39 | **–3.04** |
| **Net income/loss per share in CHF[1]** | 2.40 | **–2.97** |

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

Dividends are declared in Swiss francs. During the years ended 31 December 2019 and 2020, the parent company of the Group (Swiss Re Ltd) paid dividends per share of CHF 5.60 and CHF 5.90, respectively.

At the 2019 Annual General Meeting held on 17 April 2019, Swiss Re Ltd's shareholders authorised a public share buyback programme consisting of two tranches of each up to CHF 1 billion purchase value of Swiss Re Ltd's own shares for cancellation purposes prior to the 2020 Annual General Meeting, the first tranche being conditional on obtaining all necessary legal and regulatory approvals and Board of Directors approval and the second tranche being conditional on (in addition to obtaining all necessary legal and regulatory approvals and Board of Directors approval) the 2019 development of the Group's excess capital position and subject to the Group's capital management priorities.

The first tranche of the public share buyback programme approved by the 2019 Annual General Meeting was completed on 18 February 2020. The total number of shares repurchased amounted to 9.9 million, of which 8.2 million and 1.7 million shares were repurchased as of 31 December 2019 and between 1 January and 18 February 2020, respectively. As announced on 31 October 2019, the Board of Directors of Swiss Re Ltd decided not to launch the second tranche of the public share buyback programme approved by the 2019 Annual General Meeting.

On 17 April 2020, the 2020 Annual General Meeting resolved the cancellation of the 9.9 million repurchased shares by way of share capital reduction. The share capital reduction was registered in the Commercial Register of the Canton of Zurich on 23 July 2020 and publication in the Swiss Commercial Gazette occurred on 28 July 2020. Swiss Re Ltd's shareholders authorised the SRL Board of Directors to repurchase up to a maximum CHF 1 billion purchase value of Swiss Re Ltd's own shares by way of a public share buyback programme for cancellation purposes prior to the 2021 Annual General Meeting. At the post-AGM meeting, the Board of Directors decided that the share buyback programme would not be launched.

Net of tax expense effects of debt conversion, totalling USD 14 million in 2020, and the potential impact of this debt conversion as well as the issuance of employee options on the weighted average number of shares, of 14 303 549 shares, have not been included in the diluted earnings per share calculation because the impact of such an inclusion was antidilutive.

# 14 Income taxes

The Group is generally subject to corporate income taxes based on the taxable net income in various jurisdictions in which it operates. The components of the income tax expense were:

| USD millions | 2019 | 2020 |
|---|---|---|
| Current taxes | 496 | 398 |
| Deferred taxes | –356 | –664 |
| **Income tax expense/benefit** | 140 | **–266** |

### Tax rate reconciliation

The following table reconciles the expected tax expense at the Swiss statutory tax rate to the actual tax expense in the accompanying income statement:

| USD millions | 2019 | 2020 |
|---|---|---|
| Income tax at the Swiss statutory tax rate of 21.0% | 191 | –229 |
| Increase (decrease) in the income tax charge resulting from: | | |
| Foreign income taxed at different rates | 27 | –12 |
| Impact of foreign exchange movements | 16 | 172 |
| Tax exempt income/dividends received deduction | –142 | –181 |
| Change in valuation allowance | –16 | –88 |
| Non-deductible expenses | 38 | 61 |
| Other income based taxes | 76 | –36 |
| Change in liability for unrecognised tax benefits including interest and penalties | –42 | –17 |
| Basis differences in subsidiaries | 1 | 38 |
| Intra-entity transfers | 20 | 92 |
| Other, net[1] | –29 | –66 |
| **Total** | 140 | **–266** |

[1] Other, net includes tax return to tax provision adjustments from various jurisdictions.

For the year ended 31 December 2020, the Group reported a tax benefit of USD 266 million on a pre-tax loss of USD 1 090 million, compared to a charge of USD 140 million on a pre-tax income of USD 909 million for 2019. This translates into an effective tax rate in the current and prior-year reporting periods of 24.4 % and 15.4%, respectively.

For the year ended 31 December 2020, the tax rate was largely driven by tax benefits from tax-exempt income and the release of valuation allowance on deferred tax assets, partially offset by tax charges from intra-entity transfers and foreign currency translation differences between statutory and US GAAP accounts. The tax rate in the year ended 31 December 2019 was largely driven by tax benefits from effective settlement of tax audits and tax-exempt income, partially offset by tax charges from other income based taxes and non-deductible expenses.

## Deferred and other non-current taxes

The components of deferred and other non-current taxes were as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| **Deferred tax assets** | | |
| Income accrued/deferred | 238 | 312 |
| Technical provisions | 519 | 756 |
| Unearned Premium Reserves | 318 | 322 |
| Pension provisions | 303 | 295 |
| Benefit on loss carryforwards | 2 446 | 2 982 |
| Currency translation adjustments | 316 | 522 |
| Unrealised gains in income | 651 | 232 |
| Investment valuation in income | 269 | 182 |
| Other | 774 | 869 |
| Reclassified to assets held for sale | –604 | |
| **Gross deferred tax asset** | 5 230 | 6 472 |
| Valuation allowance | –505 | –395 |
| Unrecognised tax benefits offsetting benefits on loss carryforwards | 1 | 2 |
| **Total deferred tax assets** | 4 726 | **6 079** |
| | | |
| **Deferred tax liabilities** | | |
| Investment valuation in income | –448 | –240 |
| Deferred acquisition costs | –1 036 | –1 062 |
| Technical provisions | –2 230 | –1 818 |
| Unrealised gains on investments | –1 443 | –1 492 |
| Foreign exchange provisions | –489 | –790 |
| Currency translation adjustments | –156 | –266 |
| Other | –961 | –883 |
| Reclassified to liabilities held for sale | 1 321 | |
| **Total deferred tax liabilities** | –5 442 | **–6 551** |
| | | |
| Liability for unrecognised tax benefits including interest and penalties | –250 | –189 |
| Reclassified to liabilities held for sale | 29 | |
| **Total deferred and other non-current tax liabilities** | –5 663 | **–6 740** |

As of 31 December 2020, the aggregate amount of temporary differences associated with investment in subsidiaries, branches and associates and interests in joint ventures, for which deferred tax liabilities have not been recognised amount to approximately USD 3.4 billion. In the remote scenario in which these temporary differences were to reverse simultaneously, the resulting tax liabilities would be very limited due to participation exemption rules.

As of 31 December 2020, the Group had USD 14 061 million net operating tax loss carryforwards, expiring as follows: USD 6 million in 2021, USD 3 million in 2022, USD 7 million in 2023, USD 841 million in 2024, USD 7 495 million in 2025 and beyond, and USD 5 709 million never expire.

As of 31 December 2020, the Group had capital loss carryforwards of USD 592 million that never expire.

For the year ended 31 December 2020, net operating tax losses of USD 1 596 million and net capital tax losses of USD 1 036 million were utilised.

Income taxes paid in 2019 and 2020 were USD 611 million and USD 364 million, respectively.

## Unrecognised tax benefits

A reconciliation of the opening and closing amount of gross unrecognised tax benefits (excluding interest and penalties) is as follows:

| USD millions | 2019 | 2020 |
|---|---|---|
| Balance as of 1 January | 257 | 170 |
| Additions based on tax positions related to current year | 38 | 13 |
| Additions based on tax positions related to prior years | 8 | –6 |
| Reductions for tax positions of current year | –7 | 16 |
| Reductions for tax positions of prior years | –83 | –30 |
| Statute expiration | –2 | –5 |
| Settlements | –16 | –17 |
| Other (including foreign currency translation) | –1 | 9 |
| Reclassified to assets/liabilities held for sale | –24 | |
| **Balance as of 31 December** | 170 | **150** |

As of 31 December 2019 and 2020, the amount of gross unrecognised tax benefits within the tabular reconciliation that, if recognised, would affect the effective tax rate were approximately USD 170 million and USD 150 million, respectively.

Interest and penalties related to unrecognised tax benefits are recorded in income tax expense. For the year ended 31 December 2019 such expenses were USD 5 million and for the year ended 31 December 2020 such benefits were USD 10 million. For the years ended 31 December 2019 and 2020, USD 55 million and USD 37 million, respectively, were accrued for the payment of interest (net of tax benefits) and penalties. The accrued interest balance as of 31 December 2020 is included within the deferred and other non-current taxes section reflected above and in the balance sheet.

The balance of gross unrecognised tax benefits as of 31 December 2020 presented in the table above excludes accrued interest and penalties (USD 37 million).

During the year, certain tax positions and audits in the United Kingdom, Japan, Malaysia, United States and Switzerland were effectively settled.

The Group continually evaluates proposed adjustments by taxing authorities. The Group believes that it is reasonably possible (more than remote and less than likely) that the balance of unrecognised tax benefits could increase or decrease over the next 12 months due to settlements or expiration of statutes. However, quantification of an estimated range cannot be made at this time.

The following table summarises jurisdictions and tax years that remain subject to examination:

| | |
|---|---|
| Australia | 2014–2020 |
| Brazil | 2014; 2016–2020 |
| Canada | 2012–2020 |
| China | 2010–2020 |
| Colombia | 2016–2020 |
| Denmark | 2015–2020 |
| France | 2018–2020 |
| Germany | 2017–2020 |
| Hong Kong | 2014–2020 |
| India | 2004; 2010–2020 |
| Ireland | 2016–2020 |
| Israel | 2016–2020 |
| Italy | 2016–2020 |
| Japan | 2013–2020 |
| Korea | 2013–2020 |
| Luxembourg | 2016–2020 |
| Malaysia | 2016–2020 |
| Mexico | 2016–2020 |
| Netherlands | 2015–2020 |
| New Zealand | 2014–2020 |
| Nigeria | 2016–2020 |
| Singapore | 2014–2020 |
| Slovakia | 2016–2020 |
| South Africa | 2015–2020 |
| Spain | 2016–2020 |
| Switzerland | 2016–2020 |
| United Kingdom | 2008, 2013–2020 |
| United States | 2017–2020 |

# 15 Benefit plans

### Defined benefit pension plans and post-retirement benefits

The Group sponsors various funded defined benefit pension plans. Employer contributions to the plans are charged to income on a basis which recognises the costs of pensions over the expected service lives of employees covered by the plans. The Group's funding policy for these plans is to contribute annually at a rate that is intended to maintain a level percentage of compensation for the employees covered. A full valuation is prepared at least every three years.

The Group also provides certain healthcare and life insurance benefits for retired employees and their dependants. Employees become eligible for these benefits when they become eligible for pension benefits.

The measurement date of these plans is 31 December for each year presented.

| 2019<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Benefit obligation as of 1 January | 3 832 | 2 270 | 319 | 6 421 |
| Service cost | 99 | 8 | 3 | 110 |
| Interest cost | 29 | 67 | 7 | 103 |
| Amendments | | | –1 | –1 |
| Actuarial gains/losses | 307 | 297 | 24 | 628 |
| Benefits paid | –59 | –95 | –16 | –170 |
| Employee contribution | 32 | | | 32 |
| Effect of settlement, curtailment and termination | –150 | | | –150 |
| Effect of foreign currency translation | 75 | 42 | 4 | 121 |
| **Benefit obligation as of 31 December** | 4 165 | 2 589 | 340 | 7 094 |
| | | | | |
| Fair value of plan assets as of 1 January | 3 760 | 2 336 | 0 | 6 096 |
| Actual return on plan assets | 391 | 323 | | 714 |
| Company contribution | 97 | 16 | 16 | 129 |
| Benefits paid | –59 | –95 | –16 | –170 |
| Employee contribution | 32 | | | 32 |
| Effect of settlement, curtailment and termination | –150 | | | –150 |
| Effect of foreign currency translation | 74 | 53 | | 127 |
| **Fair value of plan assets as of 31 December** | 4 145 | 2 633 | 0 | 6 778 |
| **Funded status** | –20 | 44 | –340 | –316 |

| **2020**<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Benefit obligation as of 1 January | 4 165 | 2 589 | 340 | 7 094 |
| Service cost | 120 | 8 | 4 | 132 |
| Interest cost | 4 | 47 | 5 | 56 |
| Amendments | | | | 0 |
| Actuarial gains/losses | 226 | 169 | 10 | 405 |
| Benefits paid | –49 | –84 | –17 | –150 |
| Employee contribution | 35 | | | 35 |
| Acquisitions/disposals/additions | | –541 | | –541 |
| Effect of settlement, curtailment and termination | –161 | | | –161 |
| Effect of foreign currency translation | 410 | 46 | 18 | 474 |
| **Benefit obligation as of 31 December** | **4 750** | **2 234** | **360** | **7 344** |
| | | | | |
| Fair value of plan assets as of 1 January | 4 145 | 2 633 | 0 | 6 778 |
| Actual return on plan assets | 220 | 272 | | 492 |
| Company contribution | 104 | 15 | 17 | 136 |
| Benefits paid | –49 | –84 | –17 | –150 |
| Employee contribution | 35 | | | 35 |
| Acquisitions/disposals/additions | | –559 | | –559 |
| Effect of settlement, curtailment and termination | –161 | | | –161 |
| Effect of foreign currency translation | 408 | 39 | | 447 |
| **Fair value of plan assets as of 31 December** | **4 702** | **2 316** | **0** | **7 018** |
| **Funded status** | **–48** | **82** | **–360** | **–326** |

Amounts recognised in "Other assets" and "Accrued expenses and other liabilities" in the Group's balance sheet as of 31 December were as follows:

| 2019<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Non-current assets | | 242 | | 242 |
| Current liabilities | | –3 | –17 | –20 |
| Non-current liabilities | –20 | –195 | –323 | –538 |
| **Net amount recognised** | –20 | 44 | –340 | –316 |

| **2020**<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Non-current assets | | 294 | | 294 |
| Current liabilities | | –3 | –18 | –21 |
| Non-current liabilities | –48 | –209 | –342 | –599 |
| **Net amount recognised** | **–48** | **82** | **–360** | **–326** |

Amounts recognised in accumulated other comprehensive income, gross of tax, as of 31 December were as follows:

| 2019<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Net gain/loss | 818 | 441 | 13 | 1 272 |
| Prior service cost/credit | –85 | 2 | –50 | –133 |
| **Total** | 733 | 443 | –37 | 1 139 |

| **2020**<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Net gain/loss | 832 | 297 | 23 | 1 152 |
| Prior service cost/credit | –70 | 2 | –35 | –103 |
| **Total** | **762** | **299** | **–12** | **1 049** |

## Components of net periodic benefit cost

The components of pension and post-retirement cost for the years ended 31 December were as follows:

| 2019<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Service cost (net of participant contributions) | 99 | 8 | 3 | 110 |
| Interest cost | 29 | 67 | 7 | 103 |
| Expected return on assets | –93 | –88 | | –181 |
| Amortisation of: | | | | |
| Net gain/loss | 35 | 15 | –2 | 48 |
| Prior service cost | –15 | | –15 | –30 |
| Effect of settlement, curtailment and termination | 28 | | | 28 |
| **Net periodic benefit cost** | 83 | 2 | –7 | 78 |

| **2020**<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Service cost (net of participant contributions) | 120 | 8 | 4 | 132 |
| Interest cost | 4 | 47 | 5 | 56 |
| Expected return on assets | –102 | –61 | | –163 |
| Amortisation of: | | | | |
| Net gain/loss | 66 | 21 | | 87 |
| Prior service cost | –15 | | –15 | –30 |
| Effect of settlement, curtailment and termination | 34 | | | 34 |
| **Net periodic benefit cost** | **107** | **15** | **–6** | **116** |

Other changes in plan assets and benefit obligations recognised in other comprehensive income for the years ended 31 December were as follows:

| 2019<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Net gain/loss | 10 | 55 | 24 | 89 |
| Prior service cost/credit | | | –1 | –1 |
| Amortisation of: | | | | |
| Net gain/loss | –35 | –15 | 2 | –48 |
| Prior service cost | 15 | | 15 | 30 |
| Effect of settlement, curtailment and termination | –26 | | | –26 |
| Exchange rate gain/loss recognised during the year | | 3 | | 3 |
| **Total recognised in other comprehensive income, gross of tax** | –36 | 43 | 40 | 47 |
| **Total recognised in net periodic benefit cost and other comprehensive income, gross of tax** | 47 | 45 | 33 | 125 |

| **2020**<br>USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| Net gain/loss | 108 | –42 | 10 | 76 |
| Prior service cost/credit | | | | 0 |
| Amortisation of: | | | | |
| Net gain/loss | –66 | –21 | | –87 |
| Prior service cost | 15 | | 15 | 30 |
| Effect of settlement, curtailment and termination | –28 | | | –28 |
| Impact of sale of ReAssure | | –93 | | –93 |
| Exchange rate gain/loss recognised during the year | | 12 | | 12 |
| **Total recognised in other comprehensive income, gross of tax** | **29** | **–144** | **25** | **–90** |
| **Total recognised in net periodic benefit cost and other comprehensive income, gross of tax** | **136** | **–129** | **19** | **26** |

The accumulated benefit obligation (the current value of accrued benefits excluding future salary increases) for pension benefits was USD 6 687 million and USD 6 921 million as of 31 December 2019 and 2020, respectively.

Pension plans with a projected benefit obligation and an accumulated benefit obligation in excess of plan assets as of 31 December were as follows:

| USD millions | 2019 | **2020** |
|---|---|---|
| Projected benefit obligation | 4 793 | 5 455 |
| Fair value of plan assets | 4 575 | 5 195 |

| USD millions | 2019 | **2020** |
|---|---|---|
| Accumulated benefit obligation | 619 | 5 413 |
| Fair value of plan assets | 430 | 5 195 |

## Principal actuarial assumptions

| | Swiss plan | | Foreign plans weighted average | | Other benefits weighted average | |
|---|---|---|---|---|---|---|
| | 2019 | **2020** | 2019 | **2020** | 2019 | **2020** |
| **Assumptions used to determine obligations at the end of the year** | | | | | | |
| Discount rate | 0.1% | 0.0% | 2.1% | 1.6% | 1.5% | 1.1% |
| Rate of compensation increase | 1.8% | 1.8% | 2.9% | 2.6% | 2.1% | 2.1% |
| Interest crediting rate | 1.5% | 1.8% | | | | |
| **Assumptions used to determine net periodic pension costs for the year ended** | | | | | | |
| Discount rate | 0.8% | 0.1% | 3.0% | 2.1% | 2.2% | 1.5% |
| Expected long-term return on plan assets | 2.5% | 2.5% | 3.7% | 2.9% | | |
| Rate of compensation increase | 1.8% | 1.8% | 3.0% | 2.9% | 2.1% | 2.1% |
| Interest crediting rate | 1.5% | 1.8% | | | | |
| **Assumed medical trend rates at year end** | | | | | | |
| Medical trend – initial rate | | | | | 4.4% | 4.3% |
| Medical trend – ultimate rate | | | | | 3.6% | 3.6% |
| Year that the rate reaches the ultimate trend rate | | | | | 2023 | 2024 |

The expected long-term rates of return on plan assets are based on long-term expected inflation, interest rates, risk premiums and targeted asset category allocations. The estimates take into consideration historical asset category returns.

## Plan asset allocation by asset category

The actual asset allocation by major asset category for defined benefit pension plans as of the respective measurement dates in 2019 and 2020 was as follows:

| | Swiss plan allocation | | | Foreign plans allocation | | |
|---|---|---|---|---|---|---|
| | 2019 | **2020** | **Target allocation** | 2019 | **2020** | **Target allocation** |
| **Asset category** | | | | | | |
| Equity securities | 26% | 26% | 23% | 8% | 5% | 6% |
| Debt securities | 41% | 37% | 46% | 76% | 75% | 86% |
| Real estate | 18% | 18% | 23% | 0% | 0% | 0% |
| Other | 15% | 19% | 8% | 16% | 20% | 8% |
| **Total** | 100% | **100%** | **100%** | 100% | **100%** | **100%** |

Actual asset allocation is determined by a variety of current economic and market conditions and considers specific asset class risks.

Equity securities include Swiss Re shares of USD 3 million (0.04% of total plan assets) and USD 2 million (0.03% of total plan assets) as of 31 December 2019 and 2020, respectively.

The Group's pension plan investment strategy is to match the maturity profiles of the assets and liabilities in order to reduce the future volatility of pension expense and funding status of the plans. This involves balancing investment portfolios between equity and fixed income securities. Tactical allocation decisions that reflect this strategy are made on a quarterly basis.

### Assets measured at fair value

For a description of the different fair value levels and valuation techniques see Note 8 “Fair value disclosures”.

Certain items reported as pension plan assets at fair value in the following table are not within the scope of Note 8, namely two positions: real estate and an insurance contract.

Real estate positions classified as level 1 and level 2 are exchange-traded real estate funds where a market valuation is readily available. Real estate reported on level 3 is property owned by the pension funds. These positions are accounted for at the capitalised income value. The capitalisation based on sustainable recoverable earnings is conducted at interest rates that are determined individually for each property, based on the property´s location, age and condition. If properties are intended for disposal, the estimated selling costs and taxes are recognised in provisions. Sales gains or losses are allocated to income from real estate when the contract is concluded.

The fair value of the insurance contract is based on the fair value of the assets backing the contract.

As of 31 December, the fair values of pension plan assets were as follows:

| | Fair value | | | | |
|---|---|---|---|---|---|
| 2019<br>USD millions | Quoted prices in active markets for identical assets (level 1) | Significant other observable inputs (level 2) | Significant unobservable inputs (level 3) | Investments measured at net asset value as practical expedient | Total |
| **Assets** | | | | | |
| Fixed income securities: | | | | | |
| Government debt securities | 50 | 1 576 | | | 1 626 |
| Corporate debt securities | | 2 011 | 11 | | 2 022 |
| RMBS/CMBS/ABS | | 13 | | | 13 |
| Equity securities | 1 082 | 205 | | | 1 287 |
| Real estate | 4 | | 756 | | 760 |
| Other assets | | 174 | | 698 | 872 |
| Cash and cash equivalents | 198 | | | | 198 |
| **Total plan assets** | 1 334 | 3 979 | 767 | 698 | 6 778 |

| | Fair value | | | | |
|---|---|---|---|---|---|
| **2020**<br>USD millions | Quoted prices in active markets for identical assets (level 1) | Significant other observable inputs (level 2) | Significant unobservable inputs (level 3) | Investments measured at net asset value as practical expedient | Total |
| **Assets** | | | | | |
| Fixed income securities: | | | | | |
| Government debt securities | 60 | 1 521 | | | 1 581 |
| Corporate debt securities | | 1 891 | 11 | | 1 902 |
| RMBS/CMBS/ABS | | 9 | | | 9 |
| Equity securities | 1 209 | 122 | | | 1 331 |
| Real estate | 4 | | 861 | | 865 |
| Other assets | | 56 | | 1 155 | 1 211 |
| Cash and cash equivalents | 119 | | | | 119 |
| **Total plan assets** | **1 392** | **3 599** | **872** | **1 155** | **7 018** |

### Assets measured at fair value using significant unobservable inputs (level 3)

For the years ended 31 December, the reconciliation of fair value of pension plan assets using significant unobservable inputs were as follows:

| 2019<br>USD millions | Real estate | Other assets | Total |
|---|---|---|---|
| Balance as of 1 January | 721 | 10 | 731 |
| Realised/unrealised gains/losses: | | | |
| Relating to assets still held at the reporting date | 20 | 1 | 21 |
| Relating to assets sold during the period | | | 0 |
| Purchases, issuances and settlements | 2 | | 2 |
| Transfers in and/or out of level 3 | | | 0 |
| Impact of foreign exchange movements | 13 | | 13 |
| **Closing balance as of 31 December** | 756 | 11 | 767 |

| **2020**<br>USD millions | Real estate | Other assets | Total |
|---|---|---|---|
| Balance as of 1 January | 756 | 11 | 767 |
| Realised/unrealised gains/losses: | | | |
| Relating to assets still held at the reporting date | 19 | –1 | 18 |
| Relating to assets sold during the period | | | 0 |
| Purchases, issuances and settlements | 12 | | 12 |
| Transfers in and/or out of level 3 | | | 0 |
| Impact of foreign exchange movements | 74 | 1 | 75 |
| **Closing balance as of 31 December** | **861** | **11** | **872** |

### Expected contributions and estimated future benefit payments

The employer contributions expected to be made in 2021 to the defined benefit pension plans are USD 127 million and to the post-retirement benefit plan are USD 18 million.

As of 31 December 2020, the projected benefit payments, which reflect expected future service, not adjusted for transfers in and for employees' voluntary contributions, are as follows:

| USD millions | Swiss plan | Foreign plans | Other benefits | Total |
|---|---|---|---|---|
| 2021 | 240 | 83 | 18 | 341 |
| 2022 | 233 | 87 | 18 | 338 |
| 2023 | 226 | 89 | 18 | 333 |
| 2024 | 228 | 91 | 19 | 338 |
| 2025 | 222 | 93 | 19 | 334 |
| Years 2026–2030 | 1 095 | 486 | 93 | 1 674 |

### Defined contribution pension plans

The Group sponsors a number of defined contribution plans to which employees and the Group make contributions. The accumulated balances are paid as a lump sum at the earlier of retirement, termination, disability or death. The amount expensed in 2019 and 2020 was USD 86 million and USD 84 million, respectively.

# 16 Share-based payments

As of 31 December 2019 and 2020, the Group had the share-based compensation plans as described below.

The total compensation cost for share-based compensation plans recognised in net income was USD 30 million and USD 44 million in 2019 and 2020, respectively. The related tax benefit was USD 6 million and USD 9 million, respectively.

### Restricted shares

The Group granted 51 036 and 21 709 restricted shares to selected employees in 2019 and 2020, respectively. In addition, 37 593 and 47 984 shares were delivered to members of the Board of Directors during 2019 and 2020, respectively, which are generally not subject to forfeiture risk.

A summary of the movements in shares relating to outstanding awards granted under the restricted share plans for the year ended 31 December 2020 is as follows:

| | Weighted average grant date fair value in CHF[1] | Number of shares |
|---|---|---|
| Non-vested at 1 January | 91 | 238 125 |
| Granted | 79 | 69 693 |
| Forfeited | 92 | –3 212 |
| Vested | 90 | –71 103 |
| **Outstanding as of 31 December** | **87** | **233 503** |

[1] Equal to the market price of the shares at grant.

### Leadership Performance Plan
The Leadership Performance Plan (LPP) awards are expected to be settled in shares, and the requisite service as well as the maximum contractual term are three years. For LPP 2017, LPP 2018, LPP 2019 and LPP 2020 awards, an additional two-year holding period applies for all members of the Group EC and other key executives. At grant date, LPP 2017, LPP 2018 and LPP 2019 awards were split equally into two underlying components of Performance Share Units (PSUs). The ROE PSUs are measured against a return on equity performance condition and will vest within a range of 0–100%. The TSR PSUs are based on relative total shareholder return, measured against a pre-defined group of peers and will vest within a range of 0–200%. At grant date, LPP 2020 was split equally into three underlying components of PSUs. The ENW PSUs, being the third component, are measured against ENW growth performance and will vest within a range of 0-100%. The fair values of all components are determined separately, based on stochastic models.

The fair value assumptions in the grant valuations include market estimates for dividends and the risk-free rate based on the average of the 10-year US Treasury bond taken monthly over each year in the performance period, resulting in risk-free rates ranging between 1.5% and 3.1% for all outstanding LPP awards.

For the year ended 31 December 2020, the outstanding units were as follows:

| ROE PSU | LPP 2017 | LPP 2018 | LPP 2019 | LPP 2020 |
|---|---|---|---|---|
| Non-vested at 1 January | 446 794 | 317 069 | 314 151 | |
| Granted | | | | 215 458 |
| Forfeited | –10 337 | –13 864 | –17 121 | –7 532 |
| Vested | –436 457 | | | |
| **Outstanding as of 31 December** | | **303 205** | **297 030** | **207 926** |
| **Grant date fair value in CHF** | **47.41** | **70.18** | **78.22** | **78.81** |

| TSR PSU | LPP 2017 | LPP 2018 | LPP 2019 | LPP 2020 |
|---|---|---|---|---|
| Non-vested at 1 January | 609 090 | 256 939 | 302 567 | |
| Granted | | | | 352 827 |
| Forfeited | –14 091 | –11 243 | –16 498 | –12 334 |
| Vested | –594 999 | | | |
| **Outstanding as of 31 December** | | **245 696** | **286 069** | **340 493** |
| **Grant date fair value in CHF** | **34.78** | **86.62** | **81.25** | **48.12** |

| ENW PSU | LPP 2020 |
|---|---|
| Non-vested at 1 January | |
| Granted | 199 497 |
| Forfeited | –6 974 |
| Vested | |
| **Outstanding as of 31 December** | **192 523** |
| **Grant date fair value in CHF** | **85.17** |

### Unrecognised compensation cost
As of 31 December 2020, the total unrecognised compensation cost (net of forfeitures) related to non-vested, share-based compensation awards was USD 52 million and the weighted average period over which that cost is expected to be recognised is 1.9 years.

The number of shares authorised for the Group's share-based payments to employees was 3 660 142 and 3 004 148 as of 31 December 2019 and 2020, respectively. The Group's policy is to ensure that sufficient treasury shares are available at all times to settle future share-based compensation plans.

### Global Share Participation Plan
Swiss Re has a Global Share Participation Plan, which is a share purchase plan available to employees of companies within the Group. Swiss Re makes a financial contribution to participants in the plan, by matching the commitment that they make during the plan cycle with additional Swiss Re shares.

If the employee is still employed by Swiss Re at the end of a plan cycle, the employee will receive an additional number of shares equal to 30% of the total number of purchased and dividend shares held at that time. In 2019 and 2020, Swiss Re contributed USD 12 million and USD 11 million to the plans and authorised 169 772 and 178 571 shares as of 31 December 2019 and 2020, respectively.

# 17 Compensation, participations and loans of members of governing bodies

The disclosure requirements under Swiss Law in respect of compensation and loans to the members of the Board of Directors and of the Group Executive Committee, as well as closely related persons, are detailed in the Compensation Report on pages 140–146 of the Financial Report of the Swiss Re Group.

The disclosure requirements under Swiss Law in respect of participations of members of the Board of Directors and the Group Executive Committee, as well as closely related persons, are detailed on pages 304–305 of the Annual Report of Swiss Re Ltd.

# 18 Related parties

The Group defines the following as related parties to the Group: subsidiaries of Swiss Re Ltd, entities in which the Group has significant influence, pension plans, members of the Board of Directors (BoD) and the Group Executive Committee (EC) and their close family members, and entities which are directly and indirectly controlled by members of governing bodies of the Group and their close family members.

As part of the consolidation process, transactions between Swiss Re Ltd and subsidiaries are eliminated in consolidation and are not disclosed in the notes.

Contributions made to defined benefit pension plans and post-retirement benefit plans are disclosed in Note 15 "Benefit plans". Plan assets of the defined benefit pension plans include Swiss Re common stock of USD 3 million (0.04% of total plan assets) and USD 2 million (0.03% of total plan assets) as of 31 December 2019 and 2020, respectively.

The total number of shares, options and related instruments held by members of the BoD and the Group EC and persons closely related to, amounts to less than 1% of the shares issued by Swiss Re Ltd. None of the members of the BoD and the Group EC has any significant business connection with Swiss Re Ltd or any of its Group companies. The Board member Susan L. Wagner is also a board member of BlackRock, Inc. BlackRock, Inc. acts as external asset manager for the Group. The Board member Joachim Oechslin is a senior advisor to Credit Suisse Group AG. Swiss Re has a banking relationship with Credit Suisse. It is also a credit provider, and a named dealer under Swiss Re's Debt Issuance Programme.

Share in earnings and dividends received from equity-accounted investees for the years ended 31 December, were as follows:

| USD millions | 2019 | **2020** |
|---|---|---|
| Share in earnings of equity-accounted investees | 387 | –51 |
| Dividends received from equity-accounted investees | 104 | 124 |

## 19 Commitments and contingent liabilities

As a participant in limited and other investment partnerships, the Group commits itself to making available certain amounts of investment funding, callable by the partnerships for periods of up to ten years. The total commitments remaining uncalled as of 31 December 2020 were USD 1 781 million.

The Group has entered into various real estate construction contracts. The commitments under the contracts amount to USD 127 million over the next six years.

The Group enters into a number of contracts in the ordinary course of reinsurance and financial services business which, if the Group's credit rating and/or defined statutory measures decline to certain levels, would require the Group to post collateral or obtain guarantees. The contracts typically provide alternatives for recapture of the associated business.

### Legal proceedings

In the normal course of business operations, the Group is involved in various claims, lawsuits and regulatory matters. In the opinion of management, the resolution of these matters is not expected to have a material adverse effect on the Group's business, consolidated financial position, results of operations or cash flows.

# 20 Significant subsidiaries and equity investees

| | | Share capital (millions) | Affiliation in % as of 31.12.2020 | Method of consolidation |
|---|---|---|---|---|
| **Europe** | | | | |
| **Germany** | | | | |
| Swiss Re Germany GmbH, Munich | EUR | 45 | 100 | f |
| **Jersey** | | | | |
| Swiss Re Finance Holdings (Jersey) Limited, St Helier | GBP | 0 | 100 | f |
| Swiss Re Finance (Jersey) Limited, St Helier | GBP | 3 | 100 | f |
| Swiss Re Finance Midco (Jersey) Limited, St Helier | GBP | 0 | 100 | f |
| **Liechtenstein** | | | | |
| Elips Life AG, Vaduz | CHF | 12 | 100 | f |
| Elips Versicherungen AG, Vaduz | CHF | 5 | 100 | f |
| **Luxembourg** | | | | |
| iptiQ Life S.A., Luxembourg | EUR | 6 | 100 | f |
| Swiss Pillar Investments Europe SARL, Luxembourg | EUR | 0 | 100 | f |
| Swiss Re Europe Holdings S.A., Luxembourg | EUR | 105 | 100 | f |
| Swiss Re Europe S.A., Luxembourg | EUR | 350 | 100 | f |
| Swiss Re Finance (Luxembourg) S.A., Luxembourg | EUR | 0 | 100 | f |
| Swiss Re Funds (Lux) I, Senningerberg[1] | EUR | 13 772 | 100 | f |
| Swiss Re International SE, Luxembourg | EUR | 182 | 100 | f |
| **Netherlands** | | | | |
| elipsLife EMEA Holding B.V., Hoofddorp | EUR | 0 | 100 | f |
| Swiss Re Life Capital EMEA Holding B.V., Hoofddorp | EUR | 0 | 100 | f |
| **Switzerland** | | | | |
| Swiss Pillar Investments Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Corporate Solutions Ltd, Zurich | CHF | 100 | 100 | f |
| Swiss Re Direct Investments Company Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Investments Company Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Investments Ltd, Zurich | CHF | 1 | 100 | f |
| Swiss Re Life Capital Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Life Capital Management Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Nexus Reinsurance Company Ltd, Zurich | CHF | 10 | 100 | f |
| Swiss Re Management Ltd, Adliswil | CHF | 0 | 100 | f |
| Swiss Re Principal Investments Company Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Re Reinsurance Holding Company Ltd, Zurich | CHF | 0 | 100 | f |
| Swiss Reinsurance Company Ltd, Zurich | CHF | 34 | 100 | f |
| **United Kingdom** | | | | |
| IptiQ Holdings Limited, London | GBP | 0 | 100 | f |
| Swiss Re Finance (UK) Plc., London | GBP | 1 | 100 | f |
| Swiss Re Capital Markets Limited, London | USD | 60 | 100 | f |
| Swiss Re Life Capital Regions Holding Ltd, London | GBP | 0 | 100 | f |
| Swiss Re Services Limited, London | GBP | 2 | 100 | f |

[1] Net asset value instead of share capital.

| | | Share capital (millions) | Affiliation in % as of 31.12.2020 | Method of consolidation |
|---|---|---|---|---|
| **Americas and Caribbean** | | | | |
| **Brazil** | | | | |
| Swiss Re Brasil Resseguros S.A., Sao Paulo | BRL | 295 | 100 | f |
| Swiss Re Corporate Solutions Brasil Seguros S.A., Sao Paulo | BRL | 318 | 60 | f |
| **Cayman Islands** | | | | |
| FWD Group Ltd, Grand Cayman | USD | 1 | 15 | e |
| SRE HL PE 1 LP, George Town | EUR | 156 | 100 | f |
| SREH HL PE 1 LP, George Town | EUR | 213 | 100 | f |
| SRZ HL PE 1 LP, George Town | USD | 190 | 100 | f |
| **Colombia** | | | | |
| Compañía Aseguradora de Fianzas S.A. Confianza, Bogota | COP | 234 203 | 51 | f |
| **United States** | | | | |
| First Specialty Insurance Corporation, Jefferson City | USD | 5 | 100 | f |
| iptiQ Americas Inc., Wilmington | USD | 0 | 100 | f |
| Lumico Life Insurance Company, Jefferson City | USD | 0 | 100 | f |
| North American Capacity Insurance Company, Manchester | USD | 4 | 100 | f |
| North American Elite Insurance Company, Manchester | USD | 4 | 100 | f |
| North American Specialty Insurance Company, Manchester | USD | 5 | 100 | f |
| Pecan Re Inc., Colchester | USD | 5 | 100 | f |
| Pillar RE Holdings LLC, Wilmington | USD | 0 | 100 | f |
| SR Corporate Solutions America Holding Corporation, Wilmington | USD | 0 | 100 | f |
| SRE HL PE 1 (Master) LP, Wilmington | EUR | 155 | 100 | f |
| SREH HL PE 1 (Master) LP, Wilmington | EUR | 213 | 100 | f |
| SRZ HL PE 1 (Master) LP, Wilmington | USD | 190 | 100 | f |
| Swiss Re America Holding Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Re Capital Markets Corporation, New York | USD | 0 | 100 | f |
| Swiss Re Corporate Solutions Global Markets Inc., New York | USD | 0 | 100 | f |
| Swiss Re Financial Markets Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Re Financial Products Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Re Life & Health America Holding Company, Wilmington | USD | 0 | 100 | f |
| Swiss Re Life & Health America Inc., Jefferson City | USD | 4 | 100 | f |
| Swiss Re Life Capital Americas Holding Inc., Wilmington | USD | 0 | 100 | f |
| Swiss Re Management (US) Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Re Property & Casualty America Inc., Kansas City | USD | 1 | 100 | f |
| Swiss Re Risk Solutions Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Re Treasury (US) Corporation, Wilmington | USD | 0 | 100 | f |
| Swiss Reinsurance America Corporation, Armonk | USD | 10 | 100 | f |
| Washington Insurance Corporation, Jefferson City | USD | 4 | 100 | f |
| Westport Insurance Corporation, Jefferson City | USD | 6 | 100 | f |
| Wing Re Inc., Jefferson City | USD | 0 | 100 | f |
| Wing Re II Inc., Jefferson City | USD | 0 | 100 | f |

| | | Share capital (millions) | Affiliation in % as of 31.12.2020 | Method of consolidation |
|---|---|---|---|---|
| **Africa** | | | | |
| **South Africa** | | | | |
| Swiss Re Africa Limited, Cape Town | ZAR | 2 | 100 | f |
| **Asia-Pacific** | | | | |
| **Australia** | | | | |
| Swiss Re Australia Ltd, Sydney | AUD | 845 | 100 | f |
| Swiss Re Life & Health Australia Limited, Sydney | AUD | 980 | 100 | f |
| **China** | | | | |
| Swiss Re Corporate Solutions Insurance China Ltd, Shanghai | CNY | 569 | 100 | f |
| **Singapore** | | | | |
| Swiss Re Asia Holding Pte. Ltd., Singapore | USD | 0 | 100 | f |
| Swiss Re Asia Pte. Ltd., Singapore | USD | 3 002 | 100 | f |
| Swiss Re Principal Investments Company Asia Pte. Ltd., Singapore | USD | 0 | 100 | f |

Significance is defined by the total assets of the subsidiaries and the carrying value of the equity investees in relation to the total assets of the Group. The threshold is set at 0.05%.

**Method of consolidation**

f full

e equity

# 21 Variable interest entities

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

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

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

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

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

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

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

### Insurance-linked securitisations

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

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

### Life and health funding vehicles

The Group participates in certain structured transactions that retrocede longevity and mortality risks to captive reinsurers with an aim to provide regulatory capital credit to a transaction sponsor through the 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 the 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 because the limited partners as a group lack kick-out or participating rights. The Group does not hold the general partner interest in the limited partnerships and therefore does not direct investment activities of the entity. Therefore, the Group lacks power over the relevant activities of the vehicles and, consequently, does not qualify as the primary beneficiary. The Group is exposed to losses when the values of the investments held by the investment vehicles decrease. The Group's maximum exposure to loss equals the Group's share of the investment.

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

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

### Investment vehicles for unit-linked business

Additionally, the Group invests on behalf of the policyholders as a passive investor in a variety of investment funds across various jurisdictions. By design, many of these funds meet a VIE definition. While the Group may have a potentially significant variable interest in some of these entities due to its share of the fund's total net assets, in most cases it does not have power over the fund's investment decisions or unilateral kick-out rights relative to the decision maker.

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

### Senior commercial mortgage and infrastructure loans

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

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

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

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

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

### Other

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

The Group did not provide financial or other support to any VIEs during 2020 that it was not previously contractually required to provide.

## Consolidated VIEs

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

| USD millions | 2019 | 2020 |
|---|---|---|
| Fixed income securities available-for-sale | 3 423 | 3 807 |
| Investment real estate | 143 | |
| Short-term investments | 260 | 59 |
| Investments for unit-linked and with-profit business | 654 | |
| Cash and cash equivalents | 49 | 20 |
| Accrued investment income | 27 | 30 |
| Premiums and other receivables | 31 | 35 |
| Funds held by ceding companies | 1 | 1 |
| Deferred acquisition costs | 3 | 5 |
| Deferred tax assets | 182 | 191 |
| Other assets | 15 | 14 |
| Reclassified to assets held for sale | –812 | |
| **Total assets** | 3 976 | **4 162** |
| | | |
| Unpaid claims and claim adjustment expenses | 55 | 59 |
| Unearned premiums | 12 | 16 |
| Funds held under reinsurance treaties | 4 | 4 |
| Reinsurance balances payable | 21 | 22 |
| Deferred and other non-current tax liabilities | 152 | 166 |
| Accrued expenses and other liabilities | 129 | 18 |
| Long-term debt | 1 918 | 1 926 |
| Reclassified to liabilities held for sale | –114 | |
| **Total liabilities** | 2 177 | **2 211** |

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

## Non-consolidated VIEs

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

| USD millions | 2019 | 2020 |
|---|---|---|
| Fixed income securities available-for-sale | 1 187 | 1 084 |
| Equity securities at fair value through earnings | 113 | 100 |
| Policy loans, mortgages and other loans | 1 735 | 1 518 |
| Other invested assets | 2 160 | 2 359 |
| Investments for unit-linked and with-profit business | 17 131 | 145 |
| Funds held by ceding companies | | 25 |
| Reclassified to assets held for sale | –17 590 | |
| **Total assets** | 4 736 | **5 231** |
| | | |
| Unpaid claims and claim adjustment expenses | | 19 |
| Accrued expenses and other liabilities | 43 | 52 |
| **Total liabilities** | 43 | **71** |

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

| | | | 2019 | | | 2020 |
|---|---|---|---|---|---|---|
| USD millions | Total assets | Total liabilities | Maximum exposure to loss[1] | Total assets | Total liabilities | Maximum exposure to loss[1] |
| Insurance-linked securitisations | 598 | | 627 | 545 | | 381 |
| Life and health funding vehicles | 22 | | 2 300 | 20 | | 2 377 |
| Swaps in trusts | 83 | 43 | –[2] | 14 | 52 | –[2] |
| Investment vehicles | 2 174 | | 2 174 | 2 435 | | 2 435 |
| Investment vehicles for unit-linked business | 17 131 | | | 145 | | |
| Senior commercial mortgage and infrastructure loans | 2 318 | | 2 318 | 2 047 | | 2 047 |
| Other | | | | 25 | 19 | |
| Reclassified to held for sale | –17 590 | | –607 | | | |
| **Total** | 4 736 | 43 | –[2] | **5 231** | **71** | **–[2]** |

[1] Maximum exposure to loss is the loss the Group would absorb from a variable interest in a VIE in the event that all of the assets of the VIE are deemed worthless.
[2] The maximum exposure to loss for swaps in trusts cannot be meaningfully quantified due to their derivative character.

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

This page is intentionally left blank.

# Report of the statutory auditor

## to the General Meeting of Swiss Re Ltd

## Zurich

### Report of the statutory auditor on the consolidated financial statements

As statutory auditor, we have audited the accompanying consolidated financial statements of Swiss Re Ltd and its subsidiaries (the 'Group'), which comprise the income statement and statement of comprehensive income for the year ended 31 December 2020, the balance sheet as at 31 December 2020 and the statement of shareholders' equity and the statement of cash flows for the year then ended, and notes to the Group financial statements (pages 182 to 284).

#### Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (US GAAP) and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

#### Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and auditing standards generally accepted in the United States of America (US GAAS). Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the Group's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control system. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements of the Group for the year ended 31 December 2020 present fairly, in all material respects, the financial position, the results of operations and the cash flows in accordance with accounting principles generally accepted in the United States of America (US GAAP) and comply with Swiss law.

#### Other Matter

Accounting principles generally accepted in the United States of America (US GAAP) requires that the supplementary information based on the requirements of ASU 2015-09, Disclosures about Short-Duration Contracts, on pages 223 to 231 be presented to supplement the consolidated financial statements. Such information, although not part of the consolidated financial statements, is required by the Financial Accounting Standards Board, which considers it an essential part of financial reporting for placing the consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America (US GAAS), which consisted of inquiries of the Group about the methods of preparing the information and comparing the information for consistency with the Group's responses to our inquiries, the consolidated financial statements and other knowledge we obtained during our audit of the consolidated financial statements. We do not express an opinion or provide any assurance on the supplementary information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*PricewaterhouseCoopers Ltd, Birchstrasse 160, Postfach, CH-8050 Zurich, Switzerland*
*Telefon: +41 58 792 44 00, Telefax: +41 58 792 44 10, www.pwc.ch*

## Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

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

### Unobservable or interpolated inputs used for the valuation of certain level 2 and 3 investments

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| Investment valuation continues to be an area with inherent risk for certain level 2 and 3 investments that have unobservable or interpolated inputs. The risk is not the same for all investment types and is greatest for those listed below. These investments are more difficult to value because quoted prices are not always available, and valuation requires unobservable or interpolated inputs and complex valuation models:<br><br>• Fixed income securitised products<br>• Fixed income mortgage and asset-backed securities<br>• Private placements and infrastructure loans<br>• Private equity investments<br>• Derivatives<br>• Insurance-related financial products | We assessed and tested the design and operating effectiveness of selected relevant controls around the valuation models for level 2 and 3 investments, including the Group's independent price verification process. We also tested the Group's data integrity and change management controls relating to the valuation models.<br><br>In relation to the matters set out opposite, our substantive testing procedures included the following:<br><br>• Challenging the Group's methodology and assumptions, in particular, the yield curves, discounted cash flows, perpetual growth rates and liquidity premiums used in the valuation models; comparing these assumptions against appropriate benchmarks; and investigating significant differences.<br>• Engaging our own valuation specialists to perform independent valuations of selected level 2 and 3 investments.<br><br>Based on the work performed, we determined the Group's conclusions with regard to the valuation of these investments to be reasonable. |

### Valuation of Property & Casualty ('P&C') loss reserves

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| The valuation of P&C loss reserves within the unpaid claims and claim adjustment expenses financial statement line item involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date.<br><br>The Group uses a range of actuarial methodologies and methods to estimate these reserves. P&C loss reserves require significant judgment relating to certain factors and assumptions. Among the most significant reserving assumptions are the a-priori loss ratios, which typically drive the estimates of P&C loss reserves for the most recent contract years. Other key factors and assumptions include but are not limited to changes in exposure and business mix as well as inflation trends, claim emergence trends, and legal or regulatory decisions.<br><br>In particular, loss reserves for 'long tail' lines of business (for example, Liability, US Asbestos and Environmental, Motor and Workers' Compensation portfolios) generally require more judgment to estimate. This is due to the protracted period over which claims may be reported and/or settled as well as the fact that claim settlements are often less frequent but of higher magnitude.<br><br>Moreover, losses from natural catastrophe, significant man-made and COVID-19 pandemic events cannot be modelled using traditional actuarial methodologies or available proprietary models, which increases the degree of judgment needed in establishing reserves for these events. The ongoing nature of the COVID-19 pandemic and additional complexity because of unresolved contract coverage issues, notably on property lines, required particular focus and judgment by management. | We assessed and tested the design and operating effectiveness of selected relevant controls relating to the application of the actuarial methodology, data collection and analysis, as well as the processes for determining the assumptions used by the Group in the valuation of P&C loss reserves.<br><br>In relation to the matters set out opposite, our substantive testing procedures included involving our PwC internal actuarial specialists, as appropriate, to perform the following:<br><br>• Testing the completeness and accuracy of underlying data utilised by the Group's actuaries in estimating P&C loss reserves; this includes applying IT audit techniques to validate the claims triangles used by management to develop reserving estimates.<br>• Performing independent projections of selected portfolios. For these portfolios, we compared our calculations of projected reserves with those of the Group taking into account the available corroborating and contrary evidence and challenging the Group's assumptions as appropriate.<br>• Testing the reasonableness of the methodology and assumptions for further selected portfolios by comparing the methodologies and assumptions adopted by the Group with recognised actuarial practices and by applying our industry knowledge and experience.<br>• Assessing the process and related judgments of the Group in relation to natural catastrophes and other large losses, including using our industry knowledge to assess the reasonableness of market loss estimates and other significant assumptions.<br>• Challenging the process followed and related judgments of the Group in relation to COVID-19 pandemic losses to assess the reasonableness of loss estimates.<br>• Where there was significant estimation uncertainty, performing sensitivity tests to determine the impact of selected key assumptions.<br>• Evaluating the appropriateness of any significant adjustments made by the Group to P&C loss reserve estimates.<br><br>Based on the work performed, we determined the Group's conclusions with regard to the valuation of P&C loss reserves to be reasonable. |

### Valuation of actuarially determined liabilities for Life & Health ('L&H') policy benefits

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| The Group's valuation of actuarially determined liabilities for L&H policy benefits involves complex judgments about future events affecting the business.<br><br>Actuarial assumptions selected by the Group, including mortality, morbidity, longevity, and persistency, may result in material impacts on the valuation of liabilities for L&H policy benefits. The methodology and methods used can also have a material impact on the valuation of actuarially determined liabilities for L&H policy benefits. In addition, the impact of the COVID-19 pandemic required additional management judgment, particularly over shorter-term mortality assumptions.<br><br>The valuation of actuarially determined liabilities for L&H policy benefits depends on the use of complex models. The Group continues to migrate actuarial data and models from legacy systems and/or spreadsheets to new actuarial modelling systems. At the same time, the Group is validating models to ensure that new models are fit for use. Moving from one modelling platform to another is a complex and time-consuming process, frequently taking several years. Any resulting adjustments to the liabilities for L&H policy benefits need to be assessed in terms of appropriateness and classified as a change in estimate or as an out-of-period adjustment.<br><br>Furthermore, on a regular basis, the Group enters into large and/or structured transactions which often have material or complex financial reporting and reserving consequences. The reserving for such transactions is subject to increased risk of error due to the non-routine nature of transactions and the judgmental nature of reserving. | We assessed and tested the design and operating effectiveness of selected relevant controls relating to the application of actuarial methodology, data collection and analysis, as well as the processes for determining the assumptions used by the Group in the valuation of actuarially determined liabilities for L&H policy benefits.<br><br>In relation to the matters set out opposite, our substantive testing procedures included involving our PwC internal actuarial specialists, as appropriate, to perform the following, which are applicable for the valuation of both standard and large and/or structured transactions:<br><br>• Testing the completeness and accuracy of the underlying data by vouching against the source documentation.<br>• Testing the migration of actuarial data from legacy systems and/or spreadsheets to the new actuarial systems for completeness and accuracy.<br>• Performing independent model validation procedures, including detailed testing of models, independent recalculations and back testing.<br>• Testing the Group's methodology and methods, focusing on changes to L&H actuarial methodology and methods during the year, by applying our industry knowledge and experience to check whether the methodology and methods are consistent with recognised actuarial practices and reporting requirements.<br>• Testing the reasonableness of L&H assumptions by applying our industry knowledge and experience to check whether the assumptions are consistent with recognised actuarial practices and industry trends.<br>• Challenging the process followed and related judgments of the Group in relation to COVID-19 pandemic losses to assess the reasonableness of loss estimates.<br>• Evaluating the appropriateness of the recognition, accounting, valuation, and disclosures for large and/or structured transactions.<br><br>Based on the work performed, we determined the Group's conclusions with regard to the valuation of actuarially determined liabilities for L&H policy benefits to be reasonable. |

**Valuation of deferred tax assets and completeness and valuation of uncertain tax positions**

| Key audit matter | How our audit addressed the key audit matter |
|---|---|
| The Group operates in various countries and is subject to income taxes in those jurisdictions. The assessment of the valuation of deferred tax assets, resulting from net operating losses and temporary differences, and provisions for uncertain tax positions is based on complex calculations and depends on sensitive and judgmental assumptions made by the Group. These include, amongst others, future profitability and local fiscal regulations and developments.<br><br>Changes in those estimates may have a material impact (through income tax expense) on the Group's results. | We assessed and tested the design and operating effectiveness of selected relevant controls related to the valuation of deferred tax assets and selected relevant controls in place to determine the completeness of the uncertain tax items and the Group's assessment of the items for recognition and valuation.<br><br>In relation to the matters set out opposite, our substantive testing procedures included the following:<br><br>• Involving our own tax specialists to critically review the Group's 'more likely than not' tax assessments and to evaluate the Group's judgments and estimates of the probabilities and the amounts.<br>• Assessing the feasibility of the Group's tax planning measures, including the assessment of forecasted taxable income and any relevant tax rulings that impact the recoverability of deferred tax assets resulting from net operating losses.<br>• Assessing how the Group considered new information or changes in tax law or case law and assessing the Group's judgment of how these impact the Group's position or measurement of the required provision.<br>• Examining tax audit documentation to validate the appropriateness of releases of uncertain tax provisions.<br>• Evaluating the appropriateness of the Group's assessment of completeness of uncertain tax positions.<br>• Examining material movements within uncertain tax positions in each jurisdiction.<br><br>Based on the work performed, we determined the Group's assessments of the valuation of deferred tax assets and the completeness and valuation of uncertain tax positions to be reasonable. |

## Report on other legal requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

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

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

PricewaterhouseCoopers Ltd

Roy Clark

Audit expert
Auditor in charge

Jasmine Chang

Zurich, 17 March 2021

# Group financial years 2011–2020

| USD millions | 2011 | 2012[1] | 2013 |
|---|---|---|---|
| **Income statement** | | | |
| **Revenues** | | | |
| Premiums earned | 21 300 | 24 661 | 28 276 |
| Fee income | 876 | 785 | 542 |
| Net investment income | 5 469 | 5 302 | 4 735 |
| Net realised investment gains/losses | 388 | 2 688 | 3 325 |
| Other revenues | 50 | 188 | 24 |
| **Total revenues** | 28 083 | 33 624 | 36 902 |
| **Expenses** | | | |
| Claims and claim adjustment expenses | –8 810 | –7 763 | –9 655 |
| Life and health benefits | –8 414 | –8 878 | –9 581 |
| Return credited to policyholders | –61 | –2 959 | –3 678 |
| Acquisition costs | –4 021 | –4 548 | –4 895 |
| Other operating costs and expenses | –3 902 | –3 953 | –4 268 |
| **Total expenses** | –25 208 | –28 101 | –32 077 |
| **Income/loss before income tax expense** | 2 875 | 5 523 | 4 825 |
| Income tax expense/benefit | –77 | –1 125 | –312 |
| **Net income/loss before attribution of non-controlling interests** | 2 798 | 4 398 | 4 513 |
| Income/loss attributable to non-controlling interests | –172 | –141 | –2 |
| **Net income/loss after attribution of non-controlling interests** | 2 626 | 4 257 | 4 511 |
| Interest on contingent capital instruments, net of tax | | –56 | –67 |
| **Net income/loss attributable to common shareholders** | 2 626 | 4 201 | 4 444 |
| **Balance sheet** | | | |
| **Assets** | | | |
| Investments | 162 224 | 152 812 | 150 075 |
| Other assets | 63 675 | 68 691 | 63 445 |
| Assets held for sale | | | |
| **Total assets** | 225 899 | 221 503 | 213 520 |
| **Liabilities** | | | |
| Unpaid claims and claim adjustment expenses | 64 878 | 63 670 | 61 484 |
| Liabilities for life and health policy benefits | 39 044 | 36 117 | 36 033 |
| Unearned premiums | 8 299 | 9 384 | 10 334 |
| Other liabilities | 65 850 | 62 020 | 57 970 |
| Long-term debt | 16 541 | 16 286 | 14 722 |
| Liabilities held for sale | | | |
| **Total liabilities** | 194 612 | 187 477 | 180 543 |
| **Shareholders' equity** | 29 590 | 34 002 | 32 952 |
| Non-controlling interests | 1 697 | 24 | 25 |
| **Total equity** | 31 287 | 34 026 | 32 977 |
| Earnings per share in USD | 7.68 | 11.85 | 12.97 |
| Earnings per share in CHF | 6.79 | 11.13 | 12.04 |

[1] The Group updated its balance sheet presentation of deferred tax assets and liabilities. Deferred tax assets and liabilities are presented on a gross basis as per the first quarter 2013. The comparative period has been adjusted accordingly and is consistent with the relevant income tax disclosure in the notes to the financial statements in the prior year.

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | **2020** |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| 30 756 | 29 751 | 32 691 | 33 119 | 33 875 | 37 974 | **40 321** |
| 506 | 463 | 540 | 586 | 586 | 620 | **449** |
| 4 992 | 4 236 | 4 740 | 4 702 | 5 077 | 5 175 | **3 503** |
| 1 059 | 1 220 | 5 787 | 4 048 | –2 530 | 5 515 | **–972** |
| 34 | 44 | 28 | 32 | 39 | 30 | **37** |
| 37 347 | 35 714 | 43 786 | 42 487 | 37 047 | 49 314 | **43 338** |
| | | | | | | |
| –10 577 | –9 848 | –12 564 | –16 730 | –14 855 | –18 683 | **–19 838** |
| –10 611 | –9 080 | –10 859 | –11 083 | –11 769 | –13 087 | **–13 929** |
| –1 541 | –1 166 | –5 099 | –3 298 | 1 033 | –4 633 | **1 760** |
| –6 515 | –6 419 | –6 928 | –6 977 | –6 919 | –7 834 | **–8 236** |
| –3 876 | –3 882 | –3 964 | –3 874 | -3 987 | –4 168 | **–4 185** |
| –33 120 | –30 395 | –39 414 | –41 962 | –36 497 | –48 405 | **–44 428** |
| | | | | | | |
| 4 227 | 5 319 | 4 372 | 525 | 550 | 909 | **–1 090** |
| –658 | –651 | –749 | -132 | –69 | –140 | **266** |
| 3 569 | 4 668 | 3 623 | 393 | 481 | 769 | **–824** |
| | | | | | | |
| | –3 | 3 | 5 | –19 | –42 | **–54** |
| 3 569 | 4 665 | 3 626 | 398 | 462 | 727 | **–878** |
| | | | | | | |
| –69 | –68 | –68 | –67 | –41 | | |
| 3 500 | 4 597 | 3 558 | 331 | 421 | 727 | **–878** |
| | | | | | | |
| | | | | | | |
| 143 987 | 137 810 | 155 016 | 161 897 | 147 302 | 103 746 | **120 693** |
| 60 474 | 58 325 | 60 049 | 60 629 | 60 268 | 60 382 | **61 929** |
| | | | | | 74 439 | |
| 204 461 | 196 135 | 215 065 | 222 526 | 207 570 | 238 567 | **182 622** |
| | | | | | | |
| 57 954 | 55 518 | 57 355 | 66 795 | 67 446 | 72 373 | **81 258** |
| 33 605 | 30 131 | 41 176 | 42 561 | 39 593 | 19 836 | **22 456** |
| 10 576 | 10 869 | 11 629 | 11 769 | 11 721 | 13 365 | **13 309** |
| 53 670 | 55 033 | 59 402 | 56 959 | 51 581 | 23 232 | **26 757** |
| 12 615 | 10 978 | 9 787 | 10 148 | 8 502 | 10 138 | **11 584** |
| | | | | | 68 586 | |
| 168 420 | 162 529 | 179 349 | 188 232 | 178 843 | 207 530 | **155 364** |
| | | | | | | |
| 35 930 | 33 517 | 35 634 | 34 124 | 27 930 | 29 251 | **27 135** |
| | | | | | | |
| 111 | 89 | 82 | 170 | 797 | 1 786 | **123** |
| 36 041 | 33 606 | 35 716 | 34 294 | 28 727 | 31 037 | **27 258** |
| | | | | | | |
| 10.23 | 13.44 | 10.72 | 1.03 | 1.37 | 2.46 | **–3.04** |
| 9.33 | 12.93 | 10.55 | 1.02 | 1.34 | 2.46 | **–2.97** |