Swiss Re

Swiss Reinsurance Company Consolidated

Annual Report 2021

Contents

Group financial statements		**2**
Income statement		**2**
Statement of comprehensive income		**3**
Balance sheet		**6**
Statement of shareholder's equity		**8**
Statement of cash flows		**10**
Notes to the Group financial statements		**12**
Note 1	Organisation and summary of significant accounting policies	12
Note 2	Information on business segments	23
Note 3	Insurance information	35
Note 4	Premiums written	39
Note 5	Unpaid claims and claim adjustment expenses	40
Note 6	Deferred acquisition costs (DAC) and acquired present value of future profits (PVFP)	56
Note 7	Investments	57
Note 8	Fair value disclosures	66
Note 9	Derivative financial instruments	75
Note 10	Disposals	79
Note 11	Assets held for sale	80
Note 12	Debt and contingent capital instruments	81
Note 13	Leases	83
Note 14	Income taxes	84
Note 15	Benefit plans	88
Note 16	Related parties	94
Note 17	Commitments and contingent liabilities	96
Note 18	Variable interest entities	97
Note 19	Subsequent events	101
Report of the statutory auditor		**102**
Swiss Reinsurance Company Ltd		**109**
Annual Report		**109**
Income statement		**116**
Balance sheet		**118**
Notes		**120**
Proposal for allocation of disposable profit/loss		**132**
Report of the statutory auditor		**133**
General Information		
Cautionary note on forward-looking statements		**140**
Note on risk factors		**142**

Income statement

For the years ended 31 December

USD millions	Note	2020[1]	2021
Revenues			
Gross premiums written	4	42 951	**46 658**
Net premiums written	4	39 827	**43 220**
Change in unearned premiums		494	**–753**
Premiums earned	3	40 321	**42 467**
Fee income from policyholders	3	449	**259**
Net investment income – non-participating business[2]	7	3 041	**3 280**
Net realised investment gains/losses – non-participating business[3]	7	1 743	**468**
Net investment result – unit-linked and with-profit business	7	–2 187	**63**
Other revenues		36	**32**
Total revenues		43 403	**46 569**
Expenses			
Claims and claim adjustment expenses	3	–19 839	**–17 181**
Life and health benefits	3	–13 928	**–14 977**
Return credited to policyholders		1 760	**–431**
Acquisition costs	3	–8 236	**–8 228**
Operating expenses		–3 747	**–3 746**
Total expenses before interest expenses		–43 990	**–44 563**
Income/loss before interest and income tax expense/benefit		-587	**2 006**
Interest expenses		–603	**–562**
Income/loss before income tax expense/benefit		–1 190	**1 444**
Income tax expense/benefit	14	192	**–326**
Net income/loss before attribution of non-controlling interests		–998	**1 118**
Income/loss attributable to non-controlling interests		–54	
Net income/loss attributable to common shareholder		–1 052	**1 118**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.
[2] Total impairments for the years ended 31 December of USD 5 million in 2020 and nil in 2021, respectively, were fully recognised in earnings.
[3] Total impairments for the years ended 31 December of USD 27 million in 2020 and of USD 10 million in 2021, respectively, were fully recognised in earnings.

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

Statement of comprehensive income

For the years ended 31 December

USD millions	2020[1]	2021
Net income/loss before attribution of non-controlling interests	–998	**1 118**
Other comprehensive income, net of tax:		
Change in net unrealised investment gains/losses	2 982	**–2 965**
Change in other-than-temporary impairment		**–5**
Change in cash flow hedges	2	
Change in foreign currency translation	–176	**–482**
Change in adjustment for pension benefits	–23	**258**
Change in credit risk of financial liabilities at fair value option	1	
Disposal of ReAssure[2]	–2 080	
Other comprehensive income/loss attributable to non-controlling interests	127	**–16**
Total comprehensive income before attribution of non-controlling interests	–165	**–2 092**
Comprehensive income/loss attributable to non-controlling interests	–181	**16**
Total comprehensive income attributable to common shareholder	–346	**–2 076**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.
[2] 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 sale of ReAssure to Phoenix.

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

2020[1] USD millions	Net unrealised investment gains/losses[2]	Other-than-temporary impairment[2]	Cash flow hedges[2]	Foreign currency translation[2,3]	Adjustment for pension benefits[4]	Credit risk of financial liabilities at fair value option	Accumulated other comprehensive income
Balance as of 1 January	4 786	–1	–2	–4 877	–850	3	–941
Change in group structure	202			–1			201
Amounts reclassified on disposal of ReAssure	–2 133			–13	66		–2 080
Change during the period	5 690		17	–242	–165	1	5 301
Amounts reclassified out of accumulated other comprehensive income	–2 252		–15		138		–2 129
Tax	–658			67	4		–587
Balance as of period end	5 635	–1	0	–5 066	–807	4	–235

2021 USD millions	Net unrealised investment gains/losses[2]	Other-than-temporary impairment[2]	Cash flow hedges[2]	Foreign currency translation[2,3]	Adjustment for pension benefits[4]	Credit risk of financial liabilities at fair value option	**Accumulated other comprehensive income**
Balance as of 1 January	5 635	–1	0	–5 066	–807	4	**–235**
Change during the period	–4 106	–6		–358	257		**–4 213**
Amounts reclassified out of accumulated other comprehensive income	393			–12	70		**451**
Tax	748	1		–112	–69		**568**
Balance as of period end	**2 670**	**–6**	**0**	**–5 548**	**–549**	**4**	**–3 429**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.
[2] Reclassification adjustment included in net income is presented in "Net realised investment gains/losses – non-participating business".
[3] 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.
[4] 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 intentionally left blank.

Balance sheet

ASSETS

As of 31 December

USD millions	Note	2020[1]	2021
Investments	7, 8, 9		
Fixed income securities:			
Available-for-sale (including 7 435 in 2020 and 13 662 in 2021 subject to securities lending and repurchase agreements) (amortised cost: 2020: 74 076; 2021: 82 398)		81 080	**85 685**
Trading (including 1 551 in 2020 and 824 in 2021 subject to securities lending and repurchase agreements)		1 938	**1 300**
Equity securities at fair value through earnings (including 59 in 2020 and 2 in 2021 subject to securities lending and repurchase agreements)		4 592	**3 973**
Policy loans, mortgages and other loans		3 375	**4 003**
Investment real estate		2 602	**2 871**
Short-term investments (including 3 915 in 2020 and 1 383 in 2021 subject to securities lending and repurchase agreements)		15 969	**8 402**
Other invested assets		9 704	**9 313**
Investments for unit-linked and with-profit business (including equity securities at fair value through earnings: 463 in 2020 and 468 in 2021)		463	**468**
Total investments		119 723	**116 015**
Cash and cash equivalents (including 773 in 2020 and 903 in 2021 subject to securities lending)		5 445	**5 006**
Accrued investment income		623	**635**
Premiums and other receivables		15 934	**16 875**
Reinsurance recoverable on unpaid claims and policy benefits		5 892	**6 482**
Funds held by ceding companies		10 726	**12 532**
Deferred acquisition costs	6	8 230	**8 142**
Acquired present value of future profits	6	983	**836**
Goodwill		4 021	**3 970**
Income taxes recoverable		305	**303**
Deferred tax assets	14	5 946	**5 996**
Other assets		3 372	**3 692**
Total assets		181 200	**180 484**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.

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

LIABILITIES AND EQUITY

As of 31 December

USD millions	Note	2020[1]	2021
Liabilities			
Unpaid claims and claim adjustment expenses	5	81 258	**84 096**
Liabilities for life and health policy benefits		22 456	**22 196**
Policyholder account balances		5 192	**5 147**
Unearned premiums		13 309	**14 134**
Funds held under reinsurance treaties		5 146	**6 553**
Reinsurance balances payable		1 097	**1 074**
Income taxes payable		303	**262**
Deferred and other non-current tax liabilities	14	6 641	**6 279**
Short-term debt	12	1 935	**3 026**
Accrued expenses and other liabilities	7	11 094	**8 704**
Long-term debt	12	10 927	**9 741**
Total liabilities		159 358	**161 212**
Equity			
Common shares, CHF 0.10 par value			
2020: 344 052 565; 2021: 344 052 565 shares authorised and issued		32	**32**
Additional paid-in capital		13 003	**12 524**
Treasury shares, net of tax		–17	**–19**
Accumulated other comprehensive income:			
Net unrealised investment gains/losses, net of tax		5 635	**2 670**
Other-than-temporary impairment, net of tax		–1	**–6**
Foreign currency translation, net of tax		–5 066	**–5 548**
Adjustment for pension and other post-retirement benefits, net of tax		–807	**–549**
Credit risk of financial liabilities at fair value option, net of tax		4	**4**
Total accumulated other comprehensive income		–235	**–3 429**
Retained earnings		8 936	**10 054**
Shareholder's equity		21 719	**19 162**
Non-controlling interests		123	**110**
Total equity		21 842	**19 272**
Total liabilities and equity		181 200	**180 484**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.

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

Statement of shareholder's equity

For the years ended 31 December

USD millions	2020[1]	2021
Common shares		
Balance as of 1 January	32	**32**
Issue of common shares		
Balance as of period end	32	**32**
Additional paid-in capital		
Balance as of 1 January	17 572	**13 003**
Reclassification of past dividends[3]	–2 703	
Transactions with non-controlling interests[2]	9	
Capital contribution	1 275	**14**
Dividends on common shares[3]	–3 157	**–500**
Share-based compensation	–2	**12**
Realised gains/losses on treasury shares	9	**–5**
Balance as of period end	13 003	**12 524**
Shares in Swiss Re Ltd, net of tax		
Balance as of 1 January	–19	**–17**
Change in shares in Swiss Re Ltd	2	**–2**
Balance as of period end	–17	**–19**
Net unrealised investment gains/losses, net of tax		
Balance as of 1 January	4 786	**5 635**
Change in group structure	202	
Disposal of ReAssure[2]	–2 133	
Changes during the period	2 780	**–2 965**
Balance as of period end	5 635	**2 670**
Other-than-temporary impairment, net of tax		
Balance as of 1 January	–1	**–1**
Changes during the period		**–5**
Balance as of period end	–1	**–6**
Cash flow hedges, net of tax		
Balance as of 1 January	–2	**0**
Changes during the period	2	
Balance as of period end	0	**0**
Foreign currency translation, net of tax		
Balance as of 1 January	–4 877	**–5 066**
Change in group structure	–1	
Disposal of ReAssure[2]	–13	
Changes during the period	–175	**–482**
Balance as of period end	–5 066	**–5 548**
Adjustment for pension and other post-retirement benefits, net of tax		
Balance as of 1 January	–850	**–807**
Disposal of ReAssure[2]	66	
Changes during the period	–23	**258**
Balance as of period end	–807	**–549**

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

USD millions	2020[1]	2021
Credit risk of financial liabilities at fair value option, net of tax		
Balance as of 1 January	3	**4**
Changes during the period	1	
Balance as of period end	4	**4**
Retained earnings		
Balance as of 1 January	7 674	**8 936**
Change in group structure	–165	
Reclassification of past dividends[3]	2 703	
Transactions under common control	–224	
Net income/loss after attribution of non-controlling interests	–1 052	**1 118**
Balance as of period end	8 936	**10 054**
Shareholder's equity	21 719	**19 162**
Non-controlling interests		
Balance as of 1 January	1 786	**123**
Transactions with non-controlling interests[2]	4	**3**
Income/loss attributable to non-controlling interests	54	
Other comprehensive income attributable to non-controlling interests		
Change in net unrealised investment gains/losses	179	**–5**
Change in foreign currency translation	–53	**–11**
Other	1	
Disposal of ReAssure[2]	–1 848	
Balance as of period end	123	**110**
Total equity	21 842	**19 272**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.
[2] 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 sale of ReAssure to Phoenix.
[3] The Group has revised the presentation of dividends paid. Past dividends paid out of statutory legal reserves from capital contributions were reclassified from retained earnings to additional paid-in capital to more closely align the presentation with the statutory financial statements. The revision has no impact on net income, total shareholder's equity or any related key performance indicators. The comparative figures have been adjusted accordingly.

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

Statement of cash flows

For the years ended 31 December

USD millions	2020[1]	2021
Cash flows from operating activities		
Net income/loss attributable to common shareholder	–1 052	**1 118**
Add income/loss attributable to non-controlling interests	54	
Adjustments to reconcile net income to net cash provided/used by operating activities:		
Depreciation, amortisation and other non-cash items	577	**616**
Net realised investment gains/losses	959	**–509**
Income from equity-accounted investees, net of dividends received	30	**–521**
Change in:		
Technical provisions and other reinsurance assets and liabilities, net	4 734	**4 251**
Funds held by ceding companies and under reinsurance treaties	393	**–400**
Reinsurance recoverable on unpaid claims and policy benefits	214	**–474**
Other assets and liabilities, net	1 908	**–1 051**
Income taxes payable/recoverable	–533	**116**
Trading positions, net	–73	**–254**
Net cash provided/used by operating activities	7 211	**2 892**
Cash flows from investing activities		
Fixed income securities:		
Sales	50 464	**34 378**
Maturities	7 330	**9 700**
Purchases	–52 212	**–53 581**
Net purchases/sales/maturities of short-term investments	–9 610	**7 253**
Equity securities:		
Sales	1 696	**2 094**
Purchases	–1 726	**–1 362**
Securities purchased/sold under agreement to resell/repurchase, net	–1 489	**447**
Cash paid/received for acquisitions/disposals and reinsurance transactions, net	–2 535	**–42**
Net purchases/sales/maturities of other investments	–1 543	**–1 622**
Net purchases/sales/maturities of investments held for unit-linked and with-profit business	1 888	**32**
Net cash provided/used by investing activities	–7 737	**–2 703**
Cash flows from financing activities		
Policyholder account balances for unit-linked and with-profit business:		
Deposits	215	**9**
Withdrawals	–1 630	**–64**
Issuance/repayment of long-term debt	2 236	**1 236**
Issuance/repayment of short-term debt	–2 553	**–1 053**
Purchase/sale of shares in Swiss Re Ltd.	–1	**–2**
Dividends paid to parent	–3 157	**–500**
Capital contribution received from parent	644	**14**
Net cash provided/used by financing activities	–4 246	**–360**

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

USD millions	2020[1]	2021
Total net cash provided/used	–4 772	**–171**
Effect of foreign currency translation	–4	**–268**
Change in cash and cash equivalents	–4 776	**–439**
Cash and cash equivalents as of 1 January	7 492	**5 445**
Cash and cash equivalents as of 1 January classified as assets held for sale	2 729	
Cash and cash equivalents as of 31 December	5 445	**5 006**

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.

Interest paid was USD 583 million and USD 569 million (thereof USD 7 million and USD 8 million for letter of credit fees) for 2020 and 2021, respectively. Tax paid was USD 341 million and USD 210 million for 2020 and 2021, 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 "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.

Notes to the Group financial statements

1 Organisation and summary of significant accounting policies

Nature of operations

The Swiss Reinsurance Company Group, which is headquartered in Zurich, Switzerland, comprises Swiss Reinsurance Company Ltd (the parent company, referred to as "SRZ") and its subsidiaries (collectively, the "Group"). The Group is a wholesale provider of reinsurance, insurance and other insurance-based forms of risk transfer as well as other insurance-related services. 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.

SRZ is a wholly owned subsidiary of Swiss Re Ltd. Swiss Re Ltd is the ultimate parent company of the Swiss Re Group, which consists of three business segments: Property & Casualty Reinsurance, Life & Health Reinsurance, Corporate Solutions.

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.

In the third quarter of 2021, Swiss Re Corporate Solutions Ltd (SRCS) and Swiss Re Life Capital Ltd (SRLC) merged into SRZ. As a result, SRCS and SRLC are included in the financial statements and the comparative information for the year end 2020 has been retrospectively adjusted. The segmental disclosures have been revised to reflect the business newly included within the Group. The reasons for the mergers were to streamline the legal entity structure of the Group and make SRZ the sole direct wholly-owned operating subsidiary of Swiss Re Ltd.

The impacts for the year 2020 were as follow:

	Published year-end 2020	Impact of the mergers (unaudited)	Adjusted year-end 2020
Total revenues	40 037	3 366	43 403
Total expenses before interest expenses	–39 960	–4 030	–43 990
Net income/loss attributable to common shareholders	–438	–614	–1 052
Total comprehensive income attributable to common shareholder	1 969	–2 315	–346
Total investments	108 652	11 071	119 723
Total assets	164 737	16 463	181 200
Total liabilities	145 716	13 642	159 358
Shareholder's equity	17 853	3 866	21 719
Total equity	19 021	2 821	21 842

In addition to the above, the changes to the statement of shareholder's equity were mostly attributed to additional paid-in capital, and the change in other comprehensive income was driven by the sale of ReAssure. The impacts of the mergers in the statement of cash flows have led to a higher net cash used by financing activities, mostly related to a higher net repayment of debt and a higher dividend paid to Swiss Re Ltd.

The Board of Directors of SRZ 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. The adoption is expected to have a material impact on the Group's financial statements.

Principles of consolidation

The Group's financial statements include the consolidated financial statements of SRZ and its subsidiaries. Voting entities which SRZ 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 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 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 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 shareholder's 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 shareholder's 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 2021, 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 shareholder's 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, including interest rates and associated foreign currency impacts. 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 shareholder's 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. Deferred acquisition costs for traditional long-duration contracts are amortised over the life of underlying contracts based upon the present value of gross premiums. Deferred acquisition costs for universal-life type contracts 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.

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. The goodwill is tested for impairment on an annual basis as of 30 September, unless there is an event or circumstances which makes an impairment more likely than not. 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 13 "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. Interest and penalties related to unrecognised tax benefits are recorded in income tax expense.

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 2021, 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, morbidity, 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 acquisition date. The assumptions are based on current best estimates, 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 or morbidity rates are generally based on experience multiples applied to the actuarial select and ultimate tables based on industry experience.

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, 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 reported as fee income. Amounts credited to policyholders are reported 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, which is presented in a separate line item on the face of the income statement.

In unit-linked contracts, the investment risk is borne by the policyholder. 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.

Premium deficiency testing

The level of the premium deficiency test is at the segment level or separate business within Group Items. The testing is performed net of external retrocessions.

For long duration contracts, liabilities for life and health policy benefits are increased with a charge to earnings if there is a premium deficiency. A premium deficiency exists if the liability for future policy benefits calculated using best estimate cash flows, including investment income, is higher than the net GAAP liability. If a premium deficiency exists, the deferred acquisition costs for the related business segment will be expensed to the extent of the deficiency. If the deficiency is greater than the deferred acquisition costs, then an additional liability will be established for the difference. In connection with the premium deficiency testing, an analysis is performed to determine that profits will not be followed by losses. The best estimate cash flows by year along with the change in the locked in GAAP reserve are reviewed to determine that there are not any profits followed by losses. If so, an additional GAAP reserve is established by calculating the portion of future premiums required to be used as an additional reserve to offset the future losses.

For short duration contracts, a premium deficiency exists when the unearned premium plus expected investment income is less than the total of expected claim costs and claim adjustment expenses, related estimated policy maintenance costs (incl. ULAE), related unamortised acquisition costs and expected dividends to policyholders. If a premium deficiency exists, the deferred acquisition costs for the related business segment will be expensed to the extent of the deficiency. If the deficiency is greater than the deferred acquisition cost, then a liability will be established for the difference.

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 shareholder’s equity will ultimately accrue to policyholders and not to the shareholder.

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 2021, the Group has a Leadership Performance Plan (LPP)/Leadership Share Plan (LSP), restricted shares and a Global Share Participation Plan. 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. Total compensation cost for share-based compensation plans recognised in net income was USD 29 million for the year ended 31 December 2021.

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 shareholder's equity. As of 31 December 2021, the accrual for share-based compensation plans in additional paid-in capital was USD 24 million.

Shares in Swiss Re Ltd

Shares in Swiss Re Ltd are reported at cost in shareholder's equity.

Subsequent events

Subsequent events for the current reporting period have been evaluated up to 16 March 2022. This is the date on which the financial statements are available to be issued.

Adoption of new accounting standards

In December 2019, the FASB issued ASU 2019-12, "Simplifying the Accounting for Income Taxes", an update to Topic 740, "Income Taxes". The amendments in this Update simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740 and by clarifying and amending existing guidance, with the added benefit of a reduction in the cost and complexity in accounting for Income Taxes, and an improvement in the usefulness of the information provided to the users of financial statements. The Group adopted the standard on 1 January 2021. The adoption did not have a material impact on the Group's financial statements.

In January 2020, the FASB issued ASU 2020-01, "Clarifying the Interactions between Topic 321, Topic 323, and Topic 815", an update to Topic 321, "Investments – Equity Securities", Topic 323, "Investments – Equity Method and Joint Ventures", and Topic 815 "Derivatives and Hedging". The amendments clarify that an entity should consider observable transactions that result in either applying or discontinuing the equity method of accounting for the purpose of applying the measurement alternative in Topic 321. In addition, the amendments clarify that when determining the accounting for nonderivative forward contracts and purchased options, an entity should not consider whether the underlying securities would be accounted for under the equity method or fair value option upon settlement or exercise, for the purposes of evaluating characteristic (a) in ASC 815-10-15-141. The Group adopted the standard on 1 January 2021. The adoption did not have an impact on the Group's financial statements.

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 2021, the Group applied the guidance to Topic 815 related to the Group's adherence to the ISDA 2020 Fallbacks Protocol, which is a standardized approach for amending contracts in order to incorporate IBOR fallback provisions and 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".

In January 2021, the FASB issued ASU 2021-01, "Scope", an update to Topic 848, "Reference Rate Reform". Because of the broad population of derivatives affected by the market-wide transition to new reference rates (commonly referred to as the "discounting transition"), stakeholders analysed the accounting implications of the discounting transition against the available exceptions and expedients within Topic 848, "Reference Rate Reform", which led them to raise questions about the scope of that Topic. The amendments clarify the scope of Topic 848 and allow entities to apply certain optional provisions in Topic 848 to derivative instruments that undergo a modification of the interest rate used for margining, discounting, or contract price alignment because of the discounting transition that do not also reference LIBOR or another reference rate that is expected to be discontinued as a result of reference rate reform. The Group adopted ASU 2021-01 on a prospective basis from 1 January 2021.

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 SRZ 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.

This page intentionally left blank.

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 three core operating business segments: Property & Casualty Reinsurance, Life & Health Reinsurance and Corporate Solutions. The assignment of assets and liabilities for entities that span over more than one segment is determined by considering local statutory requirements, legal and other constraints, the economic view of duration and currency requirements of the reinsurance business written and the capacity of the segments to absorb risks. Interest expense is based on the segment's capital funding position. The tax impact of a segment is derived from the legal entity tax obligations and the segmentation of the pre-tax result. While most of the tax items can be directly attributed to individual segments, the tax within an entity which impacts two or more segments is allocated to the segments based on the applicable statutory tax rate on pre-tax income or loss with permanent tax differences specifically allocated to the applicable segments. 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- to large-sized 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

As of 1 January 2021, the Life Capital reporting segment ceased to be managed as a separate Business Unit. Life Capital managed the Group's primary life and health business as well as its primary retail property and casualty business. It encompassed the closed and open life and health insurance books, including the ReAssure business sold in 2020 (please refer to Note 10 of the 2020 Annual Report for further details on the disposal of ReAssure Group Plc) and the business comprising elipsLife and iptiQ. In 2021, iptiQ operates as a stand-alone division, and is reported as part of the Group items reporting segment. elipsLife moved to the Corporate Solutions reporting segment. Comparative information for 2020 has been adjusted accordingly. The Life Capital reporting segment for the comparative period 2020 reflects the ReAssure business.

Group items

Group items includes iptiQ, which operates as a standalone division, with results reported within the Group items segment. Group items also includes items not allocated to the business segments, which encompass certain administrative expenses related to non-core activities, Treasury units and reinsurance and insurance business in run-off. iptiQ partners with distributors providing Swiss Re access to risk pools offering white-labelled protection cover in both the life and health as well as property and casualty businesses.

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 and intersegmental funding.

a) Business segments – income statement

For the year ended 31 December

2020[1] USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Revenues							
Gross premiums written	21 512	15 067	6 185	296	915	–1 024	42 951
Net premiums written	20 636	13 657	4 785	108	641		39 827
Change in unearned premiums	196	68	234	3	–7		494
Premiums earned	20 832	13 725	5 019	111	634		40 321
Fee income from policyholders		158		205	86		449
Net investment income – non-participating business	1 178	1 126	156	348	412	–179	3 041
Net realised investment gains/losses – non-participating business	683	439	56	110	455		1 743
Net investment result – unit-linked and with-profit business		–32		–2 155			–2 187
Other revenues	26	4	5			1	36
Total revenues	22 719	15 420	5 236	–1 381	1 587	–178	43 403
Expenses							
Claims and claim adjustment expenses	–16 403		–3 433		–3		–19 839
Life and health benefits		–12 204	–899	–223	–602		–13 928
Return credited to policyholders		5		2 059	–304		1 760
Acquisition costs	–5 104	–1 999	–680	–275	–178		–8 236
Operating expenses	–1 193	–782	–778	–211	–782	–1	–3 747
Total expenses before interest expenses	–22 700	–14 980	–5 790	1 350	–1 869	–1	–43 990
Income/loss before interest and income tax expense/benefit	19	440	–554	–31	–282	–179	–587
Interest expenses	–321	–367	–32	–38	–24	179	–603
Income/loss before income tax expense/benefit	–302	73	–586	–69	–306	0	–1 190
Income tax expense/benefit	–58	–9	124	13	122		192
Net income/loss before attribution of non-controlling interests	–360	64	–462	–56	–184	0	–998
Income/loss attributable to non-controlling interests			–6	–48			–54
Net income/loss attributable to common shareholders	–360	64	–468	–104	–184	0	–1 052
Claims ratio in %	78.8		86.4				80.2
Expense ratio in %	30.2		29.0				30.0
Combined ratio in %	109.0		115.4				110.2
Management expense ratio[2] in %		5.2					
Net operating margin[3] in %	0.1	2.8	–10.6	–4.0			–1.3

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.
[2] 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".
[3] Net operating margin is calculated as "Income/loss before interest and income tax expense/benefit" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

Business segments – income statement

For the year ended 31 December

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Group items	Consolidation	Total
Revenues						
Gross premiums written	23 246	16 071	7 492	795	–946	46 658
Net premiums written	22 381	14 584	5 717	538		43 220
Change in unearned premiums	–455	104	–374	–28		–753
Premiums earned	21 926	14 688	5 343	510		42 467
Fee income from policyholders		180		79		259
Net investment income – non-participating business	1 613	1 032	121	589	–75	3 280
Net realised investment gains/losses – non-participating business	542	279	115	–468		468
Net investment result – unit-linked and with-profit business		63				63
Other revenues	20	3	12	2	–5	32
Total revenues	**24 101**	**16 245**	**5 591**	**712**	**–80**	**46 569**
Expenses						
Claims and claim adjustment expenses	–14 773		–2 374	–38	4	–17 181
Life and health benefits		–13 633	–924	–416	–4	–14 977
Return credited to policyholders		–94		–337		–431
Acquisition costs	–5 359	–2 014	–690	–165		–8 228
Operating expenses	–1 157	–864	–848	–882	5	–3 746
Total expenses before interest expenses	**–21 289**	**–16 605**	**–4 836**	**–1 838**	**5**	**–44 563**
Income/loss before interest and income tax expense/benefit	**2 812**	**–360**	**755**	**–1 126**	**–75**	**2 006**
Interest expenses	–299	–286	–26	–26	75	–562
Income/loss before income tax expense/benefit	**2 513**	**–646**	**729**	**–1 152**	**0**	**1 444**
Income tax expense/benefit	–411	106	–149	128		–326
Net income/loss before attribution of non-controlling interests	**2 102**	**–540**	**580**	**–1 024**	**0**	**1 118**
Income/loss attributable to non-controlling interests	–1		1			0
Net income/loss attributable to common shareholders	**2 101**	**–540**	**581**	**–1 024**	**0**	**1 118**
Claims ratio in %	67.4		61.7			66.3
Expense ratio in %	29.7		28.8			29.5
Combined ratio in %	97.1		90.5			95.8
Management expense ratio[1] in %		5.4				
Net operating margin[2] in %	11.7	–2.2	13.5			4.3

[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/benefit" divided by "Total revenues" excluding "Net investment result – unit-linked and with-profit business".

Business segments – balance sheet

As of 31 December

2020[1] USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Group items	Consolidation	Total
Assets						
Fixed income securities	39 691	32 958	8 522	1 847		83 018
Equity securities	1 518	641	225	2 208		4 592
Other investments	19 391	3 502	149	2 038	–9 399	15 681
Short-term investments	9 216	4 275	2 072	406		15 969
Investments for unit-linked and with-profit business		463				463
Cash and cash equivalents	2 941	1 625	694	185		5 445
Deferred acquisition costs	2 576	4 900	426	328		8 230
Acquired present value of future profits		510		473		983
Reinsurance recoverable	2 030	2 042	6 902	89	–5 171	5 892
Other reinsurance assets	13 003	7 883	3 108	3 861	–1 195	26 660
Goodwill	1 958	1 869	194			4 021
Other	8 649	7 695	2 750	1 410	–10 258	10 246
Total assets	100 973	68 363	25 042	12 845	–26 023	181 200
Liabilities						
Unpaid claims and claim adjustment expenses	55 267	14 863	15 343	953	–5 168	81 258
Liabilities for life and health policy benefits		20 207	747	1 503	–1	22 456
Policyholder account balances		1 303		3 889		5 192
Other reinsurance liabilities	14 570	1 399	4 845	253	–1 515	19 552
Short-term debt	435	1 500		66	–66	1 935
Long-term debt	4 771	12 304	498	813	–7 459	10 927
Other	16 873	9 420	1 078	2 481	–11 814	18 038
Total liabilities	91 916	60 996	22 511	9 958	–26 023	159 358
Shareholder’s equity	9 055	7 367	2 410	2 887	0	21 719
Non-controlling interests	2		121			123
Total equity	9 057	7 367	2 531	2 887	0	21 842
Total liabilities and equity	100 973	68 363	25 042	12 845	–26 023	181 200

[1] In the third quarter of 2021, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd merged into Swiss Reinsurance Company Ltd. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd are included in the financial statements and the comparative information for 2020 has been retrospectively adjusted.

Business segments – balance sheet
As of 31 December

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Group items	Consolidation	Total
Assets						
Fixed income securities	42 762	32 656	9 688	1 879		86 985
Equity securities	2 218	213	254	1 288		3 973
Other investments	19 534	3 658	162	1 979	–9 146	16 187
Short-term investments	4 335	2 294	1 476	297		8 402
Investments for unit-linked and with-profit business		468				468
Cash and cash equivalents	1 932	2 003	858	213		5 006
Deferred acquisition costs	2 538	4 717	480	407		8 142
Acquired present value of future profits		431		405		836
Reinsurance recoverable	2 004	2 289	6 907	114	–4 832	6 482
Other reinsurance assets	15 423	8 314	3 120	3 813	–1 263	29 407
Goodwill	1 903	1 855	182	30		3 970
Other	9 102	9 225	3 137	1 232	–12 070	10 626
Total assets	**101 751**	**68 123**	**26 264**	**11 657**	**–27 311**	**180 484**
Liabilities						
Unpaid claims and claim adjustment expenses	56 883	15 549	15 660	835	–4 831	84 096
Liabilities for life and health policy benefits		20 027	798	1 372	–1	22 196
Policyholder account balances		1 244		3 903		5 147
Other reinsurance liabilities	16 040	1 600	5 317	451	–1 647	21 761
Short-term debt	1 269	1 750		7		3 026
Long-term debt	3 596	12 174	499	1 275	–7 803	9 741
Other	14 628	10 961	1 132	1 553	–13 029	15 245
Total liabilities	**92 416**	**63 305**	**23 406**	**9 396**	**–27 311**	**161 212**
Shareholder's equity	**9 328**	**4 818**	**2 755**	**2 261**	**0**	**19 162**
Non-controlling interests	7		103			110
Total equity	**9 335**	**4 818**	**2 858**	**2 261**	**0**	**19 272**
Total liabilities and equity	**101 751**	**68 123**	**26 264**	**11 657**	**–27 311**	**180 484**

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

For the year ended 31 December

2020 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	–601	–440	–152		–1 193
Total expenses before interest expenses	–9 026	–10 742	–2 932	0	–22 700
Income/loss before interest and income tax expense	–776	–1 133	41	1 887	19
Interest expenses				–321	–321
Income/loss before income tax expense	–776	–1 133	41	1 566	–302
Claims ratio in %	82.2	78.8	68.9		78.8
Expense ratio in %	27.2	33.0	29.8		30.2
Combined ratio in %	109.4	111.8	98.7		109.0

Property & Casualty Reinsurance business segment – by line of business

For the year ended 31 December

2021 USD millions	Property	Casualty	Specialty	Unallocated	Total
Revenues					
Gross premiums written	9 855	10 095	3 296		23 246
Net premiums written	9 102	10 038	3 241		22 381
Change in unearned premiums	–409	100	–146		–455
Premiums earned	8 693	10 138	3 095		21 926
Net investment income				1 613	1 613
Net realised investment gains/losses				542	542
Other revenues				20	20
Total revenues	**8 693**	**10 138**	**3 095**	**2 175**	**24 101**
Expenses					
Claims and claim adjustment expenses	–5 685	–7 372	–1 716		–14 773
Acquisition costs	–1 743	–2 862	–754		–5 359
Operating expenses	–587	–378	–192		–1 157
Total expenses before interest expenses	**–8 015**	**–10 612**	**–2 662**	**0**	**–21 289**
Income/loss before interest and income tax expense	**678**	**–474**	**433**	**2 175**	**2 812**
Interest expenses				–299	–299
Income/loss before income tax expense	**678**	**–474**	**433**	**1 876**	**2 513**
Claims ratio in %	65.4	72.7	55.4		67.4
Expense ratio in %	26.8	32.0	30.6		29.7
Combined ratio in %	92.2	104.7	86.0		97.1

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

For the year ended 31 December

2020* 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	858	268		1 126
Net realised investment gains/losses – non-participating business	54	–12	397	439
Net investment result – unit-linked and with-profit business	–32			–32
Other revenues	3	1		4
Total revenues	10 233	4 790	397	15 420
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	–519	–263		–782
Total expenses before interest expenses	–10 410	–4 570	0	–14 980
Income/loss before interest and income tax expense	–177	220	397	440
Interest expenses			–367	–367
Income/loss before income tax expense	–177	220	30	73
Management expense ratio[1] in %	5.1	5.5		5.2
Net operating margin[2] in %	–1.7	4.6		2.8

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

[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".

Life & Health Reinsurance business segment – by line of business

For the year ended 31 December

2021 USD millions	Life	Health	Unallocated	Total
Revenues				
Gross premiums written	11 318	4 753		16 071
Net premiums written	10 116	4 468		14 584
Change in unearned premiums	46	58		104
Premiums earned	10 162	4 526		14 688
Fee income from policyholders	180			180
Net investment income – non-participating business	811	221		1 032
Net realised investment gains/losses – non-participating business	–3		282	279
Net investment result – unit-linked and with-profit business	63			63
Other revenues	2	1		3
Total revenues	**11 215**	**4 748**	**282**	**16 245**
Expenses				
Life and health benefits	–10 305	–3 328		–13 633
Return credited to policyholders	–94			–94
Acquisition costs	–1 348	–666		–2 014
Operating expenses	–568	–296		–864
Total expenses before interest expenses	**–12 315**	**–4 290**	**0**	**–16 605**
Income/loss before interest and income tax expense	**–1 100**	**458**	**282**	**–360**
Interest expenses			–286	–286
Income/loss before income tax expense	**–1 100**	**458**	**–4**	**–646**
Management expense ratio[1] in %	5.1	6.2		5.4
Net operating margin[2] in %	-9.9	9.6		-2.2

[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) Group items business segment

For the year ended 31 December

2020* USD millions	iptiQ	Other	Total
Revenues			
Gross premiums written	804	111	915
Net premiums written	530	111	641
Change in unearned premiums	–7		–7
Premiums earned	523	111	634
Fee income from policyholders		86	86
Net investment income – non-participating business	37	375	412
Net realised investment gains/losses		455	455
Other revenues			0
Total revenues	560	1 027	1 587
Expenses			
Claims and claim adjustment expenses	–3		–3
Life and health benefits	–431	–171	–602
Return credited to policyholders		–304	–304
Acquisition costs	–95	–83	–178
Operating expenses	–247	–535	–782
Total expenses before interest expenses	–776	–1 093	–1 869
Income/loss before interest and income tax expense/benefit	–216	–66	–282
Interest expenses	–1	–23	–24
Income/loss before income tax expense/benefit	–217	–89	–306
Income tax expense/benefit		122	122
Net income/loss	–217	33	–184

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

Group items business segment
For the year ended 31 December

2021 USD millions	iptiQ	Other	Total
Revenues			
Gross premiums written	723	72	795
Net premiums written	466	72	538
Change in unearned premiums	–28		–28
Premiums earned	438	72	510
Fee income from policyholders		79	79
Net investment income – non-participating business	21	568	589
Net realised investment gains/losses	–4	–464	–468
Other revenues	2		2
Total revenues	**457**	**255**	**712**
Expenses			
Claims and claim adjustment expenses	–38		–38
Life and health benefits	–302	–114	–416
Return credited to policyholders		–337	–337
Acquisition costs	–105	–60	–165
Operating expenses	–290	–592	–882
Total expenses before interest expenses	**–735**	**–1 103**	**–1 838**
Income/loss before interest and income tax expense/benefit	**–278**	**–848**	**–1 126**
Interest expenses	–1	–25	–26
Income/loss before income tax expense/benefit	**–279**	**–873**	**–1 152**
Income tax expense/benefit	32	96	128
Net income/loss	**–247**	**–777**	**–1 024**

e) 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	2020*	2021
Americas	19 462	20 984
Europe (including Middle East and Africa)	12 889	13 543
Asia-Pacific	8 419	8 199
Total	40 770	**42 726**

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

USD millions	2020*	2021
United States	17 130	18 300
United Kingdom	3 793	3 963
Australia	1 865	2 055
China	2 133	1 847
Canada	1 341	1 509
Germany	1 336	1 450
Japan	1 677	1 288
Netherlands	1 325	1 131
France	968	1 022
Switzerland	1 205	990
Ireland	757	813
Other	7 240	8 358
Total	40 770	**42 726**

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

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

3 Insurance information

Premiums earned and fees assessed against policyholders

For the years ended 31 December

2020* USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Total
Premiums earned, thereof:						
Direct			5 245	300	788	6 333
Reinsurance	21 152	14 794	940		81	36 967
Intra-group transactions (assumed and ceded)	418	343	–411	–118	–232	0
Premiums earned before retrocession to external parties	21 570	15 137	5 774	182	637	43 300
Retrocession to external parties	–738	–1 412	–755	–71	–3	–2 979
Net premiums earned	20 832	13 725	5 019	111	634	40 321
Fee income from policyholders, thereof:						
Direct				205		205
Reinsurance		159			86	245
Gross fee income before retrocession to external parties		159		205	86	450
Retrocession to external parties		–1				–1
Net fee income	0	158	0	205	86	449

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Total
Premiums earned, thereof:						
Direct			5 816		624	6 440
Reinsurance	22 057	16 144	1 021		57	39 279
Intra-group transactions (assumed and ceded)	654	9	–501		–162	0
Premiums earned before retrocession to external parties	22 711	16 153	6 336		519	45 719
Retrocession to external parties	–785	–1 465	–993		–9	–3 252
Net premiums earned	**21 926**	**14 688**	**5 343**	**0**	**510**	**42 467**
Fee income from policyholders, thereof:						
Direct						0
Reinsurance		182			79	261
Gross fee income before retrocession to external parties		182			79	261
Retrocession to external parties		–2				–2
Net fee income	**0**	**180**	**0**	**0**	**79**	**259**

Claims and claim adjustment expenses
For the year ended 31 December

2020* 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	−4 031	−1 088	−900	−30 057
Intra-group transactions (assumed and ceded)	−553	−222	553	87	135	0
Claims before receivables from retrocession to external parties	−12 778	−12 035	−3 478	−1 001	−765	−30 057
Retrocession to external parties	416	1 228	520	117	2	2 283
Net claims paid	−12 362	−10 807	−2 958	−884	−763	−27 774
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:						
Gross – with external parties	−4 087	−1 474	−1 057	754	83	−5 781
Intra-group transactions (assumed and ceded)	278	−88	−284	18	76	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties	−3 809	−1 562	−1 341	772	159	−5 781
Retrocession to external parties	−232	165	−33	−111	−1	−212
Net unpaid claims and claim adjustment expenses; life and health benefits	−4 041	−1 397	−1 374	661	158	−5 993
Claims and claim adjustment expenses; life and health benefits	−16 403	−12 204	−4 332	−223	−605	−33 767

Acquisition costs
For the year ended 31 December

2020* 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	−850	−276	−199	−8 710
Intra-group transactions (assumed and ceded)	−68	−24	66	6	20	0
Acquisition costs before impact of retrocession to external parties	−5 210	−2 267	−784	−270	−179	−8 710
Retrocession to external parties	106	268	104	−5	1	474
Net acquisition costs	−5 104	−1 999	−680	−275	−178	−8 236

Claims and claim adjustment expenses

For the year ended 31 December

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Total
Claims paid, thereof:						
Gross claims paid to external parties	–11 818	–13 967	–3 751		–768	–30 304
Intra-group transactions (assumed and ceded)	–561	–75	534		102	0
Claims before receivables from retrocession to external parties	–12 379	–14 042	–3 217		–666	–30 304
Retrocession to external parties	282	1 493	518		2	2 295
Net claims paid	**–12 097**	**–12 549**	**–2 699**	**0**	**–664**	**–28 009**
Change in unpaid claims and claim adjustment expenses; life and health benefits, thereof:						
Gross – with external parties	–2 903	–1 227	–696		179	–4 647
Intra-group transactions (assumed and ceded)	166	70	–265		29	0
Unpaid claims and claim adjustment expenses; life and health benefits before impact of retrocession to external parties	–2 737	–1 157	–961		208	–4 647
Retrocession to external parties	61	73	362		2	498
Net unpaid claims and claim adjustment expenses; life and health benefits	**–2 676**	**–1 084**	**–599**	**0**	**210**	**–4 149**
Claims and claim adjustment expenses; life and health benefits	**–14 773**	**–13 633**	**–3 298**	**0**	**–454**	**–32 158**

Acquisition costs

For the year ended 31 December

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Total
Acquisition costs, thereof:						
Gross acquisition costs with external parties	–5 374	–2 290	–923		–196	–8 783
Intra-group transactions (assumed and ceded)	–112	–4	87		29	0
Acquisition costs before impact of retrocession to external parties	–5 486	–2 294	–836		–167	–8 783
Retrocession to external parties	127	280	146		2	555
Net acquisition costs	**–5 359**	**–2 014**	**–690**	**0**	**–165**	**–8 228**

Reinsurance recoverable on unpaid claims and policy benefits
As of 31 December 2020* and 2021, the Group had a reinsurance recoverable of USD 5 892 million and USD 6 482 million, respectively. The concentration of credit risk is regularly monitored and evaluated. The reinsurance programme with Berkshire Hathaway and subsidiaries accounted for 30% and 26% of the Group's reinsurance recoverable as of year-end 2020 and 2021, respectively.

The Group cedes certain re/insurance contracts to affiliated companies within the Swiss Re Group, but outside of the Group (please refer to Note 16).

Reinsurance receivables
Reinsurance receivables as of 31 December were as follows:

USD millions	2020*	**2021**
Premium receivables invoiced	3 960	4 835
Receivables invoiced from ceded re/insurance business	468	392
Assets arising from the application of the deposit method of accounting and meeting the definition of financing receivables	649	640
Recognised allowance	–73	–80

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 2020* and 2021 was nil. The amount of policyholder dividend expense in 2020* and 2021 was USD 42 million and nil, respectively.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

4 Premiums written

For the years ended 31 December

2020* USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Gross premiums written, thereof:							
Direct			5 229	296	834		6 359
Reinsurance	20 871	14 732	908		81		36 592
Intra-group transactions (assumed)	641	335	48			–1 024	0
Gross premiums written	21 512	15 067	6 185	296	915	–1 024	42 951
Intra-group transactions (ceded)	–48		–589	–117	–270	1 024	0
Gross premiums written before retrocession to external parties	21 464	15 067	5 596	179	645		42 951
Retrocession to external parties	–828	–1 410	–811	–71	–4		–3 124
Net premiums written	20 636	13 657	4 785	108	641	0	39 827

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group items	Consolidation	Total
Gross premiums written, thereof:							
Direct			6 321		738		7 059
Reinsurance	22 424	16 062	1 056		57		39 599
Intra-group transactions (assumed)	822	9	115			–946	0
Gross premiums written	23 246	16 071	7 492		795	–946	46 658
Intra-group transactions (ceded)	–115		–585		–246	946	0
Gross premiums written before retrocession to external parties	23 131	16 071	6 907		549		46 658
Retrocession to external parties	–750	–1 487	–1 190		–11		–3 438
Net premiums written	**22 381**	**14 584**	**5 717**	**0**	**538**	**0**	**43 220**

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	2020*	2021
Balance as of 1 January	72 373	81 258
Balance as of 1 January classified as held for sale	497	
Reinsurance recoverable	–3 732	–3 636
Deferred expense on retroactive reinsurance	–168	–191
Net balance as of 1 January	68 970	**77 431**
Incurred related to:		
Current year	34 064	32 656
Prior year	166	–727
Amortisation of deferred expense on retroactive reinsurance and impact of commutations	–36	8
Total incurred	34 194	31 937
Paid related to:		
Current year	–10 329	–9 570
Prior year	–17 445	–18 439
Total paid	–27 774	–28 009
Foreign exchange	2 149	–1 686
Effect of acquisitions, disposals, new retroactive reinsurance and other items	–108	283
Net balance as of period end	77 431	**79 956**
Reinsurance recoverable	3 636	3 975
Deferred expense on retroactive reinsurance	191	165
Balance as of period end	81 258	**84 096**

Prior-year development

Non-life claims development on prior years in the year ended 31 December 2021 is mainly driven by favourable property experience partly offset by adverse casualty experience. Development in property is principally due to reserve releases related to natural catastrophe events and lower than expected claims activity, mostly in North America and Asia. The deterioration for casualty mainly comes from adverse development for liability in North America and cyber, partly offset by favourable development in workers' compensation. Specialty was impacted by positive claims experience mainly in credit and engineering, partly offset by adverse development in marine and aviation.

For life and health lines of business, development on prior years' unpaid claims in the year ended 31 December 2021 is favourable. For life business, there is favourable development in Continental Europe and the UK. For health business, there is unfavourable development in disability portfolios in the US and Australia driven by adverse experience and strengthening of claim reserves. 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.

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	2020*	**2021**
Line of business:		
Property	–582	–918
Casualty	456	473
Specialty	26	–255
Life and health	266	–27
Total	166	**–727**

[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 2021, the Group carried net reserves for US asbestos and environmental liabilities equal to USD 1 430 million. During 2021, the Group incurred net losses of USD 106 million and net paid losses of USD 102 million in relation to these liabilities. These amounts include unallocated loss adjustment expenses.

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.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

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 been incurred but not yet 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. Loss portfolio transfers are presented prospectively as reliable historical claims information is not always obtainable, or the data is incomplete and of insufficient quality.

In the Property & Casualty Reinsurance segment as well as for the non-life business in the Corporate Solutions segment, 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.

Life & Health contracts that are not expected to remain in force for an extended period are classified as short duration contracts. These provide insurance protection for a fixed short duration and their provisions may be subject to changes at the end of contract period, such as adjustments to the premium charged or the coverage provided. Examples of short duration contracts in the Life & Health Reinsurance segment include group life business, certain types of disability and long-term care contracts, group accident, and 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.

The Group provides no claims development information for the Group items segment as its short duration reserves are not material. This is also the case for Life & Health business in the Corporate Solutions segment, where short duration contracts mainly include disability business.

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

The Corporate Solutions business segment was created in 2012. 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 unpaid 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, and ultimate losses are derived using a blend of initial costing loss ratio and actual reported experience, with more weighting given to experience over time.

The initial reserving estimate uses a loss ratio projection method, where the projected loss ratio is generally the costing loss ratio, reflecting the underwriter's view of the risk. In the case of new information regarding loss trends, rate changes or a different underwriter's estimate, the projected loss ratio can be adjusted if approved by the Regional Reserving Committee. As experience develops, the most common standard reserving methods used are successively the Bornhuetter-Ferguson, Benktander and Chain Ladder methods. The Bornhuetter-Ferguson method assumes that the future claims experience is in line with the one anticipated by the costing loss ratio, used as an a priori loss ratio, and not based on claims experience. The Benktander method is a weighted average of the Bornhuetter-Ferguson and Chain Ladder methods, where the weighted average is linked to the reported development pattern. In other terms, this method mainly follows the Bornhuetter-Ferguson method in the early stages and the Chain Ladder later on, progressively giving more weight to the experience. The Chain Ladder method assumes past trends will be repeated and extrapolates the current position to ultimate using historical development trends.

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, such as an analysis of frequency and severity. 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 41). Reserving for non-traditional business is carried out on a deal-by-deal basis according to each deal's specifications. For large events, a separate process takes into consideration the relevant expertise from underwriting and claims functions in estimating the ultimate loss.

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.

Life and health re/insurance contracts
For the Life & Health business, liability for unpaid claims includes case reserves, IBNR, and provisions for disability income claims-in-payment. Estimates for case reserves allow for expected rates of decline for the not yet settled claims. IBNR claim reserves are calculated using generally accepted actuarial reserving techniques, such as Chain Ladder and Bornhuetter-Ferguson approaches, and assumptions as to the claims reporting patterns, initial expected ultimate claims, and weighting given to historical experience. Liability for disability income claims-in-payment is determined by calculating expected future claim payments using the assumed rate of termination of claims due to death or recovery.

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.

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 recognised 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	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**	**thereof IBNR**
2012	*2 703*	*2 527*	*2 325*	*2 282*	*2 252*	*2 236*	*2 237*	*2 231*	*2 228*	2 225	4
2013		*3 145*	*3 154*	*2 978*	*2 893*	*2 869*	*2 854*	*2 849*	*2 840*	2 860	–2
2014			*2 726*	*2 560*	*2 380*	*2 348*	*2 346*	*2 333*	*2 345*	2 331	–2
2015				*2 838*	*2 767*	*2 596*	*2 563*	*2 522*	*2 504*	2 513	–3
2016					*3 924*	*3 652*	*3 351*	*3 343*	*3 315*	3 339	4
2017						*6 030*	*5 926*	*5 689*	*5 659*	5 637	27
2018							*4 584*	*5 021*	*4 765*	4 687	18
2019								*5 099*	*5 029*	4 850	112
2020	*RSI*[1]								*7 218*	6 949	1 540
2021										5 988	3 043
Total										**41 379**	**4 741**

[1] Unaudited

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	**2021**
2012	*239*	*1 592*	*1 982*	*2 102*	*2 145*	*2 165*	*2 175*	*2 184*	*2 186*	2 191
2013		*542*	*2 004*	*2 510*	*2 704*	*2 764*	*2 786*	*2 801*	*2 815*	2 827
2014			*463*	*1 701*	*2 078*	*2 206*	*2 250*	*2 266*	*2 285*	2 290
2015				*467*	*1 654*	*2 170*	*2 337*	*2 415*	*2 438*	2 459
2016					*646*	*2 224*	*2 857*	*3 068*	*3 153*	3 212
2017						*982*	*3 668*	*4 749*	*5 086*	5 240
2018							*627*	*3 366*	*3 937*	4 091
2019								*923*	*3 176*	3 894
2020	*RSI*[1]								*1 316*	3 805
2021										1 128
Total										**31 137**
All liabilities before 2012										235
Liabilities for claims and claim adjustment expenses, net of reinsurance										**10 477**

[1] Unaudited

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[1])	*17.5%*	*49.8%*	*17.1%*	*5.7%*	*2.4%*	*1.0%*	*0.7%*	*0.4%*	*0.3%*	*0.2%*

[1] Unaudited

The liability for unpaid claims and claim adjustment expenses for property in Property & Casualty Reinsurance shows positive development on most recent accident years. The 2017 - 2021 accident year claims incurred are higher due to natural catastrophes and 2020 was impacted by COVID-19, mainly due to Property Non-Damage Business Interruption and Event Cancellation policies.

Property & Casualty Reinsurance – Liability, proportional

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	2021	thereof IBNR
2012	525	608	564	536	508	517	508	521	520	523	48
2013		734	757	764	759	763	753	751	754	761	75
2014			1 001	991	1 004	993	982	1 017	1 025	1 040	127
2015				1 269	1 317	1 408	1 481	1 553	1 538	1 573	215
2016					1 716	1 723	1 722	1 825	1 875	1 913	465
2017						1 969	2 078	2 220	2 401	2 461	764
2018							1 901	2 080	2 226	2 330	991
2019								2 736	3 104	3 197	1 767
2020	RSI[1]								2 976	3 210	2 328
2021										2 826	2 563
Total										**19 834**	**9 343**

[1] Unaudited

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	2021
2012	14	118	186	245	299	357	392	428	432	443
2013		16	130	237	352	435	510	564	595	617
2014			25	161	297	436	571	667	749	810
2015				37	213	429	659	910	1 089	1 165
2016					49	101	399	667	905	1 088
2017						52	256	548	1 009	1 255
2018							53	312	576	855
2019								86	426	784
2020	RSI[1]								132	409
2021										106
Total										**7 532**
All liabilities before 2012										1 104
Liabilities for claims and claim adjustment expenses, net of reinsurance										**13 406**

[1] Unaudited

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[1])	2.7%	11.2%	13.0%	14.2%	12.1%	10.2%	6.6%	5.6%	1.8%	2.1%

[1] Unaudited

The increase in the incurred losses for accident years 2013 to 2021 is driven by volume increases of business being written. The increases in the incurred losses across accident years in reporting year 2021 are driven by US business with 2020 impacted by COVID-19 from exposures emanating from financial and economic downturn.

Property & Casualty Reinsurance – Liability, non-proportional

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	**2021**	**thereof IBNR**
2012	*332*	*350*	*309*	*281*	*260*	*250*	*226*	*221*	*214*	211	28
2013		*412*	*394*	*357*	*301*	*276*	*254*	*255*	*250*	245	42
2014			*437*	*442*	*410*	*367*	*338*	*357*	*357*	344	80
2015				*1 839*	*1 880*	*1 849*	*1 866*	*1 890*	*1 867*	1 650	108
2016					*592*	*575*	*602*	*649*	*702*	710	132
2017						*492*	*510*	*592*	*642*	744	182
2018							*452*	*456*	*475*	454	198
2019								*2 416*	*2 388*	2 363	411
2020	*RSI*[1]								*841*	822	702
2021										613	561
Total										**8 156**	**2 444**

[1] Unaudited

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	**2021**
2012	*–4*	*11*	*35*	*53*	*84*	*99*	*113*	*128*	*137*	140
2013		*–2*	*11*	*37*	*60*	*83*	*108*	*133*	*144*	162
2014			*–2*	*8*	*40*	*71*	*100*	*141*	*167*	190
2015				*0*	*94*	*203*	*334*	*486*	*592*	660
2016					*13*	*213*	*239*	*292*	*354*	400
2017						*–2*	*18*	*48*	*124*	219
2018							*–1*	*21*	*71*	125
2019								*211*	*499*	670
2020	*RSI*[1]								*10*	31
2021										4
Total										**2 601**
All liabilities before 2012										3 866
Liabilities for claims and claim adjustment expenses, net of reinsurance										**9 421**

[1] Unaudited

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[1])	*0.9%*	*7.9%*	*8.0%*	*9.2%*	*10.5%*	*8.4%*	*7.1%*	*6.1%*	*5.8%*	*1.4%*

[1] Unaudited

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 2020 accident year was impacted by COVID-19 from exposures emanating from financial and economic downturn.

Property & Casualty Reinsurance – Accident & Health

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	**2021**	**thereof IBNR**
2012	*325*	*335*	*320*	*310*	*307*	*301*	*299*	*294*	*286*	283	17
2013		*346*	*354*	*340*	*330*	*323*	*320*	*316*	*304*	300	28
2014			*300*	*334*	*325*	*314*	*303*	*302*	*287*	285	38
2015				*431*	*428*	*406*	*396*	*387*	*367*	363	39
2016					*589*	*623*	*618*	*583*	*577*	559	103
2017						*731*	*765*	*726*	*717*	697	163
2018							*723*	*811*	*807*	780	136
2019								*799*	*791*	777	162
2020	*RSI*[1]								*892*	886	258
2021										805	505
Total										**5 735**	**1 449**

[1] Unaudited

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	**2021**
2012	*78*	*177*	*204*	*220*	*230*	*239*	*243*	*246*	*248*	250
2013		*56*	*141*	*182*	*205*	*218*	*226*	*232*	*237*	242
2014			*30*	*101*	*143*	*171*	*188*	*204*	*211*	216
2015				*60*	*134*	*186*	*219*	*237*	*251*	262
2016					*72*	*175*	*268*	*323*	*352*	370
2017						*95*	*231*	*332*	*391*	425
2018							*97*	*313*	*453*	530
2019								*111*	*327*	455
2020	*RSI*[1]								*119*	369
2021										131
Total										**3 250**
All liabilities before 2012										2 673
Liabilities for claims and claim adjustment expenses, net of reinsurance										**5 158**

[1] Unaudited

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[1])	*15.6%*	*25.6%*	*14.7%*	*8.6%*	*4.8%*	*3.7%*	*2.2%*	*1.5%*	*1.2%*	*0.7%*

[1] Unaudited

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 2020 year impacted by COVID-19 from losses emanating from adverse health impacts. The 2011 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	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**	**thereof IBNR**
2012	*1 540*	*1 530*	*1 513*	*1 501*	*1 491*	*1 490*	*1 487*	*1 487*	*1 490*	1 491	18
2013		*1 598*	*1 573*	*1 578*	*1 551*	*1 544*	*1 540*	*1 539*	*1 540*	1 541	10
2014			*2 077*	*2 037*	*2 035*	*2 017*	*2 007*	*2 004*	*2 002*	2 003	–3
2015				*1 964*	*1 955*	*1 957*	*1 960*	*1 960*	*1 968*	1 972	15
2016					*2 522*	*2 637*	*2 686*	*2 688*	*2 693*	2 706	24
2017						*2 398*	*2 412*	*2 398*	*2 410*	2 421	82
2018							*2 056*	*2 089*	*2 068*	2 064	130
2019								*2 059*	*2 034*	2 068	250
2020	*RSI*[1]								*1 882*	1 931	437
2021										1 915	983
Total										**20 112**	**1 946**

[1] Unaudited

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	**2021**
2012	*497*	*1 150*	*1 316*	*1 366*	*1 397*	*1 418*	*1 430*	*1 440*	*1 446*	1 453
2013		*596*	*1 207*	*1 393*	*1 440*	*1 471*	*1 486*	*1 495*	*1 504*	1 509
2014			*778*	*1 532*	*1 786*	*1 865*	*1 901*	*1 922*	*1 934*	1 940
2015				*819*	*1 467*	*1 715*	*1 818*	*1 864*	*1 889*	1 905
2016					*833*	*1 844*	*2 198*	*2 381*	*2 487*	2 553
2017						*764*	*1 528*	*1 866*	*2 041*	2 158
2018							*622*	*1 338*	*1 584*	1 729
2019								*665*	*1 297*	1 553
2020	*RSI*[1]								*620*	1 190
2021										649
Total										**16 639**
All liabilities before 2012										299
Liabilities for claims and claim adjustment expenses, net of reinsurance										**3 772**

[1] Unaudited

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[1])	*34.3%*	*35.3%*	*12.5%*	*5.2%*	*2.8%*	*1.4%*	*0.7%*	*0.5%*	*0.4%*	*0.5%*

[1] Unaudited

The increase in the incurred losses from accident years 2012 to 2016 is driven by new business volume across all regions with the 2020 accident year seeing mainly indirect (frequency) impacts from 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 on European business.

Property & Casualty Reinsurance – Motor, non-proportional

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	**2021**	**thereof IBNR**
2012	*340*	*357*	*336*	*320*	*321*	*303*	*312*	*307*	*310*	295	39
2013		*439*	*462*	*464*	*447*	*432*	*438*	*437*	*442*	444	62
2014			*413*	*447*	*442*	*441*	*434*	*412*	*409*	404	54
2015				*392*	*415*	*451*	*446*	*459*	*457*	454	67
2016					*474*	*593*	*556*	*550*	*537*	521	91
2017						*586*	*617*	*604*	*611*	603	130
2018							*498*	*539*	*546*	534	143
2019								*1 201*	*1 213*	1 196	205
2020	*RSI*[1]								*526*	528	311
2021										549	437
Total										**5 528**	**1 539**

[1] Unaudited

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	**2021**
2012	*2*	*25*	*50*	*85*	*112*	*137*	*159*	*171*	*178*	184
2013		*7*	*85*	*149*	*195*	*221*	*248*	*265*	*279*	286
2014			*4*	*60*	*105*	*144*	*189*	*218*	*238*	252
2015				*–1*	*34*	*92*	*158*	*204*	*234*	265
2016					*8*	*65*	*126*	*181*	*241*	272
2017						*9*	*59*	*126*	*203*	241
2018							*4*	*36*	*96*	144
2019								*92*	*304*	490
2020	*RSI*[1]								*3*	41
2021										9
Total										**2 184**
All liabilities before 2012										2 849
Liabilities for claims and claim adjustment expenses, net of reinsurance										**6 193**

[1] Unaudited

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])	*1.7%*	*10.8%*	*12.1%*	*11.3%*	*9.0%*	*6.9%*	*5.8%*	*3.6%*	*2.0%*	*2.0%*

[1] Unaudited

The increase in incurred losses for accident year 2019 compared to other years is due to an increase in volume of business written and the 2020 accident year seeing mainly indirect (frequency) impacts from COVID-19.

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.

Property & Casualty Reinsurance – Specialty

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	**2021**	**thereof IBNR**
2012	*951*	*1 008*	*1 028*	*1 011*	*1 010*	*998*	*995*	*990*	*982*	985	9
2013		*1 096*	*1 021*	*982*	*946*	*936*	*914*	*902*	*905*	904	16
2014			*1 107*	*1 096*	*996*	*970*	*955*	*959*	*941*	931	23
2015				*1 250*	*1 222*	*1 205*	*1 195*	*1 194*	*1 215*	1 215	36
2016					*1 292*	*1 278*	*1 229*	*1 230*	*1 214*	1 204	66
2017						*1 617*	*1 537*	*1 408*	*1 375*	1 391	95
2018							*1 649*	*1 738*	*1 707*	1 620	138
2019								*1 757*	*1 918*	2 000	401
2020	*RSI*[1]								*1 839*	1 803	715
2021										1 692	1 113
Total										**13 745**	**2 612**

[1] Unaudited

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	**2021**
2012	*127*	*444*	*680*	*771*	*828*	*871*	*905*	*924*	*930*	936
2013		*148*	*418*	*601*	*711*	*766*	*803*	*826*	*839*	844
2014			*175*	*409*	*589*	*687*	*744*	*783*	*806*	815
2015				*136*	*390*	*694*	*856*	*957*	*1 012*	1 042
2016					*143*	*479*	*724*	*891*	*981*	1 027
2017						*183*	*581*	*863*	*1 029*	1 102
2018							*185*	*647*	*961*	1 116
2019								*280*	*705*	1 029
2020	*RSI*[1]								*302*	655
2021										192
Total										**8 758**
All liabilities before 2012										596
Liabilities for claims and claim adjustment expenses, net of reinsurance										**5 583**

[1] Unaudited

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[1])	*13.8%*	*26.0%*	*20.6%*	*11.5%*	*6.5%*	*4.2%*	*2.7%*	*1.4%*	*0.6%*	*0.6%*

[1] Unaudited

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 2021 accident years, claims incurred is higher due to natural catastrophes, with 2020 accident year impacted by COVID-19, due to higher default probability than expected for Credit & Surety and coverage for Non-Damage Business Interruption for Engineering.

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	**2021**	**thereof IBNR**	**Cumulative number of reported claims (in nominals)**
2012	*1 303*	*1 231*	*1 157*	*1 124*	*1 121*	*1 178*	*1 160*	*1 205*	*1 202*	1 208	31	13 071
2013		*1 602*	*1 581*	*1 511*	*1 427*	*1 424*	*1 414*	*1 387*	*1 400*	1 426	72	26 496
2014			*1 838*	*1 780*	*1 708*	*1 713*	*1 684*	*1 613*	*1 593*	1 596	137	21 798
2015				*1 891*	*2 062*	*2 126*	*2 096*	*1 913*	*1 876*	1 908	141	18 627
2016					*2 016*	*2 103*	*2 142*	*2 132*	*2 125*	2 132	236	17 976
2017						*3 013*	*3 241*	*2 991*	*3 013*	2 975	267	21 061
2018							*2 695*	*2 623*	*2 655*	2 626	388	26 533
2019								*2 793*	*2 639*	2 622	624	22 096
2020	*RSI*[1]								*3 359*	2 856	957	16 714
2021										2 623	1 349	9 196
Total										**21 972**	**4 202**	**193 568**

[1] Unaudited

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	**2021**
2012	*183*	*559*	*721*	*815*	*904*	*976*	*1 009*	*1 039*	*1 061*	1 086
2013		*273*	*669*	*939*	*1 096*	*1 164*	*1 241*	*1 289*	*1 316*	1 334
2014			*272*	*831*	*1 123*	*1 267*	*1 357*	*1 456*	*1 474*	1 504
2015				*351*	*906*	*1 302*	*1 500*	*1 635*	*1 725*	1 748
2016					*369*	*1 139*	*1 391*	*1 660*	*1 734*	1 847
2017						*381*	*1 507*	*2 114*	*2 369*	2 547
2018							*416*	*1 422*	*1 900*	2 093
2019								*526*	*1 228*	1 504
2020	*RSI*[1]								*576*	1 261
2021										329
Total										**15 253**
All liabilities before 2012										372
Liabilities for claims and claim adjustment expenses, net of reinsurance										**7 091**

[1] Unaudited

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

Years	1	2	3	4	5	6	7	8	9	10
Corporate Solutions (RSI[1])	*16.9%*	*31.8%*	*16.5%*	*9.5%*	*5.7%*	*5.5%*	*2.1%*	*2.1%*	*1.5%*	*2.1%*

[1] Unaudited

The current accident year claims burden came back to normality after last year's increase due to COVID-19, which has mainly impacted Property (including Event Cancellation and Business Interruption) and Credit & Surety.

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 1.2 billion 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 2021, there were movements under both the Loss Portfolio Transfer and the Adverse Development Cover mainly in the property and casualty lines of business.

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 47).

Life & Health Reinsurance, long tail

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	**2021**	**thereof IBNR**	**Cumulative number of reported claims (in nominals)**
2012	*269*	*359*	*362*	*386*	*350*	*353*	*350*	*364*	*365*	370	25	9 896
2013		*484*	*476*	*474*	*438*	*437*	*438*	*463*	*462*	455	14	12 628
2014			*474*	*433*	*412*	*413*	*436*	*460*	*468*	465	21	14 701
2015				*405*	*439*	*424*	*425*	*456*	*465*	458	22	17 583
2016					*426*	*442*	*428*	*457*	*472*	462	58	15 272
2017						*434*	*440*	*462*	*484*	461	73	18 238
2018							*404*	*436*	*450*	445	113	18 084
2019								*375*	*457*	405	141	15 171
2020	*RSI*[1]								*175*	140	73	6 640
2021										191	162	3 231
Total										**3 852**	**702**	**131 444**

[1] Unaudited

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	**2021**
2012	*27*	*87*	*139*	*177*	*210*	*232*	*251*	*267*	*281*	291
2013		*37*	*121*	*185*	*245*	*285*	*312*	*333*	*354*	369
2014			*32*	*108*	*197*	*258*	*294*	*323*	*349*	368
2015				*35*	*106*	*187*	*237*	*275*	*309*	334
2016					*13*	*86*	*158*	*211*	*254*	284
2017						*12*	*75*	*161*	*232*	273
2018							*12*	*74*	*161*	212
2019								*12*	*78*	149
2020	*RSI*[1]								*5*	33
2021										5
Total										**2 318**
All liabilities before 2012										300
Liabilities for claims and claim adjustment expenses, net of reinsurance										**1 834**

[1] Unaudited

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[1])	*4.7%*	*16.2%*	*17.0%*	*12.3%*	*8.7%*	*6.4%*	*5.2%*	*4.3%*	*3.5%*	*2.7%*

[1] Unaudited

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

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 which could not be allocated on a consistent basis to disaggregation categories or specific accident years.

As of 31 December

USD millions	2021
Net outstanding liabilities	
Property & Casualty Reinsurance	
Property	10 477
Liability, proportional	13 406
Liability, non-proportional	9 421
Accident & Health	5 158
Motor, proportional	3 772
Motor, non-proportional	6 193
Specialty	5 583
Corporate Solutions	7 091
Life & Health Reinsurance, long tail	1 834
Total net undiscounted outstanding liabilities excluding other short duration contract lines and before unallocated reinsurance recoverable	62 935
Discounting impact on (Life & Health Reinsurance) short duration contracts	–249
Impact of acquisition accounting	–384
Total net discounted outstanding liabilities excluding other short duration contract lines and before unallocated reinsurance recoverable	62 302
Other short duration contract lines	4 331
Total net discounted outstanding short duration liabilities	**66 633**
Allocated reinsurance recoverables on unpaid claims:	
Property & Casualty Reinsurance	
Property	701
Liability, proportional	244
Liability, non-proportional	250
Accident & Health	235
Motor, proportional	45
Motor, non-proportional	204
Specialty	358
Corporate Solutions	5 163
Consolidation	–4 628
Impact of acquisition accounting	–66
Other short duration contract lines	531
Total short duration reinsurance recoverable on outstanding liabilities	**3 037**
Exclusions:	
Unallocated claim adjustment expenses	1 278
Long duration contracts	13 148
Total other reconciling items	**14 426**
Total unpaid claims and claim adjustment expenses	**84 096**

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	2020	**2021**
Carrying amount of discounted claims	1 374	1 103
Aggregate amount of the discount	−311	−249
Interest accretion[1]	29	29
Range of interest rates	3.0−3.2%	3.1−3.2%

[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 2020 and 31 December 2021, the DAC were as follows:

2020* 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	494	657	202	8 495
Deferred	5 016	619	573		142	6 350
Effect of acquisitions/disposals and retrocessions		–2		–595	2	–595
Amortisation	–5 103	–417	–648	–46	–65	–6 279
Effect of foreign currency translation and other changes	50	171	7	–16	47	259
Closing balance	2 576	4 900	426	0	328	8 230

2021 USD millions	Property & Casualty Reinsurance	Life & Health Reinsurance	Corporate Solutions	Life Capital	Group Items	Total
Opening balance as of 1 January	2 576	4 900	426	0	328	8 230
Deferred	5 367	501	738		250	6 856
Effect of acquisitions/disposals and retrocessions		–38				–38
Amortisation	–5 359	–496	–679		–164	–6 698
Effect of foreign currency translation and other changes	–46	–150	–5		–7	–208
Closing balance	**2 538**	**4 717**	**480**	**0**	**407**	**8 142**

Retroceded DAC arise on retrocession of reinsurance portfolios, including reinsurance undertaken as part of a securitisation.

As of 31 December 2020 and 31 December 2021, the PVFP was as follows:

				2020*				**2021**
USD millions	Life & Health Reinsurance	Life Capital	Group Items	Total	Life & Health Reinsurance	Life Capital	Group Items	Total
Opening balance as of 1 January	577	682	519	1 778	510	0	473	983
Effect of acquisitions/disposals and retrocessions		–469		–469	–7			–7
Amortisation	–99	–222	–75	–396	–76		–54	–130
Interest accrued on unamortised PVFP	28	26	37	91	5		37	42
Effect of change in unrealised gains/losses			–8	–8			–51	–51
Effect of foreign currency translation	4	–17		–13	–1			–1
Closing balance	510	0	473	983	**431**	**0**	**405**	**836**

Retroceded PVFP arises on retrocession of reinsurance portfolios, including reinsurance undertaken as part of a securitisation.

The percentage of PVFP which is expected to be amortised in each of the next five years is 14%, 13%, 13%, 12% and 11%.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

7 Investments

Investment income

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

USD millions	2020*	2021
Fixed income securities	2 223	1 768
Equity securities	76	133
Policy loans, mortgages and other loans	128	132
Investment real estate	241	246
Short-term investments	36	19
Other current investments	80	128
Share in earnings of equity-accounted investees	49	717
Cash and cash equivalents	27	5
Net result from deposit-accounted contracts	128	20
Deposits with ceding companies	421	482
Gross investment income	3 409	**3 650**
Investment expenses	–361	–368
Interest charged for funds held	–7	–2
Net investment income – non-participating business	3 041	**3 280**

Dividends received from investments accounted for using the equity method were USD 79 million and USD 196 million for 2020 and 2021, respectively.

Share in earnings of equity-accounted investees included impairments of the carrying amount of equity-accounted investees of USD 5 million and nil for 2020 and 2021, 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	2020*	2021
Fixed income securities available-for-sale:		
Gross realised gains	1 666	573
Gross realised losses	–258	–271
Other-than-temporary impairments	–27	–1
Net realised investment gains/losses on equity securities	–98	58
Change in net unrealised investment gains/losses on equity securities	814	–35
Net realised investment gains/losses on trading securities	86	–53
Change in net unrealised investment gains/losses on trading securities	–33	–102
Net realised/unrealised gains/losses on other investments	40	276
Net realised/unrealised gains/losses on insurance-related activities	40	19
Foreign exchange gains/losses	–242	4
Loss related to sale of ReAssure plc	–245	
Net realised investment gains/losses – non-participating business	1 743	**468**

Net realised/unrealised gains/losses on insurance-related activities included impairments of nil and USD 9 million for 2020 and 2021, 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	2020* Unit-linked	2020* With-profit	2021 Unit-linked	2021 With-profit
Investment income – fixed income securities	29	50		
Investment income – equity securities	401	27	23	
Investment income – other	5	3	–1	
Total investment income – unit-linked and with-profit business	435	80	**22**	**0**
Realised gains/losses – fixed income securities	92	72		
Realised gains/losses – equity securities	–2 566	–283	41	
Realised gains/losses – other	–8	–9		
Total realised gains/losses – unit-linked and with-profit business	–2 482	–220	**41**	**0**
Total net investment result – unit-linked and with-profit business	–2 047	–140	**63**	**0**

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	2020*	2021
Balance as of 1 January	61	46
Credit losses for which an other-than-temporary impairment was not previously recognised	18	5
Reductions for securities sold during the period	–32	–10
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		5
Impact of increase in cash flows expected to be collected	–2	–1
Impact of foreign exchange movements	1	–1
Balance as of 31 December	46	**44**

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:

2020* 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	10 957	652	–18		11 591
US Agency securitised products	6 575	214	–10		6 779
States of the United States and political subdivisions of the states	1 449	243			1 692
United Kingdom	4 242	804	–5		5 041
Germany	3 038	494	–1		3 531
Canada	2 179	223	–13		2 389
France	2 551	570	–1		3 120
China	1 704	23	–6		1 721
Other	10 584	808	–38		11 354
Total	43 279	4 031	–92		47 218
Corporate debt securities	27 652	2 970	–35		30 587
Mortgage- and asset-backed securities	3 145	156	–25	–1	3 275
Fixed income securities available-for-sale	74 076	7 157	–152	–1	81 080

2021 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	15 005	325	–99		15 231
US Agency securitised products	2 981	46	–25		3 002
States of the United States and political subdivisions of the states	1 311	198			1 509
United Kingdom	4 169	356	–62		4 463
Germany	2 758	275	–23		3 010
Canada	2 874	120	–12		2 982
France	2 403	205	–49		2 559
China	2 286	26			2 312
Other	10 613	372	–120		10 865
Total	44 400	1 923	–390		45 933
Corporate debt securities	34 055	1 916	–220	–1	35 750
Mortgage- and asset-backed securities	3 943	90	–24	–7	4 002
Fixed income securities available-for-sale	**82 398**	**3 929**	**–634**	**–8**	**85 685**

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 2020 and 2021.

2020* USD millions	Less than 12 months Fair value	Less than 12 months Unrealised losses	12 months or more Fair value	12 months or more Unrealised losses	Total Fair value	Total Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	1 375	18			1 375	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
Canada	61	8	66	5	127	13
France	41	0	28	1	69	1
China	744	6			744	6
Other	1 749	29	110	9	1 859	38
Total	4 603	76	240	16	4 843	92
Corporate debt securities	1 072	31	148	4	1 220	35
Mortgage- and asset-backed securities	384	7	194	19	578	26
Total	6 059	114	582	39	6 641	153

2021 USD millions	Less than 12 months Fair value	Less than 12 months Unrealised losses	12 months or more Fair value	12 months or more Unrealised losses	Total Fair value	Total Unrealised losses
Debt securities issued by governments and government agencies:						
US Treasury and other US government corporations and agencies	9 635	75	582	24	10 217	99
US Agency securitised products	1 325	24	36	1	1 361	25
States of the United States and political subdivisions of the states	20	0			20	0
United Kingdom	830	24	388	38	1 218	62
Germany	766	21	39	2	805	23
Canada	1 633	10	40	2	1 673	12
France	1 130	45	48	4	1 178	49
China	20	0	39	0	59	0
Other	4 608	72	637	48	5 245	120
Total	19 967	271	1 809	119	21 776	390
Corporate debt securities	12 166	188	702	33	12 868	221
Mortgage- and asset-backed securities	1 349	16	86	15	1 435	31
Total	**33 482**	**475**	**2 597**	**167**	**36 079**	**642**

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 2020* and 2021, USD 20 219 million and USD 25 004 million, respectively, of fixed income securities available-for-sale were callable.

		2020*		2021
USD millions	Amortised cost or cost	Estimated fair value	Amortised cost or cost	Estimated fair value
Due in one year or less	8 808	8 863	6 120	6 143
Due after one year through five years	18 316	19 040	34 790	35 028
Due after five years through ten years	14 564	15 696	13 660	14 171
Due after ten years	30 080	35 035	24 765	27 215
Mortgage- and asset-backed securities with no fixed maturity	2 308	2 446	3 063	3 128
Total fixed income securities available-for-sale	74 076	81 080	**82 398**	**85 685**

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	2020*	2021
Debt securities issued by governments and government agencies	1 907	1 272
Mortgage- and asset-backed securities	31	28
Fixed income securities trading – non-participating business	1 938	**1 300**
Equity securities at fair value through earnings – non-participating business	4 592	**3 973**

Investments held for unit-linked and with-profit business

As of 31 December 2020* and 2021, the carrying amounts of investments held for unit-linked and with-profit business consist of equity securities at fair value through earnings of USD 463 million and of USD 468 million.

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:

		2020*		2021
USD millions	Carrying value	Fair value	Carrying value	Fair value
Policy loans	43	43	34	34
Mortgage loans	1 410	1 458	1 645	1 672
Other loans	1 922	1 966	2 324	2 362
Investment real estate	2 602	5 118	2 871	5 544

Depreciation expense related to investment real estate was USD 67 million and USD 63 million for 2020 and 2021, respectively. Accumulated depreciation on investment real estate totalled USD 779 million and USD 786 million as of 31 December 2020 and 2021, 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. The loans are spread across numerous counterparties largely based in the US and UK with no specific high risk regarding credit concentration.

Maturity of lessor cash flows

As of 31 December 2021, 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	211
Between one year and two years	188
Between two years and three years	158
Between three years and four years	129
Between four years and five years	99
After five years	398
Total cash flows	1 183

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 2020 and 2021 was USD 27 million and USD 25 million.

Other financial assets and liabilities by measurement category

As of 31 December 2020 and 2021, "Other invested assets" and "Accrued expenses and other liabilities" by measurement category were as follows:

2020* 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	369					369
Reverse repurchase agreements			3 002			3 002
Securities lending/borrowing	1 636		281			1 917
Equity-accounted investments	141			1 984		2 125
Other	302	840	1 149			2 291
Other invested assets	2 448	840	4 432	1 984	0	9 704
Accrued expenses and other liabilities						
Derivative financial instruments	673					673
Repurchase agreements			248			248
Securities lending	1 638		183			1 821
Securities sold short	1 255					1 255
Other			1 765		5 332	7 097
Accrued expenses and other liabilities	3 566	0	2 196	0	5 332	11 094

2021 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	296					296
Reverse repurchase agreements			2 336			2 336
Securities lending/borrowing	1 333		122			1 455
Equity-accounted investments	398			2 159		2 557
Other	368	1 325	976			2 669
Other invested assets	**2 395**	**1 325**	**3 434**	**2 159**	**0**	**9 313**
Accrued expenses and other liabilities						
Derivative financial instruments	496					496
Repurchase agreements			11			11
Securities lending	1 334		139			1 473
Securities sold short	980					980
Other			1 336		4 408	5 744
Accrued expenses and other liabilities	**2 810**	**0**	**1 486**	**0**	**4 408**	**8 704**

[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:

2020* 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	1 712	–1 343	369	–40	329
Reverse repurchase agreements	4 945	–1 943	3 002	–3 002	0
Securities borrowing	291	–10	281	–280	1
Total	6 948	–3 296	3 652	–3 322	330

2020* 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	–1 953	1 280	–673	302	–371
Repurchase agreements	–1 891	1 643	–248	248	0
Securities lending	–2 131	310	–1 821	1 652	–169
Total	–5 975	3 233	–2 742	2 202	–540

2021 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	1 503	–1 207	296	–45	**251**
Reverse repurchase agreements	4 398	–2 062	2 336	–2 336	**0**
Securities borrowing	260	–138	122	–122	**0**
Total	**6 161**	**–3 407**	**2 754**	**–2 503**	**251**

2021 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	–1 611	1 115	–496	181	**–315**
Repurchase agreements	–1 778	1 767	–11	11	**0**
Securities lending	–1 906	433	–1 473	1 298	**–175**
Total	**–5 295**	**3 315**	**–1 980**	**1 490**	**–490**

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" and "Accrued expenses and other liabilities".

Assets pledged

As of 31 December 2020* and 2021, investments with a carrying value of USD 5 858 million and USD 5 974 million, respectively, were on deposit with regulatory agencies in accordance with local requirements, of which USD 249 million and USD 244 million, respectively, were cash and cash equivalents. As of 31 December 2020 and 2021, investments with a carrying value of USD 15 424 million and USD 15 006 million, respectively, were placed on deposit or pledged to secure certain reinsurance liabilities, including pledged investments in subsidiaries, of which USD 259 million and USD 119 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 2020* and 2021, investments with a carrying value of USD 799 million and USD 407 million, respectively, were placed on deposit or pledged to secure certain derivative and debt liabilities.

As of 31 December 2020* and 2021, securities of USD 13 733 million and USD 16 774 million, respectively, were transferred to third parties under securities lending transactions and repurchase agreements on a fully collateralised basis. Corresponding liabilities of USD 2 069 million and USD 1 484 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 2020 and 2021, a real estate portfolio with a carrying value of USD 200 million and USD 190 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 2020* and 2021, the fair value of the equity securities, government and corporate debt securities received as collateral was USD 4 891 million and USD 5 496 million, respectively. Of this, the amount that was sold or repledged as of 31 December 2020 and 2021 was USD 1 297 million and USD 952 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 2020 and 2021, 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.

	Remaining contractual maturity of the agreements				
2020 USD millions	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
Equity securities	99				99
Total securities lending	1 277	0	303	551	2 131
Gross amount of recognised liabilities for repurchase agreements and securities lending					4 022

	Remaining contractual maturity of the agreements				
2021 USD millions	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	2	1 614			1 616
Corporate debt securities	2	160			162
Total repurchase agreements	**4**	**1 774**	**0**	**0**	**1 778**
Securities lending					
Debt securities issued by governments and government agencies	794		445	402	1 641
Corporate debt securities	73	139			212
Equity securities	53				53
Total securities lending	**920**	**139**	**445**	**402**	**1 906**
Gross amount of recognised liabilities for repurchase agreements and securities lending					**3 684**

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

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

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 2021, 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 and 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:

2020* 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	4 592				4 592
Equity securities backing unit-linked and with-profit business	463				463
Short-term investments held for proprietary investment purposes	6 735	9 234			15 969
Derivative financial instruments	4	1 476	232	–1 343	369
Interest rate contracts		495			495
Foreign exchange contracts		271			271
Equity contracts	4	700	201		905
Credit contracts		10			10
Other contracts			31		31
Other invested assets	551	1 085	433		2 069
Funds held by ceding companies		172			172
Total assets at fair value	23 609	82 538	1 848	–1 343	106 652
Liabilities					
Derivative financial instruments	–12	–1 600	–341	1 280	–673
Interest rate contracts		–450	–2		–452
Foreign exchange contracts		–435			–435
Equity contracts	–10	–378	–23		–411
Credit contracts		–337			–337
Other contracts	–2		–316		–318
Liabilities for life and health policy benefits			–98		–98
Accrued expenses and other liabilities	–794	–2 099			–2 893
Total liabilities at fair value	–806	–3 699	–439	1 280	–3 664

[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.

2021 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	14 998	70 675	1 312		86 985
Debt securities issued by US government and government agencies	14 998	1 939			16 937
US Agency securitised products		3 100			3 100
Debt securities issued by non-US governments and government agencies		27 168			27 168
Corporate debt securities		34 438	1 312		35 750
Mortgage- and asset-backed securities		4 030			4 030
Equity securities held for proprietary investment purposes	3 353	620			3 973
Equity securities backing unit-linked and with-profit business	468				468
Short-term investments held for proprietary investment purposes	2 435	5 967			8 402
Derivative financial instruments	12	1 406	85	–1 207	296
Interest rate contracts	1	465			466
Foreign exchange contracts		379			379
Equity contracts	9	557	60		626
Credit contracts		5			5
Other contracts	2		25		27
Other invested assets	1 114	486	498		2 098
Funds held by ceding companies		172			172
Total assets at fair value	**22 380**	**79 326**	**1 895**	**–1 207**	**102 394**
Liabilities					
Derivative financial instruments	–2	–1 337	–272	1 115	–496
Interest rate contracts		–460	–2		–462
Foreign exchange contracts		–429			–429
Equity contracts	–1	–354	–9		–364
Credit contracts		–93			–93
Other contracts	–1	–1	–261		–263
Liabilities for life and health policy benefits			–83		–83
Accrued expenses and other liabilities	–1 029	–1 285			–2 314
Total liabilities at fair value	**–1 031**	**–2 622**	**–355**	**1 115**	**–2 893**

[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:

2020* 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	71	2 135	–465	–91	–556
Change in Group structure					118	118			0
Realised/unrealised gains/losses:									
Included in net income[1]	79		14	1	11	105	–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		–21	6		6
Settlements	–48		–11			–59	127		127
Transfers into level 3		204	3		213	420			0
Transfers out of level 3						0			0
Disposals	–945	–204		–134		–1 283	104		104
Impact of foreign exchange movements	43		1	4	1	49	–3		–3
Closing balance as of 31 December	1 183	0	232	0	433	1 848	–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".

2021 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	1 183	0	232	0	433	**1 848**	–341	–98	**–439**
Realised/unrealised gains/losses:									
Included in net income[1]	1		–94		–6	**–99**	121	16	**137**
Included in other comprehensive income[2]	–42					**–42**		–1	**–1**
Purchases	202		3		81	**286**			**0**
Issuances						**0**	–86		**–86**
Sales	–2		–3			**–5**	1		**1**
Settlements	–20		–53			**–73**	33		**33**
Transfers into level 3						**0**			**0**
Transfers out of level 3					–8	**–8**			**0**
Impact of foreign exchange movements	–10				–2	**–12**			**0**
Closing balance as of 31 December	**1 312**	**0**	**85**	**0**	**498**	**1 895**	**–272**	**–83**	**–355**

[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	2020*	**2021**
Gains/losses included in net income for the period	89	38
Whereof change in unrealised gains/losses relating to assets and liabilities still held at the reporting date	5	–13

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	2020* Fair value	2021 Fair value	Valuation technique	Unobservable input	Range (weighted average[1])
Assets					
Corporate debt securities	1 183	**1 312**			
Infrastructure loans	701	779	Discounted cash flow model	Valuation spread	65–305 bps (203 bps)
Private placement corporate debt	440	491	Corporate spread matrix	Credit spread	39–196 bps (99 bps)
Private placement credit tenant leases	42	36	Discounted cash flow model	Illiquidity premium	125–150 bps (146 bps)
Derivative equity contracts	201	**60**			
OTC equity option referencing correlated equity indices	201	60	Proprietary option model	Correlation	–20–50% (33%)
Liabilities					
Derivative equity contracts	–23	**–9**			
OTC equity option referencing correlated equity indices	–23	–9	Proprietary option model	Correlation	–20–95% (39.3%)
Other derivative contracts and liabilities for life and health policy benefits	–414	**–344**			
Variable annuity and fair valued GMDB contracts	–355	–261	Discounted cash flow model	Risk margin	4% (n/a)
				Volatility	10.7–70.8%
				Lapse	1–10 %
				Mortality improvement	0–1.5%
				Withdrawal rate	0–90%
Weather contracts	–30	–66	Proprietary option model	Risk margin	7–18% (13.5%)
				Correlation	–26–48% (–0.7%)
				Volatility (power/gas)	39–179% (120.9%)
				Volatility (temperature)	50–149% (119%) HDD/CAT[2]
				Index value (temperature)	1133–7379 (1508) 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 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	2020* Fair value	2021 Fair value	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Private equity funds	676	1 208	678	non-redeemable	n/a
Hedge funds	2	1		redeemable[1]	90 days[2]
Private equity direct	170	114	110	non-redeemable	n/a
Real estate funds	2	2	15	non-redeemable	n/a
Total	850	**1 325**	**803**		

[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. The Group has applied the fair value option, as the equity risk associated with those contracts is managed on a fair value basis and it is economically hedged with derivative options in the market. The liability is carried at fair value and changes in fair value attributable to instrument-specific credit risk are reported in other comprehensive income and all other changes in fair value are reported as a component of earnings.

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	2020*	2021
Assets		
Other invested assets	9 704	9 313
of which at fair value pursuant to the fair value option	141	398
Funds held by ceding companies	10 726	12 532
of which at fair value pursuant to the fair value option	172	172
Liabilities		
Liabilities for life and health policy benefits	−22 456	−22 196
of which at fair value pursuant to the fair value option	−98	−83

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	2020*	2021
Other invested assets	4	54
Funds held by ceding companies	6	
Liabilities for life and health policy benefits	−8	16
Total	2	**70**

Fair value changes from other invested assets, funds held by ceding companies and funds held under reinsurance treaties are reported in "Net investment income – non-participating business". Fair value changes from the GMDB reserves are shown in "Life and health benefits".

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

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

2020* 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		1 966	1 966
Investment real estate		5 118	5 118
Total assets	0	8 585	8 585
Liabilities			
Debt	–7 858	–7 802	–15 660
Total liabilities	–7 858	–7 802	–15 660

2021 USD millions	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)	Total
Assets			
Policy loans		34	34
Mortgage loans		1 672	1 672
Other loans		2 362	2 362
Investment real estate		5 544	5 544
Total assets	**0**	**9 612**	**9 612**
Liabilities			
Debt	–7 395	–7 458	–14 853
Total liabilities	**–7 395**	**–7 458**	**–14 853**

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.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

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:

2020* 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	31 797	228	–211	17
Equity contracts	22 703	905	–411	494
Credit contracts	14 395	10	–337	–327
Other contracts	9 608	31	–318	–287
Total	99 818	1 659	–1 713	–54
Derivatives designated as hedging instruments				
Interest rate contracts	5 885	10	–16	–6
Foreign exchange contracts	19 017	43	–224	–181
Total	24 902	53	–240	–187
Total derivative financial instruments	124 720	1 712	–1 953	–241
Amount offset				
Where a right of set-off exists		–653	653	
Due to cash collateral		–690	627	
Total net amount of derivative financial instruments		369	–673	–304

2021 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	24 144	433	–409	24
Foreign exchange contracts	31 026	352	–225	127
Equity contracts	17 067	626	–364	262
Credit contracts	9 007	5	–93	–88
Other contracts	8 571	27	–263	–236
Total	**89 815**	**1 443**	**–1 354**	**89**
Derivatives designated as hedging instruments				
Interest rate contracts	5 491	33	–53	–20
Foreign exchange contracts	19 409	27	–204	–177
Total	**24 900**	**60**	**–257**	**–197**
Total derivative financial instruments	**114 715**	**1 503**	**–1 611**	**–108**
Amount offset				
Where a right of set-off exists		–788	788	
Due to cash collateral		–419	327	
Total net amount of derivative financial instruments		**296**	**–496**	**–200**

The notional amounts of derivative financial instruments give an indication of the Group's volume of derivative activity. The fair value assets are included in "Other invested assets", and the fair value liabilities are included in "Accrued expenses and other liabilities". The fair value amounts that were not offset were nil as of 31 December 2020 and 2021.

Non-hedging activities

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

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

USD millions	2020*	2021
Derivatives not designated as hedging instruments		
Interest rate contracts	157	50
Foreign exchange contracts	816	–821
Equity contracts	–130	–209
Credit contracts	–132	–123
Other contracts	87	161
Total gains/losses recognised in income	798	**–942**

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 2020 and 2021, 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:

			2020*			2021
USD millions	Net realised investment gains/losses — non-participating business	Interest expenses	Other comprehensive income — Net unrealised investment gains/losses	Net realised investment gains/losses — non-participating business	Interest expenses	Other comprehensive income — Net unrealised investment gains/losses
Total amounts of income and expense line items	1 743	–603	2 982	468	–562	–2 965
Foreign exchange contracts						
Gains/losses on derivatives	–821			678		
Gains/losses on hedged items	821			–678		
Interest rate contracts						
Gains/losses on derivatives		13			–17	
Gains/losses on hedged items		–15			17	

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:

		2020*		2021
USD millions	Carrying value	Cumulative basis adjustment	Carrying value	Cumulative basis adjustment
Assets				
Fixed income securities available-for-sale	13 109		15 277	
Liabilities				
Short-term debt			–562	1
Long-term debt	–2 064	4	–1 366	20

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. As of 31 December 2021 the Group had no derivative instruments designated as cash flow hedging instruments outstanding.

USD millions	Net realised investment gains/losses — non-participating business	2020* Other comprehensive income — Cash flow hedges
Total amounts of income and expense line items	1 743	2
Foreign exchange contracts		
Gains/losses on derivatives	15[1]	2

[1] 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.

For the years ended 31 December 2020* and 2021, the Group recorded an accumulated net unrealised foreign currency remeasurement gain of USD 717 million and USD 809 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 2020* and 2021 was approximately USD 1 059 million and USD 715 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 71 million and USD 63 million as of 31 December 2020* and 2021, respectively. For derivative financial instruments containing credit risk-related contingent features, the Group posted collateral of USD 48 million and USD 36 million as of 31 December 2020 and 2021, respectively. In the event of a reduction of the Group's credit rating to below investment grade, a fair value of USD 30 million additional collateral would have had to be posted as of 31 December 2021. The total equals the amount needed to settle the instruments immediately as of 31 December 2021.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

10 Disposals

ReAssure Group Plc

On 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 Group received a cash payment of USD 1.6 billion, and shares in Phoenix representing a 13.3% stake. ReAssure's minority shareholder, MS&AD Insurance Group Holdings, Inc. received shares in Phoenix representing a 14.5% stake. The Group sold part of its stake in June 2021 and the remaining stake in January 2022, see Note 19 Subsequent events for further details.

Please refer to Note 10 of the Swiss Re Group 2020 Annual Report for further details on the disposal of ReAssure.

11 Assets held for sale

Elips Life AG

The Group announced on the 10 December 2021, that it has agreed to sell its life insurance subsidiary Elips Life AG (elipsLife), which is part of the Corporate Solutions business segment, to Swiss Life International and to enter into a long-term reinsurance partnership for elipsLife's in-force and new business.

As part of the agreement, Swiss Life will take over elipsLife, excluding the medical business of Elips Versicherungen AG in Ireland, which will remain with the Group. The transaction is expected to close around the middle of 2022, subject to several closing conditions, including regulatory approval and merger control clearance by the applicable authorities.

12 Debt and contingent capital instruments

The Group enters into short- and long-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	2020*	2021
Senior financial debt	1 782	2 464
Senior operational debt	153	
Subordinated financial debt		562
Total short-term debt	1 935	**3 026**
Senior financial debt	3 318	1 957
Senior operational debt	95	99
Subordinated financial debt	5 587	5 826
Subordinated operational debt	1 927	1 859
Total long-term debt	10 927	**9 741**
Total carrying value	12 862	**12 767**
Total fair value	15 660	**14 853**

Maturity of long-term debt

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

USD millions	2020*	2021
Due in 2022	1 356	
Due in 2023	1 245	659
Due in 2024	1 775	1 767
Due in 2025	1 157	1 083
Due in 2026	464	461
Due after 2026	4 930	5 771
Total carrying value	10 927	**9 741**

Senior long-term debt

Maturity	Instrument	Issued in	Currency	Nominal in millions	Interest rate	Book value in USD millions
2023	Senior loans	2021	GBP	167	1.89%	228
2024	EMTN	2014	CHF	250	1.00%	272
2026	Senior notes [1]	1996	USD	397	7.00%	449
2027	EMTN	2015	CHF	250	0.75%	271
2030	Senior notes [1]	2000	USD	193	7.75%	247
2042	Senior notes	2012	USD	500	4.25%	490
Various	Payment undertaking agreements	Various	USD	90	Various	99
Total senior long-term debt as of 31 December 2021						**2 056**
Total senior long-term debt as of 31 December 2020*						3 413

[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 spread callable note	2020	SGD	350	3.18%	2025	258
2043	Subordinated fixed-to-floating rate callable loan	2018	USD	430	5.75%	2033	430
2044	Subordinated fixed rate resettable callable loan note	2014	USD	500	4.50%	2023	499
2049	Subordinated fixed rate resettable step-up callable loan note	2019	USD	1 000	5.00%	2029	992
2050	Subordinated fixed rate resettable step-up callable loan note	2019	EUR	750	2.53%	2030	849
2052	Subordinated private placement (amortising, limited recourse)	2021	EUR	800	2.76%	2032	982
2057	Subordinated private placement (amortising, limited recourse)	2007	GBP	1 372	6.25%		1 858
Perpetual	Subordinated fixed spread callable note	2019	USD	1 000	4.25%	2024	995
Perpetual	Perpetual subordinated fixed-to-floating rate callable loan note	2015	EUR	750	2.60%	2025	822
Total subordinated long-term debt as of 31 December 2021							**7 685**
Total subordinated long-term debt as of 31 December 2020							7 514

Interest expense on long-term debt

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

USD millions	2020*	**2021**
Senior financial debt	85	79
Senior operational debt	7	3
Subordinated financial debt[1]	280	242
Subordinated operational debt	112	119
Total	484	**443**

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 2021

In June 2020, Swiss Re Finance (UK) Plc issued 32-year guaranteed subordinated fixed rate reset step-up callable notes with a face value of EUR 800 million. Swiss Re Finance (UK) Plc on-lent the issuance proceeds to Swiss Reinsurance Company Ltd in March 2021 under a loan agreement on substantially the same terms as the external issuance.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

13 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	2020*	2021
Operating lease right-of-use assets	297	257
Operating lease liabilities	323	283

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	2020*	2021
Less than one year	49	47
Between one year and two years	48	44
Between two years and three years	45	37
Between three years and four years	38	31
Between four years and five years	31	27
After five years	154	140
Total undiscounted cash flows	365	**326**
Less imputed interest	–42	–43
Total lease liability	323	**283**

As of 31 December 2021, undiscounted sublease cash flows over the next ten years were USD 54 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 2020* and 2021 was 2.1% and 2.1%, respectively. The weighted average remaining lease term for operating leases as of 31 December 2020* and 2021 was 10.2 years and 11.3 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	2020*	2021
Fixed operating lease cost	48	46
Other lease cost[1]	4	3
Total operating lease cost	52	**49**
Less sublease income from operating leases	–7	–6
Total lease cost	45	**43**

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

Other information

For the year ended 31 December 2020* and 2021, cash paid for amounts included in the measurement of operating lease liabilities was USD 52 million and USD 48 million, respectively. Right-of-use assets obtained in exchange for new operating lease liabilities in 2020* and 2021 were USD 42 million and USD 13 million, respectively.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

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	2020*	2021
Current taxes	374	197
Deferred taxes	–566	129
Income tax expense	–192	**326**

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	2020*	2021
Income tax at the Swiss statutory tax rate of 19.7% (2020: 21.0%)	–250	284
Increase (decrease) in the income tax charge resulting from:		
Foreign income taxed at different rates	–116	80
Impact of foreign exchange movements	254	–70
Tax exempt income/dividends received deduction	–190	47
Non-deductible expenses	33	31
Change in valuation allowance	–32	–13
Change in statutory rate	10	–13
Basis difference in subsidiaries	142	–25
Intra-entity transfers	77	5
Change in liability for unrecognised tax benefits including interest and penalties	–11	–5
Other income based taxes	–46	9
Other, net[1]	–63	–4
Total	–192	**326**

[1] Other, net includes tax return to tax provision and other prior year adjustments from various jurisdictions in 2020 and 2021 of USD –79 million and USD –10 million, respectively.

For the year ended 31 December 2021, the Group reported a tax expense of USD 326 million on a pre-tax income of USD 1 444 million, compared to a benefit of USD 192 million on a pre-tax loss of USD 1 190 million for 2020*. This translates into an effective tax rate in the current and prior-year reporting periods of 22.6% and 16.1%, respectively.

For the year ended 31 December 2021, the tax rate was largely driven by profits earned in higher tax jurisdictions, tax charges from non-deductible expenses and tax-exempt losses, partially offset by tax benefits from the release of valuation allowance on deferred tax assets and foreign currency translation differences between statutory and US GAAP accounts. The tax rate in the year ended 31 December 2020 was largely driven by tax benefits on losses, tax-exempt income and the release of valuation allowance on deferred tax assets, partially offset by tax charges from intra-entity transfers, basis differences in subsidiaries and foreign currency translation differences between statutory and US GAAP accounts.

Deferred and other non-current taxes

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

USD millions	2020*	2021
Deferred tax assets		
Income accrued/deferred	297	147
Technical provisions	760	1 003
Unearned premium reserve	322	375
Pension provisions	294	221
Benefit on loss carryforwards	2 878	3 026
Currency translation adjustments	506	416
Unrealised gains in income	232	121
Investment valuation in income	166	247
Other	699	662
Gross deferred tax asset	6 154	6 218
Valuation allowance	–210	–195
Unrecognised tax benefits offsetting benefits on loss carryforwards	2	–27
Total deferred tax assets	5 946	**5 996**
Deferred tax liabilities		
Income accrued/deferred	–168	–206
Investment valuation in income	–203	–437
Deferred acquisition costs	–1 062	–1 115
Technical provisions	–1 817	–2 031
Unrealised gains on investments	–1 470	–710
Foreign exchange provisions	–773	–625
Currency translation adjustments	–261	–212
Other	–712	–806
Total deferred tax liabilities	–6 466	**–6 142**
Liability for unrecognised tax benefits including interest and penalties	–175	–137
Total deferred and other non-current tax liabilities	–6 641	**–6 279**

The Group has not recognised deferred tax liabilities or additional foreign withholding tax liabilities for undistributed earnings of its foreign subsidiaries that arose in 2021 and prior where there are current plans to indefinitely reinvest those earnings. The Group has the intent and ability to control all distributions from foreign subsidiaries in a tax efficient manner. Deferred tax liabilities or additional foreign withholding tax liabilities will be recognised if the Group can no longer demonstrate that it plans to indefinitely reinvest the undistributed earnings. As of 31 December 2021, the US GAAP undistributed earnings of these subsidiaries was USD 3.5 billion. Due to the differences in US GAAP and local tax basis of undistributed earnings, it is not practicable to estimate the amount of additional tax liability if these earnings were not indefinitely reinvested.

In 2021, USD 725 million was distributed from a subsidiary where the earnings were planned to be permanently reinvested. No foreign tax withholding liability arose from this distribution and no shareholder tax liability resulted due to the participation tax exemption rules.

As of 31 December 2021, the Group had USD 14 558 million net operating tax loss carryforwards, expiring as follows: USD 3 million in 2022, USD 6 million in 2023, USD 815 million in 2024, USD 410 million in 2025, USD 7 424 million in 2026 and beyond and USD 5 900 million never expire.

As of 31 December 2021, the Group also had capital loss carryforwards of USD 162 million that never expires.

For the year ended 31 December 2021, net operating tax losses of USD 1 945 million and net capital tax losses of USD 24 million were utilised.

The valuation allowance for deferred tax assets as of 31 December 2020 and 2021 was USD 210 million and USD 195 million, respectively. The net change in the valuation allowance for year ended 31 December 2021 was a decrease of USD 15 million, with a USD 12 million decrease driven by balance sheet translation recorded in equity, a USD 13 million decrease from net releases included as tax benefit in income tax from operations, and a USD 10 million increase from tax rate changes included as a tax charge in income tax from operations.

The valuation allowance as of 31 December 2021 was primarily related to loss carryforwards and intangible assets that, in the judgment of management, are not more likely than not to be realised. In assessing the realisability of deferred tax assets, management considers whether it is more likely than not that some or all of the deferred tax assets will not be realised. The ultimate realisation of deferred tax assets depends on the generation of future taxable income during the periods in which those temporary differences are deductible.

Management considers projections of future taxable income and tax planning strategies in making this assessment. Based on the level of historical taxable income and projections of future taxable income over the periods for which the deferred tax assets are deductible, management believes that it is more likely than not that the Group will realise the benefits of these deductible differences, net of the existing valuation allowance as of 31 December 2021. The amount of the deferred tax asset considered realisable, however, could be reduced in the near term if estimates of future taxable income during the carryforward periods are reduced.

Subsequently recognised tax benefits related to the valuation allowance for deferred tax assets as of 31 December 2021 will be allocated entirely to income tax from operations.

Income taxes paid in 2020* and 2021 were USD 336 million and USD 210 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	2020*	2021
Balance as of 1 January	156	137
Additions based on tax positions related to current year	11	9
Additions based on tax positions related to prior years	13	11
Reductions for tax positions of current year	–6	
Reductions for tax positions of prior years	–23	–20
Statute expiration	–5	–2
Settlements	–17	–1
Other (including foreign currency translation)	8	–6
Balance as of 31 December	137	**128**

As of 31 December 2020* and 2021, the amount of gross unrecognised tax benefits within the tabular reconciliation that, if recognised, would affect the effective tax rate were approximately USD 137 million and USD 128 million, respectively.

Interest and penalties related to unrecognised tax benefits are recorded in income tax expense/benefit. For the years ended 31 December 2020* and 2021, such benefit was USD 10 million and nil, respectively. As of 31 December 2020 and 2021, USD 36 million and USD 36 million, respectively, were accrued for the payment of interest (net of tax benefits) and penalties. The accrued interest balance as of 31 December 2021 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 2021 presented in the table above excludes accrued interest and penalties (USD 36 million).

During the year, certain tax positions and audits in 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 decrease by USD 47 million over the next 12 months due to settlements or expiration of statutes. It is also reasonably possible that balance could increase as a result of proposed adjustments by taxing authorities. Quantification of an estimated range of increases cannot be made at this time.

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

Australia	2017–2021
Brazil	2014; 2016–2021
Canada	2014–2021
China	2011–2021
Colombia	2016–2021
Denmark	2015–2021
France	2019–2021
Germany	2017–2021
Hong Kong	2014–2021
India	2004; 2010–2021
Ireland	2016–2021
Israel	2016–2021
Italy	2017–2021
Japan	2019–2021
Korea	2013–2021
Luxembourg	2017–2021
Malaysia	2021
Mexico	2016–2021
Netherlands	2016–2021
New Zealand	2016–2021
Nigeria	2016–2021
Singapore	2017–2021
Slovakia	2016–2021
South Africa	2015–2021
Spain	2017–2021
Switzerland	2017–2021
United Kingdom	2018–2021
United States	2017–2021

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

15 Benefit plans

Defined benefit pension plans and post-retirement benefits

The Group sponsors various funded defined benefit pension plans. Employers 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. Generally 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.

2020* 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

2021 USD millions	Swiss plan	Foreign plans	Other benefits	Total
Benefit obligation as of 1 January	4 750	2 234	360	7 344
Service cost	136	7	4	147
Interest cost		35	4	39
Amendments				0
Actuarial gains/losses	2	–76	–20	–94
Benefits paid	–40	–79	–17	–136
Employee contribution	38			38
Effect of settlement, curtailment and termination	–146			–146
Effect of foreign currency translation	–142	–49	–6	–197
Benefit obligation as of 31 December	**4 598**	**2 072**	**325**	**6 995**
Fair value of plan assets as of 1 January	4 702	2 316	0	7 018
Actual return on plan assets	346	–31		315
Company contribution	112	15	17	144
Benefits paid	–40	–79	–17	–136
Employee contribution	38			38
Effect of settlement, curtailment and termination	–146			–146
Effect of foreign currency translation	–140	–40		–180
Fair value of plan assets as of 31 December	**4 872**	**2 181**	**0**	**7 053**
Funded status	**274**	**109**	**–325**	**58**

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

2020 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

2021 USD millions	Swiss plan	Foreign plans	Other benefits	Total
Non-current assets	274	263		537
Current liabilities		–2	–18	–20
Non-current liabilities		–152	–307	–459
Net amount recognised	**274**	**109**	**–325**	**58**

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

2020* 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

2021 USD millions	Swiss plan	Foreign plans	Other benefits	Total
Net gain/loss	528	263	2	793
Prior service cost/credit	–55	2	–20	–73
Total	**473**	**265**	**–18**	**720**

Components of net periodic benefit cost

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

2020* 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

2021 USD millions	Swiss plan	Foreign plans	Other benefits	Total
Service cost (net of participant contributions)	136	7	4	147
Interest cost		35	4	39
Expected return on assets	–118	–47		–165
Amortisation of:				
Net gain/loss	65	20	1	86
Prior service cost	–15		–15	–30
Effect of settlement, curtailment and termination	14			14
Net periodic benefit cost	**82**	**15**	**–6**	**91**

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

2020* 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

2021 USD millions	Swiss plan	Foreign plans	Other benefits	Total
Net gain/loss	–226	2	–20	–244
Prior service cost/credit				0
Amortisation of:				
Net gain/loss	–65	–20	–1	–86
Prior service cost	15		15	30
Effect of settlement, curtailment and termination	–13			–13
Exchange rate gain/loss recognised during the year		–16		–16
Total recognised in other comprehensive income, gross of tax	**–289**	**–34**	**–6**	**–329**
Total recognised in net periodic benefit cost and other comprehensive income, gross of tax	**–207**	**–19**	**–12**	**–238**

The accumulated benefit obligation (the current value of accrued benefits excluding future salary increases) for pension benefits was USD 6 921 million and USD 6 631 million as of 31 December 2020* and 2021, 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	2020	**2021**
Projected benefit obligation	5 455	523
Fair value of plan assets	5 195	368

USD millions	2020	**2021**
Accumulated benefit obligation	5 413	517
Fair value of plan assets	5 195	367

Principal actuarial assumptions

	Swiss plan		Foreign plans weighted average		Other benefits weighted average	
	2020	**2021**	2020*	**2021**	2020	**2021**
Assumptions used to determine obligations at the end of the year						
Discount rate	0.0%	0.2%	1.6%	2.1%	1.1%	1.5%
Rate of compensation increase	1.8%	1.8%	2.6%	2.9%	2.1%	2.1%
Interest crediting rate	1.8%	1.5%				
Assumptions used to determine net periodic pension costs for the year ended						
Discount rate	0.1%	0.0%	2.1%	1.6%	1.5%	1.1%
Expected long-term return on plan assets	2.5%	2.8%	2.9%	2.2%		
Rate of compensation increase	1.8%	1.8%	2.9%	2.6%	2.1%	2.1%
Interest crediting rate	1.8%	1.8%				
Assumed medical trend rates at year end						
Medical trend – initial rate					4.3%	4.4%
Medical trend – ultimate rate					3.6%	3.7%
Year that the rate reaches the ultimate trend rate					2024	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 2020 and 2021 was as follows:

	Swiss plan allocation			Foreign plans allocation		
	2020	**2021**	**Target allocation**	2020*	**2021**	**Target allocation**
Asset category						
Equity securities	26%	28%	23%	5%	5%	5%
Fixed income securities	37%	36%	47%	75%	68%	87%
Real estate	18%	18%	23%	0%	0%	0%
Other	19%	18%	7%	20%	27%	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 2 million (0.03% of total plan assets) and USD 3 million (0.04% of total plan assets) as of 31 December 2020 and 2021, 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. Tactical allocation decisions that reflect this strategy are made on a quarterly basis, including balancing the investment portfolios between equity and fixed income securities.

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 by level of input were as follows:

	Fair value				
2020* 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

	Fair value				
2021 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	93	1 346			1 439
Corporate debt securities		1 635	9		1 644
RMBS/CMBS/ABS		132			132
Equity securities	1 347	111			1 458
Real estate	25		882		907
Other assets		106		1 248	1 354
Cash and cash equivalents	119				119
Total plan assets	**1 584**	**3 330**	**891**	**1 248**	**7 053**

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:

2020 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

2021 USD millions	Real estate	Other assets	Total
Balance as of 1 January	861	11	872
Realised/unrealised gains/losses:			
Relating to assets still held at the reporting date	33	–1	32
Relating to assets sold during the period			0
Purchases, issuances and settlements	13		13
Transfers in and/or out of level 3			0
Impact of foreign exchange movements	–25	–1	–26
Closing balance as of 31 December	**882**	**9**	**891**

Expected contributions and estimated future benefit payments

The employer contributions expected to be made in 2022 to the defined benefit pension plans are USD 128 million and to the post-retirement benefit plans are USD 18 million.

As of 31 December 2021, 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
2022	272	80	18	370
2023	268	84	18	370
2024	258	86	18	362
2025	256	88	18	362
2026	249	89	18	356
Years 2027–2031	1 134	468	88	1 690

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 2020* and 2021 was USD 84 million and USD 87 million, respectively.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

16 Related parties

The Group conducts various investing activities, including loans, funding agreements and derivatives, with affiliated companies in the Swiss Re Group, but outside the Group. The Group also enters into various financing activities where it borrows funds from affiliated companies in the Swiss Re Group. In addition, the Group enters into various arrangements with affiliated companies in the Swiss Re Group for the provision of services. These activities result in the following related party transactions with the business segment Group items on the income statement and balance sheet:

USD millions	2020*	**2021**
Revenues		
Net investment income – non-participating business	4	5
Net realised investment gains/losses – non-participating business	8	–90
Other revenues		2
Total revenues	12	**–83**
Expenses		
Operating expenses	–1 852	–2 074
Interest expenses	–167	–104
Total expenses	–2 019	**–2 178**

USD millions	2020*	**2021**
Assets		
Policy loans, mortgages and other loans	60	60
Other invested assets	196	94
Other assets	107	92
Total assets	363	**246**
Liabilities		
Short-term debt	1 783	2 164
Long-term debt	2 006	1 898
Accrued expenses and other liabilities	3 806	2 659
Total liabilities	7 595	**6 721**

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

USD millions	2020*	2021
Share in earnings of equity-accounted investees	49	717
Dividends received from equity-accounted investees	79	196

An overview of the financing activities between the Group and affiliated companies is shown below:

	Maturity	Instrument	Issued in	Currency	Nominal in millions	Interest rate	Book value in USD millions
Short-term debt							
	2022	Senior Loan	2018	USD	1 500	0.56%	1 500
	2022	Senior Loan	2020	USD	500	0.78%	500
	2022	Senior Loan	2019	USD	157	0.10%	157
	2022	Senior Loan	2021	USD	7	0.10%	7
Total short-term debt							**2 164**
Long-term debt							
	2023	Senior Loan	2021	GBP	167	1.89%	228
	2052	Subordinated Loan	2021	EUR	800	2.76%	982
	2035	Subordinated Loan	2020	SGD	350	3.18%	258
	2043	Subordinated Loan	2018	USD	430	5.75%	430
Total long-term debt							**1 898**
Total debt as of 31 December 2021							**4 062**

SRZ has entered into subordinated funding facilities with its parent company Swiss Re Ltd under which SRZ has the right, among others, to issue subordinated notes to Swiss Re Ltd at any time. For its various rights, SRZ owes Swiss Re Ltd an unconditional fixed commitment fee on the total facility amount, payable in annual instalments. Annually, SRZ receives a partial reimbursement of the commitment fee on the undrawn facility amount. As of 31 December 2021, the facilities were undrawn.

An overview of the subordinated funding facilities is provided in the following table:

Instrument	Lender	Issued in	Maturity	Currency	Nominal value in millions	Commitment fee (on total facility amount)	Partial reimbursement of commitment fee (on undrawn amount)
Subordinated funding facility	Swiss Re Ltd	2015	2030	USD	700	5.80%	2.22%
Subordinated funding facility	Swiss Re Ltd	2016	2036	USD	400	6.10%	2.13%
Subordinated funding facility	Swiss Re Ltd	2016	2032	USD	800	5.68%	1.95%

None of the members of the Board of Directors and the Group EC has any significant business connection with the Group or any of its Group companies. The Board member Susan L. Wagner is also a board member of BlackRock, Inc., which provides technology and asset management services to the Group. The Board member Joachim Oechslin served on an interim basis as a member of the Executive Board of Credit Suisse Group AG in 2021 and continues to serve as a Senior Advisor to Credit Suisse Group AG. The Group has a business relationship with Credit Suisse. It is also a credit provider, and a named dealer under the Group's Debt Issuance Programme.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

17 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 2021 were USD 1 548 million.

The Group has entered into various real estate construction contracts. The commitments under the contracts amount to USD 83 million over the next six years.

The Group enters into a number of contracts in the ordinary course of re/insurance 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.

18 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, it never has power over the fund's investment decisions or unilateral kick-out rights relative to the decision maker.

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

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

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

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

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

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

Other

The Group consolidates a vehicle providing reinsurance to its members, because it serves as a decision maker over the entity's investment and underwriting activities, 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 the event 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 2021 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	2020	**2021**
Fixed income securities available-for-sale	3 807	3 362
Short-term investments	59	42
Cash and cash equivalents	19	76
Accrued investment income	30	29
Premiums and other receivables	35	22
Funds held by ceding companies	1	4
Deferred acquisition costs	5	7
Deferred tax assets	180	121
Other assets	14	19
Total assets	4 150	**3 682**
Unpaid claims and claim adjustment expenses	59	89
Unearned premiums	16	25
Funds held under reinsurance treaties	4	4
Reinsurance balances payable	22	24
Deferred and other non-current tax liabilities	155	104
Accrued expenses and other liabilities	18	7
Long-term debt	1 926	1 859
Total liabilities	2 200	**2 112**

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	2020*	2021
Fixed income securities available-for-sale	1 322[1]	1 465
Equity securities at fair value through earnings	100	114
Policy loans, mortgages and other loans	1 518	1 774
Other invested assets	1 977	2 805
Investments for unit-linked business	145	142
Funds held by ceding companies	25	
Total assets	5 087	**6 300**
Unpaid claims and claim adjustment expenses	19	
Accrued expenses and other liabilities	52	35
Total liabilities	71	**35**

[1] The Group has revised the scope of its insurance-linked securitisations holdings. The revision had no impact on net income or shareholders' equity. The comparatives have been adjusted accordingly.

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:

			2020*			2021
USD millions	Total assets	Total liabilities	Maximum exposure to loss[1]	Total assets	Total liabilities	Maximum exposure to loss[1]
Insurance-linked securitisations	783[3]		796[3]	837		855
Life and health funding vehicles	20		2 377	16		2 392
Swaps in trusts	14	52	–[2]	60	35	–[2]
Investment vehicles	2 053		2 053	2 859		2 859
Investment vehicles for unit-linked business	145			142		
Senior commercial mortgage and infrastructure loans	2 047		2 047	2 386		2 386
Other	25	19				
Total	5 087	71	–[2]	**6 300**	**35**	**–[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.
[3] The Group has revised the scope of its insurance-linked securitisations holdings. The revision had no impact on net income or shareholders' equity. The comparatives have been adjusted accordingly.

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.

* The 2020 comparative information has been retrospectively adjusted to reflect the impacts of the merger of SRCS, SRLC and SRZ. Please refer to Note 1 for more information.

19 Subsequent events

Sale of stake in Phoenix Group Holdings Plc.
In January 2022, Swiss Re sold its remaining 6.6% stake in Phoenix Group Holdings Plc.

The Group financial statements and related notes presented in this report are not impacted by the sale.

Military conflict in Ukraine
The military conflict unfolding in Ukraine, and the resulting trade and economic sanctions, are likely to have geopolitical, economic, business and financial asset implications that are difficult to predict at this stage. Group's exposures linked to the military conflict are being monitored and evaluated.

Statutory Auditor's Report

To the General Meeting of Swiss Reinsurance Company Ltd, Zurich

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Swiss Reinsurance Company Ltd and its subsidiaries (the Group), which comprise the consolidated balance sheet as of 31 December 2021 and the related consolidated income statement, statement of comprehensive income, statement of shareholders' equity, and statement of cash flows for the year then ended, and the related notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements (pages 2 to 101) present fairly, in all material respects, the financial position of the Group as of 31 December 2021, and the results of its operations and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles and comply with Swiss law.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group, and have fulfilled our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit, which include relevant ethical requirements in the United States of America, with the provisions of Swiss law and the requirements of the Swiss audit profession. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority

VALUATION OF LEVEL 3 INVESTMENTS

VALUATION OF LIFE AND HEALTH RESERVES

VALUATION OF PROPERTY AND CASUALTY RESERVES

VALUATION OF DEFERRED TAX ASSETS ON LOSS CARRYFORWARDS

MERGER OF SWISS RE CORPORATE SOLUTIONS LTD, AND SWISS RE LIFE CAPITAL LTD WITH SWISS REINSURANCE COMPANY LTD

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

VALUATION OF LEVEL 3 INVESTMENTS

Key Audit Matter

The Group has recorded Level 3 investments held at fair value of $1,540 million as of 31 December 2021. Level 3 investments are included in the fixed income securities, other invested assets, and accrued expenses and other liabilities line items on the consolidated balance sheet.

Level 3 investments, including fixed income securities (private placements and infrastructure loans), derivatives, and other invested assets, trade infrequently and therefore have little or no price transparency. The Group's estimation of fair value relies on unobservable assumptions, such as liquidity or credit considerations. The determination of these unobservable assumptions requires subjectivity and judgment as these assumptions are generally not based on market activity. Unobservable assumptions, such as liquidity or credit considerations, among others, are based on internal estimates. The greater the number of unobservable assumptions used, the greater the amount of judgment used to determine the estimate.

The valuation of Level 3 investments has been designated as a key audit matter due to the increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge. Auditing the unobservable inputs for Level 3 investments required a high degree of auditor judgment.

Our response

As part of our audit, we gained an understanding of the process related to the valuation of certain Level 3 investments. Further, we tested the design and implementation of certain key controls within the process, including the independent price verification and impairment analyses.

We tested the completeness, and accuracy of the data used in the fair value estimation by reconciling to source information.

We involved our valuation specialists with specialized skills and knowledge, as applicable, who assisted the audit team in:

- Assessing the pricing methodologies with reference to relevant accounting standards, and industry practice.
- Developing an independent estimate for a selection of securities, and comparison of the independent estimate to the Group's fair value estimate.
- Evaluating the assumptions used to determine the fair value of other investments by comparing to industry benchmarks.

For further information on the valuation of Level 3 financial instruments refer to the following:

- Note 1
- Note 7
- Note 8

VALUATION OF LIFE AND HEALTH RESERVES

Key Audit Matter

The Group has recorded life and health reserves of $45,628 million as of 31 December 2021. Life, and health reserves are included in the life and health

Our response

As part of our audit, we gained an understanding of the process related to the valuation of life and health reserves. Further, we tested the design and related unpaid claims and claim adjustment expenses, liabilities for life and health policy benefits, and policyholder account balances line items on the consolidated balance sheet (collectively, life and health reserves).

The determination or revision of assumptions requires subjectivity and judgment as these assumptions are generally not based on observable market inputs. These assumptions include mortality, morbidity, withdrawals, persistency (lapse), benefit termination rates and lag factors. Additional uncertainties related to the mortality assumption have arisen due to the on-going Coronavirus pandemic.

The valuation of life and health reserves has been designated as a key audit matter given the material nature of the balance and the significant estimation uncertainty and complexity of the mortality, morbidity, withdrawals, persistency (lapse), benefit termination rates and lag factors. Auditing the estimate involved a high degree of auditor judgment and increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge.

implementation of certain key controls within the process, including the independent actuarial peer review and reserving committee level reviews.

We tested the completeness, and accuracy of the underlying policyholder contract data by reconciling to source information.

We involved our actuarial specialists with specialized skills, and knowledge, as applicable, who assisted the audit team in:

- Evaluating the methods applied to select the mortality, morbidity, persistency (lapse), benefit termination rates and lag factor assumptions by comparing them to generally accepted actuarial techniques;
- Challenging the selected mortality, morbidity, persistency (lapse), benefit termination rates and lag factor assumptions where deviations from Group or industry experience were observed;
- Recalculating the liabilities for a risk based sample and comparing the results of the recalculations to the Group's estimates.

For further information on the valuation of life and health reserves refer to the following:

- Note 1
- Note 5

VALUATION OF PROPERTY AND CASUALTY RESERVES

Key Audit Matter

The Group has recorded property and casualty reserves of $65,811 million as of 31 December 2021. Property and casualty reserves is included in the property and casualty related unpaid claims and claim adjustment expenses line item on the consolidated balance sheet.

The determination of assumptions used to develop the estimate requires subjectivity and judgment as these assumptions are generally not based on observable market inputs. Among the most significant assumptions are the initial estimates of loss ratios, which are used to estimate liabilities in the most recent accident years. Other assumptions include but are not limited to changes in exposure, inflation trends, claims emergence trends, and other legal or regulatory decisions. Additional uncertainties related to these

Our response

As part of our audit, we gained an understanding of the process related to the valuation of property and casualty reserves. Further, we tested the design, and implementation of certain key controls within the process, including the independent peer review and committee level reviews.

We tested the completeness, and accuracy of the underlying data by reconciling to source information, and validating the appropriateness of claims triangles.

We involved our actuarial specialists with specialized skills, and knowledge, as applicable, who assisted the audit team in:

assumptions have arisen due to the on-going Coronavirus pandemic. This includes legal interpretations of event aggregation clauses as well as terms and conditions, risks related to claims reporting, and social inflation.

Property and casualty reserves associated with long-tail lines of business, such as Liability, Asbestos and Environmental and Motor, generally require more subjectivity, and judgment due to the length of the claim reporting period resulting in increased volatility of claims frequency, and severity trends.

The valuation of property and casualty reserves has been designated as a key audit matter given the material nature of the balance and the significant estimation uncertainty and complexity of the actuarial assumptions. Auditing the estimate involved a high degree of auditor judgment and increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge.

- Evaluating the methods applied to select the actuarial assumptions by comparing them to generally accepted actuarial techniques;
- Evaluating the Group's estimates by performing independent calculations of property and casualty reserves for certain lines of business;
- For certain lines of business where we performed independent calculations, developing a range of reserve estimates and assessing the position of the Group's recorded reserve relative to the range;
- Assessing the Group's internally prepared actuarial analyses in comparison to internal experience, and related industry trends for certain lines of business.

For further information on the valuation of property and casualty reserves refer to the following:

- Note 1
- Note 5

VALUATION OF DEFERRED TAX ASSETS ON LOSS CARRYFORWARDS

Key Audit Matter

The Group has recorded deferred tax assets of $5,996 million (net of a valuation allowance of $195 million) as of 31 December 2021.

The recoverability of deferred tax assets, resulting from net operating losses, and temporary differences, is based on assumptions, including future profitability. The determination of assumptions requires subjectivity and judgment as the assumptions are based on internal estimates.

The valuation of deferred tax assets has been designated as a key audit matter given changes in the estimate could have a material impact on net income (through income tax expense). Auditing the estimate involved a high degree of auditor judgment and increased extent of audit effort, including the involvement of specialized skills and knowledge, due to the estimation uncertainty associated with the assumptions.

Our response

As part of our audit, we gained an understanding of the process related to the valuation of deferred tax assets. Further, we tested the design, and implementation of certain key controls within the process, including independent review of items for valuation and recognition.

We tested the completeness, and accuracy of the underlying data by reconciling to source information.

We involved our tax specialists with specialized skills, and knowledge, as applicable, who assisted the audit team in:

- Assessing the future profitability assumption by performing sensitivity analyses, and the feasibility of the tax planning measures.

For further information on the valuation of deferred tax assets on loss carryforwards refer to the following:

— Note 1

— Note 14

MERGER OF SWISS RE CORPORATE SOLUTIONS LTD, AND SWISS RE LIFE CAPITAL LTD WITH SWISS REINSURANCE COMPANY LTD

Key Audit Matter

The merger of Swiss Re Corporate Solutions Ltd, and Swiss Re Life Capital Ltd with Swiss Reinsurance Company Ltd was effective for the period ended 31 December 2021. The merger resulted in material changes to the scope of consolidation and as a result, the financial statements and disclosures. The prior period figures within the consolidated financial statements were revised to reflect these changes.

The merger of Swiss Re Corporate Solutions Ltd, and Swiss Re Life Capital Ltd with Swiss Reinsurance Company Ltd has been designated as a key audit matter due to the material impact of the merger on the Group financial statements. Auditing the impacts of the merger required an increased extent of audit effort.

Our response

As part of our audit, we assessed the Group's policy elections related to the accounting for the merger in light of the relevant US GAAP accounting guidance. We validated the changes in the scope of consolidation and the financial statements and disclosures, including the revision of prior period figures.

We also involved our Information Risk Management audit professionals to validate the change in the scope of consolidation was completely and accurately applied in information technology systems.

For further information on the merger refer to the following:

— Note 1

— Note 2

Other Matter

The consolidated financial statements of the Group for the year ended 31 December 2020 were audited by another auditor who expressed an unmodified opinion on those statements on 17 March 2021.

As part of our audit of the 2021 consolidated financial statements, we also audited the adjustments described in Note 1 that were applied to restate the 2020 consolidated financial statements. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2020 financial statements of the Group other than with respect to the adjustments, and, accordingly, we do not express an opinion or any other form of assurance on the 2020 consolidated financial statements as a whole.

Responsibilities of the Board of Directors for the Consolidated Financial Statements

The Board of Directors is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles and the provisions of Swiss law, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Group's ability to continue as a going concern for one year after the date that the consolidated financial statements are available to be issued; to disclose, as applicable, matters related to going concern; and to use the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, Swiss Law, and Swiss Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with GAAS, Swiss Law, and Swiss Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Group's ability to continue as a going concern for a reasonable period of time.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit of the Group. We remain solely responsible for our audit opinion.

We are required to communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters, including any significant deficiencies, that we identified during the audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Information in the Annual Report

The Board of Directors is responsible for the other information included in the annual report. The other information comprises the information included in the annual report, with the exception of the consolidated financial statements, the stand-alone financial statements of the company and our auditor's report thereon. Our opinion on the financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report. We have nothing to report in this regard.

Report on Other Legal and Regulatory Requirements

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

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

KPMG AG

Dr. Frank Pfaffenzeller	Eric James Elman
Licensed Audit Expert	
Auditor in charge	

Zurich, 16 March 2022

Annual Report Swiss Reinsurance Company Ltd

The management report follows the regulations as outlined in article 961c of the Swiss Code of Obligations.

Reinsurance and sub-holding company
Swiss Reinsurance Company Ltd (the Company), domiciled in Zurich, Switzerland, performs a dual role within the Swiss Re Group as both a reinsurance company and a sub-holding company. The Company is a wholly owned subsidiary of Swiss Re Ltd, the ultimate parent company, domiciled in Zurich, Switzerland. In 2021, the Company employed a worldwide staff at an average of 1 402 full time equivalents, including 262 employees which were transferred to the Company in the context of the merger with Swiss Re Corporate Solutions Ltd as of 1 July 2021.

Financial year 2021

In 2021, the Swiss Re Group streamlined its legal entity structure and capital efficiency. As a result, Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd transferred the rights and obligations of all its assets and liabilities to the Company in the form of a merger with an accounting effective date 1 January 2021.

Swiss Re Corporate Solutions Ltd transferred total assets of CHF 11 521 million and total liabilities of CHF 11 006 million to the Company. The merger gain of CHF 515 million was reflected in the Company's books in legal capital reserves.

Swiss Re Life Capital Ltd transferred total assets of CHF 2 012 million and total liabilities of CHF 72 million to the Company. The merger gain of CHF 1 940 million was reflected in the Company's books in legal capital reserves and voluntary profit reserves, respectively.

Net loss for 2021 amounted to CHF 339 million, mainly driven by COVID-19 losses in life and health business and large natural catastrophe losses. This was partly offset by the strong underwriting performance and positive prior year developments, as well as by significant lower COVID-19 losses in property and casualty business, compared to the prior year.

COVID-19 losses in life and health business amounted to CHF 1 158 million, mainly driven by additional adverse mortality experience in the US. COVID-19 losses in property and casualty business amounted to CHF 19 million. Excluding these COVID-19 related claims and changes in reserves for the current year, the Company's net income before income tax expense for 2021 was CHF 858 million.

The investment result of CHF 635 million was negatively impacted by a book value adjustment of a direct subsidiary in view of its liquidation and higher value adjustments on shares in investment funds.

With CHF 13 450 million the total shareholder's equity of the Company remained strong as at 31 December 2021. The net increase in 2021 of CHF 1 647 million was mainly driven by the mergers with Swiss Re Corporate Solutions Ltd of CHF 515 million and Swiss Re Life Capital Ltd of CHF 1 940 million, partly offset by the cash dividend payment for the financial year 2020 of CHF 469 million and the net loss for the financial year 2021 of CHF 339 million.

Reinsurance result

Reinsurance result amounted to a gain of CHF 44 million in 2021, compared to CHF 1 148 million in 2020. Excluding the COVID-19 related claims and changes in reserves for the current year of CHF 1 177 million, the Company's reinsurance result amounted to a gain of CHF 1 221 million in 2021.

Property & Casualty Reinsurance result increased from a loss of CHF 1 458 million in 2020 to a gain of CHF 1 393 million in 2021. The result benefitted from significant lower COVID-19 losses, the strong underwriting performance and positive prior year developments, driven by reserve releases for property business in Japan. In addition, the result increased due to the merger with Swiss Re Corporate Solutions Ltd and renewals of business from subsidiaries of Swiss Re Corporate Solutions Holding Ltd. These movements were partly offset by large natural catastrophe losses in the US, such as hurricane Ida and winter storm Uri, as well as by the flooding and hailstorm in Central Europe.

Life & Health Reinsurance result decreased from a gain of CHF 2 606 million in 2020 to a loss of CHF 1 349 million in 2021, mostly driven by significant one-off gains from the intragroup retrocession restructuring in the prior year. This included the Asian branch transfers to Swiss Re Asia Pte. Ltd. and a subsequent retrocession agreement with Swiss Re Asia Pte. Ltd., Hong Kong branch, in the first quarter of 2020, as well as the novation of the non-disability income business assumed from Swiss Re Life & Health Australia Limited to Swiss Re Asia Pte. Ltd. and the inception of an outward retrocession agreement with Swiss Re Nexus Reinsurance Company Ltd for part of the Company's life and health portfolio at the end of 2020. In addition, the life and health result was negatively impacted by significant COVID-19 losses in 2021, driven by additional adverse mortality experience in the US.

Premiums earned increased from CHF 20 486 million in 2020 to CHF 22 615 million in 2021. Premiums earned in property and casualty business increased, following the merger with Swiss Re Corporate Solutions Ltd and due to retrocession agreements with affiliated companies in the US and with Swiss Re Europe S.A. This was reduced by lower business volume in Europe and Asia. Premiums earned in life and health business decreased, mostly following the large intragroup restructuring at the end of 2020. New retrocession agreements with Elips Versicherungen AG and Elips Life AG resulted in an increase in premiums earned in 2021.

Other reinsurance revenues decreased from CHF 3 946 million in 2020 to CHF 961 million in 2021, mainly in life and health business, reflecting the significant one-off gains from the intragroup retrocession restructuring in the prior year.

Claims incurred decreased from CHF 16 745 million in 2020 to CHF 16 202 million in 2021, mostly driven by lower COVID-19 losses. The comparison of the individual claims line items is affected by the restructuring of several intragroup retrocession agreements, as well as by various large life and health transactions creating substantial changes year-on-year. In aggregate, these various movements fully offset each other.

Property and casualty claims paid and claim adjustment expenses net increased from CHF 8 442 million in 2020 to CHF 8 776 million in 2021, following the merger with Swiss Re Corporate Solutions Ltd. Property and casualty change in unpaid claims net decreased from CHF 3 120 million in 2020 to CHF 1 992 million in 2021, reflecting negligible COVID-19 losses, but higher large natural catastrophe losses, compared to the prior year. In addition, the current year benefitted from reserve releases in connection with man-made losses, such as the Beirut explosion and the tunnel collapse at Ituango, Columbia.

Life and health claims paid and claim adjustment expenses net and change in unpaid claims net decreased from CHF 6 398 million in 2020 to CHF 4 755 million in 2021, primarily impacted by the inception of an outward retrocession agreement with Swiss Re Nexus Reinsurance Company Ltd in 2020, partly offset by new business written in Japan in 2021. These impacts were reflecting the change in reinsurance receivables, to cover the setup of the respective technical provisions, and were fully offset in life and health benefits net.

Life and health benefits net increased from a gain of CHF 1 215 million in 2020 to a loss of CHF 679 million in 2021, mainly driven by the setup of technical provisions gross and reinsurance recoverable on technical provisions retroceded, respectively, in connection with the inception of a retrocession agreement with Swiss Re Nexus Reinsurance Company Ltd in 2020, partly offset by new business written in Japan in 2021. These restructuring and large transactions were fully offset in life and health claims paid and claim adjustment expenses net and change in unpaid claims net. In addition, the reserves increased further, as a result of assumption updates in 2021.

Acquisition costs net increased from CHF 4 804 million in 2020 to CHF 5 384 million in 2021, mostly in property and casualty business, due to the merger with Swiss Re Corporate Solutions Ltd and retrocession agreements with affiliated companies in the US and with Swiss Re Europe S.A., reduced by lower external business volume in Asia and Europe. Acquisition costs in life and health business decreased, following the intragroup retrocession restructuring in late 2020.

Investment result
Investment result decreased from CHF 1 729 million in 2020 to CHF 635 million in 2021. The decrease was mainly driven by the lower distribution of retained income from investment funds of CHF 4 million, compared to the prior year of CHF 626 million, and a book value adjustment of a direct subsidiary of CHF 247 million in view of its liquidation. In addition, net realised gains from fixed income securities decreased from CHF 308 million in 2020 to CHF 51 million in 2021, whereas net realised gains from equity securities increased from CHF 13 million in 2020 to CHF 151 million in 2021.

Assets
Total assets increased from CHF 121 878 million as of 31 December 2020 to CHF 134 943 million as of 31 December 2021.

Total investments increased from CHF 70 211 million to CHF 79 464 million in 2021. Investments in subsidiaries and affiliated companies increased by CHF 2 913 million to CHF 25 777 million in 2021, primarily driven by the mergers with Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd of CHF 3 073 million, as well as various capital contributions of the Company to its subsidiaries and affiliated companies. This increase was reduced by a book value adjustment of a direct subsidiary of CHF 247 million.

Fixed income securities increased by CHF 5 287 million to CHF 22 780 million in 2021, mainly related to reinvested proceeds from short-term investments and cash, following the Company's strategic asset allocations, the merger with Swiss Re Corporate Solutions Ltd and the asset transfer from Swiss Re Nexus Reinsurance Company Ltd related to the novation of Elips business.

Shares in investment funds increased by CHF 2 824 million to CHF 15 224 million in 2021, mainly related to the merger with Swiss Re Corporate Solutions Ltd, the reinvestment of proceeds from the distribution of retained income from investment funds and other subscriptions in investment funds, in order to fund the asset and liability management's rebalancing operations.

Short-term investments decreased by CHF 3 551 million to CHF 4 345 million in 2021, mainly driven by the reinvested proceeds to fixed income securities, following the Company's strategic asset allocations.

Funds held by ceding companies increased from CHF 14 094 million to CHF 16 222 million in 2021. The property and casualty business increased, largely driven by the merger with Swiss Re Corporate Solutions Ltd and retrocession agreements with affiliated companies in the US, mostly in the liability line of business, as well as by external business in Americas. The increase in life and health business was mainly due to business written in Israel, partly offset by lower funds held by Swiss Re Life & Health America Inc.

Reinsurance recoverable on technical provisions retroceded increased from CHF 12 991 million to CHF 13 628 million in 2021. The life and health business increased, primarily driven by a retrocession agreement of the Canadian business with Swiss Re Nexus Reinsurance Company Ltd and new business written in Japan, both impacted by interest rate updates. Furthermore, the property and casualty business increased, following the merger with Swiss Re Corporate Solutions Ltd, partly offset by business retroceded to Swiss Re Asia Pte. Ltd. and Swiss Re Europe S.A.

Premiums and other receivables from reinsurance increased from CHF 13 706 million to CHF 16 697 million in 2021. The increase in property and casualty business was mainly driven by the merger with Swiss Re Corporate Solutions Ltd, a retrocession agreement with Swiss Re Asia Pte. Ltd, the deposit accounting in Asia and the pipeline receivables in Europe and Asia. The increase in life and health business was due to new business written in Europe, Middle East and Africa, as well as in China. In addition, both property and casualty as well as life and health businesses were positively impacted by foreign exchange impacts.

Accrued income decreased from CHF 845 million to CHF 250 million in 2021, mainly related to the 2020 accrued distribution of retained income from investment funds of CHF 626 million, paid in 2021.

Liabilities
Total liabilities increased from CHF 110 075 million as of 31 December 2020 to CHF 121 493 million as of 31 December 2021.

Technical provisions gross increased from CHF 71 820 million to CHF 83 462 million in 2021. The increase in property and casualty business was mainly driven by the merger with Swiss Re Corporate Solutions Ltd, as well as by external business in Americas and the assumed business from affiliated companies in the US. The increase was additionally due to large natural catastrophe losses in the US, such as hurricane Ida and winter storm Uri, as well as to the flooding and hailstorm in Central Europe. The increased life and health liabilities were primarily driven by various newly incepted retrocession agreements with affiliated companies and significant negative impacts related to COVID-19 losses, as well as by interest rate updates, particularly in businesses in Canada and Japan. In addition, both property and casualty as well as life and health businesses were positively affected by foreign exchange impacts.

Debt decreased from CHF 3 267 million to CHF 3 051 million in 2021, mainly due to the redemption of loans with Swiss Re Reinsurance Holding Company Ltd.

Reinsurance balance payable increased from CHF 9 170 million to CHF 11 098 million in 2021, mostly in property and casualty business, driven by the deposit accounting in Asia and a retrocession agreement with Swiss Re Asia Pte. Ltd. The increase in life and health business was mainly impacted by new business written in Europe, Middle East and Africa, in the US and China. These movements were partly offset by the amendment of a retrocession agreement with Swiss Re Nexus Reinsurance Company Ltd in connection with the business in the US.

Other liabilities decreased from CHF 9 804 million to CHF 6 964 million in 2021, mainly related to lower intragroup current account payables in connection with cash pooling agreements, as well as lower payables related to securities lending and repurchase agreements.

Shareholder's equity

Shareholder's equity increased from CHF 11 803 million as of 31 December 2020 to CHF 13 450 million as of 31 December 2021.

The increase reflected the mergers with Swiss Re Corporate Solutions Ltd of CHF 515 million and Swiss Re Life Capital Ltd of CHF 1 940 million, partly offset by the cash dividend payment for the financial year 2020 of CHF 469 million and the net loss for the financial year 2021 of CHF 339 million.

Part of the merger gains was allocated to legal capital reserves, following the acceptance from Swiss Federal Tax Administration to qualify as legal capital reserves from capital contributions. The remaining merger gain was allocated to the voluntary profit reserves. These allocations were reflected in the Company's books with an accounting effective date 1 January 2021.

Future prospects and business development

Property & Casualty Reinsurance business

Market environment

The global non-life reinsurance premiums grew by 5% in real terms in 2021. The expansion was driven by strength in commercial lines, which accounts for most of the demand from primary insurers. Reinsurance prices were higher for both non-proportional and proportional contracts. Demand from advanced markets grew by 5%, while emerging markets expanded by 4% in real terms.

The underlying, catastrophe adjusted underwriting result improved as reinsurance price hardening continued and even gained momentum at the January 2021 renewals, where about 50–60% of contracts were renewed. The absence of major COVID-19 claims in 2021 also offered support, as the non-life re/insurance industry quickly adapted underwriting procedures and policies to the new pandemic situation. However, natural catastrophe activity was above average throughout 2021. This would make 2021 the fourth-costliest year on record for the insurance industry after 2005, 2011 and 2017. Among the costliest events were winter storm Uri in Texas, hurricane Ida which made landfall in Louisiana and led to severe flash floods and tornadoes in the mid-Atlantic and north-eastern regions, and the severe floods in Germany and Belgium.

Consistent with the primary non-life market sentiment, the Company expects a further increase of reinsurance prices. Premium income for the reinsurance industry is forecast to grow by 5–7% in 2022 and 2023, driven by higher exposures and higher prices.

Strategy and priorities

Reinsurance continues to live its purpose of making the world more resilient and remains committed to its strategy of partnering with clients across the three proven pillars: core, transactions, and solutions. Reinsurance will drive innovation in risk knowledge and create greater opportunities for efficiency across these strong foundations. A large part of the Reinsurance capacity in the core pillar focuses on natural catastrophes, where higher frequency and severity of losses are causing primary insurance companies to seek more protection.

The Company's natural catastrophe business is robust. Despite large natural catastrophe events, the premium income over the last decade has been strong enough to cover claims and provide attractive long-term profitability. Moving forward, the Company will continue to carefully factor climate change and other macro risk drivers into its sound pricing models.

Beyond the core pillar, Reinsurance's dedicated transaction teams provide customised reinsurance structures for clients. Tailored reinsurance transactions help clients when they are seeking strong growth, targeting an acquisition, or going through a transition in their portfolio or strategy.

Life & Health Reinsurance business

Market environment

The global life and health reinsurance premiums grew by 4% in real terms in 2021. The expansion was unevenly distributed between segments and was stronger in the emerging than advanced markets. Medical expense reinsurance premiums from emerging markets were up more than 11% in real terms, mainly driven by China, India, and the UAE. Against this background, life reinsurers have sought to increase revenues through large, individual risk transfer transactions that help primary insurers stabilise income and/or bolster their balance sheets. The introduction of risk-based capital regimes has prompted much of this activity. Another area of growth has been longevity risk transfer.

The underwriting performance was significantly impacted by elevated mortality claims due to COVID-19. The contribution from investments improved slightly in the first nine months of 2021, although the low interest rate environment continued.

The continued recovery in primary insurance should support growth in life and health reinsurance revenues, including a recovery in traditional business. In real terms, the Company forecasts global life and health reinsurance premiums to increase by 3% in 2022 and by 4% and 2023. While India and China will continue to be the main drivers, it is expected that growth will remain above trend in other emerging markets, advanced Europe, and advanced Asia-Pacific as well.

Strategy and priorities

In Life and Health, a growing level of awareness of insurance protection is driving demand. In particular, the pandemic is elevating the need for mortality products, while rising life expectancies globally require more solutions for financial protection after retirement.

In line with this growth in demand, Life and Health will continue to serve its clients with capacity in attractive areas such as longevity and mortality, supported by risk transfer transactions. Transactions remain an important means of diversification across regions and lines of business.

Corporate Solutions' business

Market environment

The global corporate solutions net premiums earned increased by 6.5%, year-on-year, driven by further rate increases in the context of the continued focus on underwriting quality, selective new business growth as well as an improved customer and broker distribution franchise. Favorable foreign exchange developments further helped offset the impact of the previous portfolio pruning actions. Gross premiums written increased by 21.1%, with business written across all geographies at more adequate price levels.

The improvement in Corporate Solutions' combined ratio was the result of disciplined underwriting, strict expense management, continued rate increases and positive prior-year development. The normalised combined ratio improved further by reflecting he ongoing benefits of disciplined underwriting, strict expense management and continued rate increases.

Strategy and priorities

Corporate Solutions' future path is centred around capturing profitable growth while leveraging distinctive competitive strengths with a focused portfolio strategy that will build resilience in all market cycles. This will be further supported by strategic investments to capture existing market opportunities and expand through innovative risk solutions, international programmes and data/digital solutions and services that help address customer pain points and industry inefficiencies.

iptiQ business

Market environment

iptiQ has successfully grown and continued to develop a global team focused on supporting existing and new partners. All markets developed positively and contributed to this growth, in particular the EMEA property and casualty business. In 2021, the iptiQ business has proven resilient.

Strategy and priorities

The pandemic is accelerating the shift towards digital insurance channels and embedded insurance, resulting in a strong pipeline of new opportunities for iptiQ. In addition, iptiQ is well-positioned to take advantage of the increasing sophistication and digitalisation of the retail insurance value chain.

Investments

Strategy and priorities

Financial investments are managed in accordance with the Swiss Re's Target Standard on Asset Management and the Company's investment guidelines, which are intended to ensure compliance with regulatory requirements. The general principle governing the management of investments in the Company is the creation of economic value based on returns relative to the liability benchmark, while adhering to the investment guidelines and the general prudence principle. The liability benchmark is determined by approximating an investable benchmark from projected liability cash flows. A cash benchmark is used for the economic surplus.

Outlook

The Company forecasts global real economic growth to remain above trend at 4.1% in 2022, down from the record pace of 5.6% in 2021. Meanwhile, inflation is set to decline from its multi-decade high but will remain elevated, despite the expected tightening in monetary policy. This global picture suggests a more prudent outlook for financial markets with generally full asset valuations.

The Company's investment portfolio remains broadly diversified across asset classes and underlying sectors in both public and private markets, with a high-quality tilt. Subject to market conditions, the Company will continue to increase allocation to private markets, which will further enhance overall portfolio diversification. The Company also intends to expand its exposure to thematic investing; this will allow the Company to capture shifting value pools in the economy and effectively allocate long-term capital to industry segments that are going through innovative disruption. In addition, the Company continues its strategic efforts to enable outperformance, including the Company's leadership in Environmental, Social and Governance (ESG) and roadmap to a net-zero investment portfolio, and the application and integration of new technology across the investment process. Finally, bouts of market volatility should again provide opportunities to actively manage the investment portfolio and positioning throughout the year.

Risk assessment

The Company's Board of Directors has issued a mandate to establish a Risk Management function to provide independent risk taking oversight for the Company and its subsidiaries. In executing this task, the Risk Management function is supported by the Swiss Re Group Risk Management organisation. Significant parts of risk exposure identification, assessment, control and reporting for Swiss Reinsurance Company Ltd (the Company) on a stand-alone basis are integrated in Group Risk Management processes.

The Board of Directors of Swiss Reinsurance Company Ltd sets the Company's risk tolerance. In this role, it is advised by the Board of Directors of the Swiss Re Group (Swiss Re), which defines the Group's basic risk management principles and risk appetite framework, including the Group's risk tolerance, and approves the Group's risk strategy. The Board of Directors of Swiss Re Ltd (the Swiss Re Group) mainly performs risk oversight and governance through three committees:
- The Finance and Risk Committee defines the Group Risk Policy, reviews risk capacity limits, monitors adherence to risk tolerance, and reviews top risk issues and exposures.
- The Investment Committee reviews the financial risk analysis methodology and valuation related to each asset class and ensures that the relevant management processes and controlling mechanisms are in place.
- The Audit Committee oversees internal controls and compliance procedures.

The Group Executive Committee (Group EC) is responsible for developing and implementing Swiss Re's Group-wide risk management framework. It also sets and monitors major risk limits, oversees the Economic Value Management framework, determines product policy and underwriting standards, and manages regulatory interactions and legal obligations. The Group EC has delegated various risk management responsibilities to the Group Chief Risk Officer (Group CRO) as well as to certain legal entity CROs, like the CRO of the Company.

The Group CRO is appointed as the principal independent risk controller of Swiss Re. The Group CRO is a member of the Group EC and reports directly to the Group CEO as well as to the Board's Finance and Risk Committee. The Group CRO also advises the Group EC, the Chairman, or the respective Group Board Committees, in particular the Finance and Risk Committee, on significant matters arising in his area of responsibility. In addition, the Group CRO is also an Executive Committee member and the CRO of the Company, since it is the main company and carrier for Swiss Re.

The Group CRO leads the independent Risk Management function, which is responsible for risk oversight and control across Swiss Re. It thus forms an integral part of Swiss Re's business model and risk management framework. The Risk Management function comprises central departments that provide specialised risk expertise and oversight, as well as business level risk departments for Reinsurance, Corporate Solutions and iptiQ.

The central risk management departments oversee Group liquidity and capital adequacy and maintain the Group frameworks for controlling these risks throughout Swiss Re. They also support CROs at Group and legal entity level in discharging their oversight responsibilities. They do so by providing services, such as:
- Financial risk management
- Specialised risk category expertise and accumulation control
- Risk modelling and analytics
- Regulatory relations management
- Maintaining the central risk governance framework

The Risk Management function is also in charge of actuarial reserving and monitoring of reserve holdings for property and casualty business, while for life and health business the setting of the reserves is performed by valuation actuaries within the L&H Business Management.

While the Risk Management organisation is closely aligned to Swiss Re's business structure, in order to ensure effective risk oversight, all embedded teams and CROs remain part of the Group Risk Management function under the Group CRO, thus ensuring their independence as well as a consistent Group-wide approach to overseeing and controlling risks.

Management activities are complemented by Swiss Re's Group Internal Audit and Compliance units:
- Group Internal Audit performs independent, objective assessments of adequacy and effectiveness of internal control systems. It evaluates the execution of processes within Swiss Re, including those within Risk Management.
- The Compliance function oversees Swiss Re's compliance with applicable laws, regulations, rules, and the Code of Conduct. It also assists the Group Board of Directors, the Executive Committees, and other management bodies in identifying, mitigating, and managing compliance risks.

Income statement
Swiss Reinsurance Company Ltd

For the years ended 31 December

Income statement

CHF millions	Note	2020	2021
Reinsurance			
Premiums written gross		23 953	27 998
Premiums written retroceded		–3 104	–4 950
Premiums written net		20 849	**23 048**
Change in unearned premiums gross		664	–378
Change in unearned premiums retroceded		–1 027	–55
Change in unearned premiums net		–363	**–433**
Premiums earned		20 486	**22 615**
Other reinsurance revenues		3 946	**961**
Total revenues from reinsurance business		24 432	**23 576**
Claims paid and claim adjustment expenses gross		–18 179	–15 669
Claims paid and claim adjustment expenses retroceded		2 357	3 599
Claims paid and claim adjustment expenses net		–15 822	**–12 070**
Change in unpaid claims gross		–1 055	–3 612
Change in unpaid claims retroceded		–1 083	159
Change in unpaid claims net		–2 138	**–3 453**
Life and health benefits gross		24	–1 166
Life and health benefits retroceded		1 191	487
Life and health benefits net		1 215	**–679**
Claims and claim adjustment expenses and life and health benefits		–16 745	**–16 202**
Change in equalisation provision			
Claims incurred		–16 745	**–16 202**
Acquisition costs gross		–5 768	–6 268
Acquisition costs retroceded		964	884
Acquisition costs net		–4 804	**–5 384**
Operating costs		–870	**–1 138**
Acquisition and operating costs		–5 674	**–6 522**
Other reinsurance expenses		–865	**–808**
Total expenses from reinsurance business		–23 284	**–23 532**
Reinsurance result[1]		1 148	**44**

CHF millions	Note	2020	2021
Investments	2		
Investment income		2 051	**1 259**
Investment expenses		–322	**–624**
Investment result[1]		1 729	**635**
Other financial income and expenses			
Other financial income		3 217	**1 701**
Other financial expenses		–3 778	**–2 172**
Operating result		2 316	**208**
Interest expenses on debt and subordinated liabilities		–324	**–319**
Other income and expenses			
Other income		158	**242**
Other expenses		–529	**–450**
Income/Loss before income tax expense		1 621	**–319**
Income tax expense		–35	**–20**
Net income/loss		1 586	**–339**

[1] Due to the discontinuation of the allocated investment return for the first time in 2021, the previously reported 2020 figures of the reinsurance result of CHF 1 574 million and the investment result of CHF 1 303 million have been changed and the respective published line items were removed accordingly.

The accompanying notes are an integral part of Swiss Reinsurance Company Ltd's financial statements.

Balance sheet Swiss Reinsurance Company Ltd

As of 31 December

Assets

CHF millions	Note	2020	2021
Investments			
Investments in subsidiaries and affiliated companies		22 864	**25 777**
Fixed income securities		17 493	**22 780**
Loans		8 016	**9 915**
Mortgages		0	
Equity securities		844	**599**
Shares in investment funds		*12 400*	*15 224*
Short-term investments		*7 896*	*4 345*
Alternative investments		*698*	*824*
Other investments		20 994	**20 393**
Total investments		70 211	**79 464**
Financial and reinsurance assets			
Assets in derivative financial instruments	18	1 031	**937**
Funds held by ceding companies		14 094	**16 222**
Cash and cash equivalents		1 095	**563**
Reinsurance recoverable from unpaid claims	3	*5 424*	*5 546*
Reinsurance recoverable from liabilities for life and health policy benefits	3	*6 731*	*7 216*
Reinsurance recoverable from unearned premiums	3	*773*	*793*
Reinsurance recoverable from provisions for profit commissions	3	*63*	*73*
Reinsurance recoverable on technical provisions retroceded		12 991	**13 628**
Tangible assets		7	**9**
Deferred acquisition costs	3	1 918	**2 189**
Intangible assets		132	**127**
Premiums and other receivables from reinsurance	3	13 706	**16 697**
Other receivables		464	**1 108**
Other assets		5 384	**3 749**
Accrued income		845	**250**
Total financial and reinsurance assets		51 667	**55 479**
Total assets		121 878	**134 943**

The accompanying notes are an integral part of Swiss Reinsurance Company Ltd's financial statements.

Liabilities and shareholder's equity

CHF millions	Note	2020	2021
Liabilities			
Technical provisions gross			
Unpaid claims	3	48 114	56 627
Liabilities for life and health policy benefits	3	16 268	17 458
Unearned premiums	3	6 996	8 842
Provisions for profit commissions	3	442	535
Equalisation provision	3		
Total technical provisions gross		71 820	**83 462**
Non-technical provisions			
Tax provisions		71	43
Provision for currency fluctuation		1 672	1 573
Other provisions		186	287
Total non-technical provisions		1 929	**1 903**
Debt	11	3 267	**3 051**
Liabilities from derivative financial instruments		1 348	**1 152**
Funds held under reinsurance treaties		7 631	**7 866**
Reinsurance balances payable	3	9 170	**11 098**
Other liabilities		9 804	**6 964**
Accrued expenses		120	**193**
Subordinated liabilities	11	4 986	**5 804**
Total liabilities		110 075	**121 493**
Shareholder's equity	4		
Share capital		34	34
Legal reserves from capital contributions		*5 761*	*6 437*
Legal capital reserves		5 761	6 437
Legal profit reserves		650	650
Voluntary profit reserves		3 727	6 637
Retained earnings brought forward		45	31
Net income/loss for the financial year		1 586	−339
Total shareholder's equity		11 803	**13 450**
Total liabilities and shareholder's equity		121 878	**134 943**

The accompanying notes are an integral part of Swiss Reinsurance Company Ltd's financial statements.

Notes Swiss Reinsurance Company Ltd

Reinsurance and sub-holding company
Swiss Reinsurance Company Ltd (the Company), domiciled in Zurich, Switzerland, performs a dual role within the Swiss Re Group as both a reinsurance company and a sub-holding company. The Company is a wholly owned subsidiary of Swiss Re Ltd, the ultimate parent company domiciled in Zurich, Switzerland.

1 Significant accounting principles

Basis of presentation
In general, the financial statements are prepared in accordance with Swiss Company Law. As a reinsurance company and based on Art. 111b of the Ordinance on the supervision of private insurance companies (ISO), the Company is also required to follow the Insurance Supervisory Ordinance-FINMA (ISO-FINMA). The ISO-FINMA contains specific guidance for presentation of the balance sheet, the income statement and the notes of insurance companies and overrides the general guidance of the Swiss Code of Obligations (SCO).

Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd transferred the rights and obligations of all their assets and liabilities to the Company in the form of a merger with an accounting effective date 1 January 2021. In addition, Swiss Re Corporate Solutions Ltd transferred its employees to the Company with a legal effective date 1 July 2021.

Time period
The 2021 financial year comprises the accounting period from 1 January 2021 to 31 December 2021.

Use of estimates in the preparation of annual accounts
The preparation of the annual accounts requires management to make significant estimates and assumptions that affect the reported amounts of assets, liabilities, income, and expenses as well as the related disclosures. Actual results could differ significantly from these estimates.

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 Company has recorded its best estimate of claims and claim adjustment expenses and life and health benefits incurred, as a result of the pandemic as at 31 December 2021, which best estimate reflects the Company's expectations based on current facts and circumstances. However, the Company 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.

Foreign currency translation
Assets and liabilities denominated in foreign currencies are converted into Swiss franc at year-end exchange rates except for participations and tangible assets, which are maintained in Swiss franc at historical exchange rates. Income and expenses in foreign currencies are converted into Swiss franc at average exchange rates for the reporting year.

Investments
Investments in subsidiaries and affiliated companies are carried at cost, less necessary and legally permissible value adjustments.

The Company's investments in subsidiaries and affiliated companies are summarised as a group for valuation purposes, when a close business link exists and a similarity in nature is given.

Fixed income securities are carried at their amortised cost, less necessary value adjustments to address other than temporary market value decreases.

The following assets are carried at cost or lower market value:
- Equity securities
- Shares in investment funds
- Alternative investments

Loans and mortgages are carried at nominal value. Value adjustments are recorded where the expected recovery value is lower than the nominal value. Infrastructure loans are carried at their amortised cost, less necessary value adjustments to address other than temporary market value decreases.

Short-term investments contain investments with an original duration between three months and one year. Such investments are generally held until maturity and are measured at their amortised cost.

Subsequent recoveries of previously recorded downward value adjustments may be recognised up to the lower of cost or market value at the balance sheet date. The valuation rules prescribed by the Swiss Financial Market Supervisory Authority FINMA are observed.

Assets in derivative financial instruments
Assets in derivative financial instruments include reinsurance contract or features embedded in reinsurance contracts that fulfil the characteristics of derivative financial instruments and are generally accounted based on the lower of cost or market principle under Swiss Company Law. Derivative deals where the Company enters into two identical, but opposite directed derivatives are recorded at market value. In addition, assets in derivative financial instruments which have an observable market price and are traded in an active and liquid market are recorded at market value.

Funds held by ceding companies
Funds held by ceding companies consist mainly of assets that belong to the Company but are withheld by the cedent due to regulatory or legal requirements, or to retain control over investments and reduce a potential credit risk. Assets are initially measured based on the consideration received. Subsequently the funds held by ceding companies are measured at the consideration received or market value of the underlying assets.

Cash and cash equivalents
Cash and cash equivalents include cash at bank, short-term deposits, and certain investments in money-market funds with an original maturity of three months or less. Such current assets are held at nominal value.

Reinsurance recoverable on technical provisions retroceded
Reinsurance recoverable on technical provisions represents the retroceded part of the technical provisions. The respective accounting principle per technical provision category is described further under "Technical provisions gross".

Reinsurance business written by branches of the Company that is retroceded to affiliated companies, which is then retroceded back to the Company is presented on a gross basis.

Tangible assets
Tangible assets are carried at cost, less individually scheduled straight-line depreciation over their useful lives. Items of minor value are not capitalised.

Deferred acquisition costs
Deferred acquisition costs consist principally of commissions and are related to the generation of new reinsurance business. Property and casualty deferred acquisition costs are generally amortised in proportion to premiums earned. Life and health deferred acquisition costs will run-off on a prudent basis, typically linearly in a shorter term than the liabilities. The amortisation schedule can also be determined to be in line with the expected profits of the business, so no statutory profits are shown until the deferred acquisition costs are fully amortised.

Intangible assets
Intangible assets, consisting of capitalised development costs for software for internal use, are measured at cost less straight-line amortisation over the estimated useful life of software.

Premiums and other receivables from reinsurance
Premiums and other receivables from reinsurance are carried at nominal value after deduction of known credit risks if applicable. The position mainly consists of receivables from insurance companies and brokers.

Other assets

Other assets include deferred expenses on retroactive reinsurance policies, which are amortised through earnings over the expected claims-paying period, as well as rights in connection with securities lending collateral and reverse repurchase transactions, which are carried at nominal value.

The financial and operational leases are recorded on-balance-sheet. The lease assets and the lease liabilities for both, financial and operational leases, are carried at cost less corresponding amortisation of the assets and release of the liabilities over the useful life of the lease or rental goods.

Technical provisions gross

Unpaid claims are recognised based on information provided by clients and own estimates of expected claims experience, which are drawn from empirical statistics. These include provisions for claims incurred but not reported. Unpaid insurance obligations are set aside at the full expected amount of future payment.

Liabilities for life and health policy benefits are determined on the basis of actuarially calculated present values taking experience into account. Generally, a prospective gross premium valuation is applied. The method is prospective as it takes into account expected future cash flows inherent in the reinsurance contract from the valuation date until expiry of the contract obligations. The assumptions used in the valuation are based on estimates drawn from experience studies. Cash flows include primarily premiums, claims, commissions, profit commissions and expenses, with provisions for adverse deviations added for prudence to reflect the uncertainties of the underlying best estimates. The gross premium valuation approach may result in a negative liability provision, which is typically set to zero, in accordance with the Company's reserving policy. Under certain circumstances, a prudent allowance for deferred acquisition costs on financing treaties can be established. A loss ratio approach can be taken, mainly for Group business, and for individual risk premium lump sum business, where either information is limited, or a gross premium valuation is not possible due to practical constraints.

Modified coinsurance arrangements are treated on a gross basis with the separate recognition of the funds withheld, as well as the liabilities for life and health policy benefits.

Premiums written relating to future periods are stated as unearned premiums and are normally calculated by statistical methods. The accrual of commissions is determined proportionally and is reported under "Deferred acquisition costs".

Provisions for profit commissions are based on contractual agreements with clients and depend on the results of reinsurance treaties.

The equalisation provision for property and casualty business is established to achieve a protection of the balance sheet and to break peaks of incurred claims in individual financial years with an exceptionally high claims burden by releasing appropriate amounts from the provision.

The shares of technical provisions pertaining to retroceded business are determined or estimated according to the contractual agreement and the underlying gross business data per treaty.

Liabilities and consideration in connection with portfolio transfers are established through the respective lines in the income statement. Outstanding claims and liabilities are recorded as change in unpaid claims and life and health benefits, with the consideration being recognised as claims paid. The impact on unearned premiums is established through the change in unearned premiums, with the respective consideration accounted as premiums written. Any profit or loss on the portfolio transfer is reflected in other reinsurance revenues or other reinsurance expenses, respectively.

For property and casualty transfers of retroactive treaties, the initial set up of assets and liabilities is accounted as a balance sheet transaction.

Reinsurance business written by branches of the Company that is retroceded to affiliated companies, which is then retroceded back to the Company is presented on a gross basis.

Non-technical provisions

The provision for currency fluctuation comprises the net effect of foreign exchange gains and losses arising from revaluation of the balance sheet at year-end. This net effect is recognised in the income statement over a time period of up to nine years, based on the average duration of the technical provisions. Where the provision for currency fluctuation is insufficient to absorb net foreign exchange losses for the financial year, the provision for currency fluctuation is reduced to zero and the excess foreign exchange loss is recognised in the income statement.

Other provisions are determined according to business principles and are based on estimated needs and the tax provision in accordance with tax regulations.

Debt
Debt is held at redemption value.

Liabilities from derivative financial instruments
Derivative deals where the Company enters into two identical, but opposite directed derivatives are recorded at market value. In addition, liabilities in derivative financial instruments which have an observable market price and are traded in an active and liquid market are recorded at market value. All other liabilities from derivative financial instruments are generally maintained at the highest commitment amount per a balance sheet date during the life of the underlying contract. For such derivatives premiums received are generally not realised until expiration or settlement and deferred respectively.

Included in this position are reinsurance contracts or features embedded in reinsurance contracts that fulfil the characteristics of derivative financial instruments. For such contracts, premiums received may be recognised as income prior to contract expiration or settlement, in cases where the recorded commitment has already reached the maximum liability amount potentially payable under the terms of the respective contracts. Decreases in the liability amounts prior to expiration or settlement are only recognised as income for contracts for which hedging instruments are in place.

Funds held under reinsurance treaties
Funds held under reinsurance treaties mainly contain cash deposits withheld from retrocessionaires, which are stated at redemption value.

Reinsurance balances payable
Reinsurance balances payable are held at redemption value. The position mainly consists of payables to insurance companies and brokers.

Other liabilities
Other liabilities include rights in connection with repurchase agreements and securities lending transactions, which are held at redemption value.

Subordinated liabilities
Subordinated liabilities are held at redemption value.

Deposit arrangements
Contracts which do not meet risk transfer requirements, defined as transferring a reasonable probability of a significant loss to the reinsurer, are accounted as deposit arrangements. Deposit amounts are adjusted for payments received and made, as well as for amortisation or accretion of interest.

Management expenses
Overall management expenses are allocated to the reinsurance business, the investment business and to other expenses on an imputed basis.

Foreign exchange transaction gains and losses
Foreign exchange gains and losses arising from foreign exchange transactions are recognised in the income statement and reported net in other expenses or other income, respectively.

Capital and indirect taxes
Capital and indirect taxes related to the financial year are included in other expenses. Value-added taxes are included in the respective expense lines in the income statement.

Income tax expense
The income tax expense relates to the financial year under report.

Income statement classification
Until the end of 2020, the allocated investment return was reclassified from the investment result to the reinsurance result. With the discontinuation of allocating such income from allocated investment return, for the first time in 2021, this resulted in a lower reinsurance result offset by a higher investment result but did not impact the Company's overall net loss in 2021. Therefore, the previously reported 2020 figures of the reinsurance result and the investment result with a respective amount of CHF 426 million have been changed and the respective published line items of allocated investment return were removed accordingly.

2 Investment result

CHF millions	Income	Value readjustments	Realised gains	2021 Total
Investment income				
Investments in subsidiaries and affiliated companies	102			102
Fixed income securities	474		144	618
Loans	170			170
Mortgages	0			0
Equity securities	18	7	169	194
Shares in investment funds	*4*		*14*	*18*
Short-term investments	*–4*		*4*	*0*
Alternative investments	*110*	*6*	*0*	*116*
Other investments	110	6	18	134
Income from investment services	41			41
Investment income	**915**	**13**	**331**	**1 259**

CHF millions	Expenses	Value adjustments	Realised losses	
Investment expenses				
Investments in subsidiaries and affiliated companies		–251		–251
Fixed income securities		0	–93	–93
Loans				–
Equity securities		–16	–18	–34
Shares in investment funds		*–104*		*–104*
Short-term investments			*–1*	*–1*
Alternative investments		*–20*		*–20*
Other investments		–124	–1	–125
Investment management expenses	–121			–121
Investment expenses	**–121**	**–391**	**–112**	**–624**
Investment result				**635**

CHF millions	Income	Value readjustments	Realised gains	2020 Total
Investment income				
Investments in subsidiaries and affiliated companies	79			79
Fixed income securities	505		369	874
Loans	201		3	204
Mortgages	0			0
Equity securities	20	7	103	130
Shares in investment funds	*626*	*8*	*19*	*653*
Short-term investments	*12*		*6*	*18*
Alternative investments	*59*	*1*	*8*	*68*
Other investments	697	9	33	739
Income from investment services	25			25
Investment income	1 527	16	508	2 051

CHF millions	Expenses	Value adjustments	Realised losses	
Investment expenses				
Investments in subsidiaries and affiliated companies		–16		–16
Fixed income securities			–61	–61
Mortgages			0	0
Equity securities		–31	–92	–123
Shares in investment funds		*0*		*0*
Short-term investments			*–1*	*–1*
Alternative investments		*–31*	*0*	*–31*
Other investments		–31	–1	–32
Investment management expenses	–90			–90
Investment expenses	–90	–78	–154	–322
Investment result				1 729

3 Assets and liabilities from reinsurance

CHF millions	Gross	Retro	2020 Net / Total	Gross	Retro	2021 Net / Total
Deferred acquisition costs	2 161	–243	1 918	**2 378**	**–189**	**2 189**
Premiums and other receivables from reinsurance	12 400	1 306	13 706	**14 725**	**1 972**	**16 697**
Deferred expenses on retroactive reinsurance policies[2]	176	4	180	**156**	**5**	**161**
Unpaid claims	48 114	–5 424[1]	42 690	**56 627**	**–5 546[1]**	**51 081**
Liabilities for life and health policy benefits	16 268	–6 731[1]	9 537[3]	**17 458**	**–7 216[1]**	**10 242**
Unearned premiums	6 996	–773[1]	6 223	**8 842**	**–793[1]**	**8 049**
Provisions for profit commissions	442	–63[1]	379	**535**	**–73[1]**	**462**
Equalisation provision						
Reinsurance balances payable	6 230	2 940	9 170	**7 673**	**3 425**	**11 098**

[1] Reported under "Reinsurance recoverable on technical provisions retroceded" on page 118.
[2] Reported under "Other assets" on page 118.
[3] Included a one-off correction of accumulated rider fees since inception related to the guarantees on a variable annuities business treaty, which resulted in a reserve increase of CHF 141 million.

4 Change in shareholder's equity

CHF millions	Share capital	Legal capital reserves	Legal profit reserves	Voluntary profit reserves	Retained earnings brought forward	Net income/ loss for the financial year	Total shareholder's equity
Shareholder's equity 1.1.2020	34	6 778	650	1 027	41	2 704	11 234
Allocations relating to the dividend paid		–1 611		4 311	4	–2 704	0
Dividend for the financial year 2019				–1 611			–1 611
Contribution in-kind by Swiss Re Ltd[1]		594					594
Net income for the financial year						1 586	1 586
Shareholder's equity 31.12.2020	34	5 761	650	3 727	45	1 586	11 803
Shareholder's equity 1.1.2021	34	5 761	650	3 727	45	1 586	11 803
Allocations relating to the dividend paid		–469		2 069	–14	–1 586	0
Dividend for the financial year 2020				–469			–469
Swiss Re Corporate Solutions Ltd merger[2, 3]		515					515
Swiss Re Life Capital Ltd merger[2, 4]		630		1 310			1 940
Net loss for the financial year						–339	–339
Shareholder's equity 31.12.2021	**34**	**6 437**	**650**	**6 637**	**31**	**–339**	**13 450**

[1] Contribution in-kind by Swiss Re Ltd of its wholly-owned subsidiary Swiss Re Investments Holding Company Ltd to the Company on 18 December 2020.
[2] Allocation of the merger gains to legal capital reserves, following the acceptance from Swiss Federal Tax Administration to qualify as legal capital reserves from capital contributions. The remaining merger gain was allocated to voluntary profit reserves. These allocations were reflected in the Company's books with an accounting effective date 1 January 2021.
[3] Swiss Re Corporate Solutions Ltd transferred total assets of CHF 11 521 million and total liabilities of CHF 11 006 million to the Company in the form of a merger with an accounting effective date 1 January 2021. The merger gain of CHF 515 million was reflected in the Company's books in legal capital reserves as shown in the table above.
[4] Swiss Re Life Capital Ltd transferred total assets of CHF 2 012 million and total liabilities of CHF 72 million to the Company in the form of a merger with an accounting effective date 1 January 2021. The merger gain of CHF 1 940 million was reflected in the Company's books in legal capital reserves and voluntary profit reserves, respectively, as shown in the table above.

5 Share capital and major shareholder

The share capital of the Company amounted to CHF 34 million. It is divided into 344 052 565 registered shares, each with a nominal value of CHF 0.10. The shares were fully paid-in and held directly by Swiss Re Ltd. As of 31 December 2021 and 2020, the Company was a wholly owned subsidiary of Swiss Re Ltd.

6 Contingent liabilities

Swiss Reinsurance Company Ltd has issued a number of guarantees to several of its subsidiaries and affiliated companies in support of their business activities by securing either their overall capital positions or specific transactions. These guarantees are generally not limited by a nominal amount but rather by the exposure of the underlying business.

The Company is part of the Swiss Re value added tax (VAT) group and is therefore jointly liable for existing and future VAT claims from the Swiss Federal Tax Administration.

In addition, as a component of the Swiss Re Group's financing structure, the Company has guaranteed CHF 3 509 million (2020: CHF 3 462 million) of debt issued by certain affiliated companies and letter of credit facilities benefiting various subsidiaries and affiliated companies of which no amount was utilised as of 31 December 2021 and 2020, respectively.

7 Securities lending and repurchase agreements

To enhance the performance of its investment portfolio, the Company enters into securities lending and repurchase transactions. In the context of such transactions, securities are transferred to the counterparty.

Further, the Company performs the role of the collateral clearer for the Swiss Re Group, centrally managing collateral for the Swiss Re Group, providing funding diversification, enabling secured cash investment and yield enhancement. As such the Company acts as principal in collateral transactions, borrowing securities from its affiliated companies and entering into lending and borrowing as well as repurchase and reverse repurchase agreements with third parties. As a matter of policy, the Company requires that collateral, consisting of cash or securities, is provided to cover the assumed counterparty risk associated with such transactions.

An overview of the fair value of securities transferred under securities lending and repurchase agreements is provided in the following table as of 31 December:

CHF millions	2020	**2021**
Fair value of securities transferred to third parties	12 209	**15 320**
Fair value of securities transferred to affiliated companies	11 512	**14 576**
Total	23 721	**29 896**

8 Security deposits

To secure the technical provisions at the 2021 balance sheet date, securities with a book value of CHF 12 629 million (2020: CHF 12 285 million) were deposited in favour of ceding companies, of which CHF 3 049 million (2020: CHF 2 880 million) referred to affiliated companies.

9 Commitments

As a participant in limited investment partnerships, the Company commits itself to making available certain amounts of investment funding, callable by the partnerships in general for periods of up to 10 years. As of 31 December 2021, total commitments remaining uncalled were CHF 249 million (2020: CHF 359 million).

The Company has entered into subordinated funding facilities with its parent company Swiss Re Ltd under which the Company has the right, among others, to issue subordinated notes to Swiss Re Ltd at any time. For its various rights, the Company owes Swiss Re Ltd an unconditional fixed commitment fee on the total facility amount, payable in annual instalments. Annually, the Company receives a partial reimbursement of the commitment fee on the undrawn facility amount. As of 31 December 2021 and 2020, the facilities were undrawn.

An overview of the subordinated funding facilities is provided in the following table:

Instrument	Lender	Issued in	Maturity	Currency	Nominal value in millions	Commitment fee (on total facility amount)	Partial reimbursement of commitment fee (on undrawn amount)
Subordinated funding facility	Swiss Re Ltd	2015	2030	USD	700	5.80%	2.22%
Subordinated funding facility	Swiss Re Ltd	2016	2036	USD	400	6.10%	2.13%
Subordinated funding facility	Swiss Re Ltd	2016	2032	USD	800	5.68%	1.95%

10 Investments in subsidiaries and affiliated companies

As of 31 December 2021 and 2020, Swiss Reinsurance Company Ltd held the following direct and material indirect investments in subsidiaries and affiliated companies:

As of 31 December 2021	Country	City	% Equity interest	% Voting interest
Swiss Brokers México, Intermediario de Reaseguro, S.A. de C.V.	Mexico	Mexico City	100%	100%
Swiss Re Brasil Resseguros S.A.	Brazil	São Paulo	99%	99%
Swiss Re Investments Holding Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Investments Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Investments Ltd	Switzerland	Zurich	100%	100%
Swiss Re Africa Limited	South Africa	Cape Town	100%	100%
Swiss Re Mexico Servicios, S. de R.L. de C.V.	Mexico	Mexico City	91%	91%
Swiss Re Reinsurance Holding Company Ltd	Switzerland	Zurich	100%	100%
Swiss Pillar Investments Ltd	Switzerland	Zurich	100%	100%
Swiss Re America Holding Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Capital Markets Corporation	United States (USA)	New York	100%	100%
Swiss Re Financial Markets Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Financial Products Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Life & Health America Holding Company	United States (USA)	Wilmington	100%	100%
Swiss Re Treasury (US) Corporation	United States (USA)	Wilmington	100%	100%
Swiss Reinsurance America Corporation	United States (USA)	Armonk	100%	100%
Swiss Re Asia Holding Pte. Ltd.	Singapore	Singapore	100%	100%
Swiss Re Asia Pte. Ltd.	Singapore	Singapore	100%	100%
Swiss Re Australia Ltd	Australia	Sydney	100%	100%
Swiss Re Life & Health Australia Limited	Australia	Sydney	100%	100%
Swiss Re Europe Holdings S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Europe S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Germany GmbH	Germany	Munich	100%	100%
Swiss Re Finance (Luxembourg) S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Services Limited	United Kingdom (UK)	London	100%	100%
Swiss Re Nexus Reinsurance Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Services India Private Ltd	India	Mumbai	100%	100%
Swiss Reinsurance America Corporation - Escritório de Representação no Brasil Ltda	Brazil	São Paulo	20%	20%
Swiss Reinsurance Company Ltd - Escritório de Representação no Brasil Ltda	Brazil	São Paulo	93%	93%
Swiss Re Finance Limited	Cayman Islands	George Town	100%	100%
Vietnam National Reinsurance Corporation	Vietnam	Hanoi	25%	25%
Champlain Reinsurance Company AG	Switzerland	Zurich	100%	100%
Swiss Re Finance Holdings (Jersey) Limited[1]	Jersey	Saint Helier	100%	100%
IptiQ Group Holding Ltd[1]	Switzerland	Zurich	100%	100%
iptiQ Americas Inc.[1]	United States (USA)	Wilmington	100%	100%
iptiQ Asia Holding Limited[1]	Hong Kong SAR	Hong Kong	100%	100%
Swiss Re Life Capital EMEA Holding B.V.[1]	Netherlands	Hoofddorp	100%	100%
Swiss Re Corporate Solutions Holding Company Ltd[1]	Switzerland	Zurich	100%	100%
Swiss Re International SE[1]	Luxembourg	Luxembourg	100%	100%
SR Corporate Solutions America Holding Corporation[1]	United States (USA)	Wilmington	100%	100%
Westport Insurance Corporation[1]	United States (USA)	Jefferson City	100%	100%
Swiss Re Corporate Solutions Africa Ltd[1]	South Africa	Johannesburg	100%	100%
Swiss Re Corporate Solutions Brasil Holding Ltda[1]	Brazil	São Paulo	100%	100%
Compañía Aseguradora de Fianzas S.A. Confianza[1]	Colombia	Bogotá	51%	51%
Swiss Re Corporate Solutions Investment Holding Company Ltd[1]	Switzerland	Zurich	100%	100%
Swiss Re Corporate Solutions México Seguros, S.A. de C.V.[1]	Mexico	Mexico City	100%	100%
Swiss Re Corporate Solutions México Servicios, S. de R.L. de C.V.[1]	Mexico	Mexico City	100%	100%

1 New direct and indirect subsidiaries of the Company in the context of the mergers with Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd with an accounting effective date 1 January 2021.

As of 31 December 2020	Country	City	% Equity interest	% Voting interest
Swiss Brokers México, Intermediario de Reaseguro, S.A. de C.V.	Mexico	Mexico City	100%	100%
Swiss Re Brasil Resseguros S.A.	Brazil	São Paulo	99%	99%
Swiss Re Investments Holding Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Investments Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Investments Ltd	Switzerland	Zurich	100%	100%
Swiss Re Africa Limited	South Africa	Cape Town	100%	100%
Swiss Re Mexico Servicios, S. de R.L. de C.V.	Mexico	Mexico City	98%	98%
Swiss Re Reinsurance Holding Company Ltd	Switzerland	Zurich	100%	100%
Swiss Pillar Investments Ltd	Switzerland	Zurich	100%	100%
Swiss Re America Holding Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Capital Markets Corporation	United States (USA)	New York	77%	77%
Swiss Re Financial Markets Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Financial Products Corporation	United States (USA)	Wilmington	100%	100%
Swiss Re Life & Health America Holding Company	United States (USA)	Wilmington	100%	100%
Swiss Re Treasury (US) Corporation	United States (USA)	Wilmington	100%	100%
Swiss Reinsurance America Corporation	United States (USA)	Armonk	100%	100%
Swiss Re Asia Holding Pte. Ltd.	Singapore	Singapore	100%	100%
Swiss Re Asia Pte. Ltd.	Singapore	Singapore	100%	100%
Swiss Re Australia Ltd	Australia	Sydney	100%	100%
Swiss Re Life & Health Australia Limited	Australia	Sydney	100%	100%
Swiss Re Capital Markets Corporation	United States (USA)	New York	23%	23%
Swiss Re Europe Holdings S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Europe S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Germany GmbH	Germany	Munich	100%	100%
Swiss Re Finance (Luxembourg) S.A.	Luxembourg	Luxembourg	100%	100%
Swiss Re Services Limited	United Kingdom (UK)	London	100%	100%
Swiss Re Nexus Reinsurance Company Ltd	Switzerland	Zurich	100%	100%
Swiss Re Services India Private Ltd	India	Mumbai	100%	100%
Swiss Reinsurance America Corporation - Escritório de Representação no Brasil Ltda	Brazil	São Paulo	20%	20%
Swiss Reinsurance Company Ltd - Escritório de Representação no Brasil Ltda	Brazil	São Paulo	93%	93%
Swiss Re Finance Limited	Cayman Islands	George Town	100%	100%
Vietnam National Reinsurance Corporation	Vietnam	Hanoi	25%	25%

11 Debt and subordinated liabilities

The Company had outstanding debt and subordinated liabilities at the 2021 balance sheet date of CHF 8 855 million (2020: CHF 8 253 million). Thereof CHF 6 089 million (2020: CHF 5 497 million) were due within one to five years and CHF 2 766 million (2020: CHF 2 756 million) were due after five years.

As of 31 December 2021, the following public placed debentures were outstanding:

Instrument	Issued in	Currency	Nominal in millions	Interest rate	Maturity/ First call in	Book value CHF millions
Subordinated bond	2012	EUR	500	6.625%	2022	518
Senior bond	2014	CHF	250	1.000%	2024	250
Subordinated bond	2014	USD	500	4.500%	2024	456
Subordinated bond	2015	EUR	750	2.600%	2025	776
Senior bond	2015	CHF	250	0.750%	2027	250

12 Deposit arrangements

The following balances were related to deposit accounted reinsurance contracts:

CHF millions	2020	**2021**
Other reinsurance revenues	28	**84**
Claims paid and claim adjustment expenses gross	12	**–27**
Claims paid and claim adjustment expenses retroceded	6	**24**
Operating costs	–1	**–1**
Other reinsurance expenses	–8	**–245**
Funds held by ceding companies	64	**116**
Premiums and other receivables from reinsurance	1 826	**2 826**
Reinsurance balances payable	3 810	**5 142**

13 Claims on and obligations towards affiliated companies

CHF millions	2020	**2021**
Loans	7 388	**9 027**
Funds held by ceding companies	7 848	**8 875**
Premiums and other receivables from reinsurance	8 396	**10 304**
Other receivables	319	**878**
Other assets	1 982[1]	**885[1]**
Debt	2 767[2]	**2 551[2]**
Liabilities from derivative financial instruments	125	**106**
Funds held under reinsurance treaties	7 399	**7 557**
Reinsurance balances payable	7 363	**8 125**
Other liabilities	8 195[3]	**5 926[3]**
Subordinated liabilities	3 193[4]	**4 055[4]**

[1] Thereof at the 2021 balance sheet date CHF 12 million (2020: CHF 123 million) were on the parent company Swiss Re Ltd.
[2] Thereof at the 2021 balance sheet date CHF 1 965 million (2020: CHF 2 018 million) were towards the parent company Swiss Re Ltd.
[3] Thereof at the 2021 balance sheet date CHF 1 425 million (2020: CHF 2 405 million) were towards the parent company Swiss Re Ltd.
[4] Thereof at the 2021 balance sheet date CHF 392 million (2020: CHF 380 million) were towards the parent company Swiss Re Ltd.

14 Release of undisclosed reserves

In 2021, net undisclosed reserves were released by an amount of CHF 29 million (2020: no net release).

15 Obligations towards employee pension fund

As of 31 December 2021, other liabilities included CHF 8 million (2020: CHF 0 million) payable to the employee pension fund.

16 Personnel information

As of 31 December 2021, the Company employed a worldwide staff at an average of 1 402 (2020: 1 444) full time equivalents, including 262 employees which were transferred to the Company in the context of the merger with Swiss Re Corporate Solutions Ltd as of 1 July 2021. Personnel expenses for the 2021 financial year amounted to CHF 407 million (2020: CHF 243 million).

17 Auditor's fees

In 2021, the Swiss Re Group incurred total auditor's fees of CHF 19 million (2020: CHF 29 million) and additional fees of CHF 1 million (2020: CHF 3 million), of which CHF 9 million (2020: CHF 2 million) and CHF 1 million (2020: CHF 0 million), respectively, incurred for the Company.

18 Market value of assets in derivative financial instruments

As of 31 December 2021, the Company's book value of assets in derivative financial instruments, which are measured at market value, was CHF 937 million (2020: CHF 1 031 million).

19 Subsequent events

The military conflict unfolding in Ukraine, and the resulting trade and economic sanctions, are likely to have geopolitical, economic, business and financial asset implications that are difficult to predict at this stage. The Company's exposures linked to the military conflict are being monitored and evaluated.

Proposal for allocation of disposable profit/loss

The Board of Directors proposes to the Annual General Meeting of the Company, to be held on 29 March 2022, to approve the following allocations and payment of a cash dividend of USD 1 200 million, which must not exceed CHF 1 200 million, translated into CHF at spot rate on the settlement date. The cash dividend is paid to its sole shareholder, Swiss Re Ltd, out of voluntary profit reserves on 30 March 2022.

In order to comply with the Swiss Code of Obligations, dividends paid in foreign currencies must meet the capital protection requirements in CHF. In addition, maximum amounts in CHF must be approved by the Annual General Meeting. The Board of Directors proposes to set this maximum amount to CHF 1 200 million, which shall be fully funded from the legal reserves from capital contributions as presented in the tables below.

As such the effective allocation from the legal reserves from capital contributions to the voluntary profit reserves and the effective cash dividend amount, translated into CHF at spot rate on the settlement date, must not exceed CHF 1 200 million. This threshold of CHF 1 200 million is presented in the below tables and reflects the maximum amount in CHF to be allocated and paid.

Retained earnings/loss

CHF millions	2020	2021
Retained earnings brought forward	45	**31**
Net income/loss for the financial year	1 586	**–339**
Disposable profit/loss	1 631	**–308**
Proposed allocation to voluntary profit reserves	–1 600	
Retained earnings/loss after proposed allocation	31	**–308**

Legal reserves from capital contributions

CHF millions	2020	2021
Legal reserves from capital contributions brought forward	5 167	**5 292**
Contribution in-kind by Swiss Re Ltd[2]	594	
From Swiss Re Corporate Solutions Ltd merger[3]		**515**
From Swiss Re Life Capital Ltd merger[3]		**630**
Legal reserves from capital contributions before proposed allocation to voluntary profit reserves	5 761	**6 437**
Proposed allocation to voluntary profit reserves in connection with the cash dividend	–490[1]	**–1 200[1]**
Legal reserves from capital contributions after proposed allocation to voluntary profit reserves	5 271	**5 237**

[1] The translation into CHF at spot rate on the settlement date may result in a lower allocation to voluntary profit reserves by a respective amount on the settlement date.
[2] Contribution in-kind by Swiss Re Ltd of its wholly-owned subsidiary Swiss Re Investments Holding Company Ltd to the Company on 18 December 2020.
[3] Allocation of the merger gains to legal capital reserves, following the acceptance from Swiss Federal Tax Administration to qualify as legal capital reserves from capital contributions. These allocations were reflected in the Company's books with an accounting effective date 1 January 2021.

Voluntary profit reserves

CHF millions	2020	2021
Voluntary profit reserves brought forward	3 727	**5 327**
Proposed allocation from retained earnings	1 600	
From Swiss Re Life Capital Ltd merger[3]		**1 310**
Voluntary profit reserves before proposed allocation from legal reserves from capital contributions and cash dividend	5 327	**6 637**
Proposed allocation from legal reserves from capital contributions	490[1]	**1 200[2]**
Proposed cash dividend (maximal amount in CHF of the proposed dividend in USD translated into CHF)	–490[1]	**–1 200[2]**
Voluntary profit reserves after proposed allocation from legal reserves from capital contributions and cash dividend	5 327	**6 637**

[1] The 2020 figure was recalculated based on the final cash dividend converted into CHF at spot rate on the settlement date.
[2] The translation into CHF at spot rate on the settlement date may result in a lower allocation from legal reserves from capital contributions and a lower cash dividend by a respective amount on the settlement date.
[3] The remaining merger gain was allocated to voluntary profit reserves in the Company's books with an accounting effective date 1 January 2021.

Zurich, 16 March 2022

Statutory Auditor's Report

To the General Meeting of Swiss Reinsurance Company Ltd, Zurich

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Swiss Reinsurance Company Ltd, which comprise the balance sheet as at 31 December 2021, and the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements (pages 116 to 131) for the year ended 31 December 2021 comply with Swiss law and the company's articles of incorporation.

Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority

VALUATION OF CERTAIN HARDER TO VALUE INVESTMENTS

VALUATION OF LIFE AND HEALTH RESERVES

VALUATION OF PROPERTY AND CASUALTY RESERVES

IMPAIRMENT ASSESSMENT OF INVESTMENTS IN SUBSIDIARIES AND AFFILIATED COMPANIES

MERGER OF SWISS RE CORPORATE SOLUTIONS LTD, AND SWISS RE LIFE CAPITAL LTD WITH SWISS REINSURANCE COMPANY LTD

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

KPMG AG
Zurich, 16 March 2022

KPMG

VALUATION OF CERTAIN HARDER TO VALUE INVESTMENTS

Key Audit Matter

The Company generally carries its investments at cost or lower market value. In accordance with the Insurance Supervision Ordinance fixed income securities are carried at their amortised cost, less depreciation to address other than temporary market value decreases.

Certain harder to value investments are in particular fixed income securities (private placements), private equity investments, derivatives, and other invested assets, trade infrequently and therefore have little or no price transparency. The Company's estimation of fair value relies on unobservable assumptions, such as liquidity or credit considerations. The determination of these unobservable assumptions requires subjectivity and judgment as these assumptions are generally not based on market activity. Unobservable assumptions, such as liquidity or credit considerations, among others, are based on internal estimates. The greater the number of unobservable assumptions used, the greater the amount of judgment used to determine the estimate.

The valuation of these investments has been designated as a key audit matter due to the increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge. Auditing the unobservable inputs for these investments required a high degree of auditor judgment.

Our response

As part of our audit, we gained an understanding of the process related to the valuation of certain harder to value investments. Further, we tested the design and implementation of certain key controls within the process, including the independent price verification and impairment analyses.

We tested the completeness, and accuracy of the data used in the fair value estimation by reconciling to source information.

We involved our valuation specialists with specialized skills and knowledge, as applicable, who assisted the audit team in:

- Assessing the pricing methodologies with reference to relevant accounting standards, and industry practice.
- Developing an independent estimate for a selection of securities, and comparison of the independent estimate to the Group's fair value estimate.
- Evaluating the assumptions used to determine the fair value of other investments by comparing to industry benchmarks.

For further information on the valuation of investments refer to the following:

- Note 1

VALUATION OF LIFE AND HEALTH RESERVES

Key Audit Matter

The Company has recorded life and health reserves of CHF 17'458 million as of 31 December 2021. Life and health reserves are in particular future policy reserves. Liabilities for life and health policy benefits are determined on the basis of actuarially calculated present values taking experience into account.

The determination or revision of best estimate assumptions requires subjectivity and judgment as these assumptions are generally not based on observable market inputs. These assumptions include mortality, morbidity, persistency (lapse), benefit termination rates and lag factors. Additional uncertainties related to the mortality assumption have arisen due to the on-going Coronavirus pandemic.

The valuation of life and health reserves has been designated as a key audit matter given the material nature of the balance and the significant estimation uncertainty and complexity of the mortality, morbidity, persistency

Our response

As part of our audit, we gained an understanding of the process related to the valuation of life and health reserves. Further, we tested the design and implementation of certain key controls within the process, including the independent actuarial peer review and reserving committee level reviews.

We tested the completeness, and accuracy of the underlying policyholder contract data by reconciling to source information.

We involved our actuarial specialists with specialized skills, and knowledge, as applicable, who assisted the audit team in:

- Evaluating the methods applied to select the mortality, morbidity, persistency (lapse), benefit termination rates and lag factor assumptions by (lapse), benefit termination rates and lag factors. Auditing the estimate involved a high degree of auditor judgment and increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge.

comparing them to generally accepted actuarial techniques;

— Challenging the selected mortality, morbidity, persistency (lapse), benefit termination rates and lag factor assumptions where deviations from Group or industry experience were observed;

— Recalculating the liabilities for a risk based sample and comparing the results of the recalculations to the Company's estimates.

For further information on the valuation of life and health reserves refer to the following:

— Note 1

— Note 3

VALUATION OF PROPERTY AND CASUALTY RESERVES

Key Audit Matter

The Company has recorded property and casualty reserves of CHF 56'627 million as of 31 December 2021. Property and casualty reserves are determined on the basis of actuarially calculated present values taking experience into account.

The determination of assumptions used to develop the estimate requires subjectivity and judgment as these assumptions are generally not based on observable market inputs. Among the most significant assumptions are the initial estimates of loss ratios, which are used to estimate liabilities in the most recent underwriting years, and the loss development patterns. Other assumptions include but are not limited to changes in exposure, inflation trends, claims emergence trends, and other legal or regulatory decisions. Additional uncertainties related to these assumptions have arisen due to the on-going Coronavirus pandemic and inflation environment. This includes legal interpretations of event aggregation clauses as well as terms and conditions, risks related to claims reporting, and social inflation.

Property and casualty reserves associated with long-tail lines of business, such as Liability, Asbestos and Environmental and Motor, generally require more subjectivity, and judgment due to the length of the claim reporting period resulting in increased volatility of claims frequency, and severity trends.

The valuation of property and casualty reserves has been designated as a key audit matter given the material nature of the balance and the significant estimation uncertainty and complexity of the actuarial assumptions. Auditing the estimate involved a high degree of auditor judgment and increased extent of audit effort, including the involvement of specialists with specialized skills and knowledge.

Our response

As part of our audit, we gained an understanding of the process related to the valuation of property and casualty reserves. Further, we tested the design, and implementation of certain key controls within the process, including the independent peer review and committee level reviews.

We tested the completeness, and accuracy of the underlying data by reconciling to source information, and validating the appropriateness of claims triangles.

We involved our actuarial specialists with specialized skills, and knowledge, as applicable, who assisted the audit team in:

— Evaluating the methods applied to select the actuarial assumptions by comparing them to generally accepted actuarial techniques;

— Evaluating the Company's estimates by performing independent calculations of property and casualty reserves for certain lines of business;

— For certain lines of business where we performed independent calculations, developing a range of reserve estimates and assessing the position of the Group's recorded reserve relative to the range;

— Assessing the Company's internally prepared actuarial analyses in comparison to internal experience, and related industry trends for certain lines of business.

3

For further information on the valuation of property and casualty reserves refer to the following:

— Note 1
— Note 3

IMPAIRMENT ASSESSMENT OF INVESTMENTS IN SUBSIDIARIES AND AFFILIATED COMPANIES

Key Audit Matter

The Company has recorded investments in subsidiaries and affiliated companies of CHF 25'777 million (net of a valuation allowance of CHF 247 million) as of 31 December 2021. Investments in subsidiaries and affiliated companies are recognised at acquisition cost or, in the case of expected permanent impairment, at the lower fair value. The investments in subsidiaries and affiliated companies are not listed on an active market. The company determines the fair value of investments in subsidiaries and affiliated companies using valuation methods. Further the Company applies a group valuation approach when a close business link exists and a similarity in nature is given.

The recoverability of investments in subsidiaries and affiliated companies is supported by an impairment assessment by comparing the book value against the Company's determined fair value. Depending on the amount of the headroom between the book value and the determined fair value the recoverability represents a higher risk.

The valuation methods are using assumptions as model inputs which require subjectivity and judgment as these are partially based on internal estimates.

The impairment assessment for investments in subsidiaries and affiliated companies has been designated as a key audit matter given changes in the estimate could have a material impact on the recoverability. Auditing the impairment assessment involved a high degree of auditor judgment and increased extent of audit effort, due to the estimation uncertainty associated with the assumptions.

Our response

As part of our audit, we gained an understanding of the process related to the impairment assessment of investments in subsidiaries and affiliated companies. We performed a risk assessment to determine the amount of the headroom which would give us the scope of the investments in subsidiaries and affiliated companies with a higher risk on recoverability. For these investments in subsidiaries and affiliated companies we performed the following audit procedures:

— Evaluating the determined fair value of investments in subsidiaries and affiliated companies by comparing to a benchmark based on alternative valuation methods
— Assessment of the accuracy of the valuation allowance

For further information on the impairment assessment of investments in subsidiaries and affiliated companies refer to the following:

— Note 1
— Note 2
— Note 10

MERGER OF SWISS RE CORPORATE SOLUTIONS LTD, AND SWISS RE LIFE CAPITAL LTD WITH SWISS REINSURANCE COMPANY LTD

Key Audit Matter

Swiss Re Corporate Solutions Ltd and Swiss Re Life Capital Ltd transferred their total assets and total liabilities to the Company with an accounting effective date of 1 January 2021.

The merger resulted in material changes to the balance sheet and as a result to the financial statements and disclosures.

The merger of Swiss Re Corporate Solutions Ltd, and Swiss Re Life Capital Ltd with Swiss Reinsurance Company Ltd has been designated as a key audit matter due to the material impact of the merger on the Company's financial statements. Auditing the impacts of the merger required an increased extent of audit effort.

Our response

As part of our audit, we assessed the Company's policy elections related to the accounting for the merger in light of the relevant Swiss Code of Obligations accounting guidance. We validated the changes in the scope of investments in subsidiaries and affiliated companies, in the shareholder's equity, the financial statements and disclosures.

We also involved our Information Risk Management audit professionals to validate that the transfer of the total assets and liabilities was completely and accurately applied in the information technology systems.

For further information on the merger refer to the following:

- Note 1
- Note 4
- Note 10

Other Matter

The financial statements of Swiss Reinsurance Company Ltd for the year ended 31 December 2020 were audited by another auditor who expressed an unmodified opinion on those statements on 17 March 2021.

Responsibility of the Board of Directors for the Financial Statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor's Responsibilities for the Audit of the Financial Statements

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

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

— Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

— Obtain an understanding of internal control relevant to the audit 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 internal control.

— Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.

— Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

— Obtain sufficient appropriate audit evidence regarding the financial information of the entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit, significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

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

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

Dr. Frank Pfaffenzeller Licensed Audit Expert Auditor in Charge	Elina Monsch Licensed Audit Expert

Zurich, 16 March 2022

Cautionary note on forward-looking statements

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

Forward-looking statements typically are identified by words or phrases such as "anticipate", "assume", "believe", "continue", "estimate", "expect", "foresee", "intend", "may increase" and "may fluctuate" and similar expressions or by future or conditional verbs such as "will", "should", "would" and "could". These forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the Group's actual results of operations, financial condition, solvency ratios, capital or liquidity positions or prospects to be materially different from any future results of operations, financial condition, solvency ratios, capital or liquidity positions or prospects expressed or implied by such statements. Such factors include, among others:

- the frequency, severity and development of insured claim events, particularly natural catastrophes, man-made disasters, pandemics, acts of terrorism or acts of war;
- mortality, morbidity and longevity experience;
- the cyclicality of the reinsurance sector;
- central bank intervention in the financial markets, trade wars or other protectionist measures relating to international trade arrangements, adverse geopolitical events, domestic political upheavals or other developments that adversely impact global economic conditions;
- increased volatility of, and/or disruption in, global capital and credit markets;
- the Group's ability to maintain sufficient liquidity and access to capital markets, including sufficient liquidity to cover potential recapture of reinsurance agreements, early calls of debt or debt-like arrangements and collateral calls due to actual or perceived deterioration of the Group's financial strength or otherwise;
- the Group's inability to realize amounts on sales of securities on the Group's balance sheet equivalent to their values recorded for accounting purposes;
- the Group's inability to generate sufficient investment income from its investment portfolio, including as a result of fluctuations in the equity and fixed income markets, the composition of the investment portfolio or otherwise;
- changes in legislation and regulation, or the interpretations thereof by regulators and courts, affecting the Group or its ceding companies, including as a result of comprehensive reform or shifts away from multilateral approaches to regulation of global operations;
- the lowering or loss of one of the financial strength or other ratings of one or more companies in the Group, and developments adversely affecting its ability to achieve improved ratings;
- uncertainties in estimating reserves, including differences between actual claims experience and underwriting and reserving assumptions;
- policy renewal and lapse rates;
- uncertainties in estimating future claims for purposes of financial reporting, particularly with respect to large natural catastrophes and certain large man-made losses, as significant uncertainties may be involved in estimating losses from such events and preliminary estimates may be subject to change as new information becomes available;
- legal actions or regulatory investigations or actions, including in respect of industry requirements or business conduct rules of general applicability;

- the outcome of tax audits, the ability to realize tax loss carryforwards and the ability to realize deferred tax assets (including by reason of the mix of earnings in a jurisdiction or deemed change of control), which could negatively impact future earnings, and the overall impact of changes in tax regimes on the Group's business model;
- changes in accounting estimates or assumptions that affect reported amounts of assets, liabilities, revenues or expenses, including contingent assets and liabilities;
- changes in accounting standards, practices or policies;
- strengthening or weakening of foreign currencies;
- reforms of, or other potential changes to, benchmark reference rates;
- failure of the Group's hedging arrangements to be effective;
- significant investments, acquisitions or dispositions, and any delays, unforeseen liabilities or other costs, lower-than-expected benefits, impairments, ratings action or other issues experienced in connection with any such transactions;
- extraordinary events affecting the Group's clients and other counterparties, such as bankruptcies, liquidations and other credit-related events;
- changing levels of competition;
- the effects of business disruption due to terrorist attacks, cyberattacks, natural catastrophes, public health emergencies, hostilities or other events;
- limitations on the ability of the Group's subsidiaries to pay dividends or make other distributions; and
- operational factors, including the efficacy of risk management and other internal procedures in anticipating and managing the foregoing risks.

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

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

Note on risk factors

The operations, investments and other activities of Swiss Reinsurance Company Ltd and its subsidiaries (collectively, the "Group") are subject to a range of risks that could adversely impact the Group's business, financial condition, results of operations, liquidity and cash flows. The Group is part of the broader Swiss Re group (collectively, "Swiss Re"), the holding company for which is Swiss Re Ltd. References to the Group give effect to the legal entity realignment of Swiss Re.

Coronavirus

The global spread of the novel coronavirus and the disease it causes ("COVID-19"), and the actions taken to slow the spread of the pandemic, have had an adverse impact on communities, social and business interactions, economic activity and economies across the globe. After significant contractions in 2020, the global economy is expected to experience a protracted and uneven recovery in 2021. The impact of the pandemic on recovery of individual economies will be affected by their respective capacities to absorb shocks and the fiscal responses of their governments, and more broadly by continuing uncertainties over the impact of new strains of the virus and the effectiveness of vaccines against new strains, the timeline for the rollout of vaccination programs, the duration of immunity and resulting restrictions on mobility. Despite the impact of the pandemic on the global economy, the global insurance markets (as measured by premium growth) were less severely impacted in 2020 than expected (although the life market was more adversely affected than the non-life market) and premium growth is expected to recover, alongside recovery of the global economy, in 2021 and 2022, supported by rate hardening. Growth is expected to be led by China and, to a lesser extent, by other markets in Asia, aided in the case of life business by greater awareness of the importance post-pandemic of mortality and health coverage, as well as digital insurance penetration.

For the Group, in Property & Casualty Reinsurance, the COVID-19 crisis (in particular the impact on businesses and business activity) had the greatest impact on event cancellation, non-damage business interruption covers, and credit and surety. In Life & Health Reinsurance, the COVID-19 crisis had the greatest impact on mortality exposures. The majority of losses were incurred in the second and fourth quarters, largely driven by business closings and excess mortality, and reported 2020 losses continue to reflect high levels of incurred but not reported (IBNR) reserves.

The COVID-19 crisis prompted regulatory actions, including regulatory guidance in a number of US states in respect of temporary policyholder leniency, and legislative proposals in respect of policy exclusions and retroactive business interruption coverage. Legal challenges have been brought in a variety of jurisdictions, including, most notably, test cases brought in the United Kingdom by the Financial Conduct Authority, in respect of which the UK Supreme Court largely found on appeal, by the insurance company parties, in favour of holders of business interruption insurance policies, and in Australia, where a Court of Appeal also found in favour of policyholders. Legal actions on a range of pandemic-related claims are likely to continue in a number of jurisdictions.

The COVID-19 crisis continues, and the ultimate toll of the pandemic in terms of lives lost, societal dislocations, business activity, economic growth, broader costs to society and industry losses remains highly uncertain. Many pandemic-related developments interact with long-term trends and outlooks, including the impact of persistent low yields on the insurance industry. It also remains to be seen how public-private partnership initiatives may evolve to address future pandemics.

General impact of adverse market conditions

Swiss Re's operations as well as its investment returns are subject to conditions in the financial markets and macroeconomic factors, which are outside of its control. Financial, credit and foreign exchange markets are experiencing continued periods of volatility reflecting a range of political, geopolitical, economic and other uncertainties, some of the more significant of which are inter-related. Further adverse developments or the continuation of adverse trends that, in turn, have a negative impact on financial markets and economic conditions, could limit the Group's ability to access the capital markets and bank funding markets, could adversely affect the ability of counterparties to meet their obligations to the Group and could adversely affect the confidence of the ultimate buyers of insurance and reinsurance. Any of the foregoing factors, developments and trends could have an adverse effect on the Group's investment results, which in the current extremely low interest rate environment could have a material adverse effect on the Group's overall results, make it difficult to determine the value of certain assets in the Group's portfolio, make it more difficult to acquire suitable investments to meet its risk and return criteria and otherwise have a material adverse effect on its business and operations.

Regulatory changes

Swiss Re and its subsidiaries operate in a highly regulated environment, which continues to change over time. The regulatory regimes to which members of the Group are subject have changed significantly in recent years and are expected to continue to evolve. While some regulation is national in scope, the global nature of the Group's business means that its operations are subject in effect to a patchwork of global, national and regional standards. Swiss Re and its subsidiaries are subject to group supervision and Swiss Re's subsidiaries are also subject to applicable regulation in each of the jurisdictions in which they conduct business, particularly Switzerland, the United States, the United Kingdom, Luxembourg and Germany. The Group and its Swiss regulated entities and branches are subject to the Swiss Solvency Test and, through its legal entities and branches organised in the European Economic Area ("EEA") and the United Kingdom, Solvency II (which going forward as between the EEA and the UK could diverge).

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

On the international level, certain large insurance companies were designated as global systemically important insurers ("G-SIIs") and reinsurance companies faced potential designation as G-SIIs. While further designations have been suspended until 2022, the determination to discontinue G-SII designations altogether will only be made in 2022, based on an assessment of progress made by the International Association of Insurance Supervisors ("IAIS"), in establishing a new holistic framework for systemic risk that was adopted in November 2019 and implemented as of the beginning of 2020. The new framework embraces an enhanced set of policy measures targeted at the exposures and activities that can lead to systemic risks from the insurance sector as a whole. The Group cannot predict what additional regulatory changes will be implemented as the IAIS systemic risk process evolves and what any such changes may mean for how the Group is structured in any particular jurisdiction and how aspects of its business may be affected. Moreover, the Group cannot predict whether the Financial Stability Board will endorse the new IAIS holistic framework or retain the existing G-SII approach, or what regulatory changes may apply in the future to ceding companies in the context of broader designations of reinsurers as systemically important.

In addition, large internationally active insurance groups ("IAIGs"), which is a designation compiled by the IAIS as identified by group-wide supervisors, may become subject to a risk-based group-wide global insurance capital standard ("ICS"). ICS Version 2.0 was adopted in November 2019, and is expected to take effect in 2025, following a five-year confidential reporting period during which no supervisory action will be taken on the basis of the monitoring. In November 2019, the IAIS also adopted the Common Framework for the Supervision of Internationally Active Insurance Groups ("ComFrame"), as well as some changes to a number of Insurance Core Principles ("ICPs") – guidance and standards on supervision of insurers and which apply to insurance companies regardless of size and international exposures. ComFrame strengthens ICP requirements for IAIGs and proposes that the group-wide supervisor, in consultation with the host supervisors, should exercise discretion in requiring IAIGs to submit resolution plans. Swiss Re expects that it will be classified as an IAIG.

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

Regulatory changes also could occur in areas of broader application, such as competition policy and tax laws. For example, changes in tax laws, or the interpretation of the tax laws or tax regulations in jurisdictions in which the Group does business, or withdrawals of tax rulings in jurisdictions such as Switzerland that have issued such rulings to Swiss Re, could increase the taxes the Group pays, or impact the attractiveness of products offered by the Group, the Group's investment activities or the value of deferred tax assets. These changes, or inconsistencies between the various regimes that apply to the Group, could increase the costs of doing business (including due to increased capital requirements), reduce access to liquidity, limit the scope of current or future business or affect the competitive balance, or could make reinsurance less attractive to primary insurers.

Market risk

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

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

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

Credit risk

If the credit markets were to deteriorate, the Group could experience losses. Changes in the market value of the underlying securities and other factors impacting their price could give rise to market value losses. The Group could also face write-downs in other areas of its portfolio, including other structured instruments, and the Group and its counterparties could face difficulties in valuing credit-related instruments. Differences in opinion with respect to valuations of credit-related instruments could result in legal disputes among the Group and its counterparties as to their respective obligations, the outcomes of which are difficult to predict and could be material. The Group is also subject to credit and other risks in its credit business, including reliance on banks that underwrite and monitor facilities in which the Group participates and potential default by borrowers under those facilities.

Liquidity risks

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

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

Unexpected liquidity needs (including to meet collateral calls) could require the Group to increase levels of indebtedness or to liquidate investments or other assets. Should the Group require liquidity at a time when access to bank funding and the capital markets is limited, it may be unable to secure new sources of funding. The Group's ability to meet liquidity needs through asset sales may be constrained by market conditions and the related stress on valuations. In addition, the Group's ability to meet liquidity needs through the incurrence of debt may be limited by constraints on the general availability of credit in the case of bank funding, and adverse market conditions, in the case of capital markets debt. Failure to meet covenants in lending arrangements could further constrain access to liquidity. The Group's ability to meet liquidity needs may also be constrained by regulatory requirements that require regulated entities to maintain or increase regulatory capital, or that restrict intra-group transactions, the timing of dividend payments from subsidiaries or the fact that certain assets may be encumbered or are otherwise not tradeable. Finally, any adverse ratings action against the Group could trigger a need for further liquidity (for example, by triggering termination provisions or margin calls/collateral delivery requirements in contracts to which Swiss Re is a party) at a time when the Group's ability to obtain liquidity from external sources is limited by such ratings action. See also "Risks relating to credit rating downgrades."

Counterparty risks

The Group is exposed to the risk of defaults, or concerns about defaults, by its counterparties. Issuers or borrowers whose securities or loans the Group holds, trading counterparties, counterparties under swaps and other derivative contracts, clearing agents, clearing houses and other financial intermediaries may default on their obligations to the Group due to bankruptcy, insolvency, lack of liquidity, adverse economic conditions, operations failure, fraud or other reasons, which could also have a material adverse effect on the Group. The Group has increased its allocation to higher return-generating strategies, including high-quality corporate debt and some alternative assets, which tend to also be subject to potentially greater counterparty risk.

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

Risks relating to credit rating downgrades

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

The Group's ratings reflect the current opinion of the relevant rating agencies. One or more of the Group's ratings could be downgraded or withdrawn in the future. In addition, unsolicited ratings may also be downgraded or withdrawn, such as a downgrade in April 2020 of unsolicited insurer financial strength and long-term issuer default ratings assigned to various entities within the Group. Rating agencies may increase the frequency and scope of ratings reviews, revise their criteria or take other actions that may negatively impact the Group's ratings and/or the ratings of its legal entities, which it cannot predict. In addition, changes to the process or methodology of issuing ratings, or the occurrence of events or developments affecting the Group, could adversely affect the Group's existing ratings or make it more difficult for the Group to achieve improved ratings which it would otherwise have expected.

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

Legal and regulatory risks

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

The Group could in the future be involved in investigations and regulatory proceedings, which could result in adverse judgments, settlements, fines and other outcomes. These investigations and proceedings could relate to insurance or reinsurance matters, or could involve broader business conduct rules, including those in respect of market abuse, bribery, money laundering, trade sanctions, and data protection and privacy. The Group also is subject to audits and challenges from time to time by tax authorities, which could result in increases in tax costs, changes to internal structures and interest and penalties. Tax authorities may also actively pursue additional taxes based on retroactive changes to tax laws. The Group could be subject to risks arising from alleged, or actual, violations of any of the foregoing, and could also be subject to litigation or enforcement actions arising from potential employee misconduct, including non-compliance with internal policies and procedures, negligence and malfeasance, such as undertaking or facilitating cyber-attacks on internal systems. Substantial legal liability could materially adversely affect the Group's business, financial condition or results of operations or could cause significant reputational harm, which could seriously affect its business.

Insurance, operational and other risks

As part of the Group's ordinary course operations, the Group is subject to a variety of risks, including risks that reserves may not adequately cover future claims and benefits; risks that catastrophic events (including natural catastrophes, such as hurricanes, cyclones, tornadoes, windstorms, hail storms, wildfires, floods and earthquakes, as well as extreme space weather events such as solar storms and geomagnetic activity, and man-made disasters, such as acts of terrorism, cyberattacks and other disasters such as explosions, industrial accidents and fires, as well as pandemics) are inherently unpredictable in terms of both their frequency and severity and have exposed, and may continue to expose, the Group to unexpected large losses (and related uncertainties in estimating future claims in respect of such events); changes in the insurance industry that affect ceding companies, particularly those that further increase their sensitivity to counterparty risk; competitive conditions (including as a result of consolidation and the availability of significant levels of alternative capacity); cyclicality of the industry; risks related to emerging claims and coverage issues (including, in particular, social inflation), which trends may potentially be exacerbated by the COVID-19 crisis; macro developments giving rise to emerging risks, such as climate change and technological developments (including greater exposure to cyber risks (where accumulation risk is yet to be fully understood), which could have a range of consequences from operational disruption, to loss of proprietary or customer data, to greater regulatory burdens and potential liability); risks arising from the Group's dependence on policies, procedures and expertise of ceding companies; risks related to investments in emerging markets; and risks related to the failure of, or attacks directed at, the Group's operational systems and infrastructure, including its information technology networks and systems. Any of the foregoing, as well as the occurrence of future risks that the Group's risk management procedures fail to identify or anticipate, could have a material adverse effect on the Group, and could also give rise to reputational risk.

Use of models; accounting matters

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

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

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

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

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