

Swiss Re Corporate Solutions Ltd **2019 Annual Report**

Key Information

Financial highlights

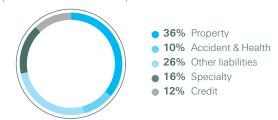
For the years ended 31 December

USD millions, unless otherwise stated	2018	2019	Change in %
Swiss Re Corporate Solutions Group			
Net income/loss attributable to common			
shareholder	-447	-932	109
Gross premiums written	4694	4974	6
Premiums earned	3925	4166	6
Combined ratio in %	119.3	136.3	
Return on equity ¹ in %	-20.4	-53.2	

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

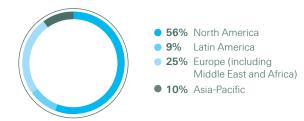
Gross premiums earned by segment, 2019

(Total USD 4 837 million)



Gross premiums earned by regions, 2019

(Total USD 4837 million)



Financial Strength Rating of Corporate Solutions Entities

	AM Best	Moody's	Standard & Poor's
Swiss Re Corporate Solutions Ltd	A+	Aa3	AA-
Swiss Re International SE	A+	Aa3	AA-
Westport Insurance Corporation	A+	Aa3	AA-
Other Corporate Solutions US entities			
(NAS, NAE, NAC, FSIC)	A+		AA-
Swiss Re Corporate Solutions Brasil Seguros S.A.		Baa3	
Company Aseguradora de Fianzas S.A. Confianza		Baa2	
National Scale Rating			
Swiss Re Corporate Solutions Brasil Seguros S.A.		Aaa.br	
Swiss Re Corporate Solutions Mexico Seguros S.A. de C.V.			mxAAA

Contents

		ancial statements	2
		atement	2
		of comprehensive income	3
Balan			4
		of shareholder's equity	6
State	ment	of cash flows	8
Note	s to 1	the Group financial statements	10
Note	1	Organisation and summary of significant accounting policies	10
Note	2	Information on business segments	17
Note	3	Insurance information	21
Note	4	Unpaid claims and claim adjustment expenses	23
Note	5	Deferred acquisition costs (DAC)	33
Note	6	Investments	34
Note	7	Fair value disclosures	40
Note	8	Derivative financial instruments	45
Note	9	Debt	47
Note	10	Income taxes	48
Note	11	Benefit plans	51
Note	12	Related parties	52
Note	13	Variable interest entities	53
Note	14	Subsequent events	55
Repo	rt of	the statutory auditor	56
Swis	s Re	Corporate Solutions Ltd	60
Annu		·	60
Incon	ne sta	atement	64
Balan	ce sł	neet	65
Notes	3		67
Propo	sal f	or allocation of disposable result	76
		the statutory auditor	77
Gene	ral lı	nformation	81
Cauti	onary	/ note on forward-looking statements	81
		sk factors	83

Income statement

			_
For the years ended 31 December			
USD millions	Note	2018	201
Revenues			
Gross premiums written	3	4 694	4 97
Net premiums written	3	4 122	4 25
Change in unearned premiums		-197	-8
Premiums earned	3	3 925	4 16
Net investment income	6	200	24
Net realised investment gains/losses ¹	6	15	150
Other revenues		2	4
Total revenues		4 142	4 57
Expenses			
Claims and claim adjustment expenses	3	-3 241	-4 173
Acquisition costs	3	-607	-640
Operating expenses		-834	-864
Total expenses before interest expenses		-4 682	-5 67
Income/loss before interest and income tax expense/benefit		-540	-1 104
Interest expenses		-24	-40
Income/loss before income tax expense/benefit		-564	-1 14
Income tax expense/benefit	10	113	20
Net income/loss before attribution of non-controlling interests		-451	-94
Income/loss attributable to non-controlling interests		4	1
Net income/loss attributable to common shareholder		-447	-93

¹ Total impairments for the years ended 31 December 2018 and 2019 were nil.

Statement of comprehensive income

		_
For the years ended 31 December		
USD millions	2018	2019
Net income/loss before attribution of non-controlling interests	-451	-943
Other comprehensive income/loss, net of tax:		
Change in net unrealised investment gains/losses	-75	184
Change in foreign currency translation	-50	5
Other comprehensive income/loss attributable to non-controlling interests	-22	
Total comprehensive income/loss before attribution of non-controlling interests	-598	-754
Comprehensive income attributable to non-controlling interests	26	11
Total comprehensive income/loss attributable to common shareholder	-572	-743

Reclassification out of accumulated other comprehensive income

For the years ended 31 December

2018 USD millions	Net unrealised investment gains/losses ¹	Foreign currency translation	Accumulated other comprehensive income
Balance as of 1 January	22	12	34
Impact of Accounting Standards Updates ²	-7	3	-4
Change during the period	-122	-48	-170
Amounts reclassified out of accumulated other comprehensive income	31		31
Tax	16	-2	14
Balance as of period end	-60	-35	-95

2019 USD millions	Net unrealised investment gains/losses ¹	Foreign currency translation	Accumulated other comprehensive income
Balance as of 1 January	-60	-35	-95
Change during the period	276	10	286
Amounts reclassified out of accumulated other comprehensive income	-48		-48
Tax	-44	-5	-49
Balance as of period end	124	-30	94

¹ Reclassification adjustment included in net income is presented in "Net realised investment gains/losses".

² Impact of ASU 2018-02 and ASU 2016-01. Please refer to Note 1 in Annual Report 2018 for more details.

Balance sheet

ASSETS			_
As of 31 December			
USD millions	Note	2018	2019
Investments	6, 7, 8		
Fixed income securities available-for-sale (including 1 238 in 2018 and 1 041 in 2019 subject to			
securities lending and repurchase agreements) (amortised cost: 2018: 6 314; 2019: 5 923)		6 2 6 4	6 048
Equity securities at fair value through earnings (including 73 in 2018 and nil in 2019 subject to			
securities lending and repurchase agreements)		180	172
Short-term investments (including 84 in 2018 and 16 in 2019 subject to securities lending			
and repurchase agreements)		393	368
Other invested assets		2 066	1 649
Total investments		8 903	8 237
Cash and cash equivalents (including 244 in 2018 and 138 in 2019 subject to securities lending)		763	1 581
Accrued investment income		44	47
Premiums and other receivables		2 321	2 538
Reinsurance recoverable on unpaid claims		5 486	7 058
Funds held by ceding companies		140	129
Deferred acquisition costs	5	488	483
Goodwill		206	204
Income taxes recoverable		65	100
Deferred tax assets	10	566	687
Other assets		908	1 085
Total assets		19 890	22 149

LIABILITIES AND EQUITY

USD millions	Note	2018	2019
Liabilities			
Unpaid claims and claim adjustment expenses	4	11 929	12 881
Liabilities for life and health policy benefits		501	728
Unearned premiums		3 320	3 456
Funds held under reinsurance treaties		380	480
Reinsurance balances payable		116	1 051
Income taxes payable		23	11
Deferred and other non-current tax liabilities	10	256	287
Accrued expenses and other liabilities		549	696
Long-term debt	9	798	798
Total liabilities		17 872	20 388
Equity			
Common shares, CHF 1 000 par value			
2018: 100 000; 2019: 100 000 shares authorised and issued		119	119
Additional paid-in capital		1 665	2 265
Accumulated other comprehensive income:			
Net unrealised investment gains/losses, net of tax		-60	124
Foreign currency translation, net of tax		-35	-30
Total accumulated other comprehensive income		-95	94
Retained earnings		186	-849
Shareholder's equity		1 875	1 629
	<u> </u>		
Non-controlling interests		143	132
Total equity		2 018	1 761
Total liabilities and equity		19 890	22 149

Statement of shareholder's equity

For the years ended 31 December		
USD millions	2018	2019
Common shares		
Balance as of 1 January	119	119
Issue of common shares		
Balance as of period end	119	119
Additional paid-in capital		
Balance as of 1 January	1 719	1 665
Capital contribution		600
Dividends on common shares	-50	
Share-based compensation	-4	
Balance as of period end	1 665	2 265
Net unrealised investment gains/losses, net of tax		
Balance as of 1 January	22	-60
Impact of ASU 2018-02 ¹	1	
Impact of ASU 2016-01 ¹	-8	
Changes during the period	-75	184
Balance as of period end	-60	124
Foreign currency translation, net of tax		
Balance as of 1 January	12	-35
Impact of ASU 2018-02 ¹	3	
Changes during the period	-50	5
Balance as of period end	-35	-30
Retained earnings		
Balance as of 1 January	637	186
Transactions under common control	-8	-103
Net income/loss attributable to common shareholder	-447	-932
Impact of ASU 2018-02 ¹	-4	
Impact of ASU 2016-01 ¹	8	
Balance as of period end	186	-849
Shareholder's equity	1 875	1 629
Non-controlling interests		
Balance as of 1 January	169	143
Income/loss attributable to non-controlling interests	-4	-11
Other comprehensive income attributable to non-controlling interests:		
Change in foreign currency translation	-20	-3
Other	-2	3
Balance as of period end	143	132
Total equity	2 018	1 761

¹ Impact of Accounting Standards Update. Please refer to Note 1 in Annual Report 2018 for more details.

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Statement of cash flows

For the years ended 31 December		
USD millions	2018	2019
Cash flows from operating activities		
Net income/loss attributable to common shareholder	-447	-932
Add income/loss attributable to non-controlling interests	-4	-11
Adjustments to reconcile net income to net cash provided/used by operating activities:		
Depreciation, amortisation and other non-cash items	49	51
Net realised investment gains/losses	-15	-156
Income from equity-accounted investees, net of dividends received	-37	-67
Change in:		
Technical provisions and other reinsurance assets and liabilities, net	500	2 237
Funds held by ceding companies and under reinsurance treaties	-399	110
Reinsurance recoverable on unpaid claims	175	-1 574
Other assets and liabilities, net	-242	-273
Income taxes payable/recoverable	-156	-268
Trading positions, net	49	46
Net cash provided/used by operating activities	-527	-837
Cash flows from investing activities		
Cash flows from investing activities Fixed income securities:		
•	2 578	2 766
Fixed income securities:	2 578 307	2 766 1 479
Fixed income securities: Sales		1 479
Fixed income securities: Sales Maturities	307	1 479 -3 867
Fixed income securities: Sales Maturities Purchases	307 -2 664	1 479 -3 867
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments	307 -2 664	1 479 -3 867 38
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities:	307 -2 664 74	1 479 -3 867 38
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases	307 -2 664 74	1 479 -3 867 38 312 -260
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net	307 -2 664 74 232 -149	1 479 -3 867 38 312 -260
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net Net purchases/maturities of other investments	307 -2 664 74 232 -149	1 479 -3 867 38 312 -260 -7 588
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales	307 -2 664 74 232 -149 77 -25	
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net Net purchases/sales/maturities of other investments Net cash provided/used by investing activities	307 -2 664 74 232 -149 77 -25	1 479 -3 867 38 312 -260 -7 588
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net Net purchases/sales/maturities of other investments Net cash provided/used by investing activities Cash flows from financing activities	307 -2 664 74 232 -149 77 -25	1 479 -3 867 38 312 -260 -7 588
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net Net purchases/maturities of other investments	307 -2 664 74 232 -149 77 -25 430	1 479 -3 867 38 312 -260 -7 588
Fixed income securities: Sales Maturities Purchases Net purchases/sales/maturities of short-term investments Equity securities: Sales Purchases Securities purchased/sold under agreement to resell/repurchase, net Net purchases/sales/maturities of other investments Net cash provided/used by investing activities Cash flows from financing activities Issuance/repayment of long-term debt	307 -2 664 74 232 -149 77 -25 430	1 479 -3 867 38 312 -260 -7 588 1 046



Interest paid was USD 23 million and USD 39 million for 2018 and 2019. Tax paid was USD 43 million and USD 67 million for 2018 and 2019, respectively.

Cash and cash equivalents include restricted cash and cash equivalents, for instance pledged cash and cash equivalents (please refer to Note 6 "Investments").

Notes to the Group financial statements

1 Organisation and summary of significant accounting policies

Nature of operations

The Swiss Re Corporate Solutions Group, which is headquartered in Zurich, Switzerland, comprises Swiss Re Corporate Solutions Ltd (the parent company, referred to as "SRCS") and its subsidiaries (collectively, the "Group"). The Group provides a wide range of traditional and non-traditional commercial insurance products and risk transfer solutions through a network of offices around the globe.

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

Basis of presentation

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

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

Principles of consolidation

The Group's financial statements include the consolidated financial statements of SRCS and its subsidiaries. Voting entities which SRCS 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 2019, 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. 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.

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 deposits and time deposits, investments in affiliated companies, investments in equity accounted companies, investment real estate, derivative financial instruments, collateral receivables, securities purchased under agreement to resell, 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

Notes to the Group financial statements

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 enters into various financial contracts covering risks such as weather, weather-contingent price risks and outage contingent power price risks that are accounted for as derivative financial instruments. The Group also uses derivatives to manage exposure to foreign currency risks. Derivative positions are carried at fair value, generally by obtaining quoted market prices or through the use of valuation models, with changes in fair value recorded in income. If the derivative is designated as a hedge of the fair value of assets or liabilities, the fair value change of the hedged item is recognised in earnings, together with the changes in fair value of the derivative.

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.

Cash and cash equivalents

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

Deferred acquisition costs

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

Deferred acquisition costs for short-duration contracts are amortised in proportion to premiums earned. Future investment income is considered in determining the recoverability of deferred acquisition costs for short-duration contracts.

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 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 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 goodwill and other intangible assets.

Goodwill

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

Other assets

Other assets include deferred expenses on retroactive reinsurance, prepaid reinsurance premiums, capitalised software expenses, receivables related to investing activities, real estate for own use, equipment, 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 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 and equipment are carried at depreciated cost. Depreciation on buildings is recognised over the estimated useful life. Land is recognised at cost and not depreciated.

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 realisation of the deferred tax assets is dependent on management's ability to successfully achieve the strategic priorities and implement tax planning strategies.

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

The Group releases stranded tax effects for unrealised gains/losses on AFS securities to earnings on a straight-line basis over the average duration of the relevant AFS portfolio as an approximation of when the individual securities within the portfolio are sold or mature. For 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 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. A provision is also included for claims incurred but not reported, which is 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. 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 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.

Experience features which are directly linked to an insurance and 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 insurance business are generally calculated using the net level premium method, based on assumptions as to investment yields, mortality, withdrawals, lapses and policyholder dividends. Assumptions are set at the time the contract is issued or, in the case of contracts acquired by purchase, at the purchase date. The assumptions are based on projections from past experience, making allowance for possible adverse deviation. Interest rate assumptions for life and health insurance benefit liabilities are based on estimates of expected investment yields. Assumed mortality rates are generally based on experience multiples applied to the actuarial select and ultimate tables based on industry experience. Liabilities for life and health policy benefits are increased with a charge to earnings if it is determined that future cash flows, including investment income, are insufficient to cover future benefits and expenses.

All liabilities for life and health policy benefits are retroceded to an external party.

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. On the liability side, funds held under reinsurance treaties consist of 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.

Premiums

Property and casualty insurance and 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

Notes to the Group financial statements

the amount of insurance and reinsurance provided. Unearned premiums consist of the unexpired portion of insurance and reinsurance provided.

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 insurance and 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 insurance and 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 retrocession 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.

Share-based payment transactions

As of 31 December 2019, the Group has a Leadership Performance Plan, 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.

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.

Subsequent events

Subsequent events for the current reporting period have been evaluated up to 18 March 2020. This is the date on which the financial statements are available to be issued.

Adoption of new accounting standards

In February 2016, the FASB issued ASU 2016-02 "Leases", which creates topic 842, "Leases". The core principle of topic 842 is that a lessee should recognise the assets and liabilities that arise from leases. A lessee should recognise in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing the right to use the underlying asset for the lease term. This accounting treatment applies to finance leases and operating leases. The accounting applied by a lessor is largely unchanged from that applied under the former lease guidance. The ASU also requires that for qualifying sale-leaseback transactions the seller recognises any gain or loss (based on the estimated fair value of the asset at the time of sale) when control of the asset is transferred instead of amortising it over the lease period. The Group adopted ASU 2016-02 on 1 January 2019 together with the following related ASUs on topic 842, "Leases": ASU 2018-01, ASU 2018-10, ASU 2018-11, ASU 2018-20 and ASU 2019-01. In line with the modified retrospective adoption approach provided by ASU 2018-11 "Targeted Improvements", the Group applied the new leases standard to its leases on the adoption date. The Group elected a package of practical expedients under the transition guidance within the new standard, which among other things allowed it to carry forward the historical lease classification. The adoption did not have a material impact on the Group's financial statements.

In March 2017, the FASB issued ASU 2017-08, "Premium Amortization on Purchased Callable Debt Securities", an update to subtopic 310-20, "Receivables – Nonrefundable Fees and Other Costs". The update applies to certain purchased callable debt securities held at a premium. The ASU requires that those premiums should be amortised to the earliest call date and not to the maturity date. The Group adopted ASU 2017-08 on a modified retrospective basis on 1 January 2019. The adoption did not have a material impact on the Group's financial statements.

In July 2017, the FASB issued ASU 2017-11, "Accounting for Certain Financial Instruments with Down Round Features", an update to topic 260, "Earnings Per Share", topic 480, "Distinguishing Liabilities from Equity" and topic 815, "Derivatives and Hedging". A down round feature is a provision in an equity-linked financial instrument (or embedded features) that reduces the exercise price if the entity later sells stock for a lower price or issues an equity-linked instrument with a lower exercise price than the instrument's original exercise price. The amendments in this update change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features and require that a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity's own stock. The Group adopted ASU 2017-11 on 1 January 2019. The adoption did not have an impact on the Group's financial statements.

In August 2017, the FASB issued ASU 2017-12, "Targeted Improvements to Accounting for Hedging Activities", an update to topic 815, "Derivatives and Hedging". The update expands and refines hedge accounting for both nonfinancial and financial risk components and aligns the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The ASU eliminates the requirement to separately measure and report hedge ineffectiveness and requires the presentation of all items that affect earnings in the same income statement line as the hedged item. The new standard also provides alternatives for applying hedge accounting to additional hedging strategies and for measuring the hedged item in fair value hedges of interest rate risk. Further, the standard reduces the cost and complexity of applying hedge accounting by easing the requirements for effectiveness testing, hedge documentation and application of the critical terms match method. The Group adopted ASU 2017-12 on 1 January 2019. The adoption did not have a material impact on the Group's financial statements.

In June 2018, the FASB issued ASU 2018-07, "Improvements to Nonemployee Share-Based Payment Accounting", an update to topic 718, "Compensation – Stock Compensation". The update expands the scope of topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The Group adopted ASU 2018-07 on 1 January 2019. The adoption did not have an impact on the Group's financial statements.

In June 2018, the FASB issued ASU 2018-08, "Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made", an update to topic 958, "Not-for-Profit Entities". The amendments in this update clarify and improve the former guidance about whether a transfer of assets (or the reduction, settlement, or cancellation of liabilities) is a contribution or an exchange transaction. The Group adopted ASU 2018-08 on a modified prospective basis on 1 January 2019. The adoption did not have an impact on the Group's financial statements.

In October 2018, the FASB issued ASU 2018-16, "Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes", an update to topic 815, "Derivatives and Hedging". The amendments in this update permit the use of the OIS rate based on SOFR as a US benchmark interest rate in order to facilitate the LIBOR to SOFR transition. The Group adopted ASU 2018-16 on 1 January 2019. The adoption did not have an impact on the Group's financial statements.

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

Notes to the Group financial statements

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 2019-09 "Effective Date", ASU 2018-12 is effective for annual periods beginning after 15 December 2023, and interim periods beginning after 15 December 2024. Due to the decision of the Board of SRCS to prepare the Group's consolidated financial statements in accordance with IFRS beginning 1 January 2024, the Group does not plan to adopt ASU 2018-12.

2 Information on business segments

The Group provides innovative insurance capacity to mid-sized and large multinational corporations across the globe. Offerings range from standard risk transfer covers and multi-line programmes to customised solutions tailored to the needs of clients.

The Group presents five core operating business segments: Property, Accident & Health, Other liability, Specialty and Credit, which are determined by the organisational structure and the way in which management reviews the operating performance of the Group.

The Group does not track and manage its investment portfolio by operating segment, and therefore separate balance sheets are not maintained. Accordingly, the Group does not review and evaluate the financial results of its operating segments based upon balance sheet data.

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

The Group operating segments are outlined below.

The Property segment includes insurance for fire, wind, water damage and vandalism. It also provides cover for flood, earthquake, tsunami and terrorism. Business interruption insurance is complementary to property insurance. Agriculture is also covered in this segment.

Accident & Health

The Accident & Health segment includes accident and health insurance, primarily consisting of employers stop loss. Employers stop loss policies provide specific and aggregate coverage for self-funded medical benefit plans. Additionally, reserves for run off workers compensation business are held and maintained, though this business is no longer actively written.

The Other liability segment includes liability and motor. The Group's liability insurance products provide coverage against legal liability exposure of a business including product, professional, directors' and officers' (D&O) and environmental liability insurance.

Specialty

The Specialty segment consists of dedicated insurance offerings to specific industries on a global scale such as aviation and space, engineering and construction and marine.

Credit

The Credit segment provides innovative trade, commodity and infrastructure finance risk sharing solutions along with surety solutions and political risk insurance covers.

Notes to the Group financial statements

a) Business segments – income statement For the year ended 31 December

2018		Accident &				
USD millions	Property	Health	Other liability	Specialty	Credit	Total
Gross premiums written	1 677	474	1 259	728	556	4 694
Net premiums written	1 424	431	1 129	694	444	4 122
Change in unearned premiums	-83	-18	-79	14	-31	-197
Premiums earned	1 341	413	1 050	708	413	3 925
Expenses						
Claims and claim adjustment expenses	-1 115	-318	-1 035	-651	-122	-3 241
Acquisition costs	-199	-59	-132	-109	-108	-607
Operating expenses	-272	-69	-225	-196	-72	-834
Total expenses before interest expenses	-1 586	-446	-1 392	-956	-302	-4 682
Underwriting result	-245	-33	-342	-248	111	-757
Net investment income						200
Net realised investment gains/losses						15
Other revenues						2
Interest expenses						-24
Income/loss before income tax expense/benefit						-564
Claims ratio in %	83.2	77.0	98.6	91.9	29.5	82.6
Expense ratio in %	35.1	31.0	34.0	43.1	43.6	36.7
Combined ratio in %	118.3	108.0	132.6	135.0	73.1	119.3

Business segments – income statementFor the year ended 31 December

2019		Accident &				
USD millions	Property	Health	Other liability	Specialty	Credit	Total
Gross premiums written	1 866	462	1 261	809	576	4 974
Net premiums written	1 546	413	1 081	726	487	4 253
Change in unearned premiums	-92	14	6	3	-18	-87
Premiums earned	1 454	427	1 087	729	469	4 166
Expenses						
Claims and claim adjustment expenses	-1 230	-333	-1 517	-720	-373	-4 173
Acquisition costs	-192	-53	-158	-120	-117	-640
Operating expenses	-274	-71	-225	-219	-75	-864
Total expenses before interest expenses	-1 696	-457	-1 900	-1 059	-565	-5 677
· · · · · · · · · · · · · · · · · · ·						
Underwriting result	-242	-30	-813	-330	-96	-1 511
Underwriting result	-242	-30	-813	-330	-96	-1 511
Underwriting result Net investment income	-242	-30	-813	-330	-96	-1 511
	-242	-30	-813	-330	-96	
Net investment income	-242	-30	-813	-330	-96	247
Net investment income Net realised investment gains/losses	-242	-30	-813	-330	-96	247 156
Net investment income Net realised investment gains/losses Other revenues	-242	-30	-813	-330	-96	247 156 4
Net investment income Net realised investment gains/losses Other revenues Interest expenses	-242	-30	-813	-330	-96	247 156 4 -40
Net investment income Net realised investment gains/losses Other revenues Interest expenses	-242 84.6	-30 78.0	-813	-330 98.8	-96 79.6	247 156 4 -40
Net investment income Net realised investment gains/losses Other revenues Interest expenses Income/loss before income tax expense/benefit						247 156 4 -40 -1 144

Notes to the Group financial statements

b) Gross premiums earned by geography

Gross premiums earned by region for the years ended 31 December

USD millions	2018	2019
North America	2 627	2 741
Latin America	456	412
Europe (including Middle East and Africa)	998	1 216
Asia-Pacific Asia-Pacific	391	468
Total	4 472	4 837

Gross premiums earned by country for the years ended 31 December

USD millions 2018	2019
United States 2 328	2 428
United Kingdom 223	265
Germany 188	235
Canada 160	176
Australia 151	176
Brazil 248	176
France 107	129
Netherlands 113	118
Switzerland 60	107
Bermuda 86	78
Other 811	949
Total 4 472	4 837

Gross premiums earned are allocated by country, based on the underlying contract.

3 Insurance information

For the years ended 31 December

Premiums written and premiums earned

USD millions	2018	2019
Premiums written, thereof:		
Direct	3 648	3 869
Reinsurance	1 046	1 105
Ceded	-572	-721
Net premiums written	4 122	4 253
Premiums earned, thereof:		
Direct	3 430	3 838
Reinsurance	1 042	999
Ceded	-547	-671
Net premiums earned	3 925	4 166

Claims and claim adjustment expenses

USD millions	2018	2019
Claims paid, thereof:		
Gross	-3 261	-4 022
Ceded	764	1 035
Net claims paid	-2 497	-2 987
Change in unpaid claims and claim adjustment expenses, thereof:		
Cross	EOE	1.046
Gross Ceded	-505 -239	-1 046 -140
Ceded	-239	-140

Acquisition costs

USD millions 2018	2019
Acquisition costs, thereof:	
Gross -710	-760
Ceded 103	120
Net acquisition costs -607	-640

Notes to the Group financial statements

Reinsurance recoverable on unpaid claims

As of 31 December 2018 and 2019, the Group had a reinsurance recoverable of USD 5 486 million and USD 7 058 million, respectively. The concentration of credit risk is regularly monitored and evaluated.

The Group cedes certain re/insurance contracts to affiliated companies within the Swiss Re Group, but outside of the Group (please refer to Note 12).

Reinsurance receivables

Reinsurance receivables as of 31 December were as follows:

USD millions	2018	2019
Premium receivables invoiced	902	966
Receivables invoiced from ceded re/insurance business	116	304
Recognised allowance	-34	-25

4 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	2018	2019
Balance as of 1 January	11 818	11 929
Reinsurance recoverable	-5 458	-4 985
Net balance as of 1 January	6 360	6 944
In commend on the Andrea		
Incurred related to:	0.040	0.005
Current year	2 946	3 065
Prior year Prior year	281	722
Impacts of retroactive reinsurance		373
Total incurred	3 227	4 160
Paid related to:		
Current year	-469	-573
Prior year	-2 028	-2 414
Total paid	-2 497	-2 987
Foreign exchange	-102	6
Effect of acquisitions, disposals, new retroactive reinsurance and other items	-44	-1 299
Net balance as of period end	6 944	6 824
Reinsurance recoverable	4 985	6 330
Deferred expense on retroactive reinsurance	4 900	-273
Balance as of period end	11 929	12 881

Prior-year development

During 2019, all lines of business experienced overall adverse development on prior accident years. The unfavourable development on property reflects large man-made and natural catastrophe losses. The adverse development on credit comes from large man-made losses across most of the regions. Other liability is impacted by reserves strengthening resulting from management actions taken in 2019 and large man-made losses, predominantly in North America. The adverse development across all lines is partially offset by the recovery under the Adverse Development Cover agreement with Swiss Reinsurance Company Ltd.

A summary of prior-year net claims and claim adjustment expenses development by lines of business for the years ended 31 December is shown below¹:

USD millions 2018	2019
Line of business:	
Property 96	288
Accident & Health 51	30
Other liability 141	217
Specialty	57
Credit -7	130
Total 281	722

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

Notes to the Group financial statements

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 as well as out of such business acquired subsequently through reinsurance arrangements to other Swiss Re Group Companies, in particular in the area of US asbestos and environmental liability.

At the end of 2019, the Group carried net reserves for US asbestos and environmental liabilities equal to USD 166 million. During 2019, the Group incurred a net gain of USD 3 million and net paid of USD 57 million in relation of these liabilities.

The net paid losses include a settlement of USD 38 million for late asbestos and environmental reported claims presented by one cedent in Q2 2019.

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

Short duration contract unpaid claims and claim adjustment expenses

Basis of presentation for claims development information

This section provides claims development information on an accident year basis.

Claims development information and information on reserves for claims relating to insured events that have occurred but have not yet been reported or not enough reported ("IBNR") is presented by the five core operating business segments ("disaggregation categories"). Amounts shown are net of external retrocession and ceded re/insurance contracts to affiliated companies within the Swiss Re Group, but outside the Swiss Re Corporate Solutions Group. Claims development information and information on IBNR reserves are shown on a nominal basis, also for cases where the Group discounts claim liabilities from acquisition accounting.

SRCS was incorporated in 2011 and started operations in 2012. Corporate Solutions as a separately managed business unit likewise started operations in 2012 after the transfer of Swiss Reinsurance Company Ltd's investment in SRCS in 2012 to the Swiss Re Group holding company, Swiss Re Ltd. Therefore, eight accident years and reporting periods are shown for the Group. Claims arising from older accident years prior to 2012 are shown as a reconciling item in "All liabilities before 2012" in the claims development tables. All but an immaterial portion of these claims arise from accident years older than 10 years and therefore are out of the required range of disclosure.

Generally, claims reserves acquired in business combinations are presented on a retrospective basis in the claims development tables, as if the Group had always owned the business acquired, to the extent the underlying information can be produced without undue effort and acquired reserves are considered material. Acquired businesses are shown in the existing disaggregation categories. Disposals will be treated similarly. Facts and circumstances may indicate a different presentation for specific transactions, in which case they will be addressed specifically in these notes.

The information presented in the claims development tables is presented at the 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 treated as Required Supplementary Information (RSI) under US GAAP. Therefore, it 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. This section of the note provides claims development information on an accident year basis.

Methodology for determining the presented amounts of liabilities for IBNR claims

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

Cedents report their case reserves and their estimated IBNR to the Group. The Group develops and recognises its own estimate of IBNR claims, which includes circumstances in which the cedent has 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 business reviewed on a portfolio level, the expected ultimate losses are set for most lines and types of business based on analysis performed using standard actuarial techniques. In general, contracts are aggregated into portfolios by combining contracts with similar features.

In most cases, these standard actuarial techniques encompass a number of loss development factor techniques applied to claim tables of paid and reported losses. Other actuarial techniques may be applicable to specific categories. For instance, the analysis of frequency and severity could be applied in all disaggregation categories. 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 (see also separate section 'Asbestos and environmental claims exposure' on page 24).

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.

Notes to the Group financial statements

In addition, the following applies to all business:

- For the most recent underwriting years, reliance may be made on the Group's costing and underwriting functions for the initial estimates of claims, although the initial reserving estimates may differ from these pricing estimates if there is good reason to believe losses are likely to emerge higher or lower, and in light of the limited claims experience to date. Reviews of those initial estimates are performed regularly, forming a basis for adjustments on both the current and prior underwriting years.
- The reserving process considers any information available in respect of either a specific case or a large loss event and the impact of any unusual features in the technical accounting of information provided by cedents.

Claims frequency information

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

Incurred claims and allocated claim adjustment expenses, net of reinsurance

USD millions	Reporting year									
										Cumulative number of reported claims
Accident year	2012	2013	2014	2015	2016	2017	2018	2019	thereof IBNR	(in nominals)
2012	483	460	419	424	422	444	436	462	0	3 288
2013		571	487	442	422	418	417	414	0	13 684
2014			657	620	577	575	570	574	6	7 237
2015				510	466	460	457	432	-8	3 758
2016					572	597	586	611	-1	4 561
2017						1 538	1 631	1 614	15	5 811
2018	RSI						951	1 196	77	6 805
2019								882	334	4 137
Total	·				·			6 185	423	49 281

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
2012	63	247	337	372	376	377	378	379
2013		103	253	358	398	406	408	410
2014			132	400	497	540	549	558
2015				91	244	370	395	415
2016					143	423	510	559
2017						177	896	1 268
2018	RSI						157	662
2019								167
Total								4 418
All liabilities bet	fore 2012							2
Liabilities for o	claims and claim a	djustment e	xpenses, ne	t of reinsura	nce			1 769

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

Years	1	2	3	4	5	6	7	8
Property (RSI)	18.6%	41.5%	21.4%	7.7%	2.2%	0.8%	0.3%	0.2%

Accident years 2012 and 2016 are primarily impacted by development on large losses from natural catastrophes in Asia and North America, as well as large man-made losses in North America.

Negative IBNRs can be a feature for claims arising from Property exposure, due to overstated case reserves. Accident years 2017 and 2018 were significantly impacted by hurricane activity in North America, accident year 2018 was additionally impacted by wildfires in North America. The accident year 2018 and 2019 were impacted by adverse prior-year development due to large manmade loss activity.

Change in claim counts in Property for accident years 2013 and 2014 relate mostly to an agriculture program written in 2013, leading to high claim counts in those years.

Notes to the Group financial statements

Accident & Health

Incurred claims and allocated claim adjustment expenses, net of reinsurance

USD millions	Reporting year									
										Cumulative number of reported claims
Accident year	2012	2013	2014	2015	2016	2017	2018	2019	thereof IBNR	(in nominals)
2012	79	93	89	89	89	89	89	89	0	796
2013		122	137	145	145	145	146	146	0	1 014
2014			110	106	123	122	123	122	1	726
2015				69	69	76	74	76	-1	296
2016					200	221	225	227	0	339
2017						170	217	213	-1	2 223
2018	RSI						240	260	5	4 947
2019								254	150	1 012
Total								1 387	154	11 353

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
2012	25	84	89	89	89	89	89	89
2013		43	130	144	145	145	145	145
2014			35	101	120	120	121	121
2015				17	66	74	74	76
2016					63	208	222	222
2017						70	207	213
2018	RSI						102	250
2019								103
Total								1 219
All liabilities bef	ore 2012							310
Liabilities for o	laims and claim a	djustment e	xpenses, ne	t of reinsura	nce			478

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

Years	1	2	3	4	5	6	7	8
Accident & Health								
(RSI)	31.1%	61.4%	8.4%	0.1%	0.9%	0.0%	0.0%	0.0%

Accident & Health experienced a large increase in small-to-mid sized claims relating to recent accident years 2017 to 2019. The significant increase in the claims count in accident year 2018 comes from Workers' compensation portfolio that was fully ceded to Swiss Reinsurance Company Ltd.

Accident & Health was impacted by the IHC Risk Solutions, LLC (IHC) acquisition in reporting year 2016. There was an increase in expected losses and changes in the accident year split for accident year 2016. The liabilities before 2012 relate mainly to accident years 2006 and prior.

Changes in the claim count across accident years is volume driven. For example, the IHC acquisition and feed of policy level detail is the main driver for the increases in counts for accident years 2016 and subsequent.

Other liability

Incurred claims and allocated claim adjustment expenses, net of reinsurance

USD millions	Reporting year									
										Cumulative number of reported claims
Accident year	2012	2013	2014	2015	2016	2017	2018	2019	thereof IBNR	(in nominals)
2012	364	355	336	325	319	364	355	372	49	5 332
2013		482	548	531	483	478	472	441	106	6 193
2014			556	544	528	526	510	431	191	7 461
2015				660	810	882	885	732	248	6 906
2016					670	670	717	623	363	5 798
2017						741	816	587	434	5 2 1 7
2018	RSI						800	353	555	4 5 3 9
2019								811	704	3 171
Total								4 350	2 650	44 617

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
2012	6	35	69	110	177	242	273	299
2013		7	46	138	223	265	323	359
2014			8	38	105	172	251	313
2015				8	85	262	407	505
2016					10	87	167	315
2017						16	83	217
2018	<i>RSI</i>						16	44
2019								30
Total								2 082
All liabilities bef	ore 2012							135
Liabilities for o	laims and claim a	djustment e	xpenses, ne	t of reinsura	nce			2 403

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

Years	1	2	3	4	5	6	7	8
Other liabilities								
(RSI)	2.3%	9.4%	17.6%	17.9%	14.8%	15.0%	8.2%	7.0%

For the 2019 reporting year, a Loss Portfolio Transfer of the US Other liability line of business to Swiss Reinsurance Company Ltd. reduced reserves by USD 1.2 billion in total across all accident years. Excluding this impact, there was unfavourable prior year development across all lines of business, in particular US liability, mainly driven by large and medium sized man-made losses. The impact of this unfavourable development was reduced by recoveries under an Adverse Development Cover with Swiss Reinsurance Company Ltd. in place for the second half of the year. A recovery in 2019 of USD 0.6 billion under this cover is included in the 2018 accident year above.

Other liability business may have a significant reporting lag between the accident date and the date reported to the Group. The reported claim counts have been trending up for 2012 to 2017, which is similar to the incurred losses. For the recent years, there will be significant increases in reported claim counts over time, which will narrow the gap of claim counts.

Notes to the Group financial statements

Specialty

Incurred claims and allocated claim adjustment expenses, net of reinsurance

USD millions	Reporting year									
										Cumulative number of reported claims
Accident year	2012	2013	2014	2015	2016	2017	2018	2019	thereof IBNR	(in nominals)
2012	340	291	287	258	266	256	256	259	0	2 958
2013		384	374	355	341	350	348	354	-1	4 321
2014			437	423	391	384	380	377	2	5 333
2015				529	534	523	504	498	3	5 348
2016					435	460	462	472	12	5 644
2017						469	478	454	29	6 383
2018	RSI						588	662	-129	6 809
2019								619	243	4 273
Total								3 695	159	41 069

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
2012	79	178	210	222	240	245	247	248
2013		109	220	272	300	318	335	344
2014			60	223	315	339	349	358
2015				128	321	405	446	462
2016					73	281	350	402
2017						92	278	341
2018	RSI						101	389
2019								154
Total								2 698
All liabilities bet	fore 2012							4
Liabilities for o	claims and claim a	djustment e	xpenses, ne	t of reinsura	nce			1 001

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

Years	1	2	3	4	5	6	7	8
Specialty (RSI)	22.3%	40.0%	16.1%	7.6%	4.5%	3.0%	1.7%	0.4%

Specialty had overall adverse prior-year development mainly driven by small-to-medium sized losses from accident year 2016 and 2018, partially offset by favourable prior-year development from accident years 2015 and 2017.

Specialty business may have a moderate reporting lag between the accident date and the date reported to the Group. The reported claim counts have been trending up for 2014 to 2019, which is similar to the incurred losses. For the recent years, there will be moderate increase in reported claim counts over time, which will narrow the gap of claim counts.

Credit

Incurred claims and allocated claim adjustment expenses, net of reinsurance

USD millions	Reporting year									
										Cumulative number of reported claims
Accident year	2012	2013	2014	2015	2016	2017	2018	2019	thereof IBNR	(in nominals)
2012	33	29	21	24	21	20	19	20	0	581
2013		38	29	32	31	28	27	28	0	961
2014			73	81	85	101	97	103	2	750
2015				119	175	181	173	173	1	1 477
2016					135	151	146	190	5	464
2017						91	95	119	10	294
2018	RSI						116	150	37	330
2019								225	72	114
Total								1 008	127	4 971

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
2012	9	13	13	19	18	19	18	19
2013		9	17	24	26	27	26	26
2014			36	68	84	93	84	102
2015				107	191	192	178	177
2016					83	141	142	159
2017						28	42	74
2018	RSI						39	76
2019								73
Total								706
All liabilities bet	fore 2012							7
Liabilities for o	claims and claim a	djustment e	xpenses, ne	t of reinsura	nce			309

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

Years	1	2	3	4	5	6	7	8
Credit (RSI)	37.5%	27.9%	11.4%	9.3%	-2.7%	6.3%	-2.5%	5.0%

Credit volume has been increasing since 2012. Credit business tends to have an initial payout and subsequent recovery from the insured. Therefore, payments can exceed incurred amounts. The claims development on accident years 2014 to 2018 is driven by several large losses. Accident year 2019 was impacted by several large and medium-sized losses.

Credit business may have a moderate reporting lag between the accident date and the date reported to the Group. Some of this business tends to have very small payouts on a high volume of claims. The high volume of small claims increases the variability of the reported claim counts by year but may not necessarily have a significant impact on incurred losses. For all recent years, there will be significant increases in reported claim counts over time, which will narrow the gap of claim counts.

Notes to the Group financial statements

Reconciliation of gross liability for unpaid claims and claim adjustment expenses

The following table reconciles the Group's net outstanding liabilities to the gross liabilities for unpaid claims and claim adjustment expenses. The net outstanding liabilities correspond to the total liabilities for unpaid claims and claim adjustment expenses, net of reinsurance for each disaggregation category. Other short-duration contract lines include reserves for business that is not material to the Group.

For the year ended 31 December

USD millions	2019
Net outstanding liabilities	
Corporate Solutions:	
Property	1 769
Accident & Health	478
Other liability	2 403
Specialty	1 001
Credit	309
Total net undiscounted outstanding liabilities excluding other short duration contract lines	5 960
Impact of acquisition accounting	-91
Total net discounted outstanding liabilities excluding other short duration contract lines	5 869
Other short duration contract lines	241
Total net discounted outstanding short duration liabilities	6 110
Allocated reinsurance recoverables on unpaid claims	
Corporate Solutions:	
Property	169
Accident & Health	1 777
Other liability	3 238
Specialty	303
Credit	19
Impact of acquisition accounting	-9
Other short duration contract lines	325
Total short duration reinsurance recoverable on outstanding liabilities	5 822
Exclusions:	
Unallocated claim adjustment expenses	484
Long duration contracts ¹	465
Total other reconciling items	949
Total unpaid claims and claim adjustment expenses	12 881

¹The reserves included in "Long duration contracts" are retroceded to an external party except for an insignificant part which remains with the Group.

5 Deferred acquisition costs (DAC)

As of 31 December, the DAC were as follows:

USD millions	2018	2019
Opening balance as of 1 January	454	488
Deferred	634	621
Amortisation	-595	-626
Effect of foreign currency translation	-5	
Closing balance	488	483

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

6 Investments

Investment income

Net investment income by source was as follows:

USD millions 201	2019
Fixed income securities 163	165
Equity securities .	5 4
Short-term investments	13
Other current investments	7
Share in earnings of equity-accounted investees 3	7 67
Cash and cash equivalents	7 14
Net result from deposit-accounted contracts	7 4
Deposits with ceding companies	5 2
Gross investment income 24	276
Investment expenses -23	-26
Interest charged for funds held —1	7 –3
Net investment income 20	247

Realised gains and losses

Realised gains and losses for fixed income securities, equity securities and other investments were as follows:

USD millions	2018	2019
Fixed income securities available-for-sale:		
Gross realised gains	4	45
Gross realised losses	-22	-4
Net realised investment gains/losses on equity securities	6	28
Change in net unrealised investment gains/losses on equity securities	-13	16
Net realised/unrealised gains/losses on other investments		-8
Net realised/unrealised gains/losses on insurance-related activities	29	89
Foreign exchange gains/losses	11	-10
Net realised investment gains/losses	15	156

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, a 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.

Investments available-for-sale

Amortised cost or cost and estimated fair values of fixed income securities classified as available-for-sale as of 31 December were as follows:

2018	Amortised cost	Gross unrealised	Gross unrealised	Estimated
USD millions	or cost	gains	losses	fair value
Debt securities issued by governments				
and government agencies:				
US Treasury and other US government corporations and agencies	2 580	6	-18	2 568
US Agency securitised products	220	1	-1	220
States of the United States and political subdivisions of the states	404	5	-4	405
Canada	417	1	-5	413
Australia	144		-1	143
Brazil	196	3		199
Other	197	1	-5	193
Total	4 158	17	-34	4 1 4 1
Corporate debt securities	1 827	4	-34	1 797
Mortgage- and asset-backed securities	329	1	-4	326
Fixed income securities available-for-sale	6 3 1 4	22	-72	6 2 6 4

2019 USD millions	Amortised cost or cost	Gross unrealised gains	Gross unrealised losses	Estimated fair value
Debt securities issued by governments				
and government agencies:				
US Treasury and other US government corporations and agencies	2 443	57	-6	2 494
US Agency securitised products	323	7		330
States of the United States and political subdivisions of the states	395	16		411
Canada	465	2	-1	466
Australia	209	2	-1	210
Brazil	207	5		212
Other	230	2	-1	231
Total	4 272	91	-9	4 354
Corporate debt securities	1 309	38		1 347
Mortgage- and asset-backed securities	342	5		347
Fixed income securities available-for-sale	5 923	134	-9	6 048

Financial statements

Notes to the Group financial statements

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 2018 and 2019.

	Less tha	n 12 months	12 months or more		Total	
2018		Unrealised		Unrealised		Unrealised
USD millions	Fair value	losses	Fair value	losses	Fair value	losses
Debt securities issued by governments						
and government agencies:						
US Treasury and other US government						
corporations and agencies	218	Ο	1 922	18	2 140	18
US Agency securitised products	20	0	18	1	38	1
States of the United States and political						
subdivisions of the states	13	Ο	140	4	153	4
Canada	271	5			271	5
Australia	20	Ο	8	1	28	1
Brazil					0	0
Other	34	0	119	5	153	5
Total	576	5	2 207	29	2 783	34
Corporate debt securities	822	13	638	21	1 460	34
Mortgage- and asset-backed securities	73	0	164	4	237	4
Total	1 471	18	3 009	54	4 480	72

	Less tha	Less than 12 months Unrealised		12 months or more		Total	
2019				Unrealised		Unrealised	
USD millions	Fair value	losses	Fair value	losses	Fair value	losses	
Debt securities issued by governments							
and government agencies:							
US Treasury and other US government							
corporations and agencies	450	6	10	0	460	6	
US Agency securitised products	43	0	3	0	46	0	
States of the United States and political							
subdivisions of the states			8	0	8	0	
Canada	211	1			211	1	
Australia	47	0	8	1	55	1	
Brazil	14	0			14	0	
Other	67	0	34	1	101	1	
Total	832	7	63	2	895	9	
Corporate debt securities	69	0	8	0	77	0	
Mortgage- and asset-backed securities	53	0	25	0	78	0	
Total	954	7	96	2	1 050	9	

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 2018 and 2019, USD 1 689 million and USD 1 500 million, respectively, of fixed income securities available-for-sale were callable.

		2018		2019
USD millions	Amortised cost or cost	Estimated fair value	Amortised cost or cost	Estimated fair value
Due in one year or less	2 054	2 042	1 055	1 059
Due after one year through five years	2 233	2 2 1 6	2 231	2 254
Due after five years through ten years	1 193	1 180	1 496	1 556
Due after ten years	505	500	799	832
Mortgage- and asset-backed securities with no fixed maturity	329	326	342	347
Total fixed income securities available-for-sale	6 314	6 264	5 923	6 048

Assets pledged

As of 31 December 2018 and 2019, investments with a carrying value of USD 924 million and USD 1 050 million, respectively, were on deposit with regulatory agencies in accordance with local requirements, of which USD 61 million and USD 33 million, respectively, were cash and cash equivalents. As of 31 December 2018 and 2019, investments with a carrying value of USD 259 million and USD 413 million, respectively, were placed on deposit or pledged to secure certain reinsurance liabilities, of which USD 3 million and USD 281 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 2018 and 2019, securities with a value of USD 1 639 million and USD 1 195 million, respectively, were transferred to third parties under securities lending transactions and repurchase agreements on a fully collateralised basis. There were no associated liabilities.

Financial statements

Notes to the Group financial statements

Other financial assets and liabilities by measurement category

As of 31 December 2018 and 2019, "Other invested assets" and "Accrued expenses and other liabilities" by measurement category were as follows:

		Investments				
		measured at net				
2018		asset value as	Amortised Cost			
USD millions	Fair value	practical expedient	or cost	Equity-accounted	Not in scope ¹	Total
Other invested assets						
Derivative financial instruments	14					14
Reverse repurchase agreements			20			20
Equity-accounted investments				1 944		1 944
Other		8	80			88
Other invested assets	14	8	100	1 944	0	2 066
Accrued expenses and other liabilities						
Derivative financial instruments	127					127
Other			65		357	422
Accrued expenses and other						
liabilities	127	0	65	0	357	549

		Investments				
		measured at net				
2019		asset value as	Amortised Cost			
USD millions	Fair value	practical expedient	or cost	Equity-accounted	Not in scope ¹	Total
Other invested assets						
Derivative financial instruments	25					25
Reverse repurchase agreements			27			27
Equity-accounted investments				1 513		1 513
Other		6	78			84
Other invested assets	25	6	105	1 513	0	1 649
Accrued expenses and other liabilities						
Derivative financial instruments	107					107
Other			48		541	589
Accrued expenses and other		·				
liabilities	107	0	48	0	541	696

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:

Gross amounts of recognised financial assets	Amounts set-off in the balance sheet	assets presented	instruments not set-off	Net amount
14		14	-1	13
20		20	-20	0
34	0	34	-21	13
	recognised financial assets 14 20	recognised financial assets in the balance sheet 14 20	recognised Amounts set-off assets presented in the balance sheet 14 14 20 20	recognised financial assets in the balance sheet in

2018	Gross amounts of recognised	Amounts set-off	Net amounts of financial	Related financial instruments not set-off	
USD millions	financial liabilities	in the balance sheet	· ·	in the balance sheet	Net amount
Derivative financial instruments – liabilities	-127		-127	22	-105
Total	-127	0	-127	22	-105

Total	52	0	52	-29	23
Reverse repurchase agreements	27		27	-27	0
Derivative financial instruments – assets	25		25	-2	23
2019 USD millions	Gross amounts of recognised financial assets	Amounts set-off in the balance sheet	· ·	Related financial instruments not set-off in the balance sheet	Net amount

	Gross amounts of		Net amounts of financial	Related financial	
2019	recognised	Amounts set-off	liabilities presented	instruments not set-off	
USD millions	financial liabilities	in the balance sheet	in the balance sheet	in the balance sheet	Net amount
Derivative financial instruments – liabilities	-107		-107	17	-90
Total	-107	0	-107	17	-90

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", respectively.

7 Fair value disclosures

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

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

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

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 2019, these adjustments were not material.

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 upon 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 Swiss Re Group's pricing validation reviews and pricing vendor challenge process. Valuations provided by pricing vendors are generally based on the actual trade information as substantially all of the Group's non-US government holdings are traded in transparent and liquid markets.

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

Governance around level 3 fair valuation

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

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

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

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

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

2018 USD millions	Quoted prices in active markets for identical assets and liabilities (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)	Investments measured at net asset value as practical expedient	Total
Assets					
Fixed income securities held for proprietary					
investment purposes	2 569	3 695			6 264
Debt securities issued by US government					
and government agencies	2 569	404			2 973
US Agency securitised products		220			220
Debt securities issued by non-US					
governments and government agencies		948			948
Corporate debt securities		1 797			1 797
Mortgage- and asset-backed securities		326			326
Equity securities held for proprietary investment purposes	167	13			180
Short-term investments held for proprietary investment purposes	176	217			393
Derivative financial instruments	2	6	6		14
Other invested assets				8	8
Total assets at fair value	2 914	3 931	6	8	6 859
Liabilities					
Derivative financial instruments		-6	-121	<u> </u>	-127
Total liabilities at fair value	0	-6	-121	0	-127

2019 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)	Investments measured at net asset value as practical expedient	Total
Assets					
Fixed income securities held for proprietary					
investment purposes	2 495	3 553			6 048
Debt securities issued by US government					
and government agencies	2 495	410			2 905
US Agency securitised products		330			330
Debt securities issued by non-US					
governments and government agencies		1 119			1 119
Corporate debt securities		1 347			1 347
Mortgage- and asset-backed securities		347			347
Equity securities held for proprietary investment purposes	171	1			172
Short-term investments held for proprietary investment purposes	126	242			368
Derivative financial instruments	6	11	8		25
Other invested assets				6	6
Total assets at fair value	2 798	3 807	8	6	6 619
Liabilities					
Derivative financial instruments		-11	-96		-107
Total liabilities at fair value	0	-11	-96	0	-107

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:

2018 USD millions	Derivative assets	Total assets	Derivative liabilities	Total liabilities
Assets and liabilities				
Balance as of 1 January	16	16	-76	-76
Realised/unrealised gains/losses:				
Included in net income		0	30	30
Included in other comprehensive income		0		0
Purchases	3	3		0
Issuances		0	-140	-140
Sales	-3	-3	23	23
Settlements	-10	-10	42	42
Transfers into level 3 ¹		0		0
Transfers out of level 3 ¹		0		0
Impact of foreign exchange movements		0		0
Closing balance as of 31 December	6	6	-121	-121

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

2019 USD millions	Derivative assets	Total assets	Derivative liabilities	Total liabilities
Assets and liabilities				
Balance as of 1 January	6	6	-121	-121
Realised/unrealised gains/losses:				
Included in net income	-4	-4	84	84
Included in other comprehensive income		0		0
Purchases	18	18		0
Issuances		0	-114	-114
Sales	-2	-2	22	22
Settlements	-10	-10	33	33
Transfers into level 3 ¹		0		0
Transfers out of level 3 ¹		0		0
Impact of foreign exchange movements		0		0
Closing balance as of 31 December	8	8	-96	-96

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

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

The gains and losses relating to the assets and liabilities measured at fair value using significant unobservable inputs (level 3) for the years ended 31 December were as follows:

USD millions	2018	2019
Gains/losses included in net income for the period	30	80
Whereof change in unrealised gains/losses relating to assets and liabilities still held at the reporting date	3	33

Quantitative information about level 3 fair value measurements

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

USD millions	2018 Fair value	2019 Fair value Valuation technique	Unobservable input	Range (weighted average)
Liabilities	T dii Valdo	Tun Variation teamings	Onobodivable input	nange (weighted average)
Derivative financial instruments	-121	-96		
Weather contracts	-77	-76 Proprietary option model	Risk margin	5-11% (9%)
			Correlation	-74-60% (25%)
			Volatility (power/gas)	27-118% (67%)
			Volatility (temperature)	69-304 (95) HDD/CAT1
			Index value (temperature)	199-2 894 (1 115)
				HDD/CAT1
Industry loss warrants	-26	-15 Credit default model	Market implied probability	1-13% (7%)
			of Nat Cat event	
Power outage contracts	-18	-5 Proprietary option model	Risk margin	6% (6%)
			Average power forward	USD 28-44 (USD 33.8)
			price	

¹ Heating Degree Days (HDD); Cumulative Average Temperature (CAT).

Sensitivity of recurring level 3 measurements to changes in unobservable inputs

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

The significant unobservable input used in the fair value measurement of the Group's industry loss warrants is the market implied probability of a natural catastrophe event. A significant increase (decrease) in this input in isolation would result in a significantly lower (higher) fair value measurement.

The significant unobservable inputs used in the fair value measurement of the Group's power outage contracts are risk margin and average power forward price. A significant increase (decrease) in these inputs in isolation would result in a significantly lower (higher) fair value measurement.

Other invested assets measured at net asset value

As of 31 December 2018 and 2019, other assets measured at net asset value were USD 8 million and USD 6 million, respectively. Additionally there were USD 1 million of unfunded commitments as of 31 December 2019.

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

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

Total liabilities	-467	-300	-767	-525	-300	-825
Debt	-467	-300	-767	-525	-300	-825
Liabilities						
	(level 2)	inputs (level 3)	Total	(level 2)	inputs (level 3)	Total
	observable inputs	unobservable		observable inputs	unobservable	
	Significant other	Significant	2018	Significant other	Significant	2019

The Group's debt position classified as level 2 measurement is fair valued based on executable broker quotes. The Group's level 3 debt position is judged to approximate carrying value due to the highly tailored nature of the obligation and due to the resetting interest rate.

8 Derivative financial instruments

The Group enters into various financial contracts covering risks such as weather, weather-contingent price risks, outage contingent power price risks and industry loss warrants, that are accounted for as derivative financial instruments (also referred to as Environmental Commodity Markets and Weather business, or "ECM/Weather contracts/ ILW"). The Group also uses derivatives to manage exposure to foreign currency and credit risks. Derivative positions are carried at fair value, generally by obtaining quoted market prices or through the use of valuation models, with changes in fair value recorded in the income statement.

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:

2018 USD millions	Notional amount assets/liabilities	Fair value assets	Fair value liabilities	Carrying value assets/liabilities
Derivatives not designated as hedging instruments				
Foreign exchange contracts	461	3	-5	-2
ECM/Weather contracts/ILW	1 190	8	-121	-113
Credit contracts	205		-1	-1
Total	1 856	11	-127	-116
Derivatives designated as hedging instruments				
Foreign exchange contracts	149	3		3
Total	149	3	0	3
Total derivative financial instruments	2 005	14	-127	-113

2019 USD millions	Notional amount assets/liabilities	Fair value assets	Fair value liabilities	Carrying value assets/liabilities
Derivatives not designated as hedging instruments				
Foreign exchange contracts	702	9	-3	6
ECM/Weather contracts/ILW	1 176	14	-96	-82
Credit contracts	310	2	-6	-4
Total	2 188	25	-105	-80
Derivatives designated as hedging instruments				
Foreign exchange contracts	172		-2	-2
Total	172	0	-2	-2
Total derivative financial instruments	2 360	25	-107	-82

The notional amounts of derivative financial instruments give an indication of the Group's volume of derivative activity and are presented without set-off. The fair value assets are included in "Other invested assets" and the fair value liabilities are included in "Accrued expenses and other liabilities".

Financial statements

Notes to the Group financial statements

Non-hedging activities

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

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

USD millions 2018	2019
Derivatives not designated as hedging instruments	
Foreign exchange contracts -16	-4
ECM/Weather contracts/ILW 30	87
Credit contracts	-7
Total gains/losses recognised in income 14	76

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 2018 and 2019, the following hedging relationships were outstanding:

Fair value hedges

The Group enters into foreign exchange swaps to reduce the exposure to foreign exchange volatility for certain fixed income securities. These derivative instruments are designated as hedging instruments in qualifying fair value hedges.

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

	2018	2019
	Net realised	Net realised
	investment	investment
USD millions	gains/losses	gains/losses
Total amounts of income and expense line items	15	156
Foreign exchange contracts		
Gains/losses on derivatives	13	-10
Gains/losses on hedged items	-13	10

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

	201
	Cumulative bas
USD millions	Carrying value adjustme
Assets	
Fixed income securities available-for-sale	173

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 2018 and 2019 was approximately USD 14 million and USD 25 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 47 million and USD 30 million as of 31 December 2018 and 2019, respectively. For derivative financial instruments containing credit risk-related contingent features, the Group posted collateral of nil as of 31 December 2018 and 2019. 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 2019. The total equals the amount needed to settle the instruments immediately as of 31 December 2019.

9 Debt

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

USD millions	2018	2019
Long-term subordinated financial debt	798	798
Total carrying value	798	798
Total fair value	767	825

Maturity of long-term debt

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

USD millions	2018	2019
Due in 2023	300	300
Due in 2024	498	498
Total carrying value	798	798

Subordinated long-term debt

	Nominal in E					Book value	
Maturity	Instrument	Issued in	Currency	millions	Interest rate	First call in	in USD millions
2028	Subordinated floating rate callable loan	2018	USD	300	4.75%	2023	300
2044	Subordinated fixed rate resettable callable loan						
	note	2014	USD	500	4.50%	2024	498
Total su	ubordinated long-term debt as of 31 December 2019)					798
Total su	bordinated long-term debt as of 31 December 2018						798

Interest expense on long-term debt

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

USD millions	2018	2019
Subordinated financial debt	24	39
Total	24	39

Long-term debt issued in 2019

No long-term debt was issued in the year ended 31 December 2019.

10 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/benefit were:

USD millions	2018	2019
Current taxes	66	21
Deferred taxes	-179	-222
Income tax expense/benefit	-113	-201

Tax rate reconciliation

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

USD millions	2018	2019
Income tax at the Swiss statutory tax rate of 21.15%	-119	-242
Increase (decrease) in the income tax charge resulting from:		
Foreign income taxed at different rates	7	-3
Impact of foreign exchange movements	5	-4
Tax exempt income/dividends received deduction	-10	8
Change in valuation allowance	5	-7
Change in statutory rate	-7	25
Other income based taxes	22	1
Other, net ¹	-16	21
Total	-113	-201

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

For the year ended 31 December 2019, the Group reported a tax benefit of USD 201 million on a pre-tax loss of USD 1 144 million, compared to a benefit of USD 113 million on a pre-tax loss of USD 564 million for 2018. This translates into an effective tax rate in the current and prior-year reporting periods of 17.6% and 20.0%, respectively.

The lower tax rate in the current year is mainly driven by tax benefits from large losses, partially offset by tax charges from tax rate changes.

As of 31 December 2019, the tax rate includes a tax charge of USD 26 million from the Swiss tax reform impact. The impact is included within the change in statutory rate component of the tax rate reconciliation. The benefit arises from revaluing the Swiss deferred tax assets and liabilities to the new Swiss statutory tax rate (combined federal and cantonal) of 19.7% (from 21% for ordinary companies and 7.8% for holding companies).

Deferred and other non-current taxes

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

USD millions	2018	2019
Deferred tax assets		
Income accrued/deferred	26	43
Unearned premium reserve	67	75
Technical provisions	37	77
Benefit on loss carryforwards	352	426
Currency translation adjustments	26	21
Other	73	52
Gross deferred tax assets	581	694
Valuation allowance	-15	-7
Total deferred tax assets	566	687
Deferred tax liabilities		
Deferred acquisition costs	-71	-64
Present value of future profits	-48	-48
Technical provisions	-18	-31
Unrealised gains on investments	-10	-26
Foreign exchange provisions	-25	-25
Currency translation adjustments	-48	-46
Other	-32	-45
Total deferred tax liabilities	-252	-285
Liability for unrecognised tax benefits including interest and penalties	-4	-2
Total deferred and other non-current tax liabilities	-256	-287

As of 31 December 2019, a tax charge of USD 26 million arises from revaluing the Swiss deferred assets and liabilities to the new Swiss statutory tax rate of 19.7% (from 21% for ordinary companies and 7.8% for holding companies), under the Swiss tax reform. Accordingly, the revaluing reduced the Swiss deferred tax assets by USD 27 million and the Swiss deferred tax liabilities by USD 1 million (net USD 26 million).

As of 31 December 2019, the aggregate amount of temporary differences associated with investment in subsidiaries, branches and associates and interests in joint ventures, for which deferred tax liabilities have not been recognised amount to approximately USD 307 million. In the remote scenario in which these temporary differences were to reverse simultaneously, the resulting tax liabilities would be very limited due to participation exemption rules.

As of 31 December 2019, the Group had USD 2 085 million net operating tax loss carryforwards, expiring as follows: USD 1 million in 2020, USD 1 million in 2021, USD 2 million in 2022, USD 1 951 million in 2023 and beyond, and USD 130 million never expire.

As of 31 December 2019, the Group has nil capital loss carryforwards.

For the year ended 31 December 2019, USD 45 million net operating losses and USD 13 million net capital losses were utilised.

For the years ended 31 December 2018 and 2019, income taxes paid were USD 43 million and USD 67 million, respectively.

Financial statements

Notes to the Group financial statements

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	2018	2019
Balance as of 1 January	4	4
Additions for tax positions of current year	1	
Additions based on tax positions related to prior years		5
Reductions for tax positions of prior years		-3
Statute expiration	-1	
Settlements		-4
Balance as of 31 December	4	2

As of 31 December 2018 and 2019, the amount of gross unrecognised tax benefits within the tabular reconciliation that, if recognised, would affect the effective tax rate were approximately USD 4 million and USD 2 million, respectively.

Interest and penalties related to unrecognised tax benefits are recorded in income tax expense. Such expense for 2018 and 2019 were nil.

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

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

Australia	2014 - 2019
Brazil	2014 - 2019
Canada	2012 – 2019
China	2009 - 2019
Colombia	2016 - 2019
Denmark	2014 - 2019
France	2017 – 2019
Germany	2017 – 2019
Hong Kong	2016 - 2019
Italy	2015 – 2019
Japan	2011 – 2019
Luxembourg	2015 – 2019
Mexico	2016 – 2019
Netherlands	2015 – 2019
Singapore	2016 - 2019
Slovakia	2015 – 2019
South Africa	2015 – 2019
Spain	2015 – 2019
Switzerland	2016 - 2019
United Kingdom	2018 - 2019
United States	2011 – 2019

11 Benefit plans

SRCS is a wholly owned subsidiary of Swiss Re Ltd. Swiss Re Ltd is the ultimate parent company of the Swiss Re Group. SRCS and its subsidiaries participate in various pension plans sponsored by affiliated companies of the Swiss Re Group. These pension plans include the "Pension Fund Swiss Reinsurance Company (Swiss Re)" among others.

Group contributions for 2019

For the year ended 31 December 2019, the Group contributed USD 10 million to the aforementioned pension plans. The Group contributes into a number of defined contribution plans. The amount expensed in 2019 was USD 15 million.

12 Related parties

The Group assumes and cedes certain re/insurance contracts from/to affiliated companies within the Swiss Re Group, but outside the Group. The Group also conducts various investing activities, including derivatives, with affiliated companies in the Swiss Re Group. The Group enters into 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 on the income statement and balance sheet:

USD millions	2018	2019
Revenues		
Gross premiums written	99	68
Net premiums written	-177	-306
Change in unearned premiums	16	41
Premiums earned	-161	-265
Net investment income/loss	-20	5
Net realised investment gains/losses	37	-29
Total revenues	-144	-289
Expenses		
Claims and claim adjustment expenses	-85	337
Acquisition costs	4	27
Operating expenses	-411	-421
Interest expenses	-1	-17
Total expenses	-493	-74

USD millions 2018	2019
Assets	
Other invested assets 10	25
Premiums and other receivables 160	391
Reinsurance recoverable on unpaid claims 3 675	5 012
Funds held by ceding companies 83	67
Deferred acquisition costs —10	-17
Other assets 480	529
Total assets 4 398	6 007
Liabilities	
Unpaid claims and claim adjustment expenses 528	430
Unearned premiums 74	52
Funds held under reinsurance treaties 298	393
Reinsurance balances payable 168	1 046
Long-term debt 300	300
Accrued expenses and other liabilities 147	184
Total liabilities 1 515	2 405

In December 2018, Swiss Re Ltd granted a USD 300 million subordinated floating rate callable loan to Swiss Re Corporate Solutions Ltd due in 2028 with a first optional redemption date on 19 December 2023. The loan bears interest at a floating rate of 6 month Libor plus 2.85%.

Share in earnings from equity-accounted investees for the years ended 31 December 2018 and 2019 were USD 37 million and USD 67 million, respectively.

None of the members of SRCS BoD and the Corporate Solutions EC has any significant business connection with the Group or any of its Group companies.

13 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 investment vehicles, 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.

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 page.

The Group invests in an investment vehicle that is consolidated by Swiss Reinsurance Company. The investment vehicle is a VIE because it is structured as an umbrella company comprised of multiple sub-funds.

The Group did not provide financial or other support to any VIEs during 2019 that it was not previously contractually required to provide.

Financial statements

Notes to the Group financial statements

Non-consolidated VIEs

The following table shows the total assets 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	2018	2019
Equity securities at fair value through earnings	27	34
Other invested assets	1 951	1 519
Total assets	1 978	1 553

The following table shows the Group's assets 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:

		2018		2019
		Maximum		Maximum
USD millions	Total assets	exposure to loss ¹	Total assets	exposure to loss ¹
Investment vehicles	1 978	1 978	1 553	1 553
Total	1 978	1 978	1 553	1 553

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.

14 Subsequent events

The rapid spread of the coronavirus, which has been declared a pandemic, and the actions being taken to contain it on an increasingly global basis have led to significant volatility in the financial markets and are having an adverse impact on global business and economic activity. There is an increasing likelihood that the coronavirus and containment efforts could have adverse effects on the global economy and could possibly lead to a global recession. The Group is closely monitoring developments and the potential impact of the spread of infection and global responses on, for example, asset prices and insurance exposures, as well as on its operations.

Report of the statutory auditor

to the General Meeting of Swiss Re Corporate Solutions Ltd Zurich

Report of the statutory auditor on the consolidated financial statements

As statutory auditor, we have audited the accompanying consolidated financial statements of Swiss Re Corporate Solutions Ltd and its subsidiaries (the 'Company'), which comprise the income statement and statement of comprehensive income for the year ended 31 December 2019, the balance sheet as at 31 December 2019 and the statement of shareholder's equity and the statement of cash flows for the year then ended, and notes to the Group financial statements (pages 2 to 55).

Board of Directors' responsibility

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

Auditor's responsibility

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

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

Opinion

In our opinion, the accompanying consolidated financial statements for the year ended 31 December 2019 present fairly, in all material respects, the financial position, the results of operations and the cash flows in accordance with accounting principles generally accepted in the United States of America (US GAAP) and comply with Swiss law.

Other Matter

Accounting principles generally accepted in the United States of America (US GAAP) requires that the supplementary information based on the requirements of ASU 2015-09, Disclosures about Short-Duration Contracts, on pages 27 to 31 be presented to supplement the consolidated financial statements. Such information, although not part of the consolidated financial statements, is required by the Financial Accounting Standards Board, which considers it an essential part of financial reporting for placing the consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of the Company about the methods of preparing the information and comparing the information for consistency with the Company's responses to our inquiries, the consolidated financial statements and other knowledge we obtained during our audit of the consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

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

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

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

Key audit matter

Investment valuation continues to be an area with inherent risk for certain level 2 and 3 investments that have unobservable or interpolated inputs. The risk is not the same for all investment types and is greatest for those listed below. These investments are more difficult to value because quoted prices are not always available, and valuation requires unobservable or interpolated inputs and complex valuation models:

- Fixed income securitised products
- Fixed income mortgage and asset-backed securities
- Derivatives

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls around the valuation models for level 2 and 3 investments, including the Company's independent price verification process. We also tested the Company's data integrity and change management controls relating to the valuation models.

In relation to the matters set out opposite, our substantive testing procedures included the following:

- Challenging the Company's methodology and assumptions, in particular, the yield curves, discounted cash flows, perpetual growth rates and liquidity premiums used in the valuation models.
- Comparing the assumptions used against appropriate benchmarks and investigating significant differences.
- Engaging our own valuation specialists to perform independent valuations of selected level 2 and 3 investments.

Based on the work performed, we consider the methodology and assumptions used by the Company in determining the valuation to be appropriate.



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

Key audit matter

Valuation of actuarially determined P&C loss reserves involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date.

The Company uses a range of actuarial methodologies and methods to estimate these reserves. Actuarially determined P&C loss reserves require significant judgment relating to certain factors and assumptions. Among the most significant reserving assumptions are the A-priori loss ratios, which typically drive the estimates of P&C loss reserves for the most recent contract years. Other key factors and assumptions include, but are not limited to changes in interest rates, exposures and mix as well as inflation trends, claims trends and regulatory decisions.

In particular, loss reserves for 'long tail' lines of business (for example, the Liability, US Asbestos and Environmental, Motor Liability and Workers' Compensation portfolios) generally require more judgment to estimate. This is due to the protracted period over which claims may be reported and/or settled as well as the fact that claim settlements are often less frequent but of higher magnitude.

Moreover, not all natural catastrophe events and significant man-made losses can be modelled using traditional actuarial methodologies, which increases the degree of judgment needed in establishing reserves for these events.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls relating to the application of the actuarial methodology, data collection and analysis, as well as the processes for determining the assumptions used by the Company in the valuation of actuarially determined P&C loss reserves.

In relation to the matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying data utilised by the Company's actuaries in estimating P&C loss reserves.
- Applying IT audit techniques to analyse claims through the recalculation of claims triangles.
- Involving PwC's internal actuarial specialists to independently test the Company's estimates of P&C loss reserves and evaluate the reasonableness of the methodology and assumptions used by comparing them with recognised actuarial practices and by applying our industry knowledge and experience.
- Performing independent projections of selected portfolios. For these portfolios, we compared our calculations of projected reserves with those of the Company taking into account the available corroborating and contrary evidence and challenging the Company's assumptions as appropriate.
- Assessing the process and related judgments of the Company in relation to natural catastrophes and other large losses, including using our industry knowledge to assess the reasonableness of market loss estimates and other significant assumptions.
- Performing sensitivity tests to determine the impact of selected key assumptions.
- Evaluating the appropriateness of any significant adjustments made by the Company to P&C loss reserve estimates.

Based on the work performed, we consider the methodologies and assumptions used by the Company in the valuation of actuarially determined P&C loss reserves to be appropriate.



3 Swiss Re Corporate Solutions Ltd | Report of the statutory auditor to the General Meeting

Valuation of deferred tax asset

Key audit matter

The Company has recognised a material deferred tax asset comprised of carry forward tax losses which are available to be set off against future taxable income and deductible temporary differences.

The recoverability of this asset is dependent on the existence in the future of adequate taxable profits within the period allowed for recovery of the losses. The Company is therefore required to make sensitive and judgmental assumptions about the likely future profitability of the operations, the rate at which those profits will be taxed, the period over which tax losses will be available for recovery, and the feasibility of certain identified future tax planning measures which may also need to be undertaken to ensure the tax losses do not expire unused.

How our audit addressed the key audit matter

In relation to the matters set out opposite, our substantive testing procedures included the following:

- We evaluated the Company's taxable profit forecasts for the period in which the tax losses can be recovered. We critically assessed the assumptions and judgments underlying these projections.
- Our evaluation of the forecast included critically assessing the extent to which the causes of past losses have been mitigated, for instance through portfolio realignment, cost reduction measures and the purchase of additional reinsurance cover.
- We assessed the credibility of the Company's tax planning measures used in the deferred tax asset recoverability assessment. We involved our tax specialists to gain comfort that the planned measures are feasible and consistent with the requirements of tax legislation.
- We obtained confirmation from Group Management that the Company will evaluate and if necessary, implement other structural solutions to ensure the recoverability of the Company's deferred tax asset in case the identified tax planning measures do not deliver adequate taxable profits.

Based on the work performed, we determined the Company's assessment of the valuation of a deferred tax asset to be appropriate.

Report on other legal requirements

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

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

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

PricewaterhouseCoopers AG

Roy Clark

Audit expert Auditor in charge

Zurich, 18 March 2020

Frank Trauschke

Audit expert



4 Swiss Re Corporate Solutions Ltd | Report of the statutory auditor to the General Meeting

Annual Report Swiss Re Corporate Solutions Ltd

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

Reinsurance and sub-holding company

Swiss Re Corporate Solutions 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 for the Corporate Solutions Business Unit. The Company is a wholly-owned subsidiary of Swiss Re Ltd, the ultimate parent company domiciled in Zurich, Switzerland. In 2019, the Company directly employed worldwide staff at an average of 293 full-time equivalents (2018: 296 full-time equivalents).

Financial year 2019

Net loss for the financial year 2019 amounted to CHF -858 million, compared to a net loss of CHF -498 million in the prior year.

The financial year under review was marked by several large to medium sized man-made losses.

As a consequence of the tax regime change in the US in 2017, the Company continued to restructure its assumed intragroup retrocession program with the affiliated Westport Insurance Company and its subsidiaries. In 2019, the US-business was partly retroceded again to a newly established taxable presence of the Company in the US.

In addition, the Company entered with Swiss Reinsurance Company Ltd into a Loss Portfolio Transfer (LPT), covering part of the liability business, and an Adverse Development Cover (ADC), protecting accident years 2012 - 2018 across the Business Unit's portfolio.

The Company paid no ordinary dividend, compared to CHF 48 million in prior year.

Reinsurance result

Reinsurance result amounted to CHF -904 million in 2019, compared to CHF -410 million in 2018.

Premiums earned increased by 76.2% to CHF 3 172 million in 2019 (2018: CHF 1 800 million), mainly due to the change of the intragroup retrocession program with Westport Insurance Corporation and higher premiums from Swiss Re International, partially offset by the premium paid for the new ADC towards Swiss Reinsurance Company Ltd. Excluding the effects of foreign exchange movements, premiums earned increased by 76.6%.

Claims and claim adjustment expenses increased by 97.3% to CHF 2 997 million in 2019 (2018: CHF 1 519 million). The increase was mainly driven by the change of the intragroup retrocession program with Westport Insurance Corporation and higher losses from Swiss Re International, partially offset by the reinsurance recoverable from the ADC with Swiss Reinsurance Company Ltd. Excluding the effects of foreign exchange movements, claims and claim adjustment expenses increased by 98.3%.

Acquisition costs increased by 72.5% to CHF 940 million in 2019 (2018: CHF 545 million). The increase was mainly driven by the change of the intragroup retrocession program with Westport Insurance Corporation, partially offset by lower costs from Swiss Re International.

Operating costs decreased by CHF 23 million to CHF 203 million in the current year (2018: CHF 226 million), mainly due to lower management expenses.

Investment result

Net investment result amounted to CHF 167 million, compared to CHF -6 million in the prior year. The investment income increased due to income from shares of investment funds and realised gain on the redemption of an investment fund, while keeping the investment expenses stable.

Result from other income and expenses

Net result amounted to CHF-94 million, compared to CHF-57 million in the prior year. The decrease in the result from other expenses and income was driven by higher project costs.

Assets

Total assets increased by 37.8% to CHF 11 913 million at 31 December 2019 (31 December 2018: CHF 8 648 million). Excluding the effects of foreign exchange movements, total assets increased by 39.6%.

Total investments increased from CHF 6 024 million at 31 December 2018 to CHF 6 437 million at 31 December 2019, driven by higher reinsurance business volume and reinvestments in fixed income securities.

Funds held by ceding companies increased by 32.1% to CHF 642 million at 31 December 2019 (31 December 2018: CHF 486 million). The increment was mainly due to the increase of funds held by Westport Insurance Corporation as a result of change of the intragroup retrocession program.

Reinsurance recoverable on technical provisions retroceded increased by 601.5% to CHF 1 845 million at 31 December 2019 (31 December 2018: CHF 263 million). The increase is driven by the introduction of the LPT and ADC with Swiss Reinsurance Company Ltd.

Premiums and other receivables from reinsurance increased by 69.6% to CHF 1 995 million at 31 December 2019 (31 December 2018: CHF 1 176 million), driven by the change of the intragroup retrocession program with Westport Insurance Corporation and higher receivables from Swiss Re International.

Total liabilities increased by 46.9% to CHF 11 081 million at 31 December 2019 (31 December 2018: CHF 7 542 million). Excluding the effects of foreign exchange movements, total liabilities increased by 49.5%.

Technical provisions gross increased from CHF 6 308 million at 31 December 2018 to CHF 8 442 million at 31 December 2019, mainly driven by the change of the intragroup retrocession program with Westport Insurance Corporation and increased claims through the intragroup retrocession program with Swiss Re International and non-proportional treaties with Westport Insurance Corporation.

Funds held under reinsurance treaties increased from CHF 0 million at 31 December 2018 to CHF 342 million at 31 December 2019, driven by the introduction of the LPT with Swiss Reinsurance Company Ltd.

Reinsurance balance payables increased by CHF 1069 million mainly due to the introduction of the LPT with Swiss Reinsurance Company Ltd and increased payables with Swiss Re International and Westport Insurance Corporation.

Shareholder's equity

Shareholder's equity decreased from CHF 1 106 million at 31 December 2018 to CHF 832 million at 31 December 2019. The decrease resulted from the net loss for 2019 of CHF 858 million, partially offset by the capital contribution of CHF 584 million from Swiss Re Ltd.

The nominal share capital of the Company remained unchanged at CHF 100 million at 31 December 2019.

Future prospects and business development

Structural changes

No structural changes have taken place in the Company.

Reinsurance business

Strategy and priorities

The Company conducts the commercial insurance business of the Swiss Re Group and is committed to deliver long-term profitability and economic growth. Corporate Solutions offers customised, innovative and multi-line, multi-year risk transfer solutions, taking into account the unique needs of local markets and specialty industries.

After years of an unsustainable pricing environment, the commercial insurance market started to harden in 2019. While rates and terms and conditions have improved, commercial risks, particularly in the large corporate segment, remain inadequately priced and the industry continues to be unprofitable overall. Corporate Solutions expects a continued market hardening via increased rates and a focus on terms and conditions over the next 12 months.

Investments

Strategy and priorities

Financial investments are managed in accordance with Swiss Re's Targeted Standard on Asset Management and the Company's investment guidelines, which are intended to ensure compliance with regulatory requirements. The general principle governing investment management in the Company is the creation of economic value on the basis of 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

Global economic growth is expected to slow significantly in 2020 due to the currently ongoing spread of the SARS-CoV-2 coronavirus, and the illness associated with it, COVID-19, with several G7 countries at risk for a recession during the year. Central banks are set to cut policy rates further and stay very accommodative in this environment of elevated uncertainty. The US Federal Reserve has already enacted a surprise 50bp interest rate cut in early March. On the policy front, the attention is also on the fiscal policy responses that are currently being discussed.

Besides the rapidly evolving COVID-19 situation, other important themes for 2020 include the continued trade policy uncertainty, and the US presidential elections.

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, Corporate Solutions' 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 Re Corporate Solutions Ltd on a stand-alone basis are integrated in Group Risk Management processes.

The Board of Directors of Swiss Re Corporate Solutions Ltd sets the Company's risk tolerance. In this role, it is advised by the Board of Directors of the Swiss Re Group, which defines the Group's basic risk management principles and risk appetite framework including the Group risk tolerance. The Board of Directors of 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 risk capacity 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, including the Company CRO.

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. 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 risk teams for legal entities and regions as well as central teams that provide specialised risk expertise and oversight.

Legal entity risk teams of the Company and its subsidiaries are led by dedicated CROs who report directly or indirectly to their top-level entity CRO (Company CRO), who reports directly to the Group CRO, with a secondary reporting line to the Company CEO. These legal entity CROs are responsible for risk oversight in their respective legal entities, as well as for establishing the proper risk governance to ensure efficient risk identification, assessment and control.

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 dedicated CROs remain part of the central 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.

The central teams support the CROs at Group and legal entity levels 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 central departments also oversee Group liquidity and capital adequacy and maintain the Group frameworks for controlling these risks throughout Swiss Re.

Risk Management is also in charge of actuarial reserving and monitoring of reserve holdings. Business Unit Corporate Solutions and Group Risk Management activities are complemented by Swiss Re's Group Internal Audit and Compliance units:

- Group Internal Audit performs independent 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 Group Code of Conduct. It also assists the Business Unit and the Group Board of Directors, Executive Committees and other management bodies in identifying, mitigating and managing compliance risks.

Income statement Swiss Re Corporate Solutions Ltd

For the years ended 31 December

CHF millions	Note 2018	2019
Reinsurance		
Premiums written gross	1 589	4315
Premiums written retroceded	-128	-323
Premiums written net	1 461	3992
Change in unearned premiums gross	338	-841
Change in unearned premiums retroceded	1	21
Change in unearned premiums net	339	-820
Premiums earned	1800	3 172
Other reinsurance revenues	21	75
Allocated investment return	59	64
Total revenues from reinsurance business	1880	3311
	4.700	0.400
Claims paid and claim adjustment expenses gross	-1729	-2 138
Claims paid and claim adjustment expenses retroceded	4	-967
Claims paid and claim adjustment expenses net	-1 725	-3 105
Change in unpaid claims gross	54	-1495
Change in unpaid claims retroceded	152	1603
Change in unpaid claims net	206	108
Claims and claim adjustment expenses		-2997
Acquisition costs gross	-545	-943
Acquisition costs retroceded	0	3
Acquisition costs net	-545	-940
Operating costs	-226	-203
Acquisition and operating costs	-771	-1 143
Other reinsurance expenses	0	-75
Total expenses from reinsurance business	-2290	-4215
Reinsurance result	-410	-904
Investments	2	
Investment income	64	239
Investment expenses	-11	-8
Allocated investment return		-64
Investment result	-6	167
investment result	-0	107
Other financial income	4	6
Other financial expenses	-30	-32
Operating result	-442	-763
Interest expenses on subordinated liabilities	-24	-39
Other income	10	24
Other expenses	-43	-79
Result before income tax expense	-499	-857
Income tax expense		-057
		-858
Net result	-498	-858

The accompanying notes are an integral part of Swiss Re Corporate Solutions Ltd's financial statements.

Balance sheet Swiss Re Corporate Solutions Ltd

As of 31 December

Assets

CHF millions	Note	2018	2019
Investments			
Investments in subsidiaries and affiliated companies		1 525	1 525
Fixed income securities		987	1 517
Loans		1 181	1 212
Shares in investment funds		1 823	1 500
Short-term investments		508	683
Other investments		2331	2 183
Total investments		6024	6437
Financial and reinsurance assets			
Assets in derivative financial instruments		4	3
Funds held by ceding companies	3	486	642
Cash and cash equivalents		18	11
Reinsurance recoverable from unpaid claims	3	251	1813
Reinsurance recoverable from unearned premiums	3	12	32
Reinsurance recoverable on technical provisions retroceded		263	1845
Deferred acquisition costs	3	336	513
Intangible assets		40	30
Premiums and other receivables from reinsurance	3	1 176	1995
Other receivables		293	416
Other assets		2	8
Accrued income		6	13
Total financial and reinsurance assets		2624	5 4 7 6
Total assets		8648	11 913

The accompanying notes are an integral part of Swiss Re Corporate Solutions Ltd's financial statements.

Liabilities and shareholder's equity

CHF millions	Note	2018	2019
Liabilities			
Technical provisions gross			
Unpaid claims gross	3	4657	6034
Unearned premiums gross	3	1600	2389
Provisions for profit commissions gross	3	51	19
Total technical provisions gross		6308	8442
Non-technical provisions			
Tax provisions		1	2
Provision for currency fluctuation		17	23
Other provisions		35	44
Total non-technical provisions		53	69
Liabilities from derivative financial instruments		7	6
Funds held under reinsurance treaties	3	-	342
Reinsurance balances payable	3	342	1 411
Other liabilities		30	17
Accrued expenses		14	19
Subordinated liabilities		788	775
Total liabilities		7 5 4 2	11 081
Shareholder's equity	4		
Share capital	-	100	100
Legal reserves from capital contributions		1439	439
Other legal capital reserves		52	52
Legal capital reserves		1491	491
Voluntary profit reserves		903	2487
Retained earnings brought forward		-890	-1388
Net loss for the financial year		-498	-858
Total shareholder's equity		1 106	832
Total liabilities and shareholder's equity		8648	11 913

The accompanying notes are an integral part of Swiss Re Corporate Solutions Ltd's financial statements.

Notes Swiss Re Corporate Solutions Ltd

Reinsurance and sub-holding company

Swiss Re Corporate Solutions 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 for the Corporate Solutions Business Unit. The Company is a wholly-owned subsidiary of Swiss Re Ltd, the ultimate parent company domiciled in Zurich, Switzerland,

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).

Time period

The financial year 2019 comprises the accounting period from 1 January 2019 to 31 December 2019.

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.

Foreign currency translation

Assets and liabilities denominated in foreign currencies are converted into Swiss francs at year-end exchange rates with the exception of participations, which are maintained in Swiss francs at historical exchange rates. Income and expenses in foreign currencies are converted into Swiss francs at average exchange rates.

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

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 depreciation 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 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 depreciation to address other than temporary market value decreases.

Shares in investment funds are carried at cost or lower market value.

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

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.

Financial statements

Swiss Re Corporate Solutions Ltd

Assets in derivative financial instruments

Assets in derivative financial instruments are accounted based on the lower of cost or market principle.

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 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".

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.

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 the 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, which are carried at nominal value.

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.

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 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, 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 transfers of retroactive treaties with external counterparties, the initial set up of assets and liabilities is accounted as a balance sheet transaction.

Non-technical provisions

The provision for currency fluctuation comprises the net effect of foreign exchange gains and losses arising from the yearly revaluation of the opening balance sheet and the translation adjustment of the income statement from average to closing exchange rates at year-end. These net impacts are recognised in the income statement over a time period of up to three 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. The tax provision is in accordance with tax regulations.

Liabilities from derivative financial instruments

Liabilities from derivative financial instruments are generally maintained at the highest commitment amount as per a balance sheet date during the life of the underlying contracts.

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.

Financial statements

Swiss Re Corporate Solutions Ltd

Other liabilities

Other liabilities are held at redemption value.

Subordinated liabilities

Subordinated liabilities are held at redemption values.

Allocated investment return

The allocated investment return contains the calculated interest generated on the investments covering the technical provisions. The interest rate reflects the currency-weighted, five-year average yield on five-year government bonds.

Operating expenses

Operating expenses exclude unallocated loss adjustment expenses (ULAE) which are reclassed to internal claim expenses.

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.

2 Investment result

OUE - III		Value	Realised	2019
CHF millions Investment income	Income	readjustment	gains	Total
Subsidiaries and affiliated companies			_	
Fixed income securities	27		4	31
Equity securities				-
Loans	42		_	42
Shares in investment funds	114	_	44	158
Short-term investments	6		1	700
Alternative investments				
Other investments	120		45	165
Income from investment services	1		-	1
Investment income	190	0	49	239
		Value	Realised	2019
CHF millions	Expenses	adjustments	losses	Total
Investment expenses				
Subsidiaries and affiliated companies				_
Fixed income securities		0	-1	-1
Equity securities			0	0
Loans				
Shares in investment funds		0	_	0
Short-term investments		_	0	0
Alternative investments		_	-	_
Other investments		0	0	0
Investment management expenses			-	-7
Investment expenses	-7	0	-1	-8
Allocated investment return				-64
Investment result				167
CHF millions	Income	Value readjustment	Realised gains	2018 Total
Investment income	meome	readjustinent	ganio	Total
Subsidiaries and affiliated companies	2	_	_	2
Fixed income securities	20	_	0	20
Equity securities		_	0	0
Loans	36	_	_	36
Shares in investment funds	1	_	_	1
Short-term investments	4	_	0	4
Alternative investments		_	0	0
Other investments	5	_	0	5
Income from investment services				
THE CHIEF THE CONTROL OF THE CONTROL	1	_	_	1
Investment income	<u>1</u>			
Investment income	64	0	0	
Investment income				64
Investment income CHF millions		0	0	2018
CHF millions Investment expenses	64	0 Value	Realised losses	64 2018 Total
CHF millions	64	0 Value	Realised losses	64 2018 Total
CHF millions Investment expenses	64 Expenses	Value adjustments	Realised losses	2018 Total 0 -3
CHF millions Investment expenses Subsidiaries and affiliated companies	64 Expenses	Value adjustments	Realised losses	2018 Total 0 -3
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities	Expenses	Value adjustments	Realised losses 0 -3	2018 Total 0 -3
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities	Expenses	Value adjustments	Realised losses 0 -3 0	64 2018 Total 0 -3 0
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans	Expenses	Value adjustments	O Realised losses O -3 O -	64 2018 Total 0 -3 0
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds	Expenses	Value adjustments	0 Realised losses 0 -3 0 -	64 2018 Total 0 -3 0 0 - 0
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments	Expenses	Value adjustments	0 Realised losses 0 -3 0 - 0 - 0	64 2018 Total 0 -3 0 0 0
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments	Expenses	Value adjustments	0 Realised losses 0 -3 0 - 0 0 - 0	64 2018 Total 0 -3 0 0 0
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments Other investments	Expenses	Value adjustments	0 Realised losses 0 -3 0 0 - 0 0	1 64 2018 Total 0 -3 0 0 0 0 811
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments Other investments Investment management expenses	Expenses	Value adjustments	0 Realised losses 0 -3 0 0 - 0 - 0 - 0	64 2018 Total 0 -3 0 0 0 - 8
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments Other investments Investment management expenses Investment expenses	Expenses	Value adjustments	0 Realised losses 0 -3 0 0 - 0 - 0 - 0	64 2018 Total 0 -3 0 0 0 -811
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments Investment management expenses Investment expenses Allocated investment return	Expenses	Value adjustments	0 Realised losses 0 -3 0 0 - 0 - 0 - 0	64 2018 Total 0 -3 0 0 0 -811
CHF millions Investment expenses Subsidiaries and affiliated companies Fixed income securities Equity securities Loans Shares in investment funds Short-term investments Alternative investments Other investments Investment management expenses Investment expenses	Expenses	Value adjustments	0 Realised losses 0 -3 0 0 - 0 - 0 - 0	64 201: Tota ((((1 1

3 Assets and liabilities from reinsurance

			2018			2019
CHF millions	Gross	Retro	Net	Gross	Retro	Net
Funds held by ceding companies	486	_	486	642	_	642
Deferred acquisition costs	337	-1	336	517	-4	513
Premiums and other receivables from reinsurance	1 163	13	1 176	1807	188	1995
Unpaid claims	4657	-251 ¹	4406 ²	6034	-1813¹	4221
Unearned premiums	1600	-12 ¹	1588	2389	-32 ¹	2357
Provisions for profit commissions	51	_	51	19	_	19
Funds held under reinsurance treaties	_	_	_	_	342	342
Reinsurance balances payable	326	16	342	590	821	1 411

¹ Reported under "Reinsurance recoverable on technical provisions retroceded" on page 65.

4 Change in shareholder's equity

9	' '	Legal capital	Voluntary profit	Loss	Net loss for	Total Shareholder's
CHF millions	Share Capital	reserves	, ,	brought forward	the financial year	equity
Shareholder's equity 1.1. 2018	100	2396	46	14	-904	1652
Allocation to voluntary profit reserves	_	-905	905	_	_	_
Allocation to retained earnings	_	_	_	-904	904	_
Dividend for the financial year 2017	_	_	-48	_	_	-48
Net result for the year	_	_	_	_	-498	-498
Shareholder's equity 31.12.2018	100	1491	903	-890	-498	1 106
Shareholder's equity 1.1. 2019	100	1491	903	-890	-498	1 106
Capital injection on 24 June 2019 from Swiss Re Ltd	_	584	_	_	_	584
Allocation to voluntary profit reserves	_	-1584	1584	_	_	_
Allocation to retained earnings	_	_	_	-498	498	_
Dividend for the financial year 2018	_	_	_	_	_	_
Net result for the year	-	_	_	_	-858	-858
Shareholder's equity 31.12.2019	100	491	2487	-1388	-858	832

Share capital and major shareholder

The nominal share capital of the Company amounted to CHF 100 million. It is divided into 100 000 shares, each with a nominal value of CHF 1000. The shares were fully paid-in and held directly by Swiss Re Ltd. As of 31 December 2019 and 2018, the Company was a fully owned subsidiary of Swiss Re Ltd.

6 Contingent liabilities

As of 31 December 2019, the Company has issued limited guarantees of notional CHF 836 million (2018: CHF 920 million) to a subsidiary in support of individual transactions.

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.

7 Securities lending

As of 31 December 2019, securities of CHF 387 million (2018: CHF 509 million) were lent to Swiss Reinsurance Company Ltd under securities lending agreements. As of 31 December 2019 and 2018, there were no securities lent to third parties.

CHF millions	2018	2019
Fair value of securities transferred to third parties	-	_
Fair value of securities transferred to affiliated companies	509	387
Total	509	387

² Includes prior year corrections resulting in an increase of reserves of CHF 10.7 million.

8 Security deposits

To secure the technical provisions at the 2019 balance sheet date, securities with a value of CHF 1 711 million (2018: CHF 642 million) were deposited in favour of ceding companies. Thereof CHF 134 million were security deposits to external third parties (2018: CHF 81 million). The Company further secured reinsurance obligation towards Swiss Re international SE, Luxembourg, Zurich branch with CHF 672 million (2018: CHF 348 million) in CHF denominated and borrowed securities pursuant to regulatory directions.

9 Public placed debentures

As of 31 December 2019, the following public placed debentures were outstanding:

			Nominal		Maturity/	Book value
Instrument	Issued in	Currency	in millions	Interest rate	First call in	CHF millions
Subordinated bond	2014	USD	500	4.500%	2024	484

10 Deposit arrangements

The following balances were related to deposit accounted reinsurance contracts:

CHF millions	2018	2019
Other reinsurance revenues	1	0
Premiums and other receivables from reinsurance	1	0
Reinsurance balances payable	0	0

11 Claims on and obligations towards affiliated companies

CHF millions 2018	2019
Loans 1181	1 212
Funds held by ceding companies 486	642
Reinsurance recoverable on technical provisions retroceded 242	1780
Premiums and other receivables from reinsurance 1069	1833
Other receivables 293	414
Funds held under reinsurance treaties 0	342
Reinsurance balances payable 342	1400
Other liabilities 24	10
Subordinated liabilities 296 ¹	291 ¹

¹ The subordinated liabilities were against the parent company Swiss Re Ltd. It is a subordinated floating rate callable loan due in 2028 with a first optional redemption date on

12 Release of undisclosed reserves

In 2019, CHF 0.2 million of net undisclosed reserves were released (2018: CHF 23 million).

13 Obligations towards employee pension fund

As of 31 December 2019, other liabilities included CHF 0 million payable to the employee pension fund (2018: CHF 0.4 million).

14 Auditor's fees

In 2019, the Swiss Re Group incurred total auditor's fees of CHF 31 million (2018: CHF 31 million) and additional fees of CHF 12 million (2018: CHF 7 million), of which CHF 0.4 million (2018: CHF 0.7 million) and CHF 0.2 million (2018: CHF 0 million), respectively, incurred for the Company.

There were no other outstanding claims on and obligations towards the parent company Swiss Re Ltd at the end of the period 2019 and 2018.

15 Investments in subsidiaries

As of 31 December 2019 and 2018, Swiss Re Corporate Solutions Ltd held the following direct and indirect investments in subsidiaries and affiliated companies.

			%	%
As of 31 December 2019	Country	City	Equity interest	Voting interest
The Palatine Insurance Company Ltd	United Kingdom	London	100%	100%
Swiss Re Specialty Insurance (UK) Ltd	United Kingdom	London	100%	100%
Swiss Re International SE	Luxembourg	Luxembourg	100%	100%
Swiss Re Corporate Solutions Insurance China Ltd	China	Shanghai	100%	100%
SR Corporate Solutions America Holding Corporation	United States	Wilmington	100%	100%
Flint Hills Insurance Agency, LLC	United States	Overland Park	100%	100%
Swiss Re Corporate Solutions Global Markets Inc	United States	New York	100%	100%
Westport Insurance Corporation	United States	Jefferson City	100%	100%
First Specialty Insurance Corporation	United States	Jefferson City	100%	100%
North American Capacity Insurance Company	United States	Manchester	100%	100%
North American Elite Insurance Company	United States	Manchester	100%	100%
North American Specialty Insurance Company	United States	Manchester	100%	100%
Washington International Insurance Company	United States	Manchester	100%	100%
Westport Insurance Corporation - Escritório de Representação no				
Brasil Ltda.	Brazil	São Paulo	100%	100%
Wing RE III Inc.	United States	Missouri	100%	100%
Swiss Re Corporate Solutions Brasil Seguros S.A.	Brazil	São Paulo	60%	60%
Compania Aseguradora de Fianzas S.A. Confianza	Colombia	Bogotá	51%	51%
Swiss Re Corporate Solutions Advisors South Africa (Pty) Ltd	South Africa	Johannesburg	100%	100%
Swiss Re Corporate Solutions Investment Holding Company Ltd	Switzerland	Zurich	100%	100%
Compania Aseguradora de Fianzas S.A. Confianza	Colombia	Bogotá	0%	0%
Swiss Re Corporate Solutions México Seguros, S.A. de C.V.	Mexico	Mexico City	0%	1%
Swiss Re Corporate Solutions México Servicios, S. de R.L. de C.V.	Mexico	Mexico City	100%	67%
Swiss Re Corporate Solutions Services Ltd	United Kingdom	London	100%	100%
Swiss Re Corporate Solutions Services s.r.o.	Slovakia	Bratislava	100%	100%
Swiss Re Serviços de Consultoria em Seguros e Resseguros Ltda	Brazil	São Paulo	100%	100%
Swiss Re Corporate Solutions México Seguros, S.A. de C.V.	Mexico	Mexico City	100%	99%
Swiss Re Corporate Solutions México Servicios, S. de R.L. de C.V.	Mexico	Mexico City	0%	33%
Swiss Re Serviços de Consultoria em Seguros e Resseguros Ltda	Brazil	São Paulo	0%	0%
Westport Insurance Corporation - Escritório de Representação no Brasil Ltda.	Brazil	São Paulo	0%	0%

As of 31 December 2018	Country	City	%	%
The Palatine Insurance Company Ltd	Country United Kingdom	City London	Equity interest 100%	Voting interest
Swiss Re Specialty Insurance (UK) Ltd	United Kingdom	London	100%	100%
Swiss Re International SF	Luxembourg	Luxembourg	100%	100%
Swiss Re Corporate Solutions Insurance China Ltd	China	Shanghai	100%	100%
SR Corporate Solutions America Holding Corporation	United States	Wilmington	100%	100%
Flint Hills Insurance Agency, LLC	United States	Overland Park	100%	100%
Swiss Re Accident and Health Risk Solutions, LLC	United States	Delaware	100%	100%
Swiss Re Corporate Solutions Global Markets Inc	United States	New York	100%	100%
Westport Insurance Corporation	United States	Jefferson City	100%	100%
First Specialty Insurance Corporation	United States	Jefferson City	100%	100%
North American Capacity Insurance Company	United States	Manchester	100%	100%
North American Elite Insurance Company	United States	Manchester	100%	100%
North American Specialty Insurance Company	United States	Manchester	100%	100%
Washington International Insurance Company	United States	Manchester	100%	100%
Westport Insurance Corporation - Escritório de Representação no				
Brasil Ltda.	Brazil	São Paulo	100%	100%
Wing RE III Inc.	United States	Missouri	100%	100%
Swiss Re Corporate Solutions Brasil Seguros S.A.	Brazil	São Paulo	60%	60%
Compania Aseguradora de Fianzas S.A. Confianza	Colombia	Bogotá	51%	51%
Swiss Re Corporate Solutions Advisors South Africa (Pty) Ltd	South Africa	Johannesburg	100%	100%
Swiss Re Corporate Solutions Investment Holding Company Ltd	Switzerland	Zurich	100%	100%
Compania Aseguradora de Fianzas S.A. Confianza	Colombia	Bogotá	0%	0%
Swiss Re Corporate Solutions México Seguros, S.A. de C.V.	Mexico	Mexico City	0%	1%
Swiss Re Corporate Solutions México Servicios, S. de R.L. de C.V.	Mexico	Mexico City	100%	67%
Swiss Re Corporate Solutions Services Ltd	United Kingdom	London	100%	100%
Swiss Re Corporate Solutions Services s.r.o.	Slovakia	Bratislava	100%	100%
Swiss Re Serviços de Consultoria em Seguros e Resseguros Ltda	Brazil	São Paulo	100%	100%
Swiss Re Corporate Solutions México Seguros, S.A. de C.V.	Mexico	Mexico City	100%	99%
Swiss Re Corporate Solutions México Servicios, S. de R.L. de C.V.	Mexico	Mexico City	0%	33%
Swiss Re Serviços de Consultoria em Seguros e Resseguros Ltda	Brazil	São Paulo	0%	0%
Westport Insurance Corporation - Escritório de Representação no Brasil Ltda.	Brazil	São Paulo	0%	0%

16 Personnel information and administrative expenses

As of 31 December 2019, the Company employed a worldwide staff at an average of 293 (2018: 296) full time equivalents.

Personnel expenses for the 2019 financial year amounted to CHF 89 million (2018: CHF 100 million).

17 Subsequent event

The rapid spread of the coronavirus, which has been declared a pandemic, and the actions being taken to contain it on an increasingly global basis have led to significant volatility in the financial markets and are having an adverse impact on global business and economic activity. There is an increasing likelihood that the coronavirus and containment efforts could have adverse effects on the global economy and could possibly lead to a global recession. The Group is closely monitoring developments and the potential impact of the spread of infection and global responses on, for example, asset prices and insurance exposures, as well as on its operations.

Proposal for allocation of disposable result

The Board of Directors proposes to the Annual General Meeting of the Company, to be held on 25 March 2020, to approve the following allocation:

Retained earnings

CHF millions	2018	2019
Retained earnings brought forward	-890	-1388
Net result for the financial year	-498	-858
Disposable result	-1388	-2246
Allocation to voluntary profit reserves	_	_
Retained earnings after allocation	-1388	-2246

Legal reserves from capital contributions

CHF millions	2018	2019
Legal reserves from capital contributions brought forward	1439	439
Capital injection on 24.06.2019 from Swiss Re Ltd	_	584
Allocation to voluntary profit reserves ¹	-1000	-584
Legal reserves from capital contributions after allocation to voluntary profit reserves	439	439

 $^{^{\}mbox{\tiny 1}}$ As per extraordinary general meeting held on 26.08.2019

Voluntary profit reserves

CHF millions	2018	2019
Voluntary profit reserves brought forward	903	1903
Allocation from legal reserves from capital contributions ¹	1000	584
Voluntary profit reserves after allocation of legal reserves		
from capital contributions and before cash dividend	1903	2487
Cash dividend	_	-
Voluntary profit reserves after allocation of legal reserves		
from capital contributions and after cash dividend	1903	2487

 $^{^{\}mbox{\tiny 1}}$ As per extraordinary general meeting held on 26.08.2019

Zurich, 18 March 2020

Report of the statutory auditor

to the General Meeting of Swiss Re Corporate Solutions Ltd Zurich

Report of the statutory auditor on the financial statements

As statutory auditor, we have audited the accompanying financial statements of Swiss Re Corporate Solutions Ltd (the 'Company'), which comprise the income statement, balance sheet and notes (pages 64 to 75), for the year ended 31 December 2019.

Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the Company's Articles of Association. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

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

Opinion

In our opinion, the financial statements for the year ended 31 December 2019 comply with Swiss law and the Company's Articles of Association.

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

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the 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.

Unobservable or interpolated inputs used for the valuation of certain investments

Key audit matter

Investments are generally valued at lower of cost or market value (prudence principle). In addition to the lower of cost or market value, amortised cost must also be considered for fixed income securities, which is in accordance with the Insurance Supervision Ordinance.

Accordingly, market values have to be observed to assess the appropriate application of the prudence principle.

Investment valuation continues to be an area with inherent risk for certain investments that have unobservable or interpolated inputs. The risk is not the same for all investment types and is greatest for derivatives, which are more difficult to value because quoted prices are not always available.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls around the valuation models for certain investments, including the Company's independent price verification process. We also tested the Company's data integrity and change management controls relating to the valuation models.

In relation to the matters set out opposite, our substantive testing procedures included the following:

- Challenging the Company's methodology and assumptions, in particular, the yield curves, discounted cash flows, perpetual growth rates and liquidity premiums used in the valuation models.
- Comparing the assumptions used against appropriate benchmarks and investigating significant differences.
- Engaging our own valuation specialists to perform independent valuations of selected investments.

Based on the work performed, we consider the methodology and assumptions used by the Company in determining the valuation to be appropriate.



2 Swiss Re Corporate Solutions Ltd | Report of the statutory auditor to the General Meeting

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

Key audit matter

Valuation of actuarially determined P&C loss reserves involves a high degree of subjectivity and complexity. Reserves for losses and loss adjustment expenses represent estimates of future payments of reported and unreported claims for losses and related expenses at a given date.

The Company uses a range of actuarial methodologies and methods to estimate these reserves. Actuarially determined P&C loss reserves require significant judgment relating to certain factors and assumptions. Among the most significant reserving assumptions are the A-priori loss ratios, which typically drive the estimates of P&C loss reserves for the most recent contract years. Other key factors and assumptions include, but are not limited to changes in interest rates, exposures and mix as well as inflation trends, claims trends and regulatory decisions. In particular, loss reserves for 'long tail' lines of business (for example, the Liability, Motor Liability and Workers' Compensation portfolios) generally require more judgment to estimate. This is due to the protracted period over which claims may be reported and/or settled as well as the fact that claim settlements are often less frequent but of higher magnitude.

Moreover, not all natural catastrophe events and significant man-made losses can be modelled using traditional actuarial methodologies, which increases the degree of judgment needed in establishing reserves for these events.

How our audit addressed the key audit matter

We assessed and tested the design and operating effectiveness of selected key controls relating to the application of the actuarial methodology, data collection and analysis, as well as the processes for determining the assumptions used by the Company in the valuation of actuarially determined P&C loss reserves.

In relation to the matters set out opposite, our substantive testing procedures included the following:

- Testing the completeness and accuracy of underlying data utilised by the Company's actuaries in estimating P&C loss reserves.
- Applying IT audit techniques to analyse claims through the recalculation of claims triangles.
- Involving PwC's internal actuarial specialists to independently test the Company's estimates of P&C loss reserves and evaluate the reasonableness of the methodology and assumptions used by comparing them with recognised actuarial practices and by applying our industry knowledge and experience.
- Performing independent projections of selected portfolios. For these portfolios, we compared our calculations of projected reserves with those of the Company taking into account the available corroborating and contrary evidence and challenging the Company's assumptions as appropriate.
- Assessing the process and related judgments of the Company in relation to natural catastrophes and other large losses, including using our industry knowledge to assess the reasonableness of market loss estimates and other significant assumptions.
- Performing sensitivity tests to determine the impact of selected key assumptions.
- Evaluating the appropriateness of any significant adjustments made by the Company to P&C loss reserve estimates.

Based on the work performed, we consider the methodologies and assumptions used by the Company in the valuation of actuarially determined P&C loss reserves to be appropriate.



3 Swiss Re Corporate Solutions Ltd | Report of the statutory auditor to the General Meeting

Impairment assessment of investments in subsidiaries and affiliated companies

Key audit matter

The Company applies group valuation method when a close business link exists and a similarity in nature is given in accordance with Swiss Accounting Law.

The impairment assessment of investments in subsidiaries and affiliated companies, is based on the selected valuation model that reflects specific characteristics of investment and corresponding assumptions as model inputs.

The impairment assessment is considered a key audit matter due to the considerable judgment in the assumptions and adjustments applied to the in the valuation model.

How our audit addressed the key audit matter

In relation to the matter set out opposite, our substantive testing procedures included the following:

- Assessing whether the group valuation method is still appropriate.
- Evaluating the model used by the Company to determine a market value.
- Assessing whether the assumptions used are reasonable.
- Understanding changes in the approach and discussing these with the Company to ensure they are in accordance with our own expectation based on our knowledge of the business and industry.

Based on the work performed, we consider the methods and assumptions used by the Company to assess recoverability of investments in subsidiaries and affiliated companies to be appropriate.

Report on other legal requirements

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

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

We further confirm that the proposal for allocation of disposable result complies with Swiss law and the Company's Articles of Association. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Roy Clark

Audit expert Auditor in charge

Zurich, 18 March 2020

Frank Trauschke

Audit expert



4 Swiss Re Corporate Solutions Ltd | Report of the statutory auditor to the General Meeting

Cautionary note on forward-looking statements

Certain statements contained herein are forward-looking. These statements (including as to plans, objectives, targets and trends) 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 forwardlooking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results of operations, financial condition, liquidity position or prospects to be materially different from any future results of operations, financial condition, liquidity position or prospects expressed or implied by such statements. Among the key factors that have a direct bearing on our results of operations, financial condition, liquidity position or prospects are:

- the frequency, severity and development of insured claim events, particularly natural catastrophes, man-made disasters, pandemics, acts of terrorism or acts of
- 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;
- our 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 our financial strength or otherwise:
- our inability to realize amounts on sales of securities on our balance sheet equivalent to their values recorded for accounting purposes;
- our 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 us or our 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 of our companies, 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;
- 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:

- the availability and effectiveness of reinsurance arrangements, and any failures of counterparties to perform their obligations under such arrangements;
- 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 our 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 our 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;
- 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 our 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. We operate in a continually changing environment and new risks emerge continually. Readers are cautioned not to place undue reliance on forward-looking statements. We undertake no obligation to publicly revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

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

Note on risk factors

General impact of adverse market conditions

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

Financial, credit and foreign exchange markets are experiencing continued periods of volatility reflecting a range of political, economic and other uncertainties, some of the more significant of which are inter-related. These include the withdrawal of the United Kingdom from the European Union and significant uncertainty regarding the future relationship between the United Kingdom and the European Union; the possible emergence of trade barriers and other protection policies across a range of economies, including a sustained

trade war between the United States and China; geopolitical tensions more broadly; a prolonged slowdown in one or more of the principal global economies, particularly in China, and possible recession; continued challenges faced by the Eurozone; the tightening of monetary policy; sustained challenges to multilateral institutions and frameworks; the domestic political situation in the United States, various member states of the European Union and potentially other countries; and heightened scrutiny of technology companies.

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.

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

Coronavirus

The rapid spread of the coronavirus and the evolving actions being taken to contain it on a growing scale have led to significant volatility in the financial markets, have had an adverse impact on global economic activity and have led to heightened concerns of potentially significant adverse effects on the global economy, and possibly recession. Even countries that experience less severe direct effects of the coronavirus could be adversely affected by disruptions in the global supply chain and significantly curtailed international travel. Swiss Re is closely monitoring the spread of the coronavirus and the actions being taken to contain it, and continues to evaluate the potential impact on the Group. Contingency covers could be affected depending on the scope and severity of the spread of the virus as well as of the actions taken to contain it, and coronavirus-related financial market volatility could adversely affect the Group's investment result or access to the capital markets. The Group's operations and control processes could also be adversely affected by widening containment efforts (undertaken on a voluntary or mandatory basis). The coronavirus outbreak, the impact on business and economic activity of containment efforts and the related equity market volatility, together with the recent interest rate cuts, are likely to have an adverse effect on our SST ratio, as long as these factors remain operative.

Regulatory changes

Swiss Re and its subsidiaries operate in a highly regulated environment. The regulatory regimes to which members of the Group are subject have changed significantly in recent years and are expected to continue to evolve. 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 applicable regulation in each of the jurisdictions in which they conduct business, particularly Switzerland, the United States, the United Kingdom, countries in the European Union (including Luxembourg), Australia, Japan, Canada, Singapore and Dubai. In addition, the Group could be affected by regulatory changes or developments affecting the overall Swiss Re group, comprising Swiss Re Ltd ("SRL") and its consolidated subsidiaries, of which the Group is a part (the "Swiss Re Group").

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

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

In addition, regulatory changes could occur in areas of broader application, such as competition policy and tax laws. Changes in tax laws, for example, could increase the taxes the Group pays, the attractiveness of products offered by the Group, the Group's investment activities and the value of deferred tax assets. 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 insurance less attractive to primary insurers.

Market risk

Volatility and disruption in the global financial markets could expose the Group to significant financial and capital markets risk, including changes in interest rates, credit spreads, equity prices and foreign currency exchange rates, which may adversely impact the Group's financial condition, results of operations, liquidity and capital position.

The Group's exposure to interest rate risk is primarily related to the market price and cash flow variability associated with changes in interest rates. In general, a low interest rate environment, such as the one experienced in recent years, poses significant challenges to the insurance industry, with earnings capacity under stress unless lower investment returns from fixed income assets can be offset by lower combined ratios or higher returns from other asset classes. Exposure to credit spreads primarily relates to market price and cash flow variability associated with changes in credit spreads. When credit spreads widen, the net unrealised loss position of the Group's investment portfolio can increase, as could other-thantemporary impairments. The Group is exposed to changes in the level and volatility of equity prices, as they affect the value of equity securities themselves as well as the value of securities or instruments that derive their value from a particular equity security, a basket of equity securities or a stock index. The Group is also subject to equity price risk to the extent that the values of life-related benefits under certain products and life contracts, most notably variable annuity business, are tied to financial market values; to the extent market values fall, the financial exposure on guarantees related to these contracts would increase to the extent this exposure is not hedged. While the Group has an extensive hedging programme covering its existing variable annuity business that it believes is sufficient, certain risks cannot be hedged, including actuarial, basis and correlation risks. Exposure to foreign exchange risk arises from exposures to changes in spot prices and forward prices as well as to volatile movements in exchange rates.

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

Credit risk

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

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

Liquidity risks

The Group's business requires, and its clients expect, that it has sufficient capital and sufficient liquidity to meet its 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 coverage obligations.

The Group's uses of funds include obligations arising in its insurance business, 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.

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

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

Counterparty risks

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

The Group could also be adversely affected by the insolvency of, or other credit constraints affecting, counterparties in its insurance operations. Moreover, the Group could be adversely affected by liquidity issues at clients 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 insurance companies. Third-party rating agencies assess and rate the financial strength of insurers. These ratings are intended to measure a company's ability to repay its obligations and are based upon criteria established by the rating agencies. Ratings may be revised downward or revoked at the sole discretion of the rating agencies.

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

As claims paying and financial strength ratings are key factors in establishing the competitive position insurers, a decline in ratings alone could make insurance provided by the Group less attractive to clients relative to insurance 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 insurance only from insurers with certain ratings. Moreover, a decline in ratings could impact the availability and terms of unsecured financing (potentially impacting both the Group's ability to roll over facilities or obtain new facilities) and obligate the Group to provide collateral or other quarantees in the course of its insurance business or trigger early termination of funding arrangements, potentially resulting in a need for additional liquidity. As a ratings decline could also have a material adverse impact on the Group's costs of borrowing or ability to access the capital markets, the adverse implications of a downgrade could be more severe.

Legal and regulatory risks

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

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

Insurance, operational and other risks

As part of the Group's ordinary course operations, the Group is subject to a variety of risks, including risks that reserves may not adequately cover future claims and benefits; risks that catastrophic events (including natural disasters, such as hurricanes, windstorms, floods, earthquakes, and man-made disasters, such as acts of terrorism and other disasters such as industrial accidents, explosions, and fires, and pandemics) are inherently unpredictable in terms of both their frequency and severity and have exposed, and may expose, the Group to unexpected large losses (and related uncertainties in estimating future claims in respect of such events); 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; 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 the Group's clients; risks related to investments in emerging markets; and risks related to the failure of, or attacks directed at, the Group's operational systems and infrastructure, including its information technology networks and systems. Any of the foregoing, as well as the occurrence of future risks that the Group's risk management procedures fail to identify or anticipate, could have a material adverse effect on the Group, and could also give rise to reputational risk.

Use of models; accounting matters

The Group is subject to risks relating to the preparation of estimates and assumptions that management uses, including as part of its risk models as well as those that affect the reported amounts of assets, liabilities, revenues and expenses in the Group's financial statements. In addition, particularly with respect to large natural catastrophes, it may be difficult to estimate losses, and preliminary estimates may be subject to a high degree of uncertainty and change as new information becomes available.

Deterioration in market conditions could have an adverse impact on assumptions used for financial reporting purposes, which could affect possible impairment of present value of future profits, fair value of assets and liabilities, deferred acquisition costs or goodwill. Moreover, regulators could require the use of standard models instead of permitting the use of internal models. To the extent that management's estimates or assumptions prove to be incorrect, it could have a material impact on underwriting results (in the case of risk models) or on reported financial condition or results of operations, and such impact could be material.

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

The Group uses non-GAAP financial measures in its external 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 substitutes for measures prepared in accordance with US GAAP. Moreover, these may be different from, or otherwise inconsistent with, non-GAAP financial measures used by other companies. These measures have inherent limitations, are not required to be uniformly applied and are not audited.

Risks related to the Swiss Re corporate structure

Swiss Re is a wholly owned subsidiary of SRL, and the Group represents only one of the four principal operating segments of the Swiss Re Group.

The Group does not currently operate on a standalone basis. It is dependent on other members of the Swiss Re Group for a range of asset management services, corporate services (including general management services, human resources, logistics, IT support, finance, treasury and accounting services, auditing services, risk management oversight and legal and compliance) and technical services (including actuarial services support, underwriting services support and claims operations

support). In addition, the Group derives a range of significant operational and other benefits from its status as a part of the Swiss Re Group, including its ability to market its products on a worldwide basis under the "Swiss Re Corporate Solutions" brand name. As a result, factors affecting the Swiss Re Group, whether involving developments or events unique to Swiss Re or events or developments applicable more broadly, could have a material adverse effect on the Group's ability to conduct its business, even if such factors do not directly impact the Group's business operations.

Capital, funding, reserve and cost allocations are made at the Swiss Re Group level across the four operating segments based principally on business plans as measured against US GAAP and economic value management metrics. Decisions at the Swiss Re Group level in respect of the broader Swiss Re Group could have an adverse impact on the Group's financial condition, including its capital and liquidity levels, as well as on its SST ratio. As part of the Swiss Re Group's focus on efficient capital allocation, the Group expects to be paying dividends to SRL. Decisions on dividends payable by each of the operating segments, including the Group, are made at the Swiss Re Group level based on legal entity, regulatory, capital and liquidity considerations. While to date the Group remains wholly owned by SRL, in the future, the Swiss Re Group may partner (for purposes of acquisitions or otherwise) with other investors in, or within, one or more of its business units or sub-groups within its business units (including the Group), which, subject to applicable regulatory requirements, have the potential to alter its historical approaches taken in respect of capital, liquidity, funding and/or dividends, as well as other governance matters, including strategy for such business unit or sub-group and board composition at the relevant corporate level. The Group's structure could also change in connection with acquisitions or dispositions. To the extent it undertakes acquisitions, it is subject to the risks inherent in acquiring and integrating new operations.

While further changes to the overall Swiss Re Group structure may not have a financial statement impact on a Swiss Re Group consolidated basis, they would impact the Group to the extent that operations are transferred into or from the Group, or as a result of intra-group transactions (from the perspective of the Swiss Re Group) to the extent the Group is a counterparty to any such transactions.

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