Financial Report contents

This Annual Report includes the consolidated financial statements for QBE Insurance Group Limited (the ultimate parent entity or the Company) and its controlled entities (QBE or the Group). All amounts in this Financial Report are presented in US dollars unless otherwise stated. QBE Insurance Group Limited is a company limited by its shares and incorporated and domiciled in Australia. Its registered office is located at:

Level 27, 8 Chifley Square
Sydney NSW 2000
Australia.

A description of the nature of the Group's operations and its principal activities is included on pages 4 to 27, none of which is part of this Financial Report. The Financial Report was authorised for issue by the directors on 19 February 2021. The directors have the power to amend and reissue the financial statements.

Through the use of the internet, we have ensured that our corporate reporting is timely, complete and available globally at minimum cost to the Company. All material press releases, this Financial Report and other information are available at our QBE investor centre at our website: www.qbe.com.

Consolidated statement of comprehensive income

FOR THE YEAR ENDED 31 DECEMBER 2020

	NOTE	2020 US$M	2019 US$M
Gross written premium		**14,643**	13,442
Unearned premium movement		**(635)**	(185)
Gross earned premium revenue	2.1	**14,008**	13,257
Outward reinsurance premium		**(2,462)**	(1,825)
Deferred reinsurance premium movement		**162**	177
Outward reinsurance premium expense		**(2,300)**	(1,648)
Net earned premium (a)		**11,708**	11,609
Gross claims expense	2.2	**(12,300)**	(9,676)
Reinsurance and other recoveries revenue	2.2	**3,366**	1,574
Net claims expense (b)	2.2	**(8,934)**	(8,102)
Gross commission expense		**(2,331)**	(2,178)
Reinsurance commission revenue	2.1	**440**	359
Net commission (c)		**(1,891)**	(1,819)
Underwriting and other expenses (d)		**(1,752)**	(1,690)
Underwriting result (a)+(b)+(c)+(d)		**(869)**	(2)
Investment income – policyholders' funds	3.1	**153**	660
Investment expenses – policyholders' funds	3.1	**(11)**	(11)
Insurance (loss) profit		**(727)**	647
Investment income – shareholders' funds	3.1	**90**	393
Investment expenses – shareholders' funds	3.1	**(6)**	(6)
Financing and other costs	5.1.2	**(252)**	(257)
Loss on sale of entities and businesses	7.1.1	**(2)**	(8)
Share of net loss of associates		**(5)**	(3)
Restructuring and related expenses		**(104)**	(43)
Amortisation and impairment of intangibles	7.2	**(466)**	(51)
(Loss) profit before income tax from continuing operations		**(1,472)**	672
Income tax expense	6.1	**(39)**	(104)
(Loss) profit after income tax from continuing operations		**(1,511)**	568
Loss after income tax from discontinued operations	7.1.2	**–**	(21)
(Loss) profit after income tax		**(1,511)**	547
Other comprehensive income			
Items that may be reclassified to profit or loss			
Net movement in foreign currency translation reserve	5.3.2	**375**	28
Net movement in cash flow hedge and cost of hedging reserves	5.3.2	**(24)**	(7)
Income tax relating to these components of other comprehensive income		**7**	2
Other comprehensive income from discontinued operations after income tax		**–**	10
Items that will not be reclassified to profit or loss			
Remeasurement of defined benefit plans		**38**	(9)
Income tax relating to this component of other comprehensive income		**(10)**	2
Other comprehensive income after income tax		**386**	26
Total comprehensive (loss) income after income tax		**(1,125)**	573
(Loss) profit after income tax from continuing operations attributable to:			
Ordinary equity holders of the Company		**(1,517)**	571
Non-controlling interests		**6**	(3)
		(1,511)	568
(Loss) profit after income tax attributable to:			
Ordinary equity holders of the Company		**(1,517)**	550
Non-controlling interests		**6**	(3)
		(1,511)	547
Total comprehensive (loss) income after income tax attributable to:			
Ordinary equity holders of the Company		**(1,131)**	576
Non-controlling interests		**6**	(3)
		(1,125)	573

(LOSS) EARNINGS PER SHARE FOR (LOSS) PROFIT AFTER INCOME TAX ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE COMPANY	NOTE	2020 US CENTS	2019 US CENTS
For (loss) profit after income tax from continuing operations			
Basic (loss) earnings per share	5.5	**(108.5)**	43.4
Diluted (loss) earnings per share	5.5	**(108.5)**	43.1
For (loss) profit after income tax			
Basic (loss) earnings per share	5.5	**(108.5)**	41.8
Diluted (loss) earnings per share	5.5	**(108.5)**	41.5

The consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.

Consolidated balance sheet

AS AT 31 DECEMBER 2020

	NOTE	2020 US$M	2019 US$M
Assets			
Cash and cash equivalents	5.2	**766**	547
Investments	3.2	**26,935**	23,790
Derivative financial instruments	5.6	**520**	195
Trade and other receivables	2.6	**5,760**	4,748
Current tax assets		**60**	36
Deferred insurance costs	2.5	**2,282**	1,907
Reinsurance and other recoveries on outstanding claims	2.3	**6,527**	5,104
Other assets		**19**	13
Defined benefit plan surpluses	8.7	**64**	45
Right-of-use lease assets		**383**	275
Property, plant and equipment		**167**	170
Deferred tax assets	6.2	**546**	479
Investment properties		**34**	37
Investments in associates		**27**	25
Intangible assets	7.2	**2,534**	2,791
Total assets		**46,624**	40,162
Liabilities			
Derivative financial instruments	5.6	**845**	202
Trade and other payables	2.7	**2,338**	1,802
Current tax liabilities		**15**	43
Unearned premium	2.5	**7,466**	6,460
Gross outstanding claims	2.3	**23,861**	19,915
Lease liabilities		**431**	299
Provisions		**149**	136
Defined benefit plan deficits	8.7	**21**	42
Deferred tax liabilities	6.2	**51**	15
Borrowings	5.1	**2,955**	3,095
Total liabilities		**38,132**	32,009
Net assets		**8,492**	8,153
Equity			
Contributed equity	5.3.1	**10,273**	7,594
Treasury shares held in trust		**(1)**	(1)
Reserves	5.3.2	**(1,898)**	(1,335)
Retained profits		**117**	1,895
Shareholders' equity		**8,491**	8,153
Non-controlling interests		**1**	–
Total equity		**8,492**	8,153

The consolidated balance sheet should be read in conjunction with the accompanying notes.

Consolidated statement of changes in equity

FOR THE YEAR ENDED 31 DECEMBER 2020

	CONTRIBUTED EQUITY US$M	TREASURY SHARES HELD IN TRUST US$M	RESERVES US$M	RETAINED PROFITS US$M	SHARE-HOLDERS' EQUITY US$M	NON-CONTROLLING INTERESTS US$M	TOTAL EQUITY US$M
As at 1 January 2020	**7,594**	**(1)**	**(1,335)**	**1,895**	**8,153**	**–**	**8,153**
Loss after income tax	**–**	**–**	**–**	**(1,517)**	**(1,517)**	**6**	**(1,511)**
Other comprehensive income	**–**	**–**	**358**	**28**	**386**	**–**	**386**
Total comprehensive income (loss)	**–**	**–**	**358**	**(1,489)**	**(1,131)**	**6**	**(1,125)**
Transactions with owners in their capacity as owners							
Shares issued under Employee Share and Option Plan and held in trust	**26**	**(28)**	**–**	**–**	**(2)**	**–**	**(2)**
Share-based payment expense	**–**	**–**	**20**	**–**	**20**	**–**	**20**
Shares vested and/or released	**–**	**28**	**(28)**	**–**	**–**	**–**	**–**
Contributions of equity, net of transaction costs	**1,699**	**–**	**–**	**–**	**1,699**	**–**	**1,699**
Reclassification on disposal of controlled entities	**–**	**–**	**2**	**(2)**	**–**	**–**	**–**
Dividends paid on ordinary shares	**–**	**–**	**–**	**(265)**	**(265)**	**(5)**	**(270)**
Dividend Reinvestment Plan and Bonus Share Plan	**27**	**–**	**–**	**3**	**30**	**–**	**30**
Distribution on capital notes	**–**	**–**	**–**	**(25)**	**(25)**	**–**	**(25)**
Foreign exchange	**927**	**–**	**(915)**	**–**	**12**	**–**	**12**
As at 31 December 2020	**10,273**	**(1)**	**(1,898)**	**117**	**8,491**	**1**	**8,492**

	CONTRIBUTED EQUITY US$M	TREASURY SHARES HELD IN TRUST US$M	RESERVES US$M	RETAINED PROFITS US$M	SHARE-HOLDERS' EQUITY US$M	NON-CONTROLLING INTERESTS US$M	TOTAL EQUITY US$M
As at 1 January 2019	7,830	(7)	(1,363)	1,838	8,298	19	8,317
Profit (loss) after income tax	–	–	–	550	550	(3)	547
Other comprehensive income (loss)	–	–	33	(7)	26	–	26
Total comprehensive income (loss)	–	–	33	543	576	(3)	573
Transactions with owners in their capacity as owners							
Shares bought back on-market and cancelled	(205)	–	–	–	(205)	–	(205)
Shares acquired and held in trust	–	(63)	–	–	(63)	–	(63)
Share-based payment expense	–	–	38	–	38	–	38
Shares vested and/or released	–	69	(41)	–	28	–	28
Contributions of equity, net of transaction costs and tax	1	–	–	–	1	–	1
Net changes in non-controlling interests	–	–	(4)	–	(4)	(12)	(16)
Reclassification on disposal of owner occupied property	–	–	3	(3)	–	–	–
Dividends paid on ordinary shares	–	–	–	(488)	(488)	(4)	(492)
Dividend reinvestment under Bonus Share Plan	–	–	–	5	5	–	5
Foreign exchange	(32)	–	(1)	–	(33)	–	(33)
As at 31 December 2019	7,594	(1)	(1,335)	1,895	8,153	–	8,153

The consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

Consolidated statement of cash flows

FOR THE YEAR ENDED 31 DECEMBER 2020

	NOTE	2020 US$M	2019 US$M
Operating activities			
Premium received		**14,471**	13,705
Reinsurance and other recoveries received		**2,080**	2,373
Outward reinsurance premium paid		**(2,054)**	(1,815)
Claims paid		**(9,429)**	(8,899)
Acquisition and other underwriting costs paid		**(3,793)**	(3,729)
Interest received		**426**	473
Dividends received		**77**	127
Other operating payments		**(174)**	(154)
Interest paid		**(257)**	(250)
Income taxes paid		**(113)**	(52)
Net cash flows from operating activities	8.4	**1,234**	1,779
Investing activities			
Net proceeds on sale of growth assets		**42**	489
Net payments for purchase of interest-bearing financial assets		**(2,387)**	(1,506)
Net proceeds from (payments for) foreign exchange transactions		**277**	(64)
Payments for purchase of intangible assets		**(71)**	(84)
Proceeds on sale of property, plant and equipment		**–**	1
Payments for purchase of property, plant and equipment		**(40)**	(30)
Payments on acquisition of non-controlling interests		**–**	(13)
Proceeds on disposal of entities and businesses (net of cash disposed)		**17**	131
Net cash flows from investing activities		**(2,162)**	(1,076)
Financing activities			
Net proceeds from issue of equity instruments		**1,300**	–
Payments for shares bought back on-market and cancelled		**–**	(205)
Purchase of treasury shares		**–**	(63)
Proceeds from settlement of staff share loans		**1**	1
Payments relating to principal element of lease liabilities		**(61)**	(59)
Proceeds from borrowings		**358**	–
Repayment of borrowings		**(140)**	(199)
Dividends paid		**(265)**	(459)
Net cash flows from financing activities		**1,193**	(984)
Net movement in cash and cash equivalents		**265**	(281)
Cash and cash equivalents at the beginning of the year		**547**	863
Effect of exchange rate changes		**(46)**	(37)
Net cash flows attributable to entities held for sale		**–**	2
Cash and cash equivalents at the end of the year	5.2	**766**	547

The consolidated statement of cash flows should be read in conjunction with the accompanying notes.

Notes to the financial statements

FOR THE YEAR ENDED 31 DECEMBER 2020

1. OVERVIEW

1.1 About QBE

About QBE Insurance Group

QBE is one of the world's largest insurance and reinsurance companies, with operations in all the major insurance markets. Formed in Australia in 1886, QBE employs more than 11,000 people and carries on insurance activities in 27 countries, with operations in Australia, Europe, North America, Asia and the Pacific. QBE's captive reinsurer, Equator Re, provides reinsurance protection to our divisions in conjunction with the Group's external reinsurance programs.

The Company is listed on the Australian Securities Exchange and is a for-profit entity.

About insurance

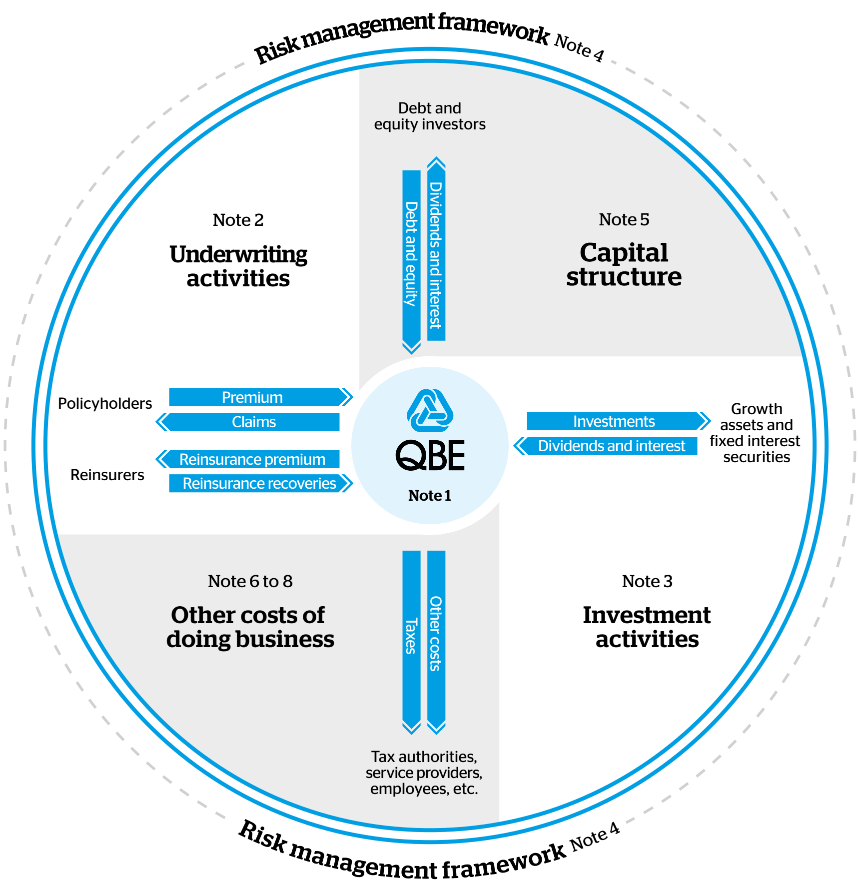
In simple terms, insurance and reinsurance companies help their customers (consumers, businesses and other insurance companies) to manage risk. More broadly put, an insurance company creates value by pooling and redistributing risk. This is done by collecting premium from those that it insures (i.e. policyholders), and then paying the claims of the few that call upon their insurance protection. A company may also choose to reduce some of its own accumulated risk through the use of outward reinsurance, which is insurance for insurance companies. As not all policyholders will actually experience a claims event, the effective pooling and redistribution of risk lowers the total cost of risk management, thereby making insurance protection more cost effective for all.

The operating model of insurance companies relies on profits being generated by:

- appropriately pricing risk and charging adequate premium to cover the expected payouts that will be incurred over the life of the insurance policy (both claims and operating expenses); and
- earning a return on the collected premium and funds withheld to pay future claims through the adoption of an appropriate investment strategy.

Insurance therefore serves a critical function of providing customers with the confidence to achieve their business and personal goals through cost-effective risk management. This is achieved within a highly regulated environment, designed to ensure that insurance companies maintain adequate capital to protect the interests of policyholders.

The diagram below presents a simplified overview of the key components of this Financial Report:



1.2 About this report

This Financial Report includes the consolidated financial statements of QBE Insurance Group Limited (the ultimate parent entity or the Company) and its controlled entities (QBE or the Group).

The Financial Report includes the four primary statements, namely the statement of comprehensive income (which comprises profit or loss and other comprehensive income or loss), balance sheet, statement of changes in equity and statement of cash flows as well as associated notes as required by Australian Accounting Standards. Disclosures have been grouped into the following categories in order to assist users in their understanding of the financial statements:

1. **Overview** contains information that impacts the Financial Report as a whole as well as segment reporting disclosures.
2. **Underwriting activities** brings together results and balance sheet disclosures relevant to the Group's insurance activities.
3. **Investment activities** includes results and balance sheet disclosures relevant to the Group's investments.
4. **Risk management** provides commentary on the Group's exposure to various financial and capital risks, explaining the potential impact on the results and balance sheet and how the Group manages these risks.
5. **Capital structure** provides information about the debt and equity components of the Group's capital.
6. **Tax** includes disclosures relating to the Group's tax expense and balances.
7. **Group structure** provides a summary of the Group's controlled entities and includes disclosures in relation to transactions impacting the Group structure.
8. **Other** includes additional disclosures required to comply with Australian Accounting Standards.

Where applicable within each note, disclosures are further analysed as follows:

- **Overview** provides some context to assist users in understanding the disclosures.
- **Disclosures** (both numbers and commentary) provide analysis of balances as required by Australian Accounting Standards.
- **How we account for the numbers** summarises the accounting policies relevant to an understanding of the numbers.
- **Critical accounting judgements and estimates** explains the key estimates and judgements applied by QBE in determining the numbers.

The notes include information which the directors believe is required to understand the financial statements and is material and relevant to the operations, balance sheet and results of the Group. Information is considered material and relevant if:

- the amount in question is significant because of its size or nature;
- it is important to assist in understanding the results of the Group;
- it helps to explain the impact of significant changes in the Group's business – for example, significant acquisitions or disposals; or
- it relates to an aspect of the Group's operations that is important to its future performance.

1.2.1 Basis of preparation

This Financial Report is a general purpose financial report which:

- has been prepared in accordance with Australian Accounting standards and the *Corporations Act 2001*;
- complies with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and Interpretations as issued by the IFRS Interpretations Committee (IFRIC);
- has been prepared on a historical cost basis as modified by certain exceptions, the most significant of which are the measurement of investments and derivatives at fair value and the measurement of the net outstanding claims liability at present value;
- is presented in US dollars; and
- is presented with values rounded to the nearest million dollars or, in certain cases, to the nearest thousand dollars in accordance with *ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191*.

New and amended Accounting Standards and Interpretations issued by the AASB that are now effective are detailed in note 8.1.1.

The Group has not adopted any Accounting Standards and Interpretations that have been issued or amended but are not yet effective as listed in note 8.1.2.

The consolidated financial statements incorporate the assets and liabilities of all entities controlled by the Company as at 31 December 2020 and the results for the financial year then ended. In preparing the consolidated financial statements, all transactions between controlled entities are eliminated in full. Where control of an entity commences or ceases during a financial year, the results are included for that part of the year during which control existed. A list of entities controlled by the Company at year end is contained in note 7.3.

Lloyd's syndicates are accounted for on a proportional basis. The nature of Lloyd's syndicates is such that, even when one party provides the majority of capital, the syndicate as a whole is not controlled for accounting purposes.

Where necessary, comparative information has been restated to conform to the current year's disclosures.

1. OVERVIEW

1.2.2 Critical accounting judgements and estimates

The preparation of the Group's consolidated financial statements requires management to make judgements and estimates that affect reported amounts. The diversity and complexity of the Group are evidenced by its international operations and the broad product range as shown in the class of business analysis in note 4.2.

In view of its geographic and product diversity, the Group has developed a centralised risk management and policy framework designed to ensure consistency of approach across a number of operational activities, subject to the specific requirements of local markets, legislation and regulation. Such operational activities include underwriting, claims management, actuarial assessment of the outstanding claims liability and investment management.

Given the centralised approach to many activities and the diversity of products and geographies, sensitivity analyses in respect of critical accounting estimates and judgements are presented at the consolidated Group level in order to provide information and analysis which is meaningful, relevant, reliable and comparable year-on-year. Sensitivity disclosure at business segment or product level would not provide a meaningful overview given the complex interrelationships between the variables underpinning the Group's operations.

The key areas in which critical estimates and judgements are applied are as follows:

- net outstanding claims liability (note 2.3);
- liability adequacy test (note 2.5.1);
- recoverability of deferred tax assets (note 6.2.1); and
- impairment testing of intangible assets (note 7.2.1).

The impacts of COVID-19 on these areas are discussed in note 1.2.3 and in individual notes where appropriate.

1.2.3 COVID-19

COVID-19 was declared a pandemic by the World Health Organisation in March 2020. The virus itself, as well as measures to slow its spread, have had a profound impact on the global economy. QBE has considered a broad range of factors to inform an assessment of the impact of the resulting uncertainty and general market volatility on the consolidated financial statements.

While the critical accounting judgements and estimates did not materially change, the impact of COVID-19 resulted in the application of further judgement within those identified areas. Given the evolving and uncertain impact of COVID-19, we anticipate that there are likely to be changes in market conditions in the future and that the impact of these changes will be accounted for in future reporting periods as they arise and/or are able to be reasonably predicted.

Areas which are most significantly impacted by COVID-19 are as follows:

- **Net discounted central estimate (note 2.3):** QBE has recorded net incurred claims (excluding risk margin) of $260 million resulting from COVID-19 in the year to 31 December 2020. While this estimate has been based on a detailed review of the Group's exposures, scenario analysis under a variety of macroeconomic and legislative outcomes, consideration of the Group's reinsurance protections and early indicators from claim payments to date, significant uncertainty remains around potential claims emergence from property business interruption claims, credit exposed classes (i.e. lenders' mortgage, trade credit, surety and landlords' insurance) and from certain long-tail classes that may experience heightened claims activity due to increased risk from recessionary and other factors (i.e. casualty, financial lines and workers' compensation). QBE will continue to closely monitor emerging claims experience, legislative outcomes and wider market developments to ensure that the net discounted central estimate is reflective of the Group's best estimate of expected future claims.
- **Risk margin (note 2.3.3):** The Group aims to maintain a probability of adequacy in the range of 87.5% to 92.5% reflecting the level of uncertainty in the net discounted central estimate. In response to the significantly heightened level of uncertainty created by COVID-19 claims as described above, particularly business interruption claims, QBE has increased the risk margin by $300 million which, when combined with the impacts of movements in risk-free rates and foreign exchange rates, resulted in a probability of adequacy at the balance date of 92.5% (2019 90.0%).
- **Liability adequacy test (note 2.5.1):** This assessment is informed by the Group's expectation of future net claims including a risk margin and is therefore subject to the same uncertainties summarised above. Future claims assumptions used in the liability adequacy test have been prepared on a basis that is consistent with the COVID-19 assumptions informing the determination of the net discounted central estimate.
- **Goodwill impairment testing (note 7.2.1):** A detailed impairment test has been completed in respect of the carrying value of QBE's cash-generating units, which included consideration of the impact of COVID-19. To address the current heightened levels of uncertainty with respect to the future cash flows, the following changes have been reflected in the impairment test: (i) cash flows have been adjusted with reference to scenario-based modelling, taking into account possible impacts of COVID-19 on short to medium-term cash flows; (ii) the pre-tax discount rate includes a temporary risk premium adjustment in the cost of equity assumption; (iii) the terminal value growth assumption has been revised down from 2.5% to 2.3% to reflect QBE's current view of long-term growth in the United States which is consistent with external benchmarks; and (iv) forecast investment returns have been reassessed to align with current market expectations. Note 7.2.1 details factors impacting the impairment of North American goodwill.
- **North American tax group deferred tax asset recoverability (note 6.2.1):** QBE's reassessment of the recoverability of this asset included consideration of the potential impacts of COVID-19. The recoverability assessment has been updated, consistent with the impairment testing completed for the North American cash-generating unit and other entities where relevant.

The Group's COVID-19 financial impact assessment was not limited to the areas identified above. All material components of the balance sheet were considered in detail, as was the effectiveness of QBE's risk management framework in responding to both financial and non-financial risks, with no material issues identified.

1.2.4 Foreign currency

Translation of foreign currency transactions and balances

Transactions included in the financial statements of controlled entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). Foreign currency transactions are translated into functional currencies at the spot rates of exchange applicable at the dates of the transactions. At the balance date, monetary assets and liabilities denominated in foreign currencies are retranslated at the rates of exchange prevailing at that date. Resulting exchange gains and losses are included in profit or loss.

Translation of foreign operations

The results and balance sheets of all foreign operations that have a functional currency different from the Group's presentation currency of US dollars are translated into US dollars as follows:

- income, expenses and other current period movements in comprehensive income are translated at average rates of exchange; and
- balance sheet items are translated at the closing balance date rates of exchange.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to shareholders' equity and recognised in other comprehensive income. When a foreign operation is sold in whole or part and capital is repatriated, exchange differences on translation from the entity's functional currency to the ultimate parent entity's functional currency of Australian dollars are reclassified out of other comprehensive income and recognised in profit or loss as part of the gain or loss on sale.

Hedging of foreign exchange risk

The Group manages its foreign exchange exposures as part of its foreign currency risk management processes, further information on which is provided in note 4.4.

QBE uses borrowings to mitigate currency risk on translation of net investments in foreign operations to the ultimate parent's functional currency of Australian dollars. QBE does not ordinarily use derivatives to mitigate such risks; however, in periods of extraordinary volatility that are expected to persist for an extended period of time, QBE may elect to utilise derivatives to mitigate currency translation risk to preserve capital.

QBE also uses derivatives to mitigate risk associated with foreign currency transactions and balances.

The Group designates hedge relationships which meet the specified criteria in AASB 9 *Financial Instruments* as either cash flow hedges or hedges of a net investment in a foreign operation. Further information on the accounting for derivatives and for designated hedge relationships is provided in note 5.6.

Exchange rates

The principal exchange rates used in the preparation of the financial statements were:

	2020		2019	
	PROFIT OR LOSS	BALANCE SHEET	PROFIT OR LOSS	BALANCE SHEET
A$/US$	**0.688**	**0.771**	0.695	0.702
£/US$	**1.283**	**1.368**	1.276	1.325
€/US$	**1.140**	**1.222**	1.119	1.122

1. OVERVIEW

1.3 Segment information

Overview

Information is provided by operating segment to assist the understanding of the Group's performance. The operating segments are consistent with the basis on which information is provided to the Group Executive Committee for measuring performance and determining the allocation of capital, being the basis upon which the Group's underwriting products and services are managed within the various markets in which QBE operates.

This note presents the results of continuing operations only. The results of discontinued operations are presented in note 7.1.2.

Operating segments

The Group's operating segments are as follows:

- North America writes general insurance, reinsurance and Crop business in the United States.
- International writes general insurance business in the United Kingdom, Europe and Canada. It also writes general insurance and reinsurance business through Lloyd's; worldwide reinsurance business through offices in the United Kingdom, United States, Ireland, Bermuda and mainland Europe; and provides personal and commercial insurance covers in Hong Kong, Singapore, Malaysia and Vietnam.
- Australia Pacific primarily underwrites general insurance risks throughout Australia, New Zealand and the Pacific region, providing all major lines of insurance for personal and commercial risks.

Consistent with information provided to the Group Executive Committee for the current period, certain inward reinsurance business written by North America but managed by International is now reflected in the results of the International segment to drive better end-to-end underwriting, pricing, reserving and performance management discipline. Where material, comparative information in the notes to the financial statements have been restated consistently.

Corporate & Other includes non-operating holding companies that do not form part of the Group's insurance operations; gains or losses on disposals except those relating to discontinued operations (refer to note 7.1.2); and financing costs and amortisation of any intangibles which are not allocated to a specific operating segment. It also includes consolidation adjustments and internal reinsurance eliminations. Intersegment transactions are priced on an arm's length basis and are eliminated on consolidation.

2020	NORTH AMERICA US$M	INTERNATIONAL US$M	AUSTRALIA PACIFIC US$M	TOTAL REPORTABLE SEGMENTS US$M	CORPORATE & OTHER US$M	TOTAL US$M
Gross written premium	4,744	5,845	4,079	14,668	(25)	14,643
Gross earned premium revenue – external	4,519	5,513	3,984	14,016	(8)	14,008
Gross earned premium revenue – internal	1	18	1	20	(20)	–
Outward reinsurance premium expense	(1,200)	(765)	(360)	(2,325)	25	(2,300)
Net earned premium	3,320	4,766	3,625	11,711	(3)	11,708
Net claims expense	(2,974)	(3,229)	(2,479)	(8,682)	(252)	(8,934)
Net commission	(480)	(874)	(534)	(1,888)	(3)	(1,891)
Underwriting and other expenses	(482)	(648)	(572)	(1,702)	(50)	(1,752)
Underwriting result	(616)	15	40	(561)	(308)	(869)
Net investment income (loss) – policyholders' funds	33	91	31	155	(13)	142
Insurance (loss) profit	(583)	106	71	(406)	(321)	(727)
Net investment income – shareholders' funds	33	27	7	67	17	84
Financing and other costs	(2)	(2)	(5)	(9)	(243)	(252)
Loss on sale of entities and businesses	–	–	–	–	(2)	(2)
Share of net loss of associates	–	–	–	–	(5)	(5)
Restructuring and related expenses	(22)	(8)	(37)	(67)	(37)	(104)
Amortisation and impairment of intangibles	–	(5)	(16)	(21)	(445)	(466)
(Loss) profit before income tax from continuing operations	(574)	118	20	(436)	(1,036)	(1,472)
Income tax credit (expense)	121	(25)	(6)	90	(129)	(39)
(Loss) profit after income tax from continuing operations	(453)	93	14	(346)	(1,165)	(1,511)
Net profit from continuing operations attributable to non-controlling interests	–	–	–	–	(6)	(6)
Net (loss) profit after income tax from continuing operations attributable to ordinary equity holders of the Company	(453)	93	14	(346)	(1,171)	(1,517)

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

1. OVERVIEW

2019	NORTH AMERICA US$M	INTERNATIONAL US$M	AUSTRALIA PACIFIC US$M	TOTAL REPORTABLE SEGMENTS US$M	CORPORATE & OTHER US$M	TOTAL US$M
Gross written premium	4,361	5,200	3,920	13,481	(39)	13,442
Gross earned premium revenue – external	4,375	4,999	3,883	13,257	–	13,257
Gross earned premium revenue – internal	–	11	2	13	(13)	–
Outward reinsurance premium expense	(683)	(671)	(317)	(1,671)	23	(1,648)
Net earned premium	3,692	4,339	3,568	11,599	10	11,609
Net claims expense	(2,929)	(2,979)	(2,223)	(8,131)	29	(8,102)
Net commission	(536)	(752)	(526)	(1,814)	(5)	(1,819)
Underwriting and other expenses	(488)	(652)	(519)	(1,659)	(31)	(1,690)
Underwriting result	(261)	(44)	300	(5)	3	(2)
Net investment income – policyholders' funds	124	324	187	635	14	649
Insurance (loss) profit	(137)	280	487	630	17	647
Net investment income – shareholders' funds	149	137	109	395	(8)	387
Financing and other costs	(3)	(2)	(5)	(10)	(247)	(257)
Loss on sale of entities and businesses	–	–	–	–	(8)	(8)
Share of net loss of associates	–	–	–	–	(3)	(3)
Restructuring and related expenses	(4)	(6)	(30)	(40)	(3)	(43)
Amortisation and impairment of intangibles	–	–	(31)	(31)	(20)	(51)
Profit (loss) before income tax from continuing operations	5	409	530	944	(272)	672
Income tax (expense) credit	(1)	(86)	(164)	(251)	147	(104)
Net profit (loss) after income tax from continuing operations	4	323	366	693	(125)	568
Net loss from continuing operations attributable to non-controlling interests	–	–	–	–	3	3
Net profit (loss) after income tax from continuing operations attributable to ordinary equity holders of the Company	4	323	366	693	(122)	571

Geographical analysis

North America is defined by reference to its geographical location and, as such, satisfies the requirements of a geographical analysis as well as an operating segment analysis.

Gross earned premium revenue – external for Australia, the ultimate parent entity's country of domicile, was $3,573 million (2019 $3,487 million). No other country within International or Australia Pacific is individually material in this respect.

Product analysis

QBE does not collect group-wide revenue information by product and the cost to develop this information would be excessive. Gross earned premium revenue by class of business is disclosed in note 4.2.

2. UNDERWRITING ACTIVITIES

Overview

This section provides analysis and commentary on the Group's underwriting activities. Underwriting, in simple terms, is the agreement by the insurer to assume insurance risk in return for a premium paid by the insured. The underwriter assesses the quality of the risk and prices it accordingly.

2.1 Revenue

Overview

Revenue mainly comprises premiums charged for providing insurance coverage. Premiums are classified as:

- direct, being those paid by the policyholder to the insurer;
- facultative, being reinsurance of an individual (usually significant) risk by a ceding insurer or reinsurer; or
- inward reinsurance, being coverage provided to an insurer or reinsurer in relation to a specified grouping of policies or risks.

Other sources of revenue include amounts recovered from reinsurers under the terms of reinsurance contracts, commission income from reinsurers and salvage or third-party recoveries.

	NOTE	2020 US$M	2019 US$M
Gross earned premium revenue			
Direct and facultative		**12,634**	12,146
Inward reinsurance		**1,374**	1,111
		14,008	13,257
Other revenue			
Reinsurance and other recoveries revenue	2.2	**3,366**	1,574
Reinsurance commission revenue		**440**	359
		17,814	15,190

How we account for the numbers

Premium revenue

Premium written comprises amounts charged to policyholders, excluding taxes collected on behalf of third parties. Premium is recognised as revenue in profit or loss based on the incidence of the pattern of risk associated with the insurance policy. The earned portion of premium on unclosed business, being business that is written at the balance date but for which detailed policy information is not yet booked, is also included in premium revenue.

Reinsurance and other recoveries

Reinsurance and other recoveries on paid claims, reported claims not yet paid, claims incurred but not reported (IBNR) and claims incurred but not enough reported (IBNER) are recognised as revenue. Recoveries are measured as the present value of the expected future receipts.

2. UNDERWRITING ACTIVITIES

2.2 Net claims expense

Overview

The largest expense for an insurance company is net claims expense, which is the difference between the net outstanding claims liability (as described in note 2.3) at the beginning and the end of the financial year plus any claims payments made net of reinsurance and other recoveries received during the financial year.

	NOTE	2020 US$M	2019 US$M
Gross claims expense			
Direct and facultative		**11,144**	8,881
Inward reinsurance		**1,156**	795
		12,300	9,676
Reinsurance and other recoveries revenue			
Direct and facultative		**3,217**	1,517
Inward reinsurance		**149**	57
	2.1	**3,366**	1,574
Net claims expense		**8,934**	8,102
Analysed as follows:			
Movement in net discounted central estimate	2.4.2	**8,590**	8,125
Movement in risk margin	2.3.3	**344**	(23)
Net claims expense		**8,934**	8,102

2.3 Net outstanding claims liability

Overview

The net outstanding claims liability comprises the elements described below:

- **the gross central estimate (note 2.3.1)**. This is the provision for expected future claims payments and includes claims reported but not yet paid, IBNR, IBNER and estimated claims handling costs; less
- **reinsurance and other recoveries on outstanding claims (note 2.3.2)**. Insurance companies may elect to purchase reinsurance cover to manage their exposure to any one claim or series of claims. When an insurance company incurs a claim as a result of an insured loss, it may be able to recover some of that claim from reinsurance. An insurer may also be entitled to non-reinsurance recoveries under the insurance contract such as salvage, subrogation and sharing arrangements with other insurers; less
- **an amount to reflect the discount to present value using risk-free rates of return**. The net central estimate is discounted to present value recognising that the claim and/or recovery may not be settled for some time. The weighted average risk-free rate for each operating segment and for the consolidated Group are summarised in note 2.3.4; plus
- **a risk margin (note 2.3.3)**. A risk margin is added to reflect the inherent uncertainty in the net discounted central estimate of outstanding claims.

	NOTE	2020 US$M	2019 US$M
Gross discounted central estimate	2.3.1	**22,324**	18,779
Risk margin	2.3.3	**1,537**	1,136
Gross outstanding claims		**23,861**	19,915
Reinsurance and other recoveries on outstanding claims	2.3.2	**(6,527)**	(5,104)
Net outstanding claims		**17,334**	14,811

1 Performance overview
2 Operating and financial review
3 Governance
4 Directors' Report
5 Financial Report
6 Other information

The table below analyses the movement in the net outstanding claims liability, showing separately the movement in the gross liability and the impact of reinsurance:

		2020			2019		
	NOTE	GROSS US$M	REINSURANCE US$M	NET US$M	GROSS US$M	REINSURANCE US$M	NET US$M
At 1 January		**19,915**	**(5,104)**	**14,811**	19,579	(5,551)	14,028
Claims expense – current accident year	2.4.2	**10,947**	**(3,099)**	**7,848**	8,698	(973)	7,725
Claims expense – prior accident years	2.4.2	**1,009**	**(267)**	**742**	1,001	(601)	400
Movement in risk margin	2.3.3	**344**	**–**	**344**	(23)	–	(23)
Incurred claims recognised in profit or loss from continuing operations	2.2	**12,300**	**(3,366)**	**8,934**	9,676	(1,574)	8,102
Claims payments		**(9,254)**	**2,079**	**(7,175)**	(9,290)	1,824	(7,466)
Foreign exchange		**900**	**(136)**	**764**	(50)	197	147
At 31 December		**23,861**	**(6,527)**	**17,334**	19,915	(5,104)	14,811

2.3.1 Gross discounted central estimate

	NOTE	2020 US$M	2019 US$M
Gross undiscounted central estimate excluding claims settlement costs		**22,169**	19,202
Claims settlement costs		**447**	369
Gross undiscounted central estimate		**22,616**	19,571
Discount to present value		**(292)**	(792)
Gross discounted central estimate	2.3	**22,324**	18,779
Payable within 12 months		**7,777**	6,609
Payable in greater than 12 months		**14,547**	12,170
Gross discounted central estimate	2.3	**22,324**	18,779

How we account for the numbers

The gross discounted central estimate is the present value of the expected future payments for claims incurred and includes reported but unpaid claims, IBNR, IBNER and claims handling costs. The central estimate is determined by the Group Chief Actuary, supported by a team of actuaries in each of the Group's divisions. The valuation process is performed quarterly and, on at least a semi-annual basis, includes extensive consultation with claims and underwriting staff as well as senior management. The central estimate of outstanding claims is also subject to annual comprehensive independent actuarial review. The risk management procedures related to the actuarial function are explained in note 4.2.

2. UNDERWRITING ACTIVITIES

Critical accounting judgements and estimates

The determination of the amounts that the Group will ultimately pay for claims arising under insurance and inward reinsurance contracts involves a number of critical assumptions. Some of the uncertainties impacting these assumptions are as follows:

- changes in patterns of claims incidence, reporting and payment;
- volatility in the estimation of future costs for long-tail insurance classes due to the longer period of time that can elapse before a claim is paid in full;
- existence of complex underlying exposures;
- incidence of catastrophic events close to the balance date;
- changes in the legal environment, including the interpretation of liability laws and the quantum of damages;
- changing social, political and economic trends, for example price and wage inflation; and
- impact of COVID-19 as described in note 1.2.3.

The estimation of IBNR and IBNER is generally subject to a greater degree of uncertainty than the estimation of the cost of settling claims that have been reported to the Group but are not yet paid, for which more information about the claims is generally available. The notification and settlement of claims relating to liability and other long-tail classes of business may not happen for many years after the event giving rise to the claim. As a consequence, liability and other long-tail classes typically display greater variability between initial estimates and final settlement due to delays in reporting claims and uncertainty in respect of court awards and future claims inflation. Claims in respect of property and other short-tail classes are typically reported and settled soon after the claim event, giving rise to more certainty.

Central estimates for each class of business are determined using a variety of estimation techniques, generally based on an analysis of historical experience and with reference to external benchmarks where relevant. The gross central estimate is discounted to present value using appropriate risk-free rates.

Central estimates are calculated gross of any reinsurance and other recoveries. A separate estimate is made of the amounts recoverable based on the gross central estimate (refer to note 2.3.2).

2.3.2 Reinsurance and other recoveries on outstanding claims

	NOTE	2020 US$M	2019 US$M
Reinsurance and other recoveries on outstanding claims – undiscounted[1]		**6,623**	5,342
Discount to present value		**(96)**	(238)
Reinsurance and other recoveries on outstanding claims	2.3	**6,527**	5,104
Receivable within 12 months		**2,715**	1,902
Receivable in greater than 12 months		**3,812**	3,202
Reinsurance and other recoveries on outstanding claims	2.3	**6,527**	5,104

1 Net of a provision for impairment of $21 million (2019 $23 million).

How we account for the numbers

The recoverability of amounts due from reinsurers is assessed at each balance date to ensure that the balances properly reflect the amounts ultimately expected to be received, taking into account counterparty credit risk and the contractual terms of the reinsurance contract. Counterparty credit risk in relation to reinsurance assets is considered in note 4.3. Recoveries are discounted to present value using appropriate risk-free rates.

2.3.3 Risk margin

Overview

A risk margin is determined by the Board to reflect the inherent uncertainty in the net discounted central estimate.

The risk margin and the net discounted central estimate are key inputs in the determination of the probability of adequacy, which is a statistical measure of the relative adequacy of the outstanding claims liability to ultimately be able to pay claims. For example, a 90% probability of adequacy indicates that the outstanding claims liability is expected to be adequate nine years in 10.

		2020	2019
Risk margin	US$M	**1,537**	1,136
Risk margin as a percentage of the net discounted central estimate	%	**9.7**	8.3
Probability of adequacy	%	**92.5**	90.0

Excluding the impact of foreign exchange which increased the risk margin by $57 million (2019 $1 million), the net movement in profit or loss was a charge of $344 million (2019 $23 million release). The resulting probability of adequacy was 92.5% (2019 90.0%). Net loss after tax would have reduced by $125 million, at the Group's prima facie income tax rate of 30%, if the probability of adequacy was maintained at 90.0%.

The increase in risk margin was mainly in response to the uncertainty created by COVID-19. Refer to note 1.2.3.

How we account for the numbers

AASB 1023 *General Insurance Contracts* requires an entity to adopt an appropriate risk margin. The resulting probability of adequacy is not of itself an accounting policy as defined by AASB 108 *Accounting Policies, Changes in Accounting Estimates and Errors*.

QBE reviews a number of factors when determining the appropriate risk margin, including any changes in the level of uncertainty in the net discounted central estimate, the resulting probability of adequacy and the risk margin as a percentage of the net discounted central estimate. The Group aims to maintain a probability of adequacy in the range of 87.5% to 92.5%.

Critical accounting judgements and estimates

The risk margin is determined by the Board and is held to mitigate the potential for uncertainty in the net discounted central estimate. The determination of the appropriate level of risk margin takes into account similar factors to those used to determine the central estimate, such as:

- mix of business, in particular the mix of short-tail and long-tail business and the overall weighted average term to settlement; and
- the level of uncertainty in the central estimate due to estimation error, data quality, variability of key inflation assumptions and possible economic and legislative changes.

The variability by class of business is measured using techniques that determine a range of possible outcomes of ultimate payments and assign a likelihood to outcomes at different levels. These techniques generally use standard statistical distributions, and the measure of variability is referred to as the coefficient of variation.

The appropriate risk margin for two or more classes of business or for two or more geographic locations combined is likely to be less than the sum of the risk margins for the individual classes, reflecting the benefit of diversification in general insurance, but is not determined by reference to a fixed probability of adequacy. The statistical measure used to determine diversification is called the correlation; the higher the correlation between two classes of business, the more likely it is that a negative outcome in one class will correspond to a negative outcome in the other class. For example, higher correlation exists between classes of business affected by court cases involving bodily injury claims such as motor third-party liability, workers' compensation and public liability, particularly in the same jurisdiction.

The probability of adequacy for the Group is determined by analysing the variability of each class of business and the correlation between classes of business and divisions. Correlations are determined for aggregations of classes of business, where appropriate, at the divisional level. The correlations adopted by the Group are generally derived from industry analysis, the Group's historical experience and the judgement of experienced and qualified actuaries.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

2. UNDERWRITING ACTIVITIES

2.3.4 Discount rate used to determine the outstanding claims liability

Overview

Claims in relation to long-tail classes of business (e.g. professional indemnity and workers' compensation) typically may not settle for many years. As such, the liability is discounted to reflect the time value of money. The table below summarises the weighted average discount rate for each operating segment and for the Group.

	2020 %	2019 %
North America	**0.84**	1.96
International	**0.03**	0.79
Australia Pacific	**0.41**	1.01
Group	**0.30**	1.05

How we account for the numbers

AASB 1023 *General Insurance Contracts* requires that the net central estimate is discounted to reflect the time value of money using risk-free rates that are based on current observable, objective rates that reflect the nature, structure and terms of the future obligations.

2.3.5 Weighted average term to settlement

Overview

The weighted average term to settlement refers to the period from the balance date to the expected date of claims settlement. All other factors being equal, a longer weighted average term to settlement generally results in a larger impact on the central estimate from discounting. The table below summarises the weighted average term to settlement for each operating segment and for the consolidated Group.

	2020 YEARS						2019 YEARS					
	US$	£	A$	€	OTHER	TOTAL	US$	£	A$	€	OTHER	TOTAL
North America	**3.6**	**–**	**–**	**–**	**–**	**3.6**	3.2	–	–	–	–	3.2
International	**3.6**	**3.3**	**3.5**	**4.3**	**2.4**	**3.7**	4.0	4.0	3.2	5.9	2.3	4.5
Australia Pacific	**–**	**–**	**2.7**	**–**	**1.9**	**2.6**	–	–	2.4	–	1.7	2.3
Group	**3.6**	**3.3**	**2.7**	**4.3**	**2.3**	**3.3**	3.5	4.0	2.4	5.9	2.2	3.6

2.3.6 Net discounted central estimate maturity profile

Overview

The maturity profile is the Group's expectation of the period over which the net central estimate will be settled. The Group uses this information to ensure that it has adequate liquidity to pay claims as they are due to be settled and to inform the Group's investment strategy. The table below summarises the expected maturity profile of the Group's net discounted central estimate for each operating segment.

2020	LESS THAN 1 YEAR US$M	13 TO 24 MONTHS US$M	25 TO 36 MONTHS US$M	37 TO 48 MONTHS US$M	49 TO 60 MONTHS US$M	OVER 5 YEARS US$M	TOTAL US$M
North America	**1,241**	**571**	**417**	**289**	**195**	**684**	**3,397**
International	**2,581**	**1,192**	**1,201**	**897**	**665**	**1,992**	**8,528**
Australia Pacific	**1,240**	**831**	**596**	**454**	**268**	**483**	**3,872**
	5,062	**2,594**	**2,214**	**1,640**	**1,128**	**3,159**	**15,797**

2019	LESS THAN 1 YEAR US$M	13 TO 24 MONTHS US$M	25 TO 36 MONTHS US$M	37 TO 48 MONTHS US$M	49 TO 60 MONTHS US$M	OVER 5 YEARS US$M	TOTAL US$M
North America	1,296	388	285	209	145	499	2,822
International	2,165	1,161	959	767	562	2,035	7,649
Australia Pacific	1,246	684	466	314	181	313	3,204
	4,707	2,233	1,710	1,290	888	2,847	13,675

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

2. UNDERWRITING ACTIVITIES

2.3.7 Impact of changes in key variables on the net outstanding claims liability

Overview

The impact of changes in key variables used in the calculation of the outstanding claims liability is summarised in the table below. Each change has been calculated in isolation from the other changes and shows the after-tax impact on profit or loss assuming that there is no change to any of the other variables. In practice, this is considered unlikely to occur as, for example, an increase in interest rates is normally associated with an increase in the rate of inflation. Over the medium to longer term, the impact of a change in discount rates is expected to be largely offset by the impact of a change in the rate of inflation.

The sensitivities below assume that all changes directly impact profit after tax. In practice, if the central estimate was to increase, it is possible that part of the increase may result in an offsetting change in the level of risk margin required rather than in a change to profit or loss after tax, depending on the nature of the change in the central estimate and risk outlook. Likewise, if the coefficient of variation were to increase, it is possible that the probability of adequacy would reduce from its current level rather than result in a change to net profit or loss after income tax.

		PROFIT (LOSS)[1]	
	SENSITIVITY %	2020 US$M	2019 US$M
Net discounted central estimate	+5	**(553)**	(479)
	-5	**553**	479
Risk margin	+5	**(54)**	(40)
	-5	**54**	40
Inflation rate	+0.5	**(194)**	(177)
	-0.5	**185**	168
Discount rate	+0.5	**185**	168
	-0.5	**(194)**	(177)
Coefficient of variation	+1	**(166)**	(126)
	-1	**166**	125
Probability of adequacy	+1	**(60)**	(39)
	-1	**54**	36
Weighted average term to settlement	+10	**11**	39
	-10	**(11)**	(39)

1 Impact on continuing operations net of tax at the Group's prima facie income tax rate of 30%.

2.4 Claims development – net undiscounted central estimate

Overview

The claims development table demonstrates the extent to which the original estimate of net ultimate claims payments in any one accident year (item (a) in the table below) has subsequently developed favourably (i.e. claims cost estimates have reduced) or unfavourably (i.e. further claims expense has been recognised in subsequent years). This table therefore illustrates the variability and inherent uncertainty in estimating the central estimate each year. The ultimate claims cost for any particular accident year is not known until all claims payments have been made which, for some long-tail classes of business, could be many years into the future. The estimate of net ultimate claims payments at the end of each subsequent accident year demonstrates how the original estimate has been revised over time (b).

Cumulative net claims payments (d) are deducted from the estimate of net ultimate claims payments in each accident year (c) at the current balance date, resulting in the undiscounted central estimate at a fixed rate of exchange (e). This is revalued to the balance date rate of exchange (f) to report the net undiscounted central estimate (g), which is reconciled to the discounted net outstanding claims liability (h). The treatment of foreign exchange in the claims development table is explained on the following page.

The net increase (decrease) in estimated net ultimate claims payments (i) reflects the estimated ultimate net claims payments at the end of the current financial year (c) less the equivalent at the end of the previous financial year (b). This is further summarised in note 2.4.1.

The claims development table is presented net of reinsurance. With insurance operations in 27 countries, hundreds of products, various reinsurance arrangements and with the Group's risk tolerance managed on a consolidated basis, it is considered neither meaningful nor practicable to provide this information other than on a consolidated Group basis.

		2010 & PRIOR US$M	2011 US$M	2012 US$M	2013 US$M	2014 US$M	2015 US$M	2016 US$M	2017 US$M	2018 US$M	2019 US$M	2020 US$M	TOTAL US$M
Net ultimate claims payments[1]													
(a)	Original estimate of net ultimate claims payments		**8,511**	**7,519**	**7,105**	**6,932**	**6,207**	**6,624**	**7,931**	**7,024**	**7,489**	**7,469**	
(b)	One year later		**8,719**	**7,574**	**7,023**	**6,938**	**6,226**	**6,413**	**7,987**	**7,187**	**7,726**		
	Two years later		**8,750**	**7,469**	**6,974**	**6,790**	**6,007**	**6,284**	**7,944**	**7,196**			
	Three years later		**8,596**	**7,465**	**6,954**	**6,698**	**5,980**	**6,276**	**8,135**				
	Four years later		**8,585**	**7,458**	**6,873**	**6,673**	**5,892**	**6,366**					
	Five years later		**8,534**	**7,412**	**6,973**	**6,683**	**5,875**						
	Six years later		**8,508**	**7,344**	**6,936**	**6,643**							
	Seven years later		**8,422**	**7,311**	**6,924**								
	Eight years later		**8,391**	**7,319**									
	Nine years later		**8,360**										
(c)	Current estimate of net ultimate claims payments		**8,360**	**7,319**	**6,924**	**6,643**	**5,875**	**6,366**	**8,135**	**7,196**	**7,726**	**7,469**	**72,013**
(d)	Cumulative net payments to date		**(8,235)**	**(7,231)**	**(6,739)**	**(6,440)**	**(5,313)**	**(5,531)**	**(6,633)**	**(5,189)**	**(4,403)**	**(2,126)**	**(57,840)**
(e)	Net undiscounted central estimate at fixed rate of exchange[2]	**783**	**125**	**88**	**185**	**203**	**562**	**835**	**1,502**	**2,007**	**3,323**	**5,343**	**14,956**
(f)	Foreign exchange impact												**569**
	Provision for impairment												**21**
(g)	Net undiscounted central estimate at 31 December 2020												**15,546**
	Discount to present value												**(196)**
	Claims settlement costs												**447**
	Risk margin												**1,537**
(h)	Net outstanding claims liability at 31 December 2020 (note 2.3)												**17,334**
(i)	Movement in estimated net ultimate claims payments (note 2.4.1)	**(72)**	**(31)**	**8**	**(12)**	**(40)**	**(17)**	**90**	**191**	**9**	**237**	**7,469**	**7,832**

1 Excludes discontinued operations, consistent with other profit or loss disclosures.

2 Excludes claims settlement costs.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

2. UNDERWRITING ACTIVITIES

How we account for the numbers

The estimate of net ultimate claims payments attributable to business acquired is generally included in the claims development table in the accident year in which the acquisition was made. The exception is increased participation in Lloyd's syndicates where the estimate of net ultimate claims payments is allocated to the original accident year(s) in which the underlying claim was incurred.

The Group writes business in many currencies. The translation of estimated net ultimate claims payments denominated in foreign currencies gives rise to foreign exchange movements which have no direct bearing on the development of the underlying claims. To eliminate this distortion, estimated net ultimate claims payments have been translated to the functional currencies of our controlled entities at constant rates of exchange. All estimates of ultimate claims payments for the 10 most recent accident years reported in functional currencies other than US dollars have been translated to US dollars using the 2020 average rates of exchange.

2.4.1 Reconciliation of claims development table to profit or loss

Overview

The table below reconciles the net increase or decrease in estimated net ultimate claims payments in the current financial year from the claims development table (item (i) in note 2.4) to the analysis of current and prior accident year net central estimate development recognised in profit or loss (refer to note 2.4.2).

	2020			2019		
	CURRENT ACCIDENT YEAR US$M	PRIOR ACCIDENT YEARS US$M	TOTAL US$M	CURRENT ACCIDENT YEAR US$M	PRIOR ACCIDENT YEARS US$M	TOTAL US$M
Movement in estimated net ultimate claims payments (note 2.4)[1,2,3]	**7,469**	**363**	**7,832**	7,487	(40)	7,447
Movement in claims settlement costs	**413**	**(1)**	**412**	386	(5)	381
Movement in discount	**(39)**	**387**	**348**	(143)	452	309
Other movements	**5**	**(7)**	**(2)**	(5)	(7)	(12)
Movement in net discounted central estimate (note 2.4.2)	**7,848**	**742**	**8,590**	7,725	400	8,125

1 Excludes claims settlement costs.

2 The movement in prior accident year claims in 2020 mainly reflects adverse development in North America and, to a lesser extent, International, partly offset by positive development in Australia Pacific.

3 The movement in prior accident year claims in 2019 includes an undiscounted $56 million adverse impact as a result of the Ogden rate change in the United Kingdom. Excluding this, the underlying prior accident year release of $96 million from continuing operations comprised positive development in Australia Pacific and International, partly offset by adverse development in North America.

2.4.2 Net central estimate development

Overview

The table below further analyses the current and prior accident year movement in the net discounted central estimate, separately identifying the gross and reinsurance components. Prior accident year claims are those claims that occurred in a previous year but for which a reassessment of the claims cost has impacted the result in the current period.

	2020			2019		
	CURRENT ACCIDENT YEAR US$M	PRIOR ACCIDENT YEARS US$M	TOTAL US$M	CURRENT ACCIDENT YEAR US$M	PRIOR ACCIDENT YEARS US$M	TOTAL US$M
Gross central estimate development						
Undiscounted	**10,994**	**476**	**11,470**	8,878	377	9,255
Discount	**(47)**	**533**	**486**	(180)	624	444
	10,947	**1,009**	**11,956**	8,698	1,001	9,699
Reinsurance and other recoveries						
Undiscounted	**(3,107)**	**(121)**	**(3,228)**	1,010	429	1,439
Discount	**8**	**(146)**	**(138)**	(37)	172	135
	(3,099)	**(267)**	**(3,366)**	973	601	1,574
Net central estimate development						
Undiscounted	**7,887**	**355**	**8,242**	7,868	(52)	7,816
Discount	**(39)**	**387**	**348**	(143)	452	309
Net discounted central estimate development (note 2.4.1)	**7,848**	**742**	**8,590**	7,725	400	8,125

2.5 Unearned premium and deferred insurance costs

Overview

Unearned premium

Gross written premium is earned in profit or loss in accordance with the pattern of incidence of risk of the related business. The unearned premium liability is that portion of gross written premium that QBE has not yet earned in profit or loss as it represents insurance coverage to be provided by QBE after the balance date.

Deferred insurance costs

Premium ceded to reinsurers by QBE in exchange for reinsurance protection is expensed in profit or loss in accordance with the reinsurance contract's expected pattern of incidence of risk. The deferred reinsurance premium asset is that portion of the reinsurance premium that QBE has not yet expensed in profit or loss as it represents reinsurance coverage to be received by QBE after the balance date.

Acquisition costs are the costs associated with obtaining and recording insurance business. Acquisition costs are similarly capitalised and amortised, consistent with the earning of the related premium for that business. Commissions are a type of acquisition cost and are disclosed separately.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

2. UNDERWRITING ACTIVITIES

Summary of unearned premium and deferred insurance costs

	2020 US$M	2019 US$M
Unearned premium (a)	**7,466**	6,460
To be earned within 12 months	**6,429**	5,912
To be earned in greater than 12 months	**1,037**	548
Unearned premium	**7,466**	6,460
Deferred reinsurance premium[1]	**724**	523
Deferred net commission	**1,141**	1,008
Deferred acquisition costs	**417**	376
Deferred insurance costs (b)	**2,282**	1,907
To be expensed within 12 months	**1,909**	1,744
To be expensed in greater than 12 months	**373**	163
Deferred insurance costs	**2,282**	1,907
Net unearned premium (a) – (b)	**5,184**	4,553

1 Deferred reinsurance premium relating to future business not yet written was $96 million (2019 $71 million).

Unearned premium movements

	2020 US$M	2019 US$M
At 1 January	**6,460**	6,212
Deferral of unearned premium on contracts written in the financial year	**5,988**	5,162
Earning of premium written in previous financial years	**(5,353)**	(4,977)
Net profit or loss movement relating to continuing operations	**635**	185
Transfers from liabilities held for sale/disposals	**–**	17
Foreign exchange	**371**	46
At 31 December	**7,466**	6,460

Deferred insurance costs movements

	DEFERRED REINSURANCE PREMIUM		DEFERRED NET COMMISSION		DEFERRED ACQUISITION COSTS	
	2020 US$M	2019 US$M	2020 US$M	2019 US$M	2020 US$M	2019 US$M
At 1 January	**523**	357	**1,008**	951	**376**	354
Costs deferred in financial year	**593**	399	**891**	754	**329**	299
Amortisation of costs deferred in previous financial years	**(431)**	(222)	**(815)**	(713)	**(310)**	(271)
Net profit or loss movement relating to continuing operations	**162**	177	**76**	41	**19**	28
Transfers from (to) assets held for sale/disposals	**–**	1	**–**	4	**–**	(3)
Foreign exchange	**39**	(12)	**57**	12	**22**	(3)
At 31 December	**724**	523	**1,141**	1,008	**417**	376

How we account for the numbers

Unearned premium

Unearned premium is calculated based on the coverage period of the insurance or reinsurance contract and in accordance with the expected pattern of the incidence of risk, using either the daily pro-rata method or the 24ths method, adjusted where appropriate to reflect different risk patterns.

Deferred insurance costs

Deferred reinsurance premium is calculated based on the period of indemnity provided to QBE by the reinsurance contract and in accordance with the related pattern of the incidence of risk.

Acquisition costs are capitalised when they relate to new business or the renewal of existing business and are amortised on the same basis as the earning pattern for that business. At the balance date, deferred acquisition costs represent the capitalised acquisition costs that relate to unearned premium and are carried forward to a subsequent accounting period in recognition of their future benefit. The carrying value of deferred acquisition costs is subject to impairment testing in the form of the liability adequacy test (refer to note 2.5.1). Deferred net commission is a type of deferred acquisition cost and is disclosed separately.

2.5.1 Liability adequacy test

Overview

At each balance date, the Group is required to assess net unearned premium to determine whether the amount provided is sufficient to pay future claims net of reinsurance recoveries attributable to the net unearned premium.

If the present value of expected future net claims including a risk margin exceeds the net unearned premium, adjusted for deferred reinsurance premium relating to future business not yet written, the net unearned premium is deemed deficient. This deficiency is immediately recognised in profit or loss. In recognising the deficiency, an insurer must first write down related intangible assets and then deferred acquisition costs before recognising an unexpired risk liability.

Expected present value of future cash flows for future claims including risk margin

	2020 US$M	2019 US$M
Undiscounted net central estimate	**4,676**	4,227
Discount to present value	**(23)**	(104)
	4,653	4,123
Risk margin at the 75th percentile of insurance liabilities	**181**	169
Expected present value of future cash flows for future claims including risk margin	**4,834**	4,292

The application of liability adequacy at 31 December 2020 did not identify a deficiency (2019 nil).

How we account for the numbers

At each balance date, the adequacy of net unearned premium is assessed on a net of reinsurance basis against the present value of the expected future claims cash flows in respect of the relevant insurance contracts, plus an additional risk margin to reflect the inherent uncertainty of the central estimate. The assessment is carried out at the operating segment level other than Europe, Asia, and the Group's captive reinsurer, Equator Re, which are assessed separately, each being a portfolio of contracts subject to broadly similar risks and which are managed together as a single portfolio.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

2. UNDERWRITING ACTIVITIES

Critical accounting judgements and estimates

In assessing the adequacy of net unearned premium, AASB 1023 *General Insurance Contracts* requires the inclusion of a risk margin but does not prescribe a minimum level of margin. While there is established practice in the calculation of the probability of adequacy of the outstanding claims liability, no such guidance exists in respect of the level of risk margin to be used in determining the adequacy of net unearned premium.

The liability adequacy test assumes a 75% probability of adequacy. The risk margin (note 2.3.3) is determined on a consistent basis and also reflects the benefit of diversification.

The 75% basis is a recognised industry benchmark in Australia, being the minimum probability of adequacy required for Australian licensed insurers by APRA.

2.6 Trade and other receivables

Overview

Trade and other receivables are principally amounts owed to QBE by policyholders or reinsurance counterparties. Unclosed premium receivables are estimated amounts due to QBE in relation to business for which the Group is on risk but where the policy is not billed to the counterparty at the balance date.

	2020 US$M	2019 US$M
Trade debtors		
Premium receivable[1]	**2,990**	2,707
Reinsurance and other recoveries[2]	**1,452**	1,063
Unclosed premium	**729**	497
Other trade debtors	**224**	148
	5,395	4,415
Other receivables	**365**	333
Trade and other receivables	**5,760**	4,748
Receivable within 12 months	**5,471**	4,532
Receivable in greater than 12 months	**289**	216
Trade and other receivables	**5,760**	4,748

1 Net of a provision for impairment of $88 million (2019 $65 million).
2 Net of a provision for impairment of $14 million (2019 $12 million).

Due to the predominantly short-term nature of these receivables, the carrying value is assumed to approximate the fair value.

The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivables. No receivables are pledged by the Group as collateral for liabilities or contingent liabilities. Information on the ageing and credit rating of these balances is included in note 4.3.

How we account for the numbers

Receivables are recognised at fair value and are subsequently measured at amortised cost less any impairment.

The vast majority of the Group's receivables arise from general insurance contracts. These include premium receivable, reinsurance and other recoveries, and unclosed premium. For these receivables, a provision for impairment is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivable. The remainder of the Group's receivables are assessed for impairment based on expected credit losses, the impacts of which are not material. Any increase or decrease in the provision for impairment is recognised in profit or loss within underwriting expenses.

2.7 Trade and other payables

Overview

Trade payables primarily comprise amounts owed to reinsurance counterparties and cedants. Treasury and investment payables are amounts due to counterparties in settlement of treasury and investment transactions.

	2020 US$M	2019 US$M
Trade payables	**1,604**	1,020
Other payables and accrued expenses	**714**	591
Treasury payables	**16**	21
Investment payables	**4**	170
Trade and other payables	**2,338**	1,802
Payable within 12 months	**2,174**	1,627
Payable in greater than 12 months	**164**	175
Trade and other payables	**2,338**	1,802

Due to the predominantly short-term nature of these payables, the carrying value is assumed to approximate the fair value.

How we account for the numbers

Trade payables are recognised initially at their fair value and are subsequently measured at amortised cost using the effective interest method.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

3. INVESTMENT ACTIVITIES

Overview

Premiums collected from policyholders are invested to meet the Group's cash flow needs to pay claims and other expenses, as well as generating a return that contributes to the Group's profitability. A sound investment strategy is therefore integral to the success of the Group's operations.

The Group invests across a diversified range of instruments to achieve an appropriate balance between risk and return. Decisions on where to invest are dependent on expected returns, cash flow requirements of the Group, liquidity of the instrument, credit quality of the instrument and the overall risk appetite of the Group. Further details on the management of risk associated with investment assets can be found in note 4.

3.1 Investment income

	2020 US$M	2019 US$M
Income on fixed interest securities, short-term money and cash[1]	**449**	806
(Loss) income on growth assets[1]	**(170)**	288
Gross investment income[2]	**279**	1,094
Investment expenses	**(17)**	(17)
Net investment income	**262**	1,077
Foreign exchange	**(29)**	(23)
Other income	**5**	1
Other expenses	**(12)**	(19)
Total investment income	**226**	1,036
Investment income – policyholders' funds	**153**	660
Investment expenses – policyholders' funds	**(11)**	(11)
Investment income – shareholders' funds	**90**	393
Investment expenses – shareholders' funds	**(6)**	(6)
Total investment income	**226**	1,036

1 From 1 January 2020, income from emerging market and high yield debt instruments is presented in income on fixed income securities, short-term money and cash, having previously been presented in income on growth assets. Corresponding changes have been made in notes 3.2 and 3.2.1, and comparative period information has been restated for consistency where relevant throughout the investment notes and the consolidated statement of cash flows.

2 Includes net fair value losses of $206 million (2019 gains of $492 million), interest income of $407 million (2019 $479 million) and dividend and distribution income of $78 million (2019 $123 million).

How we account for the numbers

Interest income is recognised in the period in which it is earned. Dividends are recognised when the right to receive payment is established. Investment income includes realised and unrealised gains or losses on financial assets which are reported on a combined basis as fair value gains or losses on financial assets.

3.2 Investment assets

	2020 US$M	2019 US$M
Fixed income assets		
Short-term money	**2,974**	1,066
Government bonds	**5,600**	5,813
Corporate bonds	**15,958**	13,268
Infrastructure debt	**372**	386
Emerging market debt	**–**	554
High yield debt	**–**	401
	24,904	21,488
Growth assets		
Developed market equity	**25**	281
Emerging market equity	**–**	108
Unlisted property trusts	**750**	716
Infrastructure assets	**894**	903
Private equity	**262**	203
Alternatives	**100**	91
	2,031	2,302
Total investments	**26,935**	23,790
Amounts maturing within 12 months	**6,679**	4,794
Amounts maturing in greater than 12 months	**20,256**	18,996
Total investments	**26,935**	23,790

At 31 December 2020, QBE had undrawn commitments to externally managed investment vehicles of $156 million (2019 $169 million).

How we account for the numbers

The Group's investments are required to be measured at fair value through profit or loss, with all investments managed and assessed on a fair value basis to maximise returns within risk appetites and investment strategy parameters and limits. They are therefore initially re-recognised at fair value, determined as the cost of acquisition excluding transaction costs, and are remeasured to fair value through profit or loss at each reporting date. The fair value hierarchy and the Group's approach to measuring the fair value of each category of investment instrument are disclosed in note 3.2.1.

All purchases and sales of investments that require delivery of the asset within the time frame established by regulation or market convention are recognised at trade date, being the date on which the Group commits to buy or sell the asset. Investments are de-recognised when the right to receive future cash flows from the asset has expired or has been transferred and the Group has transferred substantially all the risks and rewards of ownership.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

3. INVESTMENT ACTIVITIES

3.2.1 Fair value hierarchy

Overview

The Group Valuation Committee is responsible for the governance and oversight of the valuation process. The fair value of investments is determined in accordance with the Group's investment valuation policy.

The investments of the Group are disclosed in the table below using a fair value hierarchy which reflects the significance of inputs into the determination of fair value as follows:

Level 1: Valuation is based on quoted prices in active markets for identical instruments.

Level 2: Valuation is based on quoted prices for identical instruments in markets which are not active, quoted prices for similar instruments, or valuation techniques for which all significant inputs are based on observable market data, for example, consensus pricing using broker quotes or valuation models with observable inputs.

Level 3: Valuation techniques are applied in which one or more significant inputs are not based on observable market data.

	2020				2019			
	LEVEL 1 US$M	LEVEL 2 US$M	LEVEL 3 US$M	TOTAL US$M	LEVEL 1 US$M	LEVEL 2 US$M	LEVEL 3 US$M	TOTAL US$M
Fixed income assets								
Short-term money	**24**	**2,950**	**–**	**2,974**	173	893	–	1,066
Government bonds	**2,978**	**2,622**	**–**	**5,600**	4,086	1,727	–	5,813
Corporate bonds	**–**	**15,953**	**5**	**15,958**	–	13,262	6	13,268
Infrastructure debt	**–**	**–**	**372**	**372**	–	122	264	386
Emerging market debt	**–**	**–**	**–**	**–**	554	–	–	554
High yield debt	**–**	**–**	**–**	**–**	401	–	–	401
	3,002	**21,525**	**377**	**24,904**	5,214	16,004	270	21,488
Growth assets								
Developed market equity	**23**	**–**	**2**	**25**	278	–	3	281
Emerging market equity	**–**	**–**	**–**	**–**	108	–	–	108
Unlisted property trusts	**–**	**–**	**750**	**750**	–	716	–	716
Infrastructure assets	**–**	**–**	**894**	**894**	–	–	903	903
Private equity	**–**	**–**	**262**	**262**	–	–	203	203
Alternatives	**100**	**–**	**–**	**100**	91	–	–	91
	123	**–**	**1,908**	**2,031**	477	716	1,109	2,302
Total investments	**3,125**	**21,525**	**2,285**	**26,935**	5,691	16,720	1,379	23,790

The Group's approach to measuring the fair value of investments is described below:

Short-term money

Cash managed as part of the investment portfolio is categorised as a level 1 fair value measurement. Term deposits are valued at par; other short-term money (bank bills, certificates of deposit, treasury bills and other short-term instruments) is priced using interest rates and yield curves observable at commonly quoted intervals.

Government bonds and corporate bonds

Bonds which are traded in active markets and have quoted prices are categorised as level 1 fair value measurements. Bonds which are not traded in active markets are valued by reference to quoted prices, comparable prices for similar instruments or valuation techniques for which all significant inputs are based on observable market data. Quoted prices are sourced from external data providers.

Infrastructure debt

Infrastructure debt is priced by external data providers where quoted prices are available or by the external fund manager who may use a combination of observable market prices or comparable prices where available and other valuation techniques. When valuation techniques require the use of significant unobservable inputs, these assets have been classified as level 3. At 31 December 2020, $154 million of infrastructure debt was reclassified from level 2 to level 3 following a reassessment of the observability of external price sources used in the valuation of those assets.

Emerging market debt, high yield debt, emerging market equity, unlisted property trusts and infrastructure assets

These assets are valued using quoted bid prices in active markets or current unit prices as advised by the responsible entity, trustee or equivalent of the investment management scheme. $662 million of unlisted property trusts were reclassified from level 2 to level 3 at 30 June 2020 following a reassessment of the observability of external price sources used in the valuation of those assets.

Developed market equity

Listed equities traded in active markets are valued by reference to quoted bid prices. Unlisted equities are priced using QBE's share of the net assets of the entity.

Private equity

These assets comprise limited partnerships and fund of funds vehicles. Fair value is based on the net asset value of the vehicle, and the responsibility for the valuation of the underlying securities lies with the external fund manager. In most cases, an independent administrator will be utilised by the external fund manager for pricing and valuation. When the most up to date information is not available at the balance date, management may consider a combination of other valuation techniques in the determination of fair value.

Alternatives

These assets comprise investments in exchange-traded commodity products. They are listed, traded in active markets and valued by reference to quoted bid prices.

Movements in level 3 investments

The following table provides an analysis of investments valued with reference to level 3 inputs:

LEVEL 3	2020 US$M	2019 US$M
At 1 January	**1,379**	1,374
Purchases	**121**	151
Disposals	**(146)**	(194)
Reclassifications from level 2	**816**	–
Fair value movement recognised in profit or loss	**17**	46
Foreign exchange	**98**	2
At 31 December	**2,285**	1,379

3.2.2 Charges over investments and restrictions on use

A controlled entity has given fixed and floating charges over certain of its investments and other assets in order to secure the obligations of the Group's corporate members at Lloyd's as described in note 8.2.

Included in investments are amounts totalling $3,071 million (2019 $2,900 million) which are held in Lloyd's syndicate trust funds. In order to conduct underwriting business within some territories, Lloyd's syndicates are required to lodge assets in locally regulated trust funds. Under Lloyd's bylaws, these amounts can only be used to pay claims and allowable expenses of the syndicate and cannot be withdrawn from the trust funds until they become distributable as profit once annual solvency requirements are met. Included in this amount is $164 million (2019 $31 million) of short-term money.

3.2.3 Derivatives over investment assets

In accordance with our investment management policies and procedures, derivatives may be used in the investment portfolio as both a hedging tool and to alter the risk profile of the portfolio. All long positions must be cash backed, all short positions must be covered by an underlying physical asset and no net short exposure to an asset class is permitted. Risk management policies over the use of derivatives are set out in note 4.

QBE may also have exposure to derivatives through investments in underlying pooled funds in accordance with the fund mandate. Those derivative exposures are not included in the table below.

The Group's notional exposure to investment derivatives at the balance date is set out in the table below:

NOTIONAL EXPOSURE	2020 US$M	2019 US$M
Bond futures		
US 5 year note future	**(403)**	–

How we account for the numbers

Derivatives over investment assets are required to be measured at fair value through profit or loss. They are therefore initially recognised at fair value, determined as the cost of acquisition excluding transaction costs, and are remeasured to fair value through profit or loss at each reporting date. For derivatives traded in an active market, the fair value of derivatives is determined by reference to quoted market prices. The mark-to-market value of futures positions is cash settled on a daily basis resulting in a fair value of nil at the balance date.

4. RISK MANAGEMENT

Overview

QBE is in the business of managing risk. The Group's ability to satisfy customers' risk management needs is central to what we do. QBE aims to generate wealth and maximise returns for its shareholders by pursuing opportunities that involve risk. Our people are responsible for ensuring that QBE's risks are managed and controlled on a day-to-day basis. QBE aims to use its ability to properly manage risk to provide more certainty and improved outcomes for all stakeholders.

QBE applies a consistent and integrated approach to enterprise risk management (ERM). QBE's framework for managing risk sets out the approach to managing risk effectively to meet strategic objectives while taking into account the creation of value for our shareholders. QBE's ERM framework is articulated in the Group Risk Management Strategy (RMS) and Reinsurance Management Strategy (REMS), both of which are approved annually by the Group Board and lodged with APRA.

The ERM framework consists of complementary elements that are embedded throughout the business management cycle and culture of the organisation. Key aspects include risk appetite, governance, reporting, risk identification and measurement, modelling and stress testing, risk systems, and risk culture.

Risk management is a continuous process and an integral part of robust business management. QBE's approach is to integrate risk management into the broader management processes of the organisation. It is QBE's philosophy to ensure that risk management remains embedded in the business and that the risk makers or risk takers are themselves the risk managers. Specifically, the management of risk must occur at each point in the business management cycle.

QBE Group's strategy for managing risk is to:

- achieve competitive advantage by better understanding the risk environments in which we operate;
- give confidence to the business to make objective, risk-based decisions to optimise returns; and
- avoid unwelcome surprises to the achievement of business objectives by reducing uncertainty and volatility through the identification and management of risks.

The framework is supported by a suite of policies that detail QBE's approach to the key risk categories used by QBE to classify risk as follows:

- strategic risk (note 4.1);
- insurance risk (note 4.2);
- credit risk (note 4.3);
- market risk (note 4.4);
- liquidity risk (note 4.5);
- operational risk (note 4.6);
- compliance risk (note 4.7); and
- group risk (note 4.8).

4.1 Strategic risk

Overview

Strategic risk is the current and prospective impact on earnings and/or capital arising from strategic business decisions and responsiveness to external change. QBE classifies strategic risk into six subcategories, as follows:

- Performance risk: QBE is not able to achieve its performance objectives.
- Capital risk: QBE's structure and availability of capital does not meet regulatory requirements and/or support strategic initiatives.
- Reputational risk: QBE's stakeholders have a negative perception of QBE's brand which may damage QBE's reputation and threaten overall performance.
- Environmental, social and governance (ESG) risk: Negative impact on QBE's strategic priorities or objectives from environmental, social or governance issues.
- Emerging risk: New or future risks which are difficult to assess but may have a significant impact to QBE or the markets in which it operates.
- Risk culture: The norms of behaviour within QBE that determine the organisation's ability to understand, discuss and act on current and future risks.

QBE's approach to managing strategic risk is underpinned by the Group strategic risk appetite statement as set by the Group Board and is summarised below.

Performance risk

Failure to deliver acceptable performance can result in shareholders losing confidence in QBE, impacting our reputation in the market and ultimately impacting our ability to deliver our strategic objectives.

QBE monitors performance risk by assessing changing levels of risk in the business plan, and taking action accordingly prior to signing-off the plan and making market commitments.

Capital risk

The Internal Capital Adequacy Assessment Process (ICAAP) outlines QBE's approach for ensuring adequate Group capital is maintained over time and for monitoring compliance with regulatory capital requirements and targets. The ICAAP includes:

- specific capital targets set in the context of QBE's risk profile, the Board's risk appetite and regulatory capital requirements;
- plans for how target levels of capital are to be met; and
- potential sources of additional capital, if required.

The ICAAP also sets out QBE's actions and procedures for monitoring compliance with its regulatory capital requirements and capital targets. These include:

- the setting of triggers to alert management to potential breaches of these requirements; and
- actions to avert and rectify potential breaches of these requirements.

Achieving capital targets is dependent on an appropriate level and mix of capital, and effective capital management to yield adequate returns. Oversight of the Group's capital management framework is performed by senior management, the Executive Financial Risk & Capital Committee and the Board Risk & Capital Committee.

Management has a particular focus on the following performance indicators:

- The Group actively manages the components of capital in order to maintain a level of eligible regulatory capital that exceeds APRA requirements. Having determined that the current risk appetite remains appropriate, the Board has set the target level of regulatory capital for 2020 at 1.6–1.8 times (2019 1.6–1.8 times) the Group's Prescribed Capital Amount (PCA).
- All regulated controlled entities are required to maintain a minimum level of capital to meet obligations to policyholders. It is the Group's policy that each regulated entity maintains a capital base appropriate to its size, business mix, complexity and risk profile which fully complies with and meets or exceeds local regulatory requirements.
- The Group aims to maintain the ratio of borrowings to shareholders' equity at 25%–35% (2019 25%–35%). At the balance date, the ratio of borrowings to shareholders' equity was 34.8% (2019 38.0%) reflecting the benefits of active liability management activity.
- Insurer financial strength ratings are provided by the major rating agencies which indicate the Group's financial strength and claims paying ability.

4. RISK MANAGEMENT

Reputational risk

QBE assesses reputational risk through the quality of the relationships with key stakeholders, including shareholders, regulators, customers, government, communities, employees, and third-party partners including distributors and suppliers. Each of these relationships is managed through divisional and group teams, including corporate affairs, human resources, regulatory, compliance and distribution teams.

ESG and emerging risks

QBE's ESG risk and emerging risk standards operationalise QBE's approach to managing ESG and emerging risks respectively, including climate change. Biannual horizon scans are performed on ESG and emerging risks, including assessment of potential financial and reputational impacts to the Group. Risk treatment plans are developed for material risks, which include development of underwriting and investment policy, monitoring frameworks and stress and scenario analysis. ESG and emerging risks are regularly reported to the Executive Non-Financial Risk Committee and the Board Risk & Capital Committee.

Climate change is a material business risk for QBE, potentially impacting our business and customers in the medium to long term. We have considered potential short-term scenarios that could affect our insurance business written to date and our current investments, and we expect no material impact on the amounts recognised or disclosed in the financial statements. Further detail on QBE's approach to climate change, is included in our climate change disclosures on pages 28 to 35 of this Annual Report.

Risk culture

Risk culture forms part of QBE's risk management strategy and is a key component of the ERM framework, which outlines how risk culture applies to QBE's people and how it is operationalised across QBE.

QBE is committed to, and supports, a strong risk culture. It recognises the importance of risk awareness and culture as being instrumental in the effectiveness of the ERM framework. Further information on risk culture is provided on page 36 of this Annual Report.

4.2 Insurance risk

Overview

Insurance risk is the risk of fluctuations in the timing, frequency and severity of insured events and claims settlements, relative to expectations.

QBE classifies insurance risk into three subcategories, as follows:

- underwriting/pricing risk;
- insurance concentration risk; and
- reserving risk.

QBE's approach to managing insurance risk is underpinned by the Group's insurance risk appetite statement which is set by the Board and is summarised below.

Underwriting/pricing risk

QBE manages underwriting/pricing risk by appropriately setting and adjusting underwriting strategy, risk selection and pricing practices throughout the underwriting cycle.

QBE's underwriting strategy aims to diversify and limit the type of insurance risks accepted and reduce the variability of the expected outcome. The underwriting strategy is implemented through QBE's annual business planning process, supported by minimum underwriting standards and delegated authorities. These authorities reflect the level of risk that the Group is prepared to take with respect to each permitted insurance class.

Pricing of risks is controlled by the use of in-house pricing models relevant to specific portfolios and the markets in which QBE operates. Underwriters and actuaries maintain pricing and claims analysis for each portfolio, combined with a knowledge of current developments in the respective markets and classes of business.

Insurance concentration risk

QBE's exposure to concentrations of insurance risk is mitigated by maintaining a business portfolio that is diversified across countries and classes of business. Product diversification is pursued through a strategy of developing strong underwriting skills in a wide variety of classes of business.

The table below demonstrates the diversity of QBE's operations:

GROSS EARNED PREMIUM REVENUE	2020 US$M	2019 US$M
Commercial and domestic property	**4,194**	3,900
Motor and motor casualty	**1,750**	1,953
Agriculture	**1,957**	1,807
Public/product liability	**1,647**	1,505
Professional indemnity	**1,263**	1,105
Marine, energy & aviation	**1,098**	880
Workers' compensation	**847**	885
Accident and health	**727**	716
Financial and credit	**465**	475
Other	**60**	31
	14,008	13,257

Insurance concentration risk includes the risks from natural or man-made events that have the potential to produce claims from many of the Group's policyholders at the same time (e.g. catastrophes). QBE currently uses a variety of methodologies to monitor aggregates and manage catastrophe risk. These include the use of catastrophe models from third-party vendors such as RMS and AIR, the Lloyd's realistic disaster scenarios and group aggregate methodology. QBE sets the risk appetite relating to catastrophe risk with reference to the insurance concentration risk charge (ICRC). QBE's maximum risk tolerance for an individual natural catastrophe, measured using the ICRC methodology, is determined annually and is linked to a maximum net aggregate allowance of catastrophe and large individual risk claims.

Reserving risk

Reserving risk is managed through the quarterly actuarial valuation of insurance liabilities and monitoring of the probability of adequacy of the net discounted central estimate. The valuation of the net discounted central estimate is performed by qualified and experienced actuaries, with reference to historical data and reasoned expectations of future experience and events. The net discounted central estimate of outstanding claims is subject to a comprehensive independent review at least annually.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

4. RISK MANAGEMENT

4.3 Credit risk

Overview

Credit risk is the risk of financial loss where a customer, counterparty or issuer fails to meet their financial obligations to QBE in accordance with agreed terms. QBE's exposure to credit risk results from financial transactions with securities issuers, debtors, brokers, policyholders, reinsurers and guarantors.

QBE's approach to managing credit risk is underpinned by the Group's credit risk appetite as set by the Group Board and is summarised below.

Reinsurance credit risk

The Group's objective is to maximise placement of reinsurance with highly rated counterparties. Concentration of risk with reinsurance counterparties is monitored strictly and regularly by the Group's Security Committee and is controlled by reference to the following protocols:

- treaty or facultative reinsurance is placed in accordance with the requirements of the Group REMS and Group Security Committee guidelines;
- reinsurance arrangements are regularly reassessed to determine their effectiveness based on current exposures, historical claims and potential future claims based on the Group's insurance concentrations; and
- exposure to reinsurance counterparties and the credit quality of those counterparties are actively monitored.

Credit risk exposures are calculated regularly and compared with authorised credit limits. The Group is exposed to material concentrations of credit risk in relation to reinsurance recoveries at the balance date, in particular to large global reinsurers. In certain cases, the Group requires letters of credit or other collateral arrangements to be provided to guarantee the recoverability of the amount involved. Collateral held for the Group in respect of reinsurance arrangements is $1,098 million (2019 $1,218 million). The carrying amount of relevant asset classes on the balance sheet represents the maximum amount of credit exposure. Collateral held may reduce the level of credit risk associated with this exposure but generally does not change its amount. The credit rating analysis below includes the impact of such security arrangements. In some cases, further security has been obtained in the form of trust arrangements, reinsurer default protection and other potential offsets. This additional security has not been included in the credit rating analysis below.

The following table provides information about the quality of the Group's credit risk exposure in respect of reinsurance recoveries at the balance date. The analysis classifies the assets according to Standard & Poor's (S&P) counterparty credit ratings. AAA is the highest possible rating. Rated assets falling outside the range of AAA to BBB are classified as speculative grade.

	CREDIT RATING						
	AAA US$M	AA US$M	A US$M	BBB US$M	SPECULATIVE GRADE US$M	NOT RATED US$M	TOTAL US$M
As at 31 December 2020							
Reinsurance recoveries on outstanding claims[1,2]	**67**	**4,613**	**1,419**	**58**	**–**	**67**	**6,224**
Reinsurance recoveries on paid claims[1]	**1**	**1,138**	**301**	**3**	**–**	**9**	**1,452**
As at 31 December 2019							
Reinsurance recoveries on outstanding claims[1,2]	72	3,917	706	–	1	81	4,777
Reinsurance recoveries on paid claims[1]	1	914	148	–	–	–	1,063

1 Net of a provision for impairment.

2 Excludes other recoveries of $303 million (2019 $327 million).

The following table provides further information regarding the ageing of reinsurance recoveries on paid claims at the balance date:

			PAST DUE BUT NOT IMPAIRED				
	YEAR	NEITHER PAST DUE NOR IMPAIRED US$M	0 TO 3 MONTHS US$M	4 TO 6 MONTHS US$M	7 MONTHS TO 1 YEAR US$M	GREATER THAN 1 YEAR US$M	TOTAL US$M
Reinsurance recoveries on paid claims[1]	**2020**	**1,014**	**304**	**76**	**31**	**27**	**1,452**
	2019	844	153	–	48	18	1,063

1 Net of a provision for impairment.

Investment and treasury credit risk

The Group only transacts with investment counterparties within the limits outlined in the delegated authorities. Investment counterparty exposure limits are applied to individual counterparty exposures and to multiple exposures within a group of related companies in relation to investments, cash deposits and forward foreign exchange exposures. Counterparty exposure limit compliance is monitored daily.

The following table provides information regarding the Group's aggregate credit risk exposure at the balance date in respect of the major classes of financial assets. Trade and other receivables are excluded from this analysis on the basis that they comprise smaller credit risk items which generally cannot be rated and are not individually material. The analysis classifies the assets according to S&P counterparty credit ratings. AAA is the highest possible rating. Rated assets falling outside the range of AAA to BBB are classified as speculative grade.

	CREDIT RATING						
	AAA US$M	AA US$M	A US$M	BBB US$M	SPECULATIVE GRADE US$M	NOT RATED US$M	TOTAL US$M
As at 31 December 2020							
Cash and cash equivalents	**38**	**238**	**275**	**155**	**–**	**60**	**766**
Interest-bearing investments	**2,947**	**9,509**	**8,982**	**3,427**	**–**	**39**	**24,904**
Derivative financial instruments	**–**	**217**	**115**	**186**	**–**	**1**	**520**
As at 31 December 2019							
Cash and cash equivalents	–	125	218	157	1	46	547
Interest-bearing investments	2,726	7,933	6,925	2,897	12	995	21,488
Derivative financial instruments	–	93	65	36	–	1	195

The carrying amount of the relevant asset classes on the balance sheet represents the maximum amount of credit exposure at the balance date. The fair value of derivatives shown on the balance sheet represents the current risk exposure but not the maximum risk exposure that could arise in the future as a result of changing values.

Insurance and other credit risk

The Group transacts with brokers that are reputable, suitable and approved in accordance with local broker policies. The continuous due diligence over brokers involves an assessment of the broker's reputation, regulatory standing and financial strength.

QBE regularly reviews the collectability of receivables and the adequacy of associated provisions for impairment. Concentration risk for large brokers is also monitored. Balances are monitored on the basis of uncollected debt and debt outstanding in excess of six months. Brokers are also subject to regular due diligence to ensure adherence to local broker policies and associated requirements.

The following table provides information regarding the ageing of the Group's financial assets that are past due but not impaired and which are largely unrated at the balance date:

		PAST DUE BUT NOT IMPAIRED				
	NEITHER PAST DUE NOR IMPAIRED US$M	0 TO 3 MONTHS US$M	4 TO 6 MONTHS US$M	7 MONTHS TO 1 YEAR US$M	GREATER THAN 1 YEAR US$M	TOTAL US$M
As at 31 December 2020						
Premium receivable[1]	**2,425**	**334**	**159**	**50**	**22**	**2,990**
Other trade debtors	**212**	**1**	**2**	**3**	**6**	**224**
Other receivables	**353**	**4**	**1**	**1**	**6**	**365**
As at 31 December 2019						
Premium receivable[1]	2,107	372	119	70	39	2,707
Other trade debtors	120	11	3	5	9	148
Other receivables	322	7	1	2	1	333

1 Net of a provision for impairment.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

4. RISK MANAGEMENT

4.4 Market risk

Overview

Market risk is the risk of adverse impacts on earnings resulting from changes in market factors. Market factors include, but are not limited to, interest rates, equity price risks, credit spreads and foreign exchange rates.

QBE's approach to managing market risk is underpinned by the Group's market risk appetite as set by the Group Board and is summarised below.

QBE's approach to managing investment market movements is underpinned by the Group's investment strategy which outlines QBE's view of the markets and its corresponding investment approach.

Investment market risk is managed through the application of exposure and asset limits. These limits are based on the market risk appetite as determined by the Group Board and apply to:

- losses generated on the investment portfolio under market stress scenarios. The scenarios assume adverse movements in market factors and are designed to reflect a significant market stress event;
- sensitivities to changes in interest rate and credit spread risk, measured in terms of modified duration and spread duration; and
- total combined holdings in equities, investment property and other growth assets as a proportion of the Group's total investment portfolio.

Interest rate risk

QBE is exposed to interest rate risk through its holdings in interest-bearing assets. Financial instruments with a floating interest rate expose the Group to cash flow interest rate risk, whereas fixed interest rate instruments expose the Group to fair value interest rate risk. Interest-bearing borrowings issued by the Group are measured at amortised cost and therefore do not expose the Group result to fair value interest rate risk.

QBE's risk management approach is to minimise interest rate risk by actively managing investment portfolios to achieve a balance between cash flow interest rate risk and fair value interest rate risk. The Group predominantly invests in high quality, liquid interest-bearing securities and cash and may use derivative financial instruments to manage the interest rate risk of the fixed interest portfolio and other financial instruments. The risk management processes over these derivative financial instruments include close senior management scrutiny, including appropriate board and other management reporting. Derivatives are used only for approved purposes and are subject to Board approved risk appetites and delegated authority levels provided to management. The level of derivative exposure is reviewed on an ongoing basis. Appropriate segregation of duties exists with respect to derivative use, and compliance with policy, limits and other requirements is closely monitored.

The net central estimate of outstanding claims is discounted to present value by reference to risk-free interest rates. The Group is therefore exposed to potential underwriting result volatility as a result of interest rate movements. In practice, over the longer term, an increase or decrease in interest rates is normally offset by a corresponding increase or decrease in inflation. Information is provided in note 2.3.7. At the balance date, the average modified duration of cash and fixed interest securities was 2.1 years (2019 2.6 years). Although QBE maintains a shorter asset duration relative to insurance liabilities, the Group's overall exposure to interest rate risk is not material given the quantum by which the value of fixed income assets exceeds the value of insurance liabilities.

All investments are financial assets measured at fair value through profit or loss. Movements in interest rates impact the fair value of interest-bearing financial assets and therefore impact reported profit or loss after tax. The impact of a 0.5% increase or decrease in interest rates on interest-bearing financial assets owned by the Group at the balance date is shown in the table below:

	SENSITIVITY	PROFIT (LOSS)[1]	
		2020	2019
	%	US$M	US$M
Interest rate movement – interest-bearing financial assets	+0.5	**(186)**	(206)
	-0.5	**101**	181

1 Impact on continuing operations net of tax at the Group's prima facie income tax rate of 30%.

Equity price risk

Equity price risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded on the market.

QBE is exposed to equity price risk on its investment in growth assets and may use derivative financial instruments to manage this exposure. The risk management processes over these derivative financial instruments are the same as those already explained in respect of interest rate derivative financial instruments. Exposure is also managed by diversification across international markets and currencies.

Growth assets are measured at fair value through profit or loss. The impact of a 20% increase or decrease in the value of investments owned by the Group at the balance date on profit after tax from continuing operations is shown in the table below:

	SENSITIVITY %	PROFIT (LOSS)[1] 2020 US$M	PROFIT (LOSS)[1] 2019 US$M
ASX 200	+20	**2**	21
	-20	**(2)**	(21)
FTSE 100	+20	**–**	7
	-20	**–**	(7)
EURO STOXX	+20	**–**	3
	-20	**–**	(3)
S&P 500	+20	**–**	6
	-20	**–**	(6)
MSCI Emerging Markets Index	+20	**–**	15
	-20	**–**	(15)
Unlisted property trusts	+20	**105**	100
	-20	**(105)**	(100)
Infrastructure assets	+20	**125**	126
	-20	**(125)**	(126)
Private equity	+20	**37**	28
	-20	**(37)**	(28)
Alternatives	+20	**14**	12
	-20	**(14)**	(12)

1 Impact on continuing operations net of tax at the Group's prima facie income tax rate of 30%.

QBE is also exposed to price risk on its fixed interest securities as discussed above in relation to interest rate risk, and below in relation to credit spread risk. All securities are measured at fair value through profit or loss.

Credit spread risk

Movements in credit spreads impact the value of corporate interest-bearing securities and emerging market and high yield debt, and therefore impact reported profit or loss after tax. This risk is managed by investing in high quality, liquid interest-bearing securities and by managing the credit spread duration of the corporate securities portfolio.

The impact of a 0.5% increase or decrease in credit spreads on interest-bearing financial assets held by the Group at the balance date on profit or loss after tax from continuing operations is shown in the table below:

	SENSITIVITY %	PROFIT (LOSS)[1] 2020 US$M	PROFIT (LOSS)[1] 2019 US$M
Credit spread movement – corporate interest-bearing financial assets[2]	+0.5	**(143)**	(112)
	-0.5	**111**	89
Credit spread movement – emerging market and high yield debt	+0.5	**–**	(20)
	-0.5	**–**	20

1 Impact on continuing operations net of tax at the Group's prima facie income tax rate of 30%.
2 Includes infrastructure debt and other investments in non-government bonds.

Foreign exchange risk

QBE's approach to foreign exchange management is underpinned by the Group's foreign currency strategy. The Group's foreign exchange exposure generally arises as a result of either the translation of foreign currency amounts to the functional currency of a controlled entity (operational currency risk) or due to the translation of the Group's net investment in foreign operations to the functional currency of the ultimate parent entity of Australian dollars and to QBE's presentation currency of US dollars (currency translation risk).

4. RISK MANAGEMENT

Operational currency risk

Operational currency risk is managed as follows:

- Each controlled entity manages the volatility arising from changes in foreign exchange rates by matching liabilities with assets of the same currency, as far as is practicable, thus ensuring that any exposures to foreign currencies are minimised. The Group's aim is to mitigate, where possible, its operational foreign currency exposures at a controlled entity level.
- Forward foreign exchange contracts are used where possible to protect any residual currency positions. Where appropriate, forward foreign exchange contracts may also be used in relation to the Group's borrowings. In either case, these may be designated as hedge relationships for accounting purposes. Further information on forward foreign exchange contracts used to manage operational currency risk is provided in note 5.6.

The risk management process relating to the use of forward foreign exchange contracts involves close senior management scrutiny. All forward foreign exchange contracts are subject to delegated authority levels provided to management and the levels of exposure are reviewed on an ongoing basis.

The analysis below demonstrates the impact on profit or loss after income tax of a 10% strengthening or weakening of the major currencies against the functional currencies of the underlying QBE entities for which the Group has a material exposure at the balance date. The exposures below reflect the aggregation of operational currency exposures of multiple entities with different functional currencies. The sensitivity is measured with reference to the Group's residual (or unmatched) operational foreign currency exposures at the balance date. Operational foreign exchange gains or losses are recognised in profit or loss in accordance with the policy set out in note 1.2.4. The sensitivities provided demonstrate the impact of a change in one key variable in isolation while other assumptions remain unchanged.

The sensitivities shown in the table below are relevant only at the balance sheet date, as any unmatched exposures are actively monitored by management and the exposure subsequently matched.

	2020			2019		
EXPOSURE CURRENCY	RESIDUAL EXPOSURE US$M	SENSITIVITY %	PROFIT(LOSS)[1] US$M	RESIDUAL EXPOSURE US$M	SENSITIVITY %	PROFIT (LOSS)[1] US$M
US dollar	**258**	**+10**	**18**	(23)	+10	(2)
		-10	**(18)**		-10	2
Australian dollar	**(55)**	**+10**	**(4)**	(90)	+10	(6)
		-10	**4**		-10	6
Sterling	**6**	**+10**	**–**	19	+10	1
		-10	**–**		-10	(1)

1 Impact on continuing operations net of tax at the Group's prima facie income tax rate of 30%.

Currency risk in relation to translation of net investments in foreign operations

QBE is exposed to currency risk in relation to the translation of:

- the ultimate parent entity's net investments in foreign operations to its functional currency of Australian dollars; and
- all non-US dollar functional currency operations to the Group's presentation currency of US dollars.

Currency translation risk in relation to QBE's investment in foreign operations is monitored on an ongoing basis and may be mitigated by designation of foreign currency borrowings as a hedge of this risk. Any debt security that qualifies as a hedging instrument may be designated as a hedge of the Australian dollar ultimate parent entity's net investment in foreign operations and any residual exposure to foreign operations in tradeable currencies may be hedged up to the limit specified in the Group risk appetite statement. The extent of hedging this exposure is carefully managed to ensure an appropriate balance between currency risk and associated risks such as liquidity risk and stability of capital adequacy levels.

QBE does not ordinarily seek to use derivatives to mitigate currency translation risk on translation to the ultimate parent entity functional currency of Australian dollars for the following reasons:

- currency translation gains and losses generally have no cash flow;
- currency translation gains and losses are accounted for in the foreign currency translation reserve (a component of equity) and therefore do not impact profit or loss unless the related foreign operation is disposed of; and
- management of translation risk needs to be balanced against the impact on capital requirements and liquidity risk.

In periods of extraordinary volatility that are expected to persist for an extended period of time, QBE may elect to utilise derivatives to mitigate currency translation risk to preserve capital.

Currency management processes are actively monitored by the Group Treasurer and involve close senior management scrutiny. All hedge transactions are subject to delegated authority levels provided to management, and the levels of exposure are reviewed on an ongoing basis. All instruments that are designated as hedges are tested for effectiveness in accordance with AASB 9.

At the balance date, derivatives with a net exposure of $648 million (2019 $101 million) and borrowings of $536 million (2019 $547 million) were designated as hedges of net investments in foreign operations, further information on which is provided in note 5.6.1.

Foreign exchange gains or losses arising on translation of the Group's foreign operations from the ultimate parent entity's functional currency of Australian dollars to the Group's US dollar presentation currency are recognised directly in equity in accordance with the policy set out in note 1.2.4. The Group cannot hedge this exposure.

The analysis below demonstrates the impact on equity of a 10% strengthening or weakening against the US dollar of the major currencies to which QBE is exposed through its net investment in foreign operations. The basis for the sensitivity calculation is the Group's actual residual exposure at the balance date.

	2020			2019		
EXPOSURE CURRENCY	RESIDUAL EXPOSURE US$M	SENSITIVITY %	EQUITY INCREASE (DECREASE) US$M	RESIDUAL EXPOSURE US$M	SENSITIVITY %	EQUITY INCREASE (DECREASE)[1] US$M
Australian dollar	**2,962**	**+10**	**296**	2,554	+10	255
		-10	**(296)**		-10	(255)
Sterling	**150**	**+10**	**15**	1,134	+10	113
		-10	**(15)**		-10	(113)
Euro	**1,632**	**+10**	**163**	814	+10	81
		-10	**(163)**		-10	(81)
Hong Kong dollar	**36**	**+10**	**4**	176	+10	18
		-10	**(4)**		-10	(18)
New Zealand dollar	**222**	**+10**	**22**	183	+10	18
		-10	**(22)**		-10	(18)
Singapore dollar	**120**	**+10**	**12**	132	+10	13
		-10	**(12)**		-10	(13)

1 The impact on equity is disclosed, including both continuing and discontinued operations.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

4. RISK MANAGEMENT

4.5 Liquidity risk

Overview

Liquidity risk is the risk of having insufficient liquid assets to meet liabilities as they fall due to policyholders and creditors or only being able to access liquidity at excessive cost.

QBE's approach to managing liquidity risk is underpinned by the Group's liquidity risk appetite which is set by the Board and is summarised below.

QBE manages liquidity risk using a number of tools, as follows:

- cash flow targeting;
- maintenance of a minimum level of liquid assets relative to the Group's liabilities;
- cash flow forecasting; and
- stress testing and contingency planning.

Liquidity is managed across the Group using a number of cash flow forecasting and targeting tools and techniques. Cash flow forecasting and targeting are conducted at a legal entity level and involve actively managing operational cash flow requirements.

To supplement the cash flow targeting and to ensure that there are sufficient liquid funds available to meet insurance and investment obligations, a minimum percentage of QBE's liabilities is held, at all times, in cash and liquid securities. QBE also maintains a defined proportion of the funds under management in liquid assets.

QBE actively forecasts cash flow requirements to identify future cash surpluses and shortages to optimise invested cash balances and limit unexpected calls from the investment pool. The Group limits the risk of liquidity shortfalls resulting from mismatches in the timing of claims payments and receipts of claims recoveries by negotiating cash call clauses in reinsurance contracts and seeking accelerated settlements for large reinsurance recoveries.

The following table summarises the maturity profile of the Group's financial liabilities based on the remaining contractual obligations. Borrowings and contractual undiscounted interest payments are disclosed by reference to the first call date of the borrowings, details of which are included in note 5.1.

	LESS THAN 1 YEAR US$M	13 TO 36 MONTHS US$M	37 TO 60 MONTHS US$M	OVER 5 YEARS US$M	NO FIXED TERM US$M	TOTAL US$M
As at 31 December 2020						
Forward foreign exchange contracts	**316**	**231**	**298**	**–**	**–**	**845**
Trade payables	**1,475**	**122**	**3**	**–**	**4**	**1,604**
Other payables and accrued expenses	**679**	**26**	**3**	**–**	**6**	**714**
Treasury payables	**16**	**–**	**–**	**–**	**–**	**16**
Investment payables	**4**	**–**	**–**	**–**	**–**	**4**
Lease liabilities	**68**	**103**	**84**	**176**	**–**	**431**
Borrowings[1]	**200**	**854**	**1,000**	**909**	**–**	**2,963**
Contractual undiscounted interest payments	**191**	**326**	**194**	**23**	**–**	**734**
As at 31 December 2019						
Forward foreign exchange contracts	169	–	33	–	–	202
Trade payables	877	84	5	13	41	1,020
Other payables and accrued expenses	559	29	2	–	1	591
Treasury payables	21	–	–	–	–	21
Investment payables	170	–	–	–	–	170
Lease liabilities	60	102	57	80	–	299
Borrowings[1]	140	632	1,106	824	400	3,102
Contractual undiscounted interest payments	194	337	262	70	–	863

1 Excludes capitalised finance costs of $8 million (2019 $7 million).

The maturity profile of the Group's net discounted central estimate is analysed in note 2.3.6.

The maturity of the Group's directly held interest-bearing financial assets is shown in the table below.

		INTEREST-BEARING FINANCIAL ASSETS MATURING IN:						
		LESS THAN 1 YEAR	13 TO 24 MONTHS	25 TO 36 MONTHS	37 TO 48 MONTHS	49 TO 60 MONTHS	OVER 5 YEARS	TOTAL
As at 31 December 2020								
Fixed rate	US$M	**5,867**	**4,095**	**3,677**	**2,314**	**2,030**	**3,374**	**21,357**
Weighted average interest rate	% p.a.	**0.4**	**0.2**	**0.3**	**0.4**	**0.4**	**0.6**	**0.4**
Floating rate	US$M	**1,578**	**630**	**610**	**297**	**341**	**857**	**4,313**
Weighted average interest rate	% p.a.	**0.1**	**0.3**	**0.4**	**1.0**	**0.8**	**1.2**	**0.5**
As at 31 December 2019								
Fixed rate	US$M	3,986	2,865	2,741	2,436	1,622	3,600	17,250
Weighted average interest rate	% p.a.	1.7	1.5	1.2	1.5	1.3	1.5	1.5
Floating rate	US$M	2,309	745	520	100	183	928	4,785
Weighted average interest rate	% p.a.	2.3	1.4	1.5	1.0	2.0	1.8	1.4

4.6 Operational risk

Overview

Operational risk is the risk of financial loss resulting from inadequate or failed internal processes, people and systems or from external events.

Operational risk can materialise in a number of forms including fraud perpetrated by employees or by external parties (e.g. claims fraud or cyber attacks), employment practices (e.g. losses arising from breaches of employment, health or safety laws), improper business practices (e.g. failure to meet professional obligations or issues with the nature or design of an insurance product), business disruption and system failures, or business and transaction processing failures.

QBE manages operational risk through setting policy, minimum standards, and process and system controls, including effective segregation of duties, access controls, authorisations and reconciliation procedures, business continuity management, fraud management, information security and physical security.

QBE identifies, assesses and manages operational risk through the:

- risk and control self-assessment process, which identifies and assesses the key risks to achieving business objectives and is conducted at the business unit level;
- total risk assessment process, which creates a single, divisional-level view of risk across all QBE risk categories;
- operational risk appetite statement, which sets out the nature and level of risk that the Board and Group Executive Committee are willing to take in pursuit of the organisation's objectives. The operational risk appetite statement is measured through an assessment of the control environment, key risk indicators, issues and incidents;
- emerging risks process, which identifies and assesses new risks, which are characterised by incomplete but developing knowledge or existing risks that develop in new or surprising ways; and
- scenario analysis process, which assesses the impact of potentially extreme scenarios and the appropriateness of our contingency planning.

Key residual risks from the above processes are monitored by the Executive Non-Financial Risk Committee.

1 Performance overview
2 Operating and financial review
3 Governance
4 Directors' Report
5 Financial Report
6 Other information

4. RISK MANAGEMENT

4.7 Compliance risk

Overview

Compliance risk is the risk of legal or regulatory penalties, financial loss or impacts and non-financial loss or impacts (including reputational damage) resulting from a breach of obligations. Obligations refers to those in legislation, regulation, industry codes and standards, internal policies and ethical and business standards.

QBE's approach to managing compliance risk is underpinned by the Group risk appetite as set by the Board and is summarised below.

QBE manages compliance risk through its governance, culture, stakeholder management and strategy approach. There are six components for managing compliance risk:

- identify compliance obligations and controls;
- embed compliance obligations across systems and processes;
- communicate and train staff on compliance requirements;
- monitor obligations and controls;
- identify and rectify issues, incidents and breaches; and
- report on and assess the state of compliance.

Compliance management is subject to continuous improvement, recognising changes in the regulatory and legal environment and industry, customer and community expectations.

4.8 Group risk

Overview

Group risk is the risk to a division arising specifically from being part of the wider Group, including financial impact and loss of support from the Company.

QBE's approach to managing Group risk is underpinned by the Group risk appetite which is set by the Board and is summarised below.

Sources of Group risk may include:

- shared global reinsurance program;
- intercompany loans and shared use of centralised Group functions (e.g. Group IT);
- contagion reputational risk;
- credit agency dependency;
- use of Group functions where there is a global operating model in place;
- use of QBE's internal asset management function – Group Investments;
- Group initiatives or decisions with a material impact on one or more division; and
- liquidity and central foreign exchange management.

QBE manages Group risk through various systems, controls and processes, including the management of reinsurance arrangements, use of intercompany transactions and balances accounting guidance, transfer pricing guidelines, investment management agreements, capital planning and assessments of the use of Group functions, Group initiatives and contagion reputational events.

5. CAPITAL STRUCTURE

Overview

QBE's objective in managing capital is to maintain an optimal balance between debt and equity in order to reduce the overall cost of capital while satisfying the capital adequacy requirements of regulators and rating agencies, providing financial security for our policyholders and continuing to provide an adequate return to shareholders.

The Company is listed on the Australian Securities Exchange and its share capital is denominated in Australian dollars. The Group also accesses international debt markets to diversify its funding base and maintain an appropriate amount of leverage. Debt is diversified across currencies and tenure.

Details of the Group's approach to capital risk management are disclosed in note 4.1.

5.1 Borrowings

FINAL MATURITY DATE	ISSUE DATE	PRINCIPAL AMOUNT	2020 US$M	2019 US$M
Senior debt				
25 May 2023	21 September 2017	$6 million	**6**	6
			6	6
Subordinated debt				
25 August 2036	19 August 2020	A$500 million (2019 nil)[1]	**385**	–
29 September 2040	29 September 2015	Nil (2019 A$200 million)	**–**	140
24 May 2041	24 May 2011	$167 million	**167**	167
24 May 2041	24 May 2011	£24 million	**33**	32
24 May 2042	19 May 2016	£327 million	**445**	433
24 November 2043	17 November 2016	$400 million/A$689 million[1]	**400**	400
2 December 2044	2 December 2014	$700 million/A$1,169 million[1]	**697**	696
12 November 2045	12 November 2015	$300 million	**300**	300
17 June 2046	17 June 2016	$524 million	**522**	522
			2,949	2,690
Additional Tier 1 instruments				
No fixed date	16 November 2017	Nil (2019 $400 million)[2]	**–**	399
Total borrowings[3]			**2,955**	3,095
Amounts maturing within 12 months			**200**	–
Amounts maturing in greater than 12 months			**2,755**	3,095
Total borrowings			**2,955**	3,095

1 Details of related hedging activity are included in note 5.6.1.
2 In July 2020, the terms of these instruments were amended, resulting in their classification as equity. Further information is disclosed in note 5.3.1.
3 $2 million of finance costs (2019 nil) were capitalised during the year.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

5. CAPITAL STRUCTURE

Subordinated debt key terms

Subordinated debt due 2036

Interest is payable quarterly in arrears at a rate equal to the three-month BBSW rate plus a margin of 2.75% per annum.

Subordinated debt due 2040

Interest is payable quarterly in arrears at a rate equal to the 90-day average mid-rate bank bill rate plus a margin of 4.0% per annum.

The securities were redeemed with APRA approval on 29 September 2020.

Subordinated debt due 2041

Interest is payable semi-annually in arrears at a fixed rate of 7.25% per annum on the US dollar denominated debt and 7.5% per annum on the sterling debt.

Early redemption notices were issued after the balance date. Redemption is expected in early March 2021.

Subordinated debt due 2042

Interest is payable semi-annually in arrears at a fixed rate of 6.115% per annum until 24 May 2022. The rate will reset in 2022, 2027, 2032 and 2037 to a rate calculated by reference to the then five-year mid-market swap rate plus a margin of 5.0% per annum.

Subordinated debt due 2043

Interest is payable semi-annually in arrears at a fixed rate of 7.50% per annum until 24 November 2023. The rate will reset in 2023 and 2033 to a rate calculated by reference to the then 10-year US dollar swap rate plus a margin of 6.03% per annum.

QBE has an option to defer payment of interest in certain circumstances and such deferral will not constitute an event of default.

Subordinated debt due 2044

Interest is payable semi-annually in arrears at a fixed rate of 6.75% per annum until 2 December 2024, at which time the rate will reset to a 10-year mid-market swap rate plus a margin of 4.3% per annum. The rate will reset again, on the same basis, on 2 December 2034.

Subordinated debt due 2045

Interest is payable semi-annually in arrears at a fixed rate of 6.1% per annum until 12 November 2025, at which time the rate will reset to a 10-year mid-market swap rate plus a margin of 3.993% per annum. The rate will reset again, on the same basis, on 12 November 2035.

Subordinated debt due 2046

Interest is payable semi-annually in arrears at a fixed rate of 5.875% per annum until 17 June 2026. The rate will reset in 2026 and 2036 to a rate calculated by reference to the then 10-year mid-market swap rate plus a margin of 4.395% per annum.

Redemption terms

The securities are redeemable at the option of QBE, with the prior written approval of APRA on 25 August 2026 and each interest payment date thereafter for securities due 2036; on each interest reset date for securities due 2042, 2043, 2044, 2045 and 2046; or at any time in the event of certain tax and regulatory events.

Conversion terms

The securities due 2036, 2042, 2043, 2044, 2045 and 2046 must be converted into a variable number of QBE ordinary shares, or written off, if APRA determines QBE to be non-viable. The conversion rate is subject to a price floor of 20% of the VWAP of the shares in the five trading days before the date of issue of the securities.

Security arrangements

The claims of bondholders pursuant to the subordinated debt will be subordinated in right of payment to the claims of all senior creditors.

How we account for the numbers

Borrowings are initially measured at fair value net of transaction costs directly attributable to the transaction and are subsequently measured at amortised cost. Any difference between the proceeds and the redemption amount is recognised through profit or loss over the period of the financial liability using the effective interest method.

1 Performance overview
2 Operating and financial review
3 Governance
4 Directors' Report
5 Financial Report
6 Other information

5.1.1 Fair value of borrowings

	2020 US$M	2019 US$M
Senior debt	**6**	6
Subordinated debt	**3,220**	2,958
Additional Tier 1 instruments	**–**	412
Total fair value of borrowings	**3,226**	3,376

Consistent with other financial instruments, QBE is required to disclose the basis of valuation with reference to the fair value hierarchy which is explained in detail in note 3.2.1. The fair value of the Group's borrowings is categorised as level 2 fair value measurements. Fixed and floating rate securities are priced using broker quotes and comparable prices for similar instruments in active markets. Where no active market exists, floating rate resettable notes are priced using par plus accrued interest.

5.1.2 Financing and other costs

	2020 US$M	2019 US$M
Interest expense on borrowings	**188**	200
Other costs	**64**	57
Total financing and other costs	**252**	257

5.1.3 Movement in borrowings

	2020 US$M	2019 US$M
At 1 January	**3,095**	3,188
Net changes from financing cash flows	**218**	(199)
Reclassification of AT1 instrument	**(399)**	–
Other non-cash changes	**(1)**	84
Foreign exchange	**42**	22
At 31 December	**2,955**	3,095

5.2 Cash and cash equivalents

	2020 US$M	2019 US$M
Fixed interest rate	**13**	13
Floating interest rate	**753**	534
	766	547

Restrictions on use

Included in cash and cash equivalents are amounts totalling $73 million (2019 $30 million) which are held in Lloyd's syndicate trust funds. In order to conduct underwriting business within some territories, Lloyd's syndicates are required to lodge assets in locally regulated trust funds. Under Lloyd's bylaws, these amounts can only be used to pay claims and allowable expenses of the syndicates and cannot be withdrawn from the trust funds until allowed to be distributed as profit once annual solvency requirements are met.

Also included in cash and cash equivalents is $110 million (2019 $103 million) relating to policyholder trust accounts in the United Kingdom which can only be accessed by QBE in certain circumstances, such as when QBE is owed a deductible by the policyholder on a claim. The Group recognises a corresponding payable in relation to these until such an event occurs.

QBE has operations in many countries which have foreign exchange controls and regulations. These controls and regulations can vary from simple reporting requirements to outright prohibition of movement of funds without explicit prior central bank or regulator approval. The impact of these controls and regulations may restrict the Group's capacity to repatriate capital and/or profits.

How we account for the numbers

Cash and cash equivalents include cash at bank and on hand and deposits at call which are readily convertible to cash on hand and which are used for operational cash requirements. Amounts in cash and cash equivalents are the same as those included in the statement of cash flows.

The reconciliation of profit or loss after income tax to net cash flows from operating activities is included in note 8.4.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

5. CAPITAL STRUCTURE

5.3 Contributed equity and reserves

Overview

Ordinary shares in the Company rank after all creditors, have no par value and entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of shares held.

During the current period, the Group issued share capital, capital notes and amended the terms of existing Additional Tier 1 instruments, details of which are set out in note 5.3.1. These notes, together with share capital, are presented as contributed equity in the consolidated balance sheet.

5.3.1 Contributed equity

	31 DECEMBER 2020 US$M	31 DECEMBER 2019 US$M
Share capital	**9,387**	7,594
Capital notes	**886**	–
Contributed equity	**10,273**	7,594

Share capital

	2020		2019	
	NUMBER OF SHARES MILLIONS	US$M	NUMBER OF SHARES MILLIONS	US$M
Issued ordinary shares, fully paid at 1 January	**1,305**	**7,594**	1,327	7,830
Shares issued on-market net of transaction costs	**157**	**813**	–	–
Shares issued under the Employee Share and Option Plan	**3**	**26**	1	1
Shares issued under Dividend Reinvestment Plan	**5**	**27**	–	–
Shares issued under Bonus Share Plan	**1**	**–**	1	–
Shares bought back on-market and cancelled	**–**	**–**	(24)	(205)
Foreign exchange	**–**	**927**	–	(32)
Issued ordinary shares, fully paid at 31 December	**1,471**	**9,387**	1,305	7,594
Shares notified to the Australian Securities Exchange	**1,471**	**9,390**	1,305	7,597
Less: plan shares subject to non-recourse loans, de-recognised under accounting standards	**–**	**(3)**	–	(3)
Issued ordinary shares, fully paid at 31 December	**1,471**	**9,387**	1,305	7,594

Capital notes

Capital notes have no fixed redemption date and distributions are discretionary and non-cumulative. The notes are redeemable at the option of QBE, with the prior written approval of APRA, on each interest reset date or at any time in the event of certain tax or regulatory events. In the event that APRA was to declare a point of non-viability, the notes would be written off.

On 12 May 2020, the Company issued $500 million of capital notes ($493 million net of transaction costs). Distributions of 5.875% per annum are paid semi-annually in arrears until 12 May 2025. The rate will reset in May 2025 and on every fifth anniversary thereafter by reference to a reset rate to be determined at that time plus a margin of 5.513% per annum.

On 16 July 2020, the terms of Additional Tier 1 instruments with a principal amount of $400 million ($393 million carrying value) were amended such that the notes are written off at a point of non-viability, as determined by APRA, with no possibility of conversion into ordinary shares of QBE. The amended instruments are classified as equity. Distributions of 5.25% per annum are paid semi-annually in arrears until 16 May 2025. The rate will reset in May 2025 and on every fifth anniversary thereafter by reference to a reset rate to be determined at that time plus a margin of 3.047% per annum. Further information is provided in note 5.1.

5.3.2 Reserves

	2020 US$M	2019 US$M
Owner occupied property revaluation reserve[1]		
At 1 January	**1**	4
Reclassification on disposal of owner occupied property	**–**	(3)
At 31 December	**1**	1
Cash flow hedge reserve[2]		
At 1 January	**(4)**	(1)
Hedging amounts recognised in other comprehensive income	**(157)**	(16)
Hedging amounts reclassified to profit or loss	**127**	12
Taxation	**9**	1
At 31 December	**(25)**	(4)
Cost of hedging reserve[3]		
At 1 January	**(2)**	–
Amounts recognised in other comprehensive income	**11**	(1)
Amounts reclassified to profit or loss	**(5)**	(2)
Taxation	**(2)**	1
At 31 December	**2**	(2)
Foreign currency translation reserve[4]		
At 1 January	**(1,479)**	(1,517)
Net movement on translation	**(525)**	8
Net movement on hedging transactions	**(27)**	20
Net movement relating to continuing operations	**(552)**	28
Net movement relating to discontinued operations	**–**	10
At 31 December	**(2,031)**	(1,479)
Share-based payment reserve[5]		
At 1 January	**164**	167
Options and conditional rights expense	**20**	38
Transfers from reserve on vesting of options and conditional rights	**(28)**	(41)
Foreign exchange	**12**	–
At 31 December	**168**	164
Premium on purchase of non-controlling interests[6]		
At 1 January	**(15)**	(16)
Net changes in non-controlling interests	**–**	(5)
Reclassification to retained profits on disposal	**2**	6
At 31 December	**(13)**	(15)
Total reserves at 31 December	**(1,898)**	(1,335)

Each of the above reserves relates to the following:

1 Fair value movements in the carrying value of owner occupied property.

2 Cash flow hedges of foreign exchange risk, the accounting policies for which are disclosed in note 5.6.1.

3 Cost of hedging elections as described in note 5.6.1.

4 Exchange gains and losses arising on translation of foreign controlled entities and related hedging instruments, the accounting policies for which are disclosed in note 5.6.1.

5 Equity-settled share-based payment awards.

6 Movements in ownership interests in subsidiaries that do not result in a loss of control and represent the difference between the amount by which the non-controlling interest is adjusted and the fair value of the consideration paid or received.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

5. CAPITAL STRUCTURE

5.4 Dividends

Overview

Our dividend policy is designed to ensure that we reward shareholders relative to cash profit and maintain sufficient capital for future investment and growth of the business.

	2020	2019	
	INTERIM	FINAL	INTERIM
Dividend per share (Australian cents)	**4**	27	25
Franking percentage	**10%**	30%	60%
Franked amount per share (Australian cents)	**0.4**	8.1	15.0
Dividend payout (A$M)	**59**	352	329
Payment date	**25 September 2020**	9 April 2020	4 October 2019

The Board has elected not to declare a final dividend for 2020.

	2020 US$M	2019 US$M
Previous year final dividend on ordinary shares – 30% franked (2018 60% franked)	**224**	266
Interim dividend on ordinary shares – 10% franked (2019 60% franked)	**41**	222
Bonus Share Plan dividend forgone	**(3)**	(5)
Total dividend paid	**262**	483

Dividend Reinvestment and Bonus Share Plans

The Company operates a Dividend Reinvestment Plan (DRP) and a Bonus Share Plan (BSP) which allow equity holders to receive their dividend entitlement in the form of QBE ordinary shares.

Bonus Share Plan dividend forgone

The amount paid in dividends during the year has been reduced as a result of certain eligible shareholders participating in the BSP and forgoing all or part of their right to dividends. These shareholders were issued ordinary shares under the BSP. During the year, 523,532 (2019 613,874) ordinary shares were issued under the BSP.

Franking credits

The franking account balance on a tax paid basis at 31 December 2020 was a surplus of A$71 million (2019 A$87 million).

The unfranked part of the dividend is declared to be conduit foreign income. For shareholders not resident in Australia, the dividend will not be subject to Australian withholding tax.

5.5 Earnings per share

Overview

Earnings per share (EPS) is the amount of profit or loss after income tax attributable to each share. Diluted EPS adjusts the EPS for the impact of shares that are not yet issued but which may be in the future, such as shares potentially issuable from convertible notes, options and employee share-based payments plans.

	2020 US CENTS	2019 US CENTS
For (loss) profit after income tax from continuing operations		
Basic (loss) earnings per share	**(108.5)**	43.4
Diluted (loss) earnings per share	**(108.5)**	43.1
For (loss) profit after income tax		
Basic (loss) earnings per share	**(108.5)**	41.8
Diluted (loss) earnings per share	**(108.5)**	41.5

5.5.1 Reconciliation of earnings used for earnings per share measures

Earnings per share is based on profit or loss after income tax attributable to ordinary equity holders of the Company, as follows:

	2020 US$M	2019 US$M
(Loss) profit after income tax from continuing operations attributable to ordinary equity holders of the Company	**(1,517)**	571
Less: distributions paid on capital notes classified as equity (note 5.3.1)	**(25)**	–
(Loss) profit used in calculating basic and diluted earnings per share from continuing operations	**(1,542)**	571
(Loss) profit used in calculating basic and diluted earnings per share from discontinued operations	**–**	(21)
(Loss) profit used in calculating basic and diluted earnings per share	**(1,542)**	550

5.5.2 Reconciliation of weighted average number of ordinary shares used for earnings per share measures

	2020 NUMBER OF SHARES MILLIONS	2019 NUMBER OF SHARES MILLIONS
Weighted average number of ordinary shares on issue	**1,421**	1,318
Weighted average number of non-recourse loan shares issued under the Employee Share and Option Plan (the Plan)	**–**	(1)
Weighted average number of ordinary shares used as the denominator in calculating basic earnings per share	**1,421**	1,317
Weighted average number of dilutive potential ordinary shares issued under the Plan[1]	**–**	9
Weighted average number of ordinary shares used as the denominator in calculating diluted earnings per share	**1,421**	1,326

1 8 million (2019 nil) potential ordinary shares issued were excluded from the calculation because they are anti-dilutive.

The basic and diluted average numbers of ordinary shares shown above are used for calculating all earnings per share measures including those for profit or loss after income tax, profit or loss after income tax from continuing operations and loss after income tax from discontinued operations (refer to note 7.1.2).

How we account for the numbers

Basic (loss) earnings per share is calculated by dividing profit or loss after income tax attributable to members of the Company, adjusted for the cost of servicing capital notes classified as equity, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

Diluted (loss) earnings per share adjusts the weighted average number of shares to include dilutive potential ordinary shares and instruments with mandatory conversion features. As there are no impacts on interest and other financing costs from such instruments, diluted (loss) earnings per share utilises the same (loss) earnings figure used in the determination of basic (loss) earnings per share.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

5. CAPITAL STRUCTURE

5.6 Derivatives

Overview

Derivatives may be used as a tool to hedge the Group's foreign exchange exposures. Each controlled entity manages operational foreign exchange volatility by matching liabilities with assets of the same currency, as far as practicable. Forward foreign exchange contracts are used to hedge residual currency exposures, with both the foreign exchange gains or losses on translation of the exposure and the mark-to-market of related derivatives reported through profit or loss. Forward foreign exchange contracts and purchased currency options may also be utilised in cash flow hedging of foreign currency borrowings and/or exposure to net investments in foreign operations (NIFO).

Interest rate swaps and swaptions are used to hedge exposure to interest rate movements on the Group's borrowings.

Refer to note 4.4 for additional information relating to QBE's approach to managing interest rate risk and currency risk.

The Group's exposure to treasury derivatives at the balance date determined by reference to the functional currency of the relevant controlled entity is set out in the table below:

	2020			2019		
	EXPOSURE US$M	FAIR VALUE ASSET US$M	FAIR VALUE LIABILITY US$M	EXPOSURE US$M	FAIR VALUE ASSET US$M	FAIR VALUE LIABILITY US$M
Forward foreign exchange contracts	**2,603**	**505**	**394**	1,865	181	164
Forward foreign exchange contracts used in cash flow hedges	**(1,796)**	**–**	**419**	(1,451)	13	33
Forward foreign exchange contracts used in NIFO hedges	**(345)**	**13**	**32**	(101)	1	3
Interest rate swaps	**–**	**–**	**–**	140	–	2
Interest rate swaptions	**385**	**2**	**–**	–	–	–
		520	**845**		195	202

The fair value of forward foreign exchange contracts, interest rate swaps and interest rate swaptions are categorised as level 2 in the fair value hierarchy. They are fair valued using present value techniques utilising observable market data, broker quotes and/or comparable prices for similar instruments in active markets.

How we account for the numbers

Derivatives are initially recognised at fair value, determined as the cost of acquisition excluding transaction costs, and remeasured to fair value at each reporting date. Remeasurements are recognised in profit or loss at each reporting date, unless the derivative is designated as part of a qualifying hedge relationship (refer to note 5.6.1).

5.6.1 Designated hedges

The Group's material designated hedge relationships are analysed below by risk category and are accounted for using the accounting policies set out at the end of this note. Hedging ratios, being the relationship between the quantity of the hedging instrument and the quantity of the hedged item, are 1:1 as the nominal values of hedging instruments match those of the hedged items. Any ineffectiveness arising from factors such as credit risk is not expected to be material. Amounts recognised in equity or reclassified to profit or loss are disclosed in note 5.3.2.

Cash flow hedges of borrowings

At the balance date, forward foreign exchange contracts were used to hedge foreign currency risk associated with highly probable forecast transactions in relation to $400 million of subordinated notes maturing in 2043 and $700 million of subordinated notes maturing in 2044. Foreign currency risk on future coupons and principal amounts are hedged up to and including the first call dates of the notes, being 2023 and 2024 respectively. Similarly, an interest rate swaption was put in place to hedge interest rate risk in relation to coupons on A$500 million of subordinated notes maturing in 2036. The swaption is exercisable in August 2023 and hedges coupon payments from that date to the first call date in August 2026. These hedges were put in place to more effectively manage currency exposures and costs of funding.

Only the spot components of the forward foreign exchange contracts and the intrinsic value of the interest rate swaptions are designated in hedge relationships. For forward foreign exchange contracts, reclassifications of hedging gains and losses to profit or loss are included in foreign exchange in note 3.1, consistent with the currency movement of the hedged borrowings. For the interest rate swaption, reclassifications of any cumulative hedging gains or losses to profit or loss will occur as related coupon payments are made during the period from August 2023 to August 2026. A 'cost of hedging' election was made in respect of these hedges, as described below, and amortisation of the forward and currency basis components is included in financing costs in note 5.1.2, consistent with the hedged interest and principal payments.

The interest rate swaption does not generate any cash flows until August 2023, when the potential settlement would occur if the swaption is in-the-money at that point in time. The timing of cash flows relating to the forward foreign exchange contracts and corresponding average forward rates are provided in the following table:

		MATURING IN:					
2020		LESS THAN 1 YEAR	13 TO 24 MONTHS	25 TO 36 MONTHS	37 TO 48 MONTHS	49 TO 60 MONTHS	OVER 5 YEARS
Nominal amounts	Buy US$M/ Sell A$M	**77/129**	**77/130**	**477/819**	**747/1,251**	**–**	**–**
Average forward rate	US$/A$	**0.60**	**0.60**	**0.58**	**0.60**	**–**	**–**

		MATURING IN:					
2019		LESS THAN 1 YEAR	13 TO 24 MONTHS	25 TO 36 MONTHS	37 TO 48 MONTHS	49 TO 60 MONTHS	OVER 5 YEARS
Nominal amounts	Buy US$M/ Sell A$M	77/105	77/105	77/105	477/682	747/1,073	–
Average forward rate	US$/A$	0.74	0.74	0.74	0.70	0.70	–

Hedges of currency risk relating to translation of net investments in foreign operations

At the balance date, forward foreign exchange contracts and borrowings were designated as hedges of net investments in foreign operations. Only the spot components of the forward foreign exchange contracts are designated as being in hedge relationships. The forward and currency basis components are measured at fair value through profit or loss and included in foreign exchange in note 3.1. Cumulative hedging gains or losses recognised in equity are recycled to profit or loss only on disposal of the foreign operation.

The timing of cash flows relating to the hedging instruments and corresponding average forward rates, if applicable, are provided in the following table, with borrowings being disclosed by reference to their first call dates (refer to note 5.1):

		MATURING IN:					
2020		LESS THAN 1 YEAR	13 TO 24 MONTHS	25 TO 36 MONTHS	37 TO 48 MONTHS	49 TO 60 MONTHS	OVER 5 YEARS
Debt instruments hedging US dollar net investment in foreign operations							
Subordinated debt	US$M	**–**	**–**	**–**	**–**	**–**	**49**
Senior debt	US$M	**–**	**–**	**6**	**–**	**–**	**–**
Forward foreign exchange contracts hedging sterling net investment in foreign operations							
Nominal amounts	Buy A$M/ Sell £M	**657/367**	**–**	**–**	**–**	**–**	**–**
Average forward rate	A$/£	**0.56**	**–**	**–**	**–**	**–**	**–**
Debt instruments hedging sterling net investment in foreign operations							
Subordinated debt	£M	**25**	**327**	**–**	**–**	**–**	**–**
Forward foreign exchange contracts hedging Hong Kong dollar net investment in foreign operations							
Nominal amounts	Buy A$M/ Sell HKDM	**177/970**	**–**	**–**	**–**	**–**	**–**
Average forward rate	A$/HKD	**5.48**	**–**	**–**	**–**	**–**	**–**
Forward foreign exchange contracts hedging Indian Rupees net investment in foreign operations							
Nominal amounts	Buy A$M/ Sell INRM	**27/1,484**		**–**	**–**	**–**	**–**
Average forward rate	A$/INR	**54.89**	**–**	**–**	**–**	**–**	**–**

		MATURING IN:					
2019		LESS THAN 1 YEAR	13 TO 24 MONTHS	25 TO 36 MONTHS	37 TO 48 MONTHS	49 TO 60 MONTHS	OVER 5 YEARS
Debt instruments hedging US dollar net investment in foreign operations							
Subordinated debt	Buy US$M/ Sell A$M	–	1	–	–	–	73
Senior debt	US$/A$	–	–	–	6	–	–
Forward foreign exchange contracts hedging sterling net investment in foreign operations							
Nominal amounts	Buy A$M/ Sell £M	145/76	–	–	–	–	–
Average forward rate	A$/£	0.53	–	–	–	–	–
Debt instruments hedging sterling net investment in foreign operations							
Subordinated debt	£M	–	25	327	–	–	–

5. CAPITAL STRUCTURE

How we account for the numbers

When a derivative or other financial instrument is designated in a qualifying hedge relationship, the relevant controlled entity formally documents the relationship between the hedging instrument and hedged item, as well as its risk management objectives and its strategy for undertaking hedging transactions. The relevant entity also documents its assessment, both at hedge inception and on an ongoing basis, of whether the hedge effectiveness requirements are met, including the relevant economic relationship, the effect of credit risk and the hedge ratio.

For qualifying cash flow hedges and hedges of net investments in foreign operations, the gain or loss on the hedging instrument associated with the effective portion of the hedge is accumulated in equity through other comprehensive income and is subsequently reclassified to profit or loss when the hedged item also affects profit or loss. For cash flow hedges, this is reflected in the cash flow hedge reserve; for hedges of net investments in foreign operations, this is reflected in the foreign currency translation reserve (refer to note 5.3.2). The gain or loss on any ineffective portion of the hedging instrument is recognised in profit or loss immediately.

Where the forward and currency basis components of a designated derivative do not form part of the designated hedge relationship, these components are accounted for at fair value through profit or loss unless a 'cost of hedging' election is made. Under this election, the fair value of these components at inception of the hedge are amortised through profit or loss over time periods relevant to the hedge, with other changes in their fair values after inception recognised in equity through other comprehensive income. This election can be made on a hedge-by-hedge basis and is reflected in the cost of hedging reserve (refer to note 5.3.2).

Hedge accounting is discontinued when the qualifying hedge no longer meets the criteria for hedge accounting, including when the risk management objective is no longer met or is no longer relevant; the hedging instrument expires or is sold, terminated or exercised; the hedged item matures, is sold or repaid; or a hedged forecast transaction is no longer considered highly probable. When a cash flow hedge is discontinued, any cumulative hedging gain or loss in equity at that time remains in equity and is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is a forecast transaction that is no longer considered highly probable, the cumulative gain or loss is immediately reclassified to profit or loss. When a hedge of a net investment in a foreign operation is discontinued, any cumulative hedging gain or loss at that time remains in equity and is only recycled to profit or loss on disposal of the foreign operation, forming part of the resulting gain or loss.

6. TAX

Overview

Income tax expense or credit is the accounting tax outcome for the period and is calculated as the tax payable on the current period taxable income based on the applicable income tax rate for each jurisdiction, adjusted for changes in deferred tax assets and liabilities attributable to temporary differences and unused tax losses. The relationship between accounting profit or loss and income tax expense or credit is provided in the reconciliation of prima facie tax to income tax expense or credit (refer to note 6.1). Income tax expense does not equate to the amount of tax actually paid to tax authorities around the world, as it is based upon the accrual accounting concept.

Accounting income and expenses do not always have the same recognition pattern as taxable income and expenses, creating a timing difference as to when a tax expense or benefit can be recognised. These differences usually reverse over time but, until they do, a deferred tax asset or liability is recognised on the balance sheet. Note 6.2 details the composition and movements in deferred tax balances and the key management assumptions applied in recognising tax losses.

Details of franking credits available to shareholders are disclosed in note 5.4.

6.1 Reconciliation of prima facie tax to income tax expense or credit

	NOTE	2020 US$M	2019 US$M
(Loss) profit before income tax from continuing operations		**(1,472)**	672
Prima facie tax (credit) expense at 30%		**(442)**	202
Tax effect of non-temporary differences:			
Untaxed dividends		**(1)**	(8)
Differences in tax rates		**109**	(13)
Other, including non-allowable expenses and non-taxable income		**75**	18
Prima facie tax adjusted for non-temporary differences		**(259)**	199
Deferred tax assets de-recognised (re-recognised)		**278**	(64)
Underprovision (overprovision) in prior years		**20**	(31)
Income tax expense		**39**	104
Analysed as follows:			
Current tax		**59**	133
Deferred tax		**(20)**	(29)
		39	104
Deferred tax (credit) expense comprises:			
Deferred tax assets recognised in profit or loss relating to continuing operations	6.2.1	**(125)**	(58)
Deferred tax liabilities recognised in profit or loss relating to continuing operations	6.2.2	**105**	29
		(20)	(29)

How we account for the numbers

The current income tax credit or expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries in which controlled entities operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends to either settle on a net basis or to realise the asset and settle the liability simultaneously. Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, as appropriate.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

6. TAX

6.2 Deferred income tax

	NOTE	2020 US$M	2019 US$M
Deferred tax assets	6.2.1	**546**	479
Deferred tax liabilities	6.2.2	**51**	15

6.2.1 Deferred tax assets

	NOTE	2020 US$M	2019 US$M
Amounts recognised in profit or loss			
Financial assets – fair value movements		**4**	9
Provision for impairment		**14**	12
Employee benefits		**55**	58
Intangible assets		**161**	148
Insurance provisions		**696**	525
Tax losses recognised		**204**	271
Other		**136**	91
		1,270	1,114
Amounts recognised in other comprehensive income and equity			
Defined benefit plans		**32**	34
Other		**4**	2
		36	36
Deferred tax assets before set-off		**1,306**	1,150
Set-off of deferred tax liabilities	6.2.2	**(760)**	(671)
	6.2	**546**	479

Movements

	NOTE	2020 US$M	2019 US$M
At 1 January		**1,150**	1,074
Adjustment on adoption of AASB 16 *Leases*		**–**	5
Amounts recognised in profit or loss relating to continuing operations	6.1	**125**	58
Amounts recognised in other comprehensive income		**(1)**	2
Transfer from assets held for sale		**–**	9
Foreign exchange		**32**	2
At 31 December		**1,306**	1,150

Critical accounting judgements and estimates

Recoverability of deferred tax assets

QBE assesses the recoverability of deferred tax assets at each balance date. In making this assessment, QBE considers in particular each controlled entity's future business plans, history of generating taxable profits, whether the unused tax losses resulted from identifiable causes which are unlikely to recur and if any tax planning opportunities exist in the period in which the taxable losses can be utilised.

The recoverability assessment resulted in the de-recognition of North America tax group deferred tax assets of $120 million, reflecting updated estimates of future taxable profits consistent with QBE's reassessment of estimated future cash flows used for impairment testing of North American goodwill as discussed in note 7.2.1. The recognised deferred tax asset relating to the North America tax group of $295 million (2019 $415 million) comprises $117 million (2019 $254 million) of carry forward tax losses and $178 million (2019 $161 million) of deductible temporary differences, net of applicable offsetting deferred tax liabilities, as a result of insurance technical reserves and the tax deductibility of goodwill and other intangibles.

Uncertainty continues to exist in relation to the utilisation of this asset, which is subject to there being continued future taxable profits over the period of time in which the losses can be utilised. QBE has made a judgement that the North America tax group will be able to generate sufficient taxable profits over the foreseeable future, based upon its future business plans. Key assumptions include an expectation of future taxable profit driven by no material deterioration in the prior accident year central estimate, a sustained return to underwriting profitability, benefits flowing from initiatives to reduce the cost base of the division and future increases in investment yields. Losses expire over the next 20 years, with the majority expiring between 2031 and 2040. The uncertainty around the recognition of the deferred tax asset will be resolved in future years if taxable profits are generated. Recovery of the asset continues to be sensitive to changes in the combined operating ratio, premium growth and investment yield assumptions as these items are the key drivers of future taxable profits.

6.2.2 Deferred tax liabilities

	NOTE	2020 US$M	2019 US$M
Amounts recognised in profit or loss			
Intangible assets		**143**	142
Insurance provisions		**531**	441
Financial assets – fair value movements		**7**	13
Other provisions		**27**	12
Other		**92**	74
		800	682
Amounts recognised in other comprehensive income and equity			
Defined benefit plans		**11**	4
		11	4
Deferred tax liabilities before set-off		**811**	686
Set-off of deferred tax assets	6.2.1	**(760)**	(671)
	6.2	**51**	15

Movements

	NOTE	2020 US$M	2019 US$M
At 1 January		**686**	653
Amounts recognised in profit or loss relating to continuing operations	6.1	**105**	29
Amounts recognised in other comprehensive income		**6**	2
Foreign exchange		**14**	2
At 31 December		**811**	686

6. TAX

How we account for the numbers

Deferred income tax is provided in full using the liability method on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill or if they arise from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax assets and liabilities are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Controlled entity is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset in the consolidated financial statements when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority.

6.2.3 Tax losses

The Group has not brought to account $414 million (2019 $149 million) of tax losses, which includes the benefit arising from tax losses in overseas countries. $66 million of tax losses not brought to account have an indefinite life and the remaining $348 million expire in two to 20 years. The benefits of unused tax losses will only be brought to account when it is probable that they will be realised.

This benefit of tax losses will only be obtained if:

- the Group derives future assessable income of a nature and an amount sufficient to enable the benefit from the deductions for the losses to be realised;
- the Group continues to comply with the conditions for deductibility imposed by tax legislation; and
- no changes in tax legislation adversely affect the Group in realising the benefit from the deductions for the losses.

6.2.4 Tax consolidation legislation

On adoption of the tax consolidation legislation, the Company and its wholly-owned Australian controlled entities entered into a tax sharing and tax funding agreement that requires the Australian entities to fully compensate the Company for current tax liabilities and to be fully compensated by the Company for any current tax or deferred tax assets in respect of tax losses arising from external transactions occurring after the date of implementation of the tax consolidation legislation. The contributions are allocated by reference to the notional taxable income of each Australian entity. The head entity is QBE Insurance Group Limited.

7. GROUP STRUCTURE

Overview

This section provides information to help users understand the QBE Group structure, including the impact of changes in the financial year. This includes acquisitions and disposals of businesses, intangible assets acquired or developed and the results of impairment reviews.

7.1 Disposals and assets held for sale

7.1.1 Disposals – continuing operations

2020

During the year, QBE disposed of Southern Fire & Casualty Company and Unigard Insurance Company, resulting in a gain of $2 million.

A post-closing adjustment of $4 million loss was recognised in the current period in respect of prior period disposals, mainly in relation to North America's personal lines business.

2019

During 2019, the Group disposed of its insurance operations in Indonesia and the Philippines, the travel insurance and wool and livestock in transit insurance business in Australia, the Unigard Indemnity entity and remaining personal lines business in North America. These disposals resulted in an aggregate pre-tax loss of $8 million.

7.1.2 Discontinued operations

In 2019, operations in Latin America were classified as a discontinued operation and were disposed of prior to 2020. Summarised information relating to the 2019 results and cash flows from discontinued operations is disclosed below:

Loss from discontinued operations

	2019 US$M
Gain before income tax from discontinued operations	2
Income tax expense	–
Gain after income tax from discontinued operations	2
Loss on disposal	(23)
Loss after income tax from discontinued operations attributable to ordinary equity holders of the Company	(21)

LOSS PER SHARE FROM DISCONTINUED OPERATIONS ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE COMPANY	2019 US CENTS
Basic loss per share	(1.6)
Diluted loss per share	(1.6)

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

7. GROUP STRUCTURE

During the prior period, the Group disposed of its remaining discontinued Latin American operations in Colombia and Puerto Rico, information on which is set out in the table below:

	2019 US$M
Assets	
Cash, investments and other financial assets	169
Insurance assets	187
Current and deferred tax assets	17
Property, plant and equipment	4
Total assets	377
Liabilities	
Insurance liabilities	304
Current and deferred tax liabilities	1
Other liabilities	5
Total liabilities	310
Net assets at the dates of disposal	67
Proceeds received on disposal	54
Net loss on disposal before reclassification of foreign currency translation reserve	(13)
Reclassification of foreign currency translation reserve	(10)
Net loss on disposal after reclassification of foreign currency translation reserve included in the results of discontinued operations	(23)

Net cash flows from discontinued operations

	2019 US$M
Net movement in cash and cash equivalents from discontinued operations	(13)

7.2 Intangible assets

Overview

Intangible assets are assets with no physical substance. The most significant classes of intangible assets are detailed below:

Lloyd's syndicate capacity

The Lloyd's syndicate capacity intangible asset relates to the syndicate capacity acquired as part of the acquisition of QBE Underwriting Limited (formerly trading as Limit) in 2000 and costs incurred as a result of increasing capacity since that date. Syndicate capacity is the aggregate of the premium limits of each member of that syndicate at a point in time. An existing capital provider has the first right to participate on the next year of account, giving the indefinite right to participate on all future years of account. The Group has demonstrated a long-term commitment to developing its operations at Lloyd's. The value of this asset is in the access it gives to future underwriting profits at Lloyd's. For these reasons, Lloyd's syndicate capacity is deemed to have an indefinite useful life.

Customer relationships

Customer relationships comprise the capitalisation of future profits relating to insurance contracts acquired and the expected renewal of those contracts. It also includes the value of distribution networks and agency relationships. Customer relationships are amortised over remaining lives of up to five years depending on the classes of business to which the assets relate.

Brand names

These assets reflect the revenue generating ability of acquired brands. In some circumstances, brand names are considered to have an indefinite useful life due to the long-term nature of the asset.

Insurance licences

These assets give the Group the right to operate in certain geographic locations and to write certain classes of business with a potential to generate additional revenue. In some cases, these are considered to have an indefinite useful life due to their long-term nature; however, where there is a finite useful life, assets are amortised over the remaining period, up to 16 years.

Software

This includes both acquired and internally developed software which is not integral or closely related to an item of hardware such as an underwriting system. Capitalised software is amortised over periods of up to 10 years, reflecting the period during which the Group is expected to benefit from the use of the software.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net identifiable assets acquired. Goodwill has an indefinite useful life and therefore is not subject to amortisation but is tested for impairment annually, or more often if there is an indication of impairment.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

7. GROUP STRUCTURE

2020	IDENTIFIABLE INTANGIBLES LLOYD'S SYNDICATE CAPACITY US$M	CUSTOMER RELATION-SHIPS US$M	BRAND NAMES US$M	INSURANCE LICENCES US$M	SOFTWARE US$M	OTHER US$M	GOODWILL US$M	TOTAL US$M
Cost								
At 1 January	84	454	26	152	378	19	2,330	3,443
Additions/reclassifications	–	–	–	–	71	–	–	71
Impairment – continuing operations	–	(3)	–	(11)	(34)	–	(390)	(438)
Disposals/transfers to assets held for sale	–	–	–	(3)	(1)	–	–	(4)
Foreign exchange	3	4	1	10	28	–	167	213
At 31 December	87	455	27	148	442	19	2,107	3,285
Amortisation								
At 1 January	–	(388)	(21)	(70)	(155)	(18)	–	(652)
Amortisation – continuing operations[1]	–	(21)	–	(2)	(50)	(1)	–	(74)
Foreign exchange	–	(3)	(1)	(7)	(14)	–	–	(25)
At 31 December	–	(412)	(22)	(79)	(219)	(19)	–	(751)
Carrying amount								
At 31 December	87	43	5	69	223	–	2,107	2,534

1 Amortisation of $46 million is included in underwriting expenses as it relates to intangible assets integral to the Group's underwriting activities.

2019	IDENTIFIABLE INTANGIBLES LLOYD'S SYNDICATE CAPACITY US$M	CUSTOMER RELATION-SHIPS US$M	BRAND NAMES US$M	INSURANCE LICENSES US$M	SOFTWARE US$M	OTHER US$M	GOODWILL US$M	TOTAL US$M
Cost								
At 1 January	81	564	26	41	292	16	2,333	3,353
Additions/reclassifications	–	(111)	–	111	83	1	–	84
Impairment reversal – continuing operations	–	–	–	–	6	–	–	6
Impairment – continuing operations	–	–	–	–	(2)	–	–	(2)
Disposals/transfer to assets held for sale	–	–	–	(2)	(4)	–	(2)	(8)
Foreign exchange	3	1	–	2	3	2	(1)	10
At 31 December	84	454	26	152	378	19	2,330	3,443
Amortisation								
At 1 January	–	(403)	(19)	–	(115)	(16)	–	(553)
Reclassifications	–	72	–	(72)	–	–	–	–
Amortisation – continuing operations[1]	–	(53)	–	–	(43)	(2)	–	(98)
Disposals/transfers to assets held for sale	–	–	–	3	3	–	–	6
Foreign exchange	–	(4)	(2)	(1)	–	–	–	(7)
At 31 December	–	(388)	(21)	(70)	(155)	(18)	–	(652)
Carrying amount								
At 31 December	84	66	5	82	223	1	2,330	2,791

1 Amortisation of $43 million is included in underwriting expenses as it relates to intangible assets integral to the Group's underwriting activities.

How we account for the numbers

Intangible assets are measured at cost less accumulated amortisation and impairment. Those with a finite useful life are amortised over their estimated useful life in accordance with the pattern of expected consumption of economic benefits, with amortisation expense reported in underwriting and other expenses or in amortisation and impairment of intangibles depending on the use of the asset. Intangible assets with an indefinite useful life are not subject to amortisation but are tested for impairment annually or more frequently if there are indicators of impairment. Intangible assets with a finite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

7.2.1 Impairment testing of intangible assets

Overview

An intangible asset's recoverable value is the greater of its value in use and its fair value less cost to sell.

For intangible assets with a finite life, if there are indicators that the intangible asset's recoverable value has fallen below its carrying value (e.g. due to changing market conditions), an impairment test is performed and a loss is recognised for the amount by which the carrying value exceeds the asset's recoverable value.

Intangible assets that have an indefinite useful life, such as goodwill, are tested annually for impairment or more frequently where there is an indication that the carrying amount may not be recoverable.

Goodwill is allocated to cash-generating units, or groups of units, expected to benefit from synergies arising from the acquisition giving rise to the goodwill. Cash-generating units or groups of cash-generating units reflect the level at which goodwill is monitored for impairment by management. As the Group acquires or disposes of operations or reorganises the way that operations are managed, reporting structures may change, giving rise to a reassessment of cash-generating units and the allocation of goodwill to those cash-generating units.

The changes to the Group's operating segments described in note 1.3 have resulted in changes to the composition of the cash-generating units to which goodwill is allocated.

The goodwill relating to certain acquisitions is denominated in currencies other than the US dollar and so is subject to foreign exchange movements.

Goodwill is analysed by groups of cash-generating units as follows:

	2020 US$M	2019 US$M
North America	**358**	832
International	**546**	417
Australia Pacific	**1,203**	1,081
	2,107	2,330

Impairment losses

During 2020, $390 million of goodwill relating to North America was impaired. Further detail is provided below.

During 2020, capitalised software assets of $34 million were impaired following management's review for indicators of impairment in light of planned strategic changes to modernise the Group's technology state. Insurance licences and customer relationship assets were also impaired by $14 million in aggregate following a review of their recoverability in light of recent business performance.

During 2019, capitalised software assets of $2 million were impaired and $6 million of previous impairment was reversed.

7. GROUP STRUCTURE

How we account for the numbers

Impairment testing of identifiable intangible assets

The recoverable amount of each intangible asset with an indefinite useful life has been determined by reference to a value in use calculation based on the following key assumptions and estimates:

- Cash flow forecasts relevant to the initial valuation of the identifiable intangible asset are reviewed and updated (if appropriate) by management. Cash flow forecasts are based on a combination of actual performance to date and management's expectations of future performance based on prevailing and anticipated market factors.
- Discount rates that include a beta and a market risk premium sourced from observable market information and a specific risk premium appropriate to reflect the nature of the risk associated with the intangible asset or the cash-generating unit to which the asset is allocated.

Impairment testing of goodwill

The recoverable amount of each cash-generating unit or group of cash-generating units has been determined by reference to a value in use calculation based on the following key assumptions and estimates:

- Cash flow forecasts reflecting combined operating ratio and investment return assumptions that build from the latest three-year business plan. These forecasts cover a period of five years, with the final two years determined with reference to the terminal growth rates discussed below. The cash flow forecasts are based on a combination of historical performance and management's expectations of future performance based on prevailing and anticipated market factors and the benefit of committed cost saving measures.
- Terminal value is calculated using a perpetuity growth formula from the end of the cash flow forecast period. Growth rates reflect the long-term average growth rates of the countries relevant to the cash-generating unit or group of cash-generating units and are based on observable market information. The terminal growth rates used in management's impairment testing are: North America 2.3% (2019 2.5%), Australia Pacific 2.5% (2019 2.5%) and International 2.0% (2019 2.0%).
- Discount rates that reflect a beta and a market risk premium sourced from observable market information and a specific risk premium appropriate to reflect the nature of the business of each cash-generating unit or group of cash-generating units. The pre-tax discount rates used were: North America 9.8% (2019 10.9%), Australia Pacific 12.5% (2019 12.4%) and International 9.0% (2019 8.9%). The post-tax discount rates used were: North America 7.8% (2019 8.9%), Australia Pacific 9.1% (2019 8.8%) and International 7.3% (2019 7.4%).

Critical accounting judgements and estimates

The impairment test completed in respect of goodwill relating to North America resulted in an impairment of $390 million at the current balance date. QBE has reassessed the business plan and terminal value combined operating ratio assumption used in the impairment test, and has explicitly considered the impacts of COVID-19, as well as elevated catastrophe activity and crop losses that occurred in the second half of the year. The reassessment resulted in an increase to the terminal value combined operating ratio assumption (broadly aligned with the historical underlying financial performance of the business), and a reduction in the specific risk premium in the discount rate to account for the execution risk that is directly reflected in the updated combined operating ratio assumption. The updated assumptions are set out below.

After recognising the impairment, both the recoverable amount and carrying value of the North American cash-generating unit are $2,450 million, resulting in nil headroom (being the excess of recoverable value over carrying value) at the current balance date compared with headroom of $596 million at 31 December 2019. The valuation continues to be highly sensitive to a range of assumptions, in particular the forecast combined operating ratio used in the terminal value calculation, discount rate and long-term investment return. The impact of changes in these key assumptions is shown in the table below and each change has been calculated in isolation from other changes. In practice, this is considered unlikely to occur due to interrelationships between assumptions.

As previously noted, the structural and reporting changes associated with changes to the Group's operating segments have resulted in changes to the composition of cash-generating units to which North American goodwill is allocated. Excluding this change, impairment of goodwill relating to North America would have been $415 million.

KEY ASSUMPTION	ASSUMPTION %	SENSITIVITY %	IMPACT OF SENSITIVITY ON CARRYING VALUE OF GOODWILL
Terminal value combined operating ratio	98.5	+1	Impairment of $358 million
	(2019 95.8)	-1	Headroom of $491 million
Long-term investment return	3.75	+1	Headroom of $714 million
	(2019 4.17)	-1	Impairment of $358 million
Post-tax discount rate	7.8	+1	Impairment of $358 million
	(2019 8.9)	-1	Headroom of $654 million

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

7. GROUP STRUCTURE

7.3 Controlled entities

Overview

This section lists the Group's controlled entities. The consolidated financial statements incorporate the assets and liabilities of all entities controlled by the Company at 31 December 2020 and the results for the financial year then ended, or for the period during which control existed if the entity was acquired or disposed of during the financial year.

7.3.1 Controlled entities

	COUNTRY OF INCORPORATION/ FORMATION	EQUITY HOLDING 2020 %	EQUITY HOLDING 2019 %
Ultimate parent entity			
QBE Insurance Group Limited	Australia		
Controlled entities			
Anex Jenni & Partner SA (in the process of deregistration)	Switzerland	**100.00**	100.00
Austral Mercantile Collections Pty Limited	Australia	**100.00**	100.00
Australian Aviation Underwriting Pool Pty Limited	Australia	**100.00**	100.00
Burnett & Company, Inc.	United States	**100.00**	100.00
Elders Insurance (Underwriting Agency) Pty Limited	Australia	**80.00**	80.00
Equator Reinsurances Limited	Bermuda	**100.00**	100.00
General Casualty Company of Wisconsin	United States	**100.00**	100.00
General Casualty Insurance Company	United States	**100.00**	100.00
Greenhill BAIA Underwriting GmbH	Germany	**100.00**	100.00
Greenhill International Insurance Holdings Limited	United Kingdom	**100.00**	100.00
Greenhill Sturge Underwriting Limited	United Kingdom	**100.00**	100.00
Greenhill Underwriting Espana Limited	United Kingdom	**100.00**	100.00
Hoosier Insurance Company (merged with General Casualty Company of Wisconsin on 1 October 2020)	United States	**–**	100.00
Insurance Box Holdings Pty Limited (in the process of deregistration)	Australia	**100.00**	100.00
Insurance Box Pty Limited (in the process of deregistration)	Australia	**100.00**	100.00
Lifeco s.r.o.	Czech Republic	**100.00**	100.00
NAU Country Insurance Company	United States	**100.00**	100.00
North Pointe Insurance Company	United States	**100.00**	100.00
Praetorian Insurance Company	United States	**100.00**	100.00
QBE (PNG) Limited	PNG	**100.00**	100.00
QBE Administration Services, Inc.	United States	**100.00**	100.00
QBE Americas, Inc.	United States	**100.00**	100.00
QBE Asia Pacific Holdings Limited	Hong Kong	**100.00**	100.00
QBE Blue Ocean Re Limited	Bermuda	**100.00**	100.00
QBE Capital Funding III Limited	Jersey	**100.00**	100.00
QBE Capital Funding IV Limited	Jersey	**100.00**	100.00
QBE Corporate Limited	United Kingdom	**100.00**	100.00
QBE Emerging Markets Holdings Pty Limited	Australia	**100.00**	100.00
QBE Employee Share Trust [1]	Australia	**–**	–
QBE Europe Intermediary Services SAS	France	**100.00**	100.00
QBE Europe SA/NV	Belgium	**100.00**	100.00
QBE European Operations plc	United Kingdom	**100.00**	100.00
QBE European Services Limited	United Kingdom	**100.00**	100.00
QBE European Underwriting Services (Australia) Pty Limited	Australia	**100.00**	100.00
QBE Finance Holdings (EO) Limited	United Kingdom	**100.00**	100.00

	COUNTRY OF INCORPORATION/ FORMATION	EQUITY HOLDING 2020 %	EQUITY HOLDING 2019 %
QBE FIRST Enterprises, LLC	United States	**100.00**	100.00
QBE FIRST Property Tax Solutions, LLC	United States	**100.00**	100.00
QBE General Insurance (Hong Kong) Limited	Hong Kong	**100.00**	100.00
QBE Group Services Pty Ltd	Australia	**100.00**	100.00
QBE Group Shared Services Limited	United Kingdom	**100.00**	100.00
QBE Holdings (AAP) Pty Limited	Australia	**100.00**	100.00
QBE Holdings (EO) Limited	United Kingdom	**100.00**	100.00
QBE Holdings, Inc.	United States	**100.00**	100.00
QBE Hongkong & Shanghai Insurance Limited	Hong Kong	**100.00**	100.00
QBE Insurance (Australia) Limited	Australia	**100.00**	100.00
QBE Insurance (Fiji) Limited	Fiji	**100.00**	100.00
QBE Insurance (International) Pty Limited	Australia	**100.00**	100.00
QBE Insurance (Malaysia) Berhad	Malaysia	**100.00**	100.00
QBE Insurance (PNG) Limited	PNG	**100.00**	100.00
QBE Insurance (Singapore) Pte Ltd	Singapore	**100.00**	100.00
QBE Insurance (Vanuatu) Limited	Vanuatu	**100.00**	100.00
QBE Insurance (Vietnam) Company Limited	Vietnam	**100.00**	100.00
QBE Insurance Corporation	United States	**100.00**	100.00
QBE Insurance Holdings Pty Limited	Australia	**100.00**	100.00
QBE International Markets Pte Ltd	Singapore	**100.00**	100.00
QBE Investments (Australia) Pty Limited	Australia	**100.00**	100.00
QBE Investments (North America), Inc.	United States	**100.00**	100.00
QBE Irish Share Incentive Plan [1]	Ireland	**–**	–
QBE Latin America Insurance Holdings Pty Ltd	Australia	**100.00**	100.00
QBE Lenders' Mortgage Insurance Limited	Australia	**100.00**	100.00
QBE Management (Ireland) Limited	Ireland	**100.00**	100.00
QBE Management, Inc.	United States	**100.00**	100.00
QBE Management Services (Philippines) Pty Limited	Australia	**100.00**	100.00
QBE Management Services (UK) Limited	United Kingdom	**100.00**	100.00
QBE Management Services Pty Limited	Australia	**100.00**	100.00
QBE Mortgage Insurance (Asia) Limited	Hong Kong	**100.00**	100.00
QBE Partner Services (Europe) LLP	United Kingdom	**100.00**	100.00
QBE Regional Companies (N.A.), Inc.	United States	**100.00**	100.00
QBE Reinsurance Corporation	United States	**100.00**	100.00
QBE Reinsurance Services (Bermuda) Limited	Bermuda	**100.00**	100.00
QBE Services Inc	Canada	**100.00**	100.00
QBE SK s.r.o. (in the process of liquidation)	Slovakia	**100.00**	100.00
QBE Specialty Insurance Company	United States	**100.00**	100.00
QBE s.r.o.	Czech Republic	**100.00**	100.00
QBE Stonington Insurance Holdings Inc	United States	**100.00**	100.00
QBE Strategic Capital (Europe) Limited	United Kingdom	**100.00**	100.00
QBE Strategic Capital (International) Limited (incorporated 6 April 2020)	United Kingdom	**100.00**	–
QBE Strategic Capital Company Pty Limited	Australia	**100.00**	100.00
QBE UK Finance IV Limited	United Kingdom	**100.00**	100.00
QBE UK Limited	United Kingdom	**100.00**	100.00
QBE UK Share Incentive Plan [1]	United Kingdom	**–**	–
QBE Underwriting Limited	United Kingdom	**100.00**	100.00
QBE Underwriting Services (Ireland) Limited	Ireland	**100.00**	100.00
QBE Underwriting Services (UK) Limited	United Kingdom	**100.00**	100.00
QBE Ventures Pty Limited (incorporated 22 October 2020)	Australia	**100.00**	–
QBE Workers Compensation (NSW) Limited (dormant)	Australia	**100.00**	100.00
QBE Workers Compensation (VIC) Pty Limited (dormant)	Australia	**100.00**	100.00
Queensland Insurance (Investments) Pte Limited (previously Queensland Insurance (Investments) Limited)	Fiji	**100.00**	100.00

1 Performance overview
2 Operating and financial review
3 Governance
4 Directors' Report
5 Financial Report
6 Other information

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

7. GROUP STRUCTURE

	COUNTRY OF INCORPORATION/ FORMATION	EQUITY HOLDING 2020 %	EQUITY HOLDING 2019 %
Regent Insurance Company	United States	**100.00**	100.00
Ridgwell Fox & Partners (Underwriting Management) Limited (in the process of liquidation)	United Kingdom	**100.00**	100.00
Sinkaonamahasarn Company Limited[2]	Thailand	**49.00**	49.00
Southern Fire & Casualty Company (sold effective 1 November 2020)	United States	**–**	100.00
Southern National Risk Management Corporation	United States	**100.00**	100.00
Southern Pilot Insurance Company	United States	**100.00**	100.00
Standfast Corporate Underwriters Limited	United Kingdom	**100.00**	100.00
Stonington Insurance Company	United States	**100.00**	100.00
Trade Credit Collections Pty Limited	Australia	**100.00**	100.00
Trade Credit Underwriting Agency NZ Limited	NZ	**100.00**	100.00
Trade Credit Underwriting Agency Pty Limited	Australia	**100.00**	100.00
Unigard Insurance Company (sold effective 1 November 2020)	United States	**–**	100.00
Westwood Insurance Agency	United States	**100.00**	100.00

1 QBE Employee Share Trust, QBE Irish Share Incentive Plan and QBE United Kingdom Share Incentive Plan have been included in the consolidated financial statements as these entities are special purpose entities that exist for the benefit of the Group.

2 Although QBE has less than a 50% equity interest in Sinkaonamahasarn Company Limited, controlled entities have the right to acquire the remaining share capital.

All equity in controlled entities is held in the form of shares or through contractual arrangements.

How we account for the numbers

Controlled entities

Control exists when the Group is exposed, or has rights, to variable returns from its involvement with an entity and has the ability to affect those returns through its power over it. All transactions between and with controlled entities are eliminated in full. Non-controlling interests in the results and equity of controlled entities are shown separately in the consolidated statement of comprehensive income, balance sheet and statement of changes in equity.

Where control of an entity commences during a financial year, its results are included in the consolidated statement of comprehensive income from the date on which control is obtained. Where control of an entity ceases during a financial year, its results are included for that part of the year during which the control existed.

A change in ownership of a controlled entity without the gain or loss of control is accounted for as an equity transaction.

8. OTHER

Overview

This section includes other information that must be disclosed to comply with the Australian Accounting Standards or the *Corporations Act 2001*.

8.1 Other accounting policies

8.1.1 New accounting standards and amendments adopted by the Group

The Group adopted the following new or amended accounting standards from 1 January 2020:

TITLE	
Revised Conceptual Framework for Financial Reporting	
AASB 2019-5	*Amendments to Australian Accounting Standards – Disclosure of the Effect of New IFRS Standards Not Yet Issued in Australia*
AASB 2018-6	*Amendments to Australian Accounting Standards – Definition of a Business*
AASB 2018-7	*Amendments to Australian Accounting Standards – Definition of Material*
AASB 2019-1	*Amendments to Australian Accounting Standards – References to the Conceptual Framework*
AASB 2019-3	*Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform*

The adoption of these new or amended standards did not significantly impact the Group's accounting policies or financial statements.

8.1.2 New accounting standards and amendments issued but not yet effective

TITLE		OPERATIVE DATE
AASB 2020-8	*Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform – Phase 2*	1 January 2021
AASB 2014-10	*Amendments to Australian Accounting Standards – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*	1 January 2022
AASB 2020-1	*Amendments to Australian Accounting Standards – Classification of Liabilities as Current or Non-current*	1 January 2022
AASB 2020-3	*Amendments to Australian Accounting Standards – Annual Improvements 2018–2020 and Other Amendments*	1 January 2022
AASB 2020-4	*Amendments to Australian Accounting Standards – COVID-19-Related Rent Concessions*	1 January 2022
AASB 17	*Insurance Contracts*	1 January 2023

The Australian Accounting Standards and amendments detailed in the table above are not mandatory for the Group until the operative dates stated; however, early adoption is often permitted.

The Group currently plans to adopt the standards and amendments detailed above in the reporting periods beginning on their respective operative dates. An assessment of the financial impact of the standards and amendments has been undertaken and they are not expected to have a material impact on the Group's financial statements, except where noted below:

AASB 17 *Insurance Contracts*

AASB 17, a new accounting standard for insurance contracts, was adopted by the AASB in July 2017. In June 2020, the IASB issued Amendments to IFRS 17 which deferred the effective date from 1 January 2021 to 1 January 2023 and made significant amendments to the standard in response to feedback from, and implementation issues raised by, stakeholders. These amendments were adopted by the AASB in July 2020.

Given the broad scope of the recent amendments, complexity of the new requirements and lack of general consensus on the interpretation of key components of the standard, the impact of AASB 17 on the Group's financial statements is still being determined; however, significant presentation and disclosure changes and some impact on reported profit or loss are expected.

The standard introduces a new 'general model' for the recognition and measurement of insurance contracts, but permits the use of a simplified approach (which is similar to the current basis on which general insurance is brought to account under AASB 1023) if the liability for remaining coverage under the simplified approach is not expected to materially differ from the general model. QBE has completed a gap assessment and has determined that the simplified approach is expected to apply to more than 95% of the Group's business, based on the current business mix.

8. OTHER

QBE has considered the key areas of expected impact and plans to apply the following accounting policy choices permitted by AASB 17:

- **Acquisition costs:** For groups of contracts that apply the simplified approach and have a coverage period of one year or less, AASB 17 provides an option to recognise any insurance acquisition costs as expenses when incurred. QBE does not plan to apply this option and expects to amortise acquisition costs over the coverage period of the related insurance contracts.
- **Effect of previous interim reporting:** AASB 17 provides an option to change the treatment of accounting estimates made in previous interim financial statements when applying AASB 17 in the annual financial statements (i.e. a 'year-to-date basis'). QBE expects to apply this option and will measure accounting estimates on a year-to-date basis which is consistent with existing practice.

The areas of judgement applicable to measuring insurance contract liabilities under AASB 17 are expected to be broadly similar to those applicable when applying AASB 1023 and include the following, noting that there are differences in the way they are to be measured:

- **Discount rates:** AASB 1023 requires the net outstanding claims liability to be discounted using risk-free rates as described in note 2.3.4. Under AASB 17, QBE expects to apply a 'bottom-up approach' to determining discount rates used to discount insurance contract liabilities, which uses risk-free rates adjusted to reflect the liquidity characteristics of the insurance contracts.
- **Risk adjustment:** The risk adjustment under AASB 17 is conceptually similar to the risk margin under AASB 1023. Similar to AASB 1023, AASB 17 requires the disclosure of the confidence level that corresponds to the risk adjustment used in the measurement of insurance contract liabilities.
- **Onerous contracts:** AASB 17 requires the identification of 'groups' of onerous contracts which are expected to be determined at a more granular level of aggregation than the level at which the liability adequacy test is performed under AASB 1023.
- **Attribution of expenses:** The measurement of insurance contract liabilities under AASB 17 will include all cash flows that directly relate to the fulfilment of insurance contracts, including acquisition, claims settlement, policy administration and maintenance costs. It also includes other costs such as overheads which are currently recognised in 'Trade and other payables' on the balance sheet.

On transition to AASB 17, QBE expects to apply the new standard retrospectively to all insurance contracts except for certain contracts acquired in the past (e.g. as part of a business combination) that, at the time of acquisition, were considered past expiry and were in their claims settlement period. For these contracts, QBE expects to apply a modified retrospective approach under AASB 17 whereby the related liabilities are classified as liabilities for incurred claims, on the basis that it would be impracticable to treat these liabilities as related to unexpired coverage.

The requirements of AASB 17 are complex and the expectations noted above are subject to change as the project progresses and as the Group continues to analyse the impacts of the standard and recent amendments. Group-wide accounting guidance and application methodologies are being developed, and a global project team has been mobilised to progress the detailed design and implementation of required changes to financial reporting systems. Market developments also continue to be monitored in order to assess the impact of evolving interpretations and other changes.

8.2 Contingent liabilities

Overview

Contingent liabilities are disclosed when the possibility of a future settlement of economic benefits is considered to be less than probable but more likely than remote. If the expected settlement of the liability becomes probable, a provision is recognised.

QBE is required to support the underwriting activities of the Group's controlled entities including corporate members at Lloyd's. Funds at Lloyd's are those funds of the Group which are subject to the terms of the Lloyd's Deposit Trust Deed and are required to support underwriting for the following year and the open years of account, determined by a formula prescribed by Lloyd's each year. At the balance date, letters of credit and similar forms of support of $2,085 million (2019 $1,848 million) were in place in respect of the Group's participation in Lloyd's, along with cash and investments of $250 million (2019 $37 million). In addition, a controlled entity has entered into various trust and security deeds with Lloyd's in respect of assets lodged to support its underwriting activities. These deeds contain covenants that require the entity to meet financial obligations should they arise in relation to cash calls from syndicate participations. A cash call would be made first on the assets held in syndicate trust funds and would only call on funds at Lloyd's after syndicate resources were exhausted. Only if the level of these trust funds was not sufficient would a cash call result in a draw down on the letters of credit and other assets lodged with Lloyd's.

In the normal course of business, the Group is also exposed to contingent liabilities in relation to claims litigation and regulatory examinations arising out of its insurance and reinsurance activities. The Group may also be exposed to the possibility of contingent liabilities in relation to insurance and non-insurance litigation including but not limited to regulatory test cases and class actions, taxation and compliance matters, which may result in legal or regulatory penalties and financial or non-financial losses and other impacts. Entities in the Group may also provide guarantees to support representations in commercial transactions.

1 Performance overview
2 Operating and financial review
3 Governance
4 Directors' Report
5 Financial Report
6 Other information

8.3 Offsetting financial assets and liabilities

The Group has $261 million receivable from and payable to (2019 nil) a single counterparty which are fully set off in the balance sheet in accordance with Australian Accounting Standards, on the basis that the Group intends to settle these on a net basis and has a legally enforceable right to do so.

8.4 Reconciliation of profit or loss after income tax to net cash flows from operating activities

Overview

AASB 1054 *Australian Additional Disclosures* requires a reconciliation of profit or loss after income tax to net cash flows from operating activities.

	2020 US$M	2019 US$M
(Loss) profit after income tax from continuing operations	**(1,511)**	568
Loss after income tax from discontinued operations	**–**	(21)
(Loss) profit after income tax	**(1,511)**	547
Adjustments for:		
Depreciation and impairment of property, plant and equipment	**40**	37
Amortisation of right-of-use lease assets	**68**	66
Amortisation/impairment of intangibles	**512**	94
Loss on sale of entities and businesses	**2**	8
Share of net loss of associates	**5**	3
Net foreign exchange losses	**29**	23
Fair value losses (gains) on financial assets	**206**	(492)
Share-based payments expense	**20**	38
Balance sheet movements:		
(Increase) decrease in trade debtors	**(433)**	616
Increase in net operating assets	**(142)**	(119)
Increase in trade payables	**378**	299
Increase in gross outstanding claims liability	**1,760**	637
Increase in unearned premium	**635**	185
Increase in deferred insurance costs	**(262)**	(245)
Increase in net defined benefit obligation	**1**	9
(Increase) decrease in net tax assets	**(74)**	73
Net cash flows from operating activities	**1,234**	1,779

8. OTHER

8.5 Share-based payments

Overview

Share-based payments are equity-based compensation schemes provided to employees and executives. The Company issues shares from time to time under an Employee Share and Option Plan (the Plan). Any full-time or part-time employee of the Group or any equally-owned joint venture who is offered shares or options is eligible to participate in the Plan.

8.5.1 Share schemes

A summary of deferred equity award plans is set out below:

PLAN	AVAILABLE TO:	NATURE OF AWARD	VESTING CONDITIONS
Executive Incentive Plan (EIP) (2017–2020)	Executives (before 1 Jan 2019) and other key senior employees	• 40%-50% delivered in cash (20% in the case of the Group CEO). • 50%-60% deferred as conditional rights[1] to fully paid ordinary QBE shares (80% in the case of the Group CEO).	The conditional rights are deferred in four equal tranches, such that 25% vests on each of the first, second, third and fourth anniversaries of the award. EIP outcomes are subject to the achievement of: • Group COR and cash ROE targets; • divisional COR targets in the case of divisional employees; and • individual performance objectives reflecting QBE's strategic priorities.
Short-term Incentive (STI) (2014–2020)	Executives and other key senior employees	• 67% delivered in cash (50% in the case of the Group CEO). • 33% deferred as conditional rights to fully paid ordinary QBE shares (50% in the case of the Group CEO).	The conditional rights are deferred in two equal tranches such that 50% vests on the first anniversary of the award and 50% vests on the second anniversary of the award. STI outcomes are subject to the achievement of: • Group COR and cash ROE targets; • divisional COR targets[2] in the case of divisional employees; and • individual performance objectives reflecting QBE's strategic priorities.
Long-term incentive (LTI) (2019–2020)	Executives	• Conditional rights to fully paid ordinary QBE shares.	On achievement of the performance measures at the end of a three-year performance period, conditional rights vest in three tranches as follows: • 33% at the end of the three-year performance period; • 33% on the first anniversary of the end of the performance period; and • 34% on the second anniversary of the end of the performance period. Vesting is subject to performance conditions as follows: • 50% of each tranche is subject to the achievement against a three-year average Group ROE performance target; and • 50% of each tranche is subject to the performance of the Group's relative total shareholder return, compared against two independent peer groups, over a three-year performance period.

1 For participants outside of Australia, the deferred component may be delivered in equal shares of conditional rights and cash.
2 Divisional return on allocated capital targets until 31 December 2016.

Additionally:

- plan rules provide suitable discretion for the People & Remuneration Committee to adjust any formulaic outcome to ensure that awards made under the EIP, STI and LTI appropriately reflect performance;
- during the period from the grant date to the vesting date, further conditional rights are issued under the Bonus Share Plan to reflect dividends paid on ordinary shares of the Company. These conditional rights are subject to the same vesting conditions as the original grant of conditional rights;
- recipients must remain in the Group's service throughout the service period in order for the awards to vest, except in cases where good leaver provisions apply. Vesting is also subject to malus provisions;

- under good leaver provisions (e.g. retirement, redundancy, ill health, injury or mutually agreed separation), a pro-rata amount of conditional rights remains subject to the performance and vesting conditions; and
- once vested, conditional rights can be exercised for no consideration.

8.5.2 Conditional rights

Details of the number of employee entitlements to conditional rights to ordinary shares granted, vested and transferred to employees during the year are as follows:

	2020 NUMBER OF RIGHTS	2019 NUMBER OF RIGHTS
At 1 January	**13,484,807**	12,630,099
Granted	**3,999,178**	7,220,150
Dividends attaching	**357,956**	408,101
Vested and transferred to employees	**(2,827,980)**	(4,994,517)
Forfeited	**(1,766,721)**	(1,779,026)
At 31 December	**13,247,240**	13,484,807
Weighted average share price at date of vesting of conditional rights during the year	**A$13.10**	A$12.45
Weighted average fair value of conditional rights granted during the year	**A$12.35**	A$11.93

8.5.3 Fair value of conditional rights

The fair value of conditional rights granted during the year was determined using the following significant assumptions:

		2020	2019
Five-day volume weighted average price of instrument at grant date	A$	**7.49–14.91**	11.88–12.77
Expected volatility	%	**21–24**	21–22
Risk-free rate	%	**0.18–0.68**	0.67–1.79
Expected life of instrument	Years	**0.1–5.0**	0.1–5.0

The fair value is determined using appropriate models including Monte Carlo simulations, depending on the vesting conditions. Some of the assumptions used may be based on historical data which is not necessarily indicative of future trends. Reasonable changes in these assumptions would not have a material impact on the Group's financial statements.

8.5.4 Employee options

The market value of all shares underlying the options at the balance date is A$0.1 million (2019 A$0.2 million). During 2020, no options were cancelled or forfeited. At 31 December 2020, 17,000 remained (excluding notional dividends). The options were issued to employees in 2004 in lieu of shares under the Plan. The options vested immediately and are exercisable until March 2024.

8.5.5 Share-based payment expense

Total expenses arising from share-based payment awards under the Plan amounted to $20 million (2019 $38 million). These amounts are included in underwriting and other expenses.

8.5.6 Shares purchased on-market

The Group may purchase shares on-market to satisfy entitlements under employee share schemes. The Group acquired 0.2 million (2019 four million) such shares during the period at an average price of A$13.18 (2019 A$12.14).

How we account for the numbers

The fair value of the employee services received in exchange for the grant of equity-settled instruments is recognised as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the instruments granted, excluding the impact of any non-market vesting conditions. The impacts of non-market vesting conditions are included in assumptions about the number of instruments that are expected to become exercisable.

The fair value of each instrument is recognised evenly over the service period ending at the vesting date; however, at each balance date, the Group revises its estimates of the number of instruments that are expected to become exercisable due to the achievement of non-market vesting conditions. The Group recognises the impact of the revision of original estimates, if any, in profit or loss with a corresponding adjustment to equity.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

8. OTHER

8.6 Key management personnel

Overview

AASB 124 *Related Party Disclosures* requires disclosure of the compensation of directors (executive and non-executive) and those persons having authority and responsibility for planning, directing and controlling the activities of the Group, either directly or indirectly. This group is collectively defined as key management personnel. Additional details in respect of key management personnel and their remuneration are shown in the Remuneration Report.

	2020 US$000	2019 US$000
Short-term employee benefits	**10,060**	15,565
Post-employment benefits	**162**	167
Other long-term employment benefits	**38**	122
Share-based payments	**2,793**	7,617
Termination benefits	**622**	1,383
	13,675	24,854

How we account for the numbers

Short-term employee benefits – profit sharing and bonus plans

A provision is recognised for profit sharing and bonus plans where there is a contractual obligation or where past practice has created a constructive obligation at the end of each reporting period. Bonus or profit sharing obligations are settled within 12 months from the balance date.

Post-employment benefits – defined contribution plans

Defined contribution plans are post-employment benefit plans under which an entity pays a fixed contribution into a fund during the course of employment and has no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods. Contributions to defined contribution plans are expensed as incurred.

Other long-term employee employment benefits

The liabilities for long service leave and annual leave are recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using high quality corporate bond yields with terms and currencies that match, as closely as possible, the estimated future cash outflows. Remeasurements as a result of experience adjustments and changes in actuarial assumptions are recognised in profit or loss.

Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date or when an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the date when the Group:

- can no longer withdraw the offer of those benefits; and
- recognises costs for a restructuring that is within the scope of AASB 137 *Provisions, Contingent Liabilities and Contingent Assets* and involves the payment of termination benefits.

In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to present value.

8.7 Defined benefit plans

Overview

Defined benefit plans are post-employment plans which provide benefits to employees on retirement, disability or death. The benefits are based on years of service and an average salary calculation. Contributions are made to cover the current cash outflows from the plans and a liability is recorded to recognise the estimated accrued but not yet funded obligations.

		FAIR VALUE OF PLAN ASSETS		PRESENT VALUE OF PLAN OBLIGATIONS		NET RECOGNISED SURPLUSES (DEFICITS)	
	DATE OF LAST ACTUARIAL ASSESSMENT	2020 US$M	2019 US$M	2020 US$M	2019 US$M	2020 US$M	2019 US$M
Defined benefit plan surpluses							
Iron Trades Insurance staff trust	31 Dec 2020	**363**	330	**(299)**	(285)	**64**	45
Defined benefit plan deficits							
Janson Green final salary superannuation scheme[1]	31 Dec 2020	**209**	186	**(208)**	(202)	**1**	(16)
QBE the Americas plan[1]	31 Dec 2020	**258**	248	**(259)**	(255)	**(1)**	(7)
Other plans[2]	31 Dec 2020	**44**	41	**(65)**	(60)	**(21)**	(19)
		511	475	**(532)**	(517)	**(21)**	(42)

1 Defined benefit plan obligations are funded.
2 Other plans includes $12 million (2019 $12 million) of defined benefit post-employment plan obligations that are not funded.

The measurement of assets and liabilities in defined benefit plans makes it necessary to use assumptions about discount rates, expected future salary increases, investment returns, inflation and life expectancy. If actual outcomes differ materially from actuarial assumptions, this could result in a significant change in employee benefit expense recognised in profit or loss or in actuarial remeasurements recognised in other comprehensive income, together with the defined benefit assets and liabilities recognised in the balance sheet.

The Group does not control the investment strategies of defined benefit plans; they are managed by independent trustees. Nonetheless, the Group has agreed, as part of ongoing funding arrangements, that the trustees should manage their strategic asset allocation in order to minimise the risk of material adverse impact. In particular, the Group has agreed with the trustees to reduce the level of investment risk by investing in assets that match, where possible, the profile of the liabilities. This involves holding a mixture of government and corporate bonds. The Group believes that due to the long-term nature of the plan liabilities, a level of continuing equity investment is also appropriate.

The charge recognised in profit or loss in the year of $3 million (2019 $2 million) is included in underwriting expenses. Total employer contributions expected to be paid to the various plans in 2021 amount to $1 million.

How we account for the numbers

The surplus or deficit recognised in the balance sheet in respect of defined benefit plans is the present value of the defined benefit obligation at the balance date less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high quality corporate or government bonds that are denominated in the currency in which the benefits will be paid, and that have a term to maturity approximating the term of the related superannuation liability. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in the period in which they occur, and are recognised in other comprehensive income. Past service costs are recognised immediately in profit or loss.

Notes to the financial statements continued

FOR THE YEAR ENDED 31 DECEMBER 2020

8. OTHER

8.8 Remuneration of auditors

Overview

QBE may engage the external auditor for non-audit services other than excluded services subject to the general principle that fees for non-audit services should not exceed 50% of all fees paid to the external auditor in any one financial year. The Board believes some non-audit services are appropriate given the external auditor's knowledge of the Group. External tax services are generally provided by an accounting firm other than the external auditor. Consistent with prior periods, the external auditor cannot provide the excluded services of preparing accounting records or financial reports or acting in a management capacity.

	2020 US$000	2019 US$000
PricewaterhouseCoopers (PwC) Australian firm		
Audit or review of financial reports of the ultimate parent entity	**1,868**	1,694
Audit of financial reports of controlled entities	**1,805**	1,895
Audit of statutory returns	**483**	533
Other assurance services	**920**	194
Taxation services	**32**	39
Advisory services	**505**	214
	5,613	4,569
Related practices of PwC Australian firm (including overseas PwC firms)		
Audit of financial reports of controlled entities	**9,654**	8,831
Audit of statutory returns	**2,824**	2,747
Other assurance services	**130**	72
Taxation services	**74**	240
Advisory services	**102**	839
	12,784	12,729
	18,397	17,298
Audit and assurance services	**17,684**	15,966
Other services	**713**	1,332
	18,397	17,298
Other auditors		
Audit of financial reports of controlled entities	**15**	44

8.9 Ultimate parent entity information

Overview

The *Corporations Act 2001* requires the disclosure of summarised financial information relating to the ultimate parent entity, QBE Insurance Group Limited.

8.9.1 Summarised financial data of QBE Insurance Group Limited (the Company)

	2020 US$M	2019 US$M
(Loss) profit after income tax	**(78)**	343
Other comprehensive loss	**(1,011)**	(13)
Total comprehensive income (loss)	**(1,089)**	330
Assets due within 12 months[1]	**1,366**	700
Shares in controlled entities	**14,860**	12,993
Total assets	**16,226**	13,693
Liabilities payable within 12 months[2]	**504**	714
Borrowings	**3,016**	2,897
Total liabilities	**3,520**	3,611
Net assets	**12,706**	10,082
Share capital	**10,273**	7,594
Treasury shares held in trust	**(1)**	(1)
Foreign currency translation reserve	**116**	113
Other reserves	**315**	6
Retained profits	**2,003**	2,370
Total equity	**12,706**	10,082

1 Includes amounts due from QBE companies of $977 million (2019 $306 million).
2 Includes amounts due to QBE companies of $255 million (2019 $676 million).

8.9.2 Guarantees and contingent liabilities

	2020 US$M	2019 US$M
Support of the Group's participation in Lloyd's	**2,085**	1,848
Support of other insurance operations of controlled entities	**2,187**	2,491
Guarantees to investors in subordinated debt[1]	**1,443**	1,429

1 Excludes subordinated debt owned by the ultimate parent entity.

8.9.3 Tax consolidation legislation

The accounting in relation to the legislation is set out in note 6.2.4. On adoption of the tax consolidation legislation, the directors of the Company and its wholly-owned Australian controlled entities entered into a tax sharing and tax funding agreement that requires the Australian entities to fully compensate the Company for current tax liabilities and to be fully compensated by the Company for any current tax or deferred tax assets in respect of tax losses arising from external transactions occurring after the date of implementation of the tax consolidation legislation. The contributions are allocated by reference to the notional taxable income of each Australian entity.

Details of franking credits available to shareholders are shown in note 5.4.

How we account for the numbers

The financial information of the ultimate parent entity of the Group has been prepared on the same basis as the consolidated financial report except for shares in controlled entities, which are recorded at cost less any provision for impairment.

Directors' declaration

FOR THE YEAR ENDED 31 DECEMBER 2020

In the directors' opinion:

(a) the financial statements and notes set out on pages 80 to 155 are in accordance with the *Corporations Act 2001*, including:

- (i) complying with accounting standards, the *Corporations Regulations 2001* and other mandatory professional reporting requirements; and
- (ii) giving a true and fair view of the Group's financial position as at 31 December 2020 and of its performance for the financial year ended on that date; and

(b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Note 1.2.1 confirms that the financial statements comply with International Financial Reporting Standards as issued by the International Accounting Standards Board.

The directors have been given the declarations by the Interim Group Chief Executive Officer and Group Chief Financial Officer required by section 295A of the *Corporations Act 2001* and as recommended under the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations.

Signed in Sydney this 19th day of February 2021 in accordance with a resolution of the directors.

Michael Wilkins AO
Director

John M Green
Director

Independent auditor's report

TO THE MEMBERS OF QBE INSURANCE GROUP LIMITED

Report on the audit of the Financial Report

Our opinion

In our opinion:

The accompanying Financial Report of QBE Insurance Group Limited (the Company) and its controlled entities (together the Group) is in accordance with the *Corporations Act 2001*, including:

- giving a true and fair view of the Group's financial position as at 31 December 2020 and of its financial performance for the year then ended
- complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

What we have audited

The Group Financial Report comprises:

- the consolidated balance sheet as at 31 December 2020
- the consolidated statement of comprehensive income for the year then ended
- the consolidated statement of changes in equity for the year then ended
- the consolidated statement of cash flows for the year then ended
- the notes to the financial statements, which include significant accounting policies and other explanatory information
- the directors' declaration.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the Financial Report* section of our report.

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

Independence

We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional & Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the Financial Report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

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Independent auditor's report

TO THE MEMBERS OF QBE INSURANCE GROUP LIMITED

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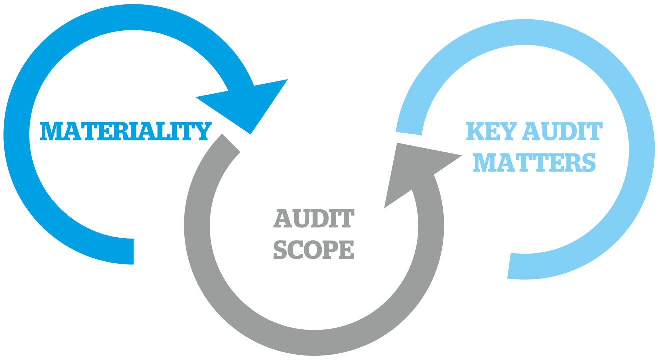
Our audit approach

An audit is designed to provide reasonable assurance about whether the Financial Report is free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Financial Report.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the Financial Report as a whole, taking into account the geographic and management structure of the Group, its accounting processes and controls and the industry in which it operates.



Materiality

- For the purpose of our audit we used overall Group materiality of US$57.8 million, which represents approximately 0.5% of the Group's net earned premium.
- We applied this threshold, together with qualitative considerations, to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the Financial Report as a whole.
- We chose Group net earned premium because, in our view, it is a key financial statement metric used in assessing the performance of the Group and is not as volatile as other profit or loss measures.
- We utilised a 0.5% threshold based on our professional judgement, noting it is within the range of commonly acceptable thresholds.

Audit scope

- Our audit focused on where the Group made subjective judgements; for example, significant accounting estimates involving assumptions and inherently uncertain future events.
- We conducted an audit of the most financially significant components, being the Australia Pacific, International and North America divisions. In addition, we performed specified risk focused audit procedures in relation to the captive reinsurer, Equator Re, and other head office entities. Further audit procedures were performed over the consolidation process.
- We determined the level of involvement we needed to have in the audit work performed by component auditors to be satisfied that sufficient audit evidence had been obtained for the purposes of our opinion.
- We kept in regular communication with component auditors throughout the year with conference calls and written instructions.
- We also ensured that our team, including the component auditors across the Group, possessed the appropriate skills and competencies needed for the audit of a complex global insurer. This included industry expertise as well as specialists and experts in IT, actuarial, tax and valuations.

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Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Report for the current period. The key audit matters were addressed in the context of our audit of the Financial Report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Further, any commentary on the outcomes of a particular audit procedure is made in that context. We communicated the key audit matters to the Audit Committee.

Key audit matter	How our audit addressed the key audit matter

Valuation of net outstanding claims liability

(Refer to note 2.3) US$17,334 million

The liability for outstanding claims relates to claims incurred during the year or prior periods, net of any reinsurance recoveries.

The liability for outstanding claims is estimated by the Group as a central estimate but, as is the case with any accounting estimate, there is a risk that the ultimate claims paid will differ from the initial estimate. A risk margin is therefore applied by the Group to reflect the uncertainty in the estimate. The central estimate and risk margin combined, which are estimated based on judgements and actuarial expertise, are intended to achieve a probability of adequacy within the Group's desired range of 87.5% - 92.5%, being the estimated overall sufficiency of reserves to pay future claims.

We considered the valuation of net outstanding claims liability a key audit matter due to:

- The significant judgement required by the Group and the inherent uncertainty in estimating the expected future payments for claims incurred, including those not yet reported.
- The uncertainty related to catastrophe events, particularly those occurring closer to year end, and in relation to classes of business where there is a greater length of time between the initial claim event and settlement, because of the inherent difficulty in assessing amounts until further evidence is available.
- The uncertainty created by the COVID-19 pandemic on particular classes of business including property business interruption, credit exposed lines and certain long-tail classes that may experience heightened claims activity due to increased risk from economic impacts and other factors.
- Models used to calculate the net outstanding claims liability across the Group are complex and judgement is applied in determining the appropriate construct of the models.
- The higher degree of auditor subjectivity and effort in performing procedures and evaluating audit evidence related to significant assumptions, particularly patterns of claims incidence, reporting and payment.
- The audit effort required the use of experts with specialised skills and knowledge.

Together with PwC actuarial experts, our procedures included:

Gross discounted central estimate

- Evaluating the design of the Group's relevant controls over the claims reserving process and assessing whether a sample of these controls operated effectively throughout the year.
- Evaluating whether the Group's actuarial methodologies were consistent with recognised practices and with prior periods.
- Evaluating the appropriateness and reliability of data used to derive the central estimate, including testing a sample of case estimates and settlements by agreeing to underlying documentation.
- Assessing the reasonableness of significant actuarial assumptions such as patterns of claims incidence, reporting and payment, focusing on those classes of business which present a higher risk and in particular those impacted by the COVID-19 pandemic. We assessed these assumptions by comparing them with our expectations based on the Group's experience, current trends and benchmarks, and our own industry knowledge.
- Testing the discount assumptions applied through evaluating the yield curves and claims payment patterns. This included comparing the rates applied to external market data and the payment patterns to historical information.

Reinsurance and recoveries

- Evaluating a sample of reinsurance recoveries held by divisions and the Group against underlying contracts to assess the existence of cover and appropriateness of their recognition, including inspecting relevant legal advice obtained by the Group.
- Assessing the recoverability of the reinsurance recoveries by considering the payment history and credit worthiness of reinsurer counterparties for a sample of reinsurance recoveries.

Independent auditor's report

TO THE MEMBERS OF QBE INSURANCE GROUP LIMITED

Key audit matter	How our audit addressed the key audit matter
	Risk margin and probability of adequacy • Assessing the Group's approach to setting the risk margin in accordance with the requirements of Australian Accounting Standards, with a focus on the assessed level of uncertainty in the net central estimate leading to a change in the margin year on year. • Considering the Group's key judgements about the variability of each class of business underwritten and the extent of correlation within each division based on the Group's experience and prior periods. • Evaluating the Group's actuarial calculation of the probability of adequacy for reasonableness and consistency with previous valuations. This included developing an understanding of and testing the actuarial techniques applied by the Group and comparing the results with industry approach. We also considered the reasonableness of the Group's disclosures against the requirements of Australian Accounting Standards.
Carrying value of goodwill **(Refer to note 7.2.1) US$2,107 million** An impairment assessment is performed annually by the Group, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. Potential impairment is identified by comparing the value-in-use of a cash-generating unit (CGU) to its carrying value, including goodwill. The value-in-use for each of the CGUs is estimated by the Group using a discounted cash flow model which includes significant judgements and assumptions relating to cash flow projections, investment returns, terminal growth rates, and discount rates. The impairment test for the North America CGU resulted in an impairment charge of US$390 million for the Group. We considered the carrying value of goodwill a key audit matter due to: • The inherent estimation uncertainty and subjectivity in judgements in a number of assumptions, including cash flow projections, investment returns, terminal growth rates and discount rates. • Models used to calculate value-in-use are complex and judgement is applied in determining the appropriate construct of the models. • The higher degree of auditor subjectivity and effort in performing procedures and evaluating audit evidence related to significant assumptions, particularly cash flow projections. • The audit effort required the use of experts with specialised skills and knowledge.	Our procedures included: • Evaluating the determination and composition of the CGUs to which goodwill is allocated. • Evaluating the appropriateness of the value-in-use methodology based on the requirements of Australian Accounting Standards. • Developing an understanding of the process by which the cash flow projections were developed and comparing the cash flows included in the impairment assessment with the three year business plan presented to the Board. • Evaluating the reasonableness of significant assumptions used to derive the cash flow projections, with a particular focus on the impact of the COVID-19 pandemic, by comparing to external market and industry data where available, and current and past performance of the CGUs. • Together with PwC valuation experts, we: – Assessed the consistency of the terminal growth rates and investment returns with available external information. – Reperformed the calculation of the discount rates applied to cash flow projections, comparing key inputs (including risk-free-rate, market premium and unlevered beta) to industry or other benchmarks. • Testing the mathematical accuracy of the models which were used to determine the value-in-use of the CGUs. We also considered the reasonableness of the Group's disclosures against the requirements of Australian Accounting Standards.

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Key audit matter	How our audit addressed the key audit matter

Recoverability of deferred tax assets in the North America tax group
(Refer to note 6.2.1) US$295 million

The Group holds deferred tax assets comprised of carry forward tax losses and deductible temporary differences related to the North America tax group.

The Group performs a recoverability assessment at each balance date in order to evaluate the expected utilisation of the deferred tax assets. The assessment is largely dependent upon the future profitability of the North America CGU, as well as the period over which tax losses will be available for recovery, and the execution of any future tax planning strategies. The recoverability assessment resulted in a write down of the deferred tax assets of US$120 million for the Group.

We considered the recoverability of the deferred tax assets in the North America tax group a key audit matter due to:

- The inherent estimation uncertainty and subjectivity in judgements in a number of assumptions, including cash flow projections, investment returns, and terminal growth rates.
- The higher degree of auditor subjectivity and effort in performing procedures and evaluating audit evidence related to significant assumptions, particularly cash flow projections.

Our procedures included:

- Evaluating the reasonableness of the deferred tax assets recoverability assessment based on the requirements of Australian Accounting Standards with consideration of the “convincing other evidence” test under AASB 112 *Income Taxes*.
- Evaluating the reasonableness of significant assumptions used to derive the cash flow projections, with a particular focus on the impact of the COVID-19 pandemic, by comparing with external market and industry data where available, and current and past performance of the North America CGU.
- Comparing cash flow projections and other assumptions used in the deferred tax assets recoverability assessment to those used for the goodwill impairment assessment for the North America CGU.
- Testing the mathematical accuracy of the model which was used to determine the recoverability of the deferred tax assets.

We also considered the reasonableness of the Group’s disclosures against the requirements of Australian Accounting Standards.

Independent auditor's report

TO THE MEMBERS OF QBE INSURANCE GROUP LIMITED

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Key audit matter	How our audit addressed the key audit matter

Valuation of level 3 investments
(Refer to note 3.2.1) US$2,285 million

The Group held US$26,935 million of investments at 31 December 2020, of which US$2,285 million were classified as level 3 in accordance with AASB 13 *Fair Value Measurement*.

The Group exercises judgement in valuing level 3 investments as there are significant unobservable inputs as a result of market illiquidity or instrument complexity.

The level 3 investments held at fair value largely consist of infrastructure assets and debt, unlisted property trusts and private equity.

We considered the valuation of level 3 investments a key audit matter due to:

- The extent of judgement involved in determining the fair value of investments as a result of significant unobservable market inputs.
- The level of effort required in evaluating audit evidence obtained in relation to the valuation, and use of experts with specialised skills and knowledge.

Our procedures included:

- Evaluating the design of the Group's relevant controls over the investments process and assessing whether a sample of these controls operated effectively throughout the year.
- Evaluating the appropriateness of the valuation methodologies used against the requirements of Australian Accounting Standards.
- For infrastructure debt, we compared the Group's calculation of fair value with our own calculation. Together with PwC valuation experts, this included sourcing independent inputs from market data providers and using our own valuation models.
- For infrastructure assets and unlisted property trusts where the Group determines the fair value with reference to external information, we:
  - Compared the price used by the Group to the 31 December 2020 price quoted by the fund manager.
  - Obtained the most recent audited financial statements of the relevant funds and evaluated the reliability and accuracy of past statements.
  - Inspected the most recent reports provided by the fund manager setting out the controls in place at the fund manager, and that included an independent audit opinion over the design and operating effectiveness of those controls, where available.
- For private equity, together with PwC valuation experts, we assessed the appropriateness of the methodology and key inputs used in the valuation model with reference to external information, where available.

We also considered the reasonableness of the Group's disclosures against the requirements of Australian Accounting Standards.

Key audit matter	How our audit addressed the key audit matter
Operation of IT systems and controls The Group's operations and financial reporting systems are heavily dependent on IT systems, including automated accounting procedures and IT dependent manual controls. The Group's controls over IT systems include: • The framework of governance over IT systems. • Controls over program development and changes. • Controls over access to programs, data and IT operations. • Governance over generic and privileged user accounts. We considered this a key audit matter given the reliance on the IT systems in the financial reporting process and the impact on relevant controls we seek to rely on as part of our audit.	Our procedures included: • Evaluating the design, and testing the operating effectiveness, of certain controls over the continued integrity of the IT systems that are relevant to financial reporting. Where we identified design and operating effectiveness issues relating to IT systems or application controls relevant to our audit, we performed alternative audit procedures. • Assessing the operation of key applications to establish the accuracy of selected calculations, the correct generation of certain reports, and to evaluate the correct operation of selected automated controls and technology-dependent manual controls. • Where technology services were provided by a third party, we considered assurance reports from the third party's auditor on the design and operating effectiveness of controls.

Other information

The directors are responsible for the other information. The other information comprises the information included in the Annual Report for the year ended 31 December 2020, but does not include the Financial Report and our auditor's report thereon.

Our opinion on the Financial Report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the Financial Report

The directors of the Company are responsible for the preparation of the Financial Report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the Financial Report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the Financial Report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Report

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

A further description of our responsibilities for the audit of the Financial Report is located at the Auditing and Assurance Standards Board website at: https://www.auasb.gov.au/admin/file/content102/c3/ar1_2020.pdf. This description forms part of our auditor's report.