

Consolidated income statement

For the year ended 31 December 2019

	Notes	2019 \$million	restated ¹ 2018 \$million
Interest income		16,549	15,150
Interest expense		(8,882)	(7,355)
Net interest income	3	7,667	7,795
Fees and commission income		4,111	4,029
Fees and commission expense		(589)	(537)
Net fee and commission income	4	3,522	3,492
Net trading income	5	3,350	2,681
Other operating income	6	878	821
Operating income		15,417	14,789
Staff costs		(7,122)	(7,074)
Premises costs		(420)	(790)
General administrative expenses		(2,211)	(2,926)
Depreciation and amortisation		(1,180)	(857)
Operating expenses	7	(10,933)	(11,647)
Operating profit before impairment losses and taxation		4,484	3,142
Credit impairment	8	(908)	(653)
Goodwill impairment	9	(27)	–
Other impairment	9	(136)	(182)
Profit from associates and joint ventures	32	300	241
Profit before taxation		3,713	2,548
Taxation	10	(1,373)	(1,439)
Profit for the year		2,340	1,109
Profit attributable to:			
Non-controlling interests	29	37	55
Parent company shareholders		2,303	1,054
Profit for the year		2,340	1,109
		cents	cents
Earnings per share:			
Basic earnings per ordinary share	12	57.0	18.7
Diluted earnings per ordinary share	12	56.4	18.5

¹ Refer to Accounting policies section (Note 1). The Group has changed its accounting policies for net interest income and net trading income

The notes on pages 262 to 377 form an integral part of these financial statements.

Consolidated statement of comprehensive income

For the year ended 31 December 2019

	Notes	2019 \$million	2018 \$million
Profit for the year		2,340	1,109
Other comprehensive (loss)/income			
Items that will not be reclassified to income statement:		(531)	382
Own credit (losses)/gains on financial liabilities designated at fair value through profit or loss		(462)	394
Equity instruments at fair value through other comprehensive income		13	36
Actuarial losses on retirement benefit obligations	30	(124)	(19)
Taxation relating to components of other comprehensive income	10	42	(29)
Items that may be reclassified subsequently to income statement:		131	(1,189)
Exchange differences on translation of foreign operations:			
Net losses taken to equity		(386)	(1,462)
Net gains on net investment hedges		191	282
Share of other comprehensive income from associates and joint ventures		25	33
Debt instruments at fair value through other comprehensive income:			
Net valuation gains/(losses) taken to equity		555	(128)
Reclassified to income statement		(170)	31
Net impact of expected credit losses		7	—
Cashflow hedges:			
Net (losses)/gains taken to equity		(64)	34
Reclassified to income statement	14	21	7
Taxation relating to components of other comprehensive income	10	(48)	14
Other comprehensive loss for the year, net of taxation		(400)	(807)
Total comprehensive income for the year		1,940	302
Total comprehensive income attributable to:			
Non-controlling interests	29	20	34
Parent company shareholders		1,920	268
Total comprehensive income for the year		1,940	302

Consolidated balance sheet

As at 31 December 2019

	Notes	2019 \$million	2018 \$million
Assets			
Cash and balances at central banks	13,35	52,728	57,511
Financial assets held at fair value through profit or loss	13	92,818	87,132
Derivative financial instruments	13,14	47,212	45,621
Loans and advances to banks ¹	13,15	53,549	61,414
Loans and advances to customers ²	13,15	268,523	256,557
Investment securities	13	143,731	125,901
Other assets	20	42,022	35,401
Current tax assets	10	539	492
Prepayments and accrued income		2,700	2,505
Interests in associates and joint ventures	32	1,908	2,307
Goodwill and intangible assets	17	5,290	5,056
Property, plant and equipment	18	6,220	6,490
Deferred tax assets	10	1,105	1,047
Assets classified as held for sale	21	2,053	1,328
Total assets		720,398	688,762
Liabilities			
Deposits by banks	13	28,562	29,715
Customer accounts	13	405,357	391,013
Repurchase agreements and other similar secured borrowing	13,16	1,935	1,401
Financial liabilities held at fair value through profit or loss	13	66,974	60,700
Derivative financial instruments	13,14	48,484	47,209
Debt securities in issue	13,22	53,025	46,454
Other liabilities	23	41,583	38,309
Current tax liabilities	10	703	676
Accruals and deferred income		5,369	5,393
Subordinated liabilities and other borrowed funds	13,27	16,207	15,001
Deferred tax liabilities	10	611	563
Provisions for liabilities and charges	24	449	1,330
Retirement benefit obligations	30	469	399
Liabilities included in disposal groups held for sale	21	9	247
Total liabilities		669,737	638,410
Equity			
Share capital and share premium account	28	7,078	7,111
Other reserves		11,685	11,878
Retained earnings		26,072	26,129
Total parent company shareholders' equity		44,835	45,118
Other equity instruments	28	5,513	4,961
Total equity excluding non-controlling interests		50,348	50,079
Non-controlling interests	29	313	273
Total equity		50,661	50,352
Total equity and liabilities		720,398	688,762

1 Reverse repurchase agreements and other similar secured lending balances held at amortised cost of \$1,341 million (31 December 2018: \$3,815 million) have been included with loans and advances to banks

2 Reverse repurchase agreements and other similar secured lending balances held at amortised cost of \$1,469 million (31 December 2018: \$3,151 million) have been included with loans and advances to customers

The notes on pages 262 to 377 form an integral part of these financial statements.

These financial statements were approved by the Board of directors and authorised for issue on 27 February 2020 and signed on its behalf by:



José Viñals
Chairman



Bill Winters
Group Chief Executive



Andy Halford
Group Chief Financial Officer

Consolidated statement of changes in equity

For the year ended 31 December 2019

	Ordinary share capital and share premium account \$million	Preference share capital and share premium account \$million	Capital and merger reserves \$million	Own credit adjustment reserve \$million	Fair value through other comprehensive income reserve – debt \$million	Fair value through other comprehensive income reserve – equity \$million	Cash flow hedge reserve \$million	Translation reserve \$million	Retained earnings \$million	Parent company shareholders' equity \$million	Other equity instruments \$million	Non-controlling interests \$million	Total \$million
As at 1 January 2018	5,603	1,494	17,129 ¹	54	(77)	53	(45)	(4,454)	25,895	45,652	4,961	333	50,946
Profit after tax	–	–	–	–	–	–	–	–	1,054	1,054	–	55	1,109
Other comprehensive income/(loss)	–	–	–	358	(84)	67	35	(1,158)	(4) ²	(786)	–	(21)	(807)
Distributions	–	–	–	–	–	–	–	–	–	–	–	(97)	(97)
Shares issued, net of expenses ³	14	–	–	–	–	–	–	–	–	14	–	–	14
Treasury shares purchased	–	–	–	–	–	–	–	–	(8)	(8)	–	–	(8)
Treasury shares issued	–	–	–	–	–	–	–	–	9	9	–	–	9
Share option expense, net of taxation	–	–	–	–	–	–	–	–	158	158	–	–	158
Dividends on ordinary shares	–	–	–	–	–	–	–	–	(539)	(539)	–	–	(539)
Dividends on preference shares and AT1 securities	–	–	–	–	–	–	–	–	(436)	(436)	–	–	(436)
Other movements	–	–	–	–	–	–	–	–	–	–	–	3 ⁴	3
As at 31 December 2018	5,617	1,494	17,129	412	(161)	120	(10)	(5,612)	26,129	45,118	4,961	273	50,352
Profit after tax	–	–	–	–	–	–	–	–	2,303	2,303	–	37	2,340
Other comprehensive (loss)/income	–	–	–	(410)	358	30	(49)	(180)	(132) ²	(383)	–	(17)	(400)
Distributions	–	–	–	–	–	–	–	–	–	–	–	(35)	(35)
Shares issued, net of expenses ³	25	–	–	–	–	–	–	–	–	25	–	–	25
Other equity instruments issued, net of expenses	–	–	–	–	–	–	–	–	–	–	552	–	552
Treasury shares purchased	–	–	–	–	–	–	–	–	(206)	(206)	–	–	(206)
Treasury shares issued	–	–	–	–	–	–	–	–	7	7	–	–	7
Share option expense, net of taxation	–	–	–	–	–	–	–	–	139	139	–	–	139
Dividends on ordinary shares	–	–	–	–	–	–	–	–	(720)	(720)	–	–	(720)
Dividend on preference shares and AT1 securities	–	–	–	–	–	–	–	–	(448)	(448)	–	–	(448)
Share buy-back ⁵	(58)	–	58	–	–	–	–	–	(1,006)	(1,006)	–	–	(1,006)
Other movements	–	–	–	–	–	–	–	–	6⁶	6	–	55⁷	61
As at 31 December 2019	5,584	1,494	17,187	2	197	150	(59)	(5,792)	26,072	44,835	5,513	313	50,661

1 Includes capital reserve of \$5 million, capital redemption reserve of \$13 million and merger reserve of \$17,111 million

2 Comprises actuarial loss, net of taxation and share from associates and joint ventures \$132 million (\$4 million for the year ending 31 December 2018)

3 Comprises share capital of shares issued to fulfil discretionary awards \$1 million, share capital of shares issued to fulfil employee share save options \$1 million (\$5 million for the year ended 31 December 2018) and share premium of shares issued to fulfil employee Sharesave options exercised \$23 million (\$9 million for the year ended 31 December 2018)

4 Movement is mainly due to additional share capital issued by Standard Chartered Bank Angola S.A. subscribed by its non-controlling interest without change in shareholding percentage

5 On 1 May 2019, the Group commenced a share buy-back of its ordinary shares of \$0.50 each up to a maximum consideration of \$1,000 million. Nominal value of share purchases is \$58 million for the year ended 31 December 2019 and the total consideration paid was \$1,006 million which includes share buy-back expenses of \$6 million. The total number of shares purchased was 116,103,483 representing 3.51% of the ordinary shares in issue. The nominal value of the shares was transferred from the share capital to the capital redemption reserve account

6 Comprises \$10 million disposal of non-controlling interest of Phoon Huat Pte Ltd offset by \$4 million withholding tax on capitalisation of revenue reserves for Standard Chartered Bank Ghana Limited

7 Comprises \$72 million of non-controlling interest in SC Digital Solutions offset by \$17 million disposal of non-controlling interest in Phoon Huat Pte Ltd, Sirat Holdings Limited and Ori Private Limited

Note 28 includes a description of each reserve.

The notes on pages 262 to 377 form an integral part of these financial statements.

Cash flow statement

For the year ended 31 December 2019

	Notes	Group		Company	
		2019 \$million	2018 \$million	2019 \$million	2018 \$million
Cash flows from operating activities:					
Profit before taxation		3,713	2,548	22,306	790
Adjustments for non-cash items and other adjustments included within income statement	34	2,417	2,635	(16,760)	232
Change in operating assets	34	(35,285)	(12,837)	(5,473)	61
Change in operating liabilities	34	29,935	33,859	(4,182)	(462)
Contributions to defined benefit schemes	30	(137)	(143)	–	–
UK and overseas taxes paid	10	(1,421)	(770)	–	–
Net cash (used in)/from operating activities		(778)	25,292	(4,109)	621
Cash flows from investing activities:					
Purchase of property, plant and equipment	18	(219)	(171)	–	–
Disposal of property, plant and equipment		119	85	–	–
Dividends received from subsidiaries, associates and joint ventures	32	3	67	4,494	1,035
Disposal of subsidiaries		–	7	–	–
Purchase of investment securities		(259,473)	(276,388)	(7,583)	–
Disposal and maturity of investment securities		241,600	263,983	1,065	621
Net cash (used in)/from investing activities		(17,970)	(12,417)	(2,024)	1,656
Cash flows from financing activities:					
Issue of ordinary and preference share capital, net of expenses	28	577	14	577	14
Exercise of share options		7	9	7	9
Purchase of own shares		(206)	(8)	(206)	(8)
Cancellation of shares including share buy-back		(1,006)	–	(1,006)	–
Premises and equipment lease liability principal payment		(332)	–	–	–
Gross proceeds from issue of subordinated liabilities	34	1,000	500	1,000	500
Interest paid on subordinated liabilities	34	(603)	(602)	(547)	(507)
Repayment of subordinated liabilities	34	(23)	(2,097)	–	(474)
Proceeds from issue of senior debts	34	9,169	9,766	6,012	4,552
Repayment of senior debts	34	(7,692)	(7,030)	(3,780)	(3,141)
Interest paid on senior debts	34	(797)	(507)	(740)	(355)
Investment from non-controlling interests		56	–	–	–
Dividends paid to non-controlling interests, preference shareholders and AT1 securities		(483)	(533)	(448)	(436)
Dividends paid to ordinary shareholders		(720)	(539)	(720)	(539)
Net cash (used in)/from financing activities		(1,053)	(1,027)	149	(385)
Net (decrease)/increase in cash and cash equivalents		(19,801)	11,848	(5,984)	1,892
Cash and cash equivalents at beginning of the year		97,500	87,231	17,606	15,714
Effect of exchange rate movements on cash and cash equivalents		(245)	(1,579)	–	–
Cash and cash equivalents at end of the year	35	77,454	97,500	11,622	17,606

Company balance sheet

As at 31 December 2019

	Notes	2019 \$million	2018 \$million
Non-current assets			
Investments in subsidiary undertakings	32	58,037	34,853
Current assets			
Derivative financial instruments	39	229	9
Financial assets held at fair value through profit or loss	39	4,502	–
Investment securities	39	13,665	11,537
Amounts owed by subsidiary undertakings	39	11,622	17,606
Taxation		15	12
Total current assets		30,033	29,164
Current liabilities			
Derivative financial instruments	39	738	1,128
Amounts owed to subsidiary undertakings		26	–
Financial liabilities held at fair value through profit or loss	39	112	–
Other creditors		403	403
Total current liabilities		1,279	1,531
Net current assets		28,754	27,633
Total assets less current liabilities		86,791	62,486
Non-current liabilities			
Debt securities in issue	39	19,713	17,202
Subordinated liabilities and other borrowed funds	39	14,588	13,436
Total non-current liabilities		34,301	30,638
Total assets less liabilities		52,490	31,848
Equity			
Share capital and share premium account	28	7,078	7,111
Other reserves		17,177	17,129
Retained earnings		22,722	2,647
Total shareholders' equity		46,977	26,887
Other equity instruments	28	5,513	4,961
Total equity		52,490	31,848

The Company has taken advantage of the exemption in section 408 of the Companies Act 2006 not to present its individual statement of comprehensive income and related notes that form a part of these financial statements. The Company profit for the year after tax is \$22,309 million (31 December 2018: \$799 million). Please see Note 39 Standard Chartered PLC (Company) for details of the group reorganisation.

The notes on pages 262 to 377 form an integral part of these financial statements.

These financial statements were approved by the Board of directors and authorised for issue on 27 February 2020 and signed on its behalf by:

José Viñals
Chairman

Bill Winters
Group Chief Executive

Andy Halford
Group Chief Financial Officer

Company statement of changes in equity

For the year ended 31 December 2019

	Share capital and share premium account \$million	Capital and merger reserve \$million	Own credit adjustment \$million	Retained earnings \$million	Other equity instruments \$million	Total \$million
As at 1 January 2018	7,097	17,129 ¹	–	2,664	4,961	31,851
Profit for the year	–	–	–	799	–	799
Shares issued, net of expenses	14	–	–	–	–	14
Treasury shares purchased	–	–	–	(8)	–	(8)
Treasury shares issued	–	–	–	9	–	9
Share option expense, net of taxation	–	–	–	158	–	158
Capitalised on scrip dividend	–	–	–	22	–	22
Dividends on ordinary shares	–	–	–	(561)	–	(561)
Dividends on preference share and AT1 securities	–	–	–	(436)	–	(436)
As at 31 December 2018	7,111	17,129	–	2,647	4,961	31,848
Profit for the year	–	–	–	22,309 ²	–	22,309
Other comprehensive loss	–	–	(10)	–	–	(10)
Shares issued, net of expenses	25	–	–	–	–	25
Other equity instruments issued, net of expenses	–	–	–	–	552	552
Treasury shares purchased	–	–	–	(206)	–	(206)
Treasury shares issued	–	–	–	7	–	7
Share option expense, net of taxation	–	–	–	139	–	139
Dividends on ordinary shares	–	–	–	(720)	–	(720)
Dividends on preference share and AT1 securities	–	–	–	(448)	–	(448)
Cancellation of shares including share buy-back ³	(58)	58	–	(1,006)	–	(1,006)
As at 31 December 2019	7,078	17,187	(10)	22,722	5,513	52,490

1 Includes capital reserve of \$5 million, capital redemption reserve of \$13 million and merger reserve of \$17,111 million

2 Includes dividend received of \$20,989 million from Standard Chartered Holding Limited. Of this amount, \$17,978 million was a dividend in specie of Standard Chartered Bank (Hong Kong) Limited and Standard Chartered Bank (China) Limited, while \$3,010 million was a cash dividend related to the sale of Standard Chartered NEA Limited and Standard Chartered Bank (Taiwan) Limited

3 On 1 May 2019, the Group commenced a share buy-back of its ordinary shares of \$0.50 each up to a maximum consideration of \$1,000 million. Nominal value of share purchases is \$58 million for the year ended 31 December 2019 and the total consideration paid was \$1,006 million which includes share buy-back expenses of \$6 million. The total number of shares purchased was 116,103,483 representing 3.51 per cent of the ordinary shares in issue. The nominal value of the shares was transferred from the share capital to the capital redemption reserve account

Note 28 includes a description of each reserve.

The notes on pages 262 to 377 form an integral part of these financial statements.

Contents – Notes to the financial statements

Section	Note	Page
Basis of preparation	1 Accounting policies	262
Performance/return	2 Segmental information	265
	3 Net interest income	270
	4 Net fees and commission	271
	5 Net trading income	272
	6 Other operating income	273
	7 Operating expenses	273
	8 Credit impairment	274
	9 Other impairment	278
	10 Taxation	279
	11 Dividends	283
	12 Earnings per ordinary share	284
Assets and liabilities held at fair value	13 Financial instruments	285
	14 Derivative financial instruments	308
Financial instruments held at amortised cost	15 Loans and advances to banks and customers	318
	16 Reverse repurchase and repurchase agreements including other similar lending and borrowing	318
Other assets and investments	17 Goodwill and intangible assets	320
	18 Property, plant and equipment	323
	19 Leased assets	325
	20 Other assets	326
	21 Assets held for sale and associated liabilities	326
Funding, accruals, provisions, contingent liabilities and legal proceedings	22 Debt securities in issue	329
	23 Other liabilities	330
	24 Provisions for liabilities and charges	330
	25 Contingent liabilities and commitments	331
	26 Legal and regulatory matters	332
Capital instruments, equity and reserves	27 Subordinated liabilities and other borrowed funds	333
	28 Share capital, other equity instruments and reserves	334
	29 Non-controlling interests	340
Employee benefits	30 Retirement benefit obligations	340
	31 Share-based payments	345
Scope of consolidation	32 Investments in subsidiary undertakings, joint ventures and associates	350
	33 Structured entities	354
Cash flow statement	34 Cash flow statement	355
	35 Cash and cash equivalents	356
Other disclosure matters	36 Related party transactions	357
	37 Post balance sheet events	358
	38 Auditor's remuneration	358
	39 Standard Chartered PLC (Company)	359
	40 Related undertakings of the Group	362

Notes to the financial statements

1. Accounting policies

Statement of compliance

The Group financial statements consolidate Standard Chartered PLC (the Company) and its subsidiaries (together referred to as the Group) and equity account the Group's interests in associates and jointly controlled entities.

The parent company financial statements present information about the Company as a separate entity.

Both the parent company financial statements and the Group financial statements have been prepared and approved by the directors in accordance with International Financial Reporting Standards (IFRS) and International Financial Reporting Interpretations Committee (IFRIC) interpretations as endorsed by the European Union (EU). EU-endorsed IFRS may differ from IFRS published by the International Accounting Standards Board (IASB) if a standard has not been endorsed by the EU.

The Company has taken advantage of the exemption in section 408 of the Companies Act 2006 not to present its individual statement of comprehensive income and related notes that form a part of these financial statements.

The following parts of the Risk review and Capital review form part of these financial statements:

a) From the start of Risk profile section (page 152) to the end of other principal risks in the same section (page 205) excluding:

- Loans and advances by client segment credit quality analysis, (page 161)
- Credit quality by geographic region, (page 162)
- Analysis of stage 2 balances, (page 169)
- Forborne and other modified loans by region, (page 171)
- Credit-impaired (stage 3) loans by geographic region, (page 172)
- Credit quality by industry, (page 179)
- Industry and Retail products analysis by geographic region, (page 180)
- Country Risk, (page 190)
- Risks not in VaR, (page 192)
- Backtesting, (page 192)
- Mapping of market risk items to the balance sheet, (page 194)
- Liquidity coverage ratio (LCR), (page 196)
- Stressed coverage, (page 197)
- Net stable funding ratio (NSFR), (page 198)
- Liquidity pool, (page 198)
- Encumbrance, (page 198)
- Interest rate risk in the banking book, (page 204)
- Operational Risk, (page 205)
- Other principal risks, (page 205)

b) Capital review: from the start of 'Capital Requirements Directive (CRD) IV capital base' to the end of 'Movement in total capital', excluding capital ratios and risk-weighted assets (RWA).

Basis of preparation

The consolidated and Company financial statements have been prepared on a going concern basis and under the historical cost convention, as modified by the revaluation of cash-settled share-based payments, fair value through other comprehensive income, and financial assets and liabilities (including derivatives) at fair value through profit or loss.

The consolidated financial statements are presented in United States dollars (\$), being the presentation currency of the Group and functional currency of the Company, and all values are rounded to the nearest million dollars, except when otherwise indicated.

Significant accounting estimates and judgements

In determining the carrying amounts of certain assets and liabilities, the Group makes assumptions of the effects of uncertain future events on those assets and liabilities at the balance sheet date. The Group's estimates and assumptions are based on historical experience and expectation of future events and are reviewed periodically. Further information about key assumptions concerning the future, and other key sources of estimation uncertainty and judgement, are set out in the relevant disclosure notes for the following areas:

- Credit impairment (Note 8)
- Taxation (Note 10)
- Financial instruments measured at fair value (Note 13)
- Goodwill impairment (Note 17)
- Provisions for liabilities and charges (Note 24)
- Investments in subsidiary undertakings, joint ventures and associates (Note 32)

IFRS and Hong Kong accounting requirements

As required by the Hong Kong Listing Rules, an explanation of the differences in accounting practices between EU-endorsed IFRS and Hong Kong Financial Reporting Standards is required to be disclosed. There would be no significant differences had these accounts been prepared in accordance with Hong Kong Financial Reporting Standards.

New accounting policies adopted by the Group

Net interest and trading income

The Group has changed its accounting policies for net interest income and net trading income. In previous years the Group recognised interest income and expense on financial instruments held at fair value through profit or loss in net interest income, except for fair value elected structured notes and structured deposits for which all gains and losses were recognised in net trading income. The Group now recognises all gains and losses on financial assets and liabilities held at fair value through profit or loss, including contractual interest, in net trading income. Prior period comparatives have been presented under the updated accounting policy, and quantification of the effect of the change in accounting policy on the current and prior period is given in Notes 3 and 5.

1. Accounting policies continued

The Group believes the updated accounting policy gives users of the financial statements reliable and more relevant information because it ensures that all interest income and expense presented on the face of the income statement is measured using the effective interest method as required by IAS 1 Presentation of Financial Statements, it results in a natural offset in net trading income of gains and losses on fair value through profit or loss instruments and derivatives used to economically hedge valuation risks of those instruments, and it is more comparable to our peers' accounting policies. There is no change in opening retained earnings or adjustment to basic or diluted earnings per share as a result of this change in accounting policy.

Interest in suspense

Following a clarification issued by IFRIC in March 2019, if there are any recoveries on stage 3 loans, any contractual interest earned while the asset was in stage 3 is recognised in the credit impairment line. Although this differs from the Group's previous approach of recognising a residual amount of this within interest income, there is no material impact on the classification of amounts reported in the income statement in the current or prior period and accordingly no adjustments have been made to comparative information. Further, the gross asset balances for stage 3 financial instruments have been increased to reflect contractual interest due but not paid with a corresponding increase in credit impairment provisions. These changes have been disclosed within the credit risk section. There has been no net impact on the balance sheet or on shareholders' equity.

Comparatives

Certain comparatives have been represented in line with current year disclosures.

Details of these changes are set out in the relevant sections and notes below:

- Credit risk: Problem credit management and provisioning
- Note 2 Segmental information
- Note 3 Net interest income
- Note 5 Net trading income
- Note 13 Financial instruments
- Note 17 Goodwill and intangible assets

New accounting standards adopted by the Group

IFRS 16 Leases

On 1 January 2019, the Group adopted IFRS 16 Leases, which has been endorsed by the EU. IFRS 16 replaced IAS 17 Leases.

IFRS 16 introduced a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17 Leases. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

The Group has elected to adopt the modified retrospective approach and has not restated comparative information. The following practical expedients were applied on transition to IFRS 16:

- The Group did not reassess whether premises' leases identified under IAS 17 were leases under IFRS 16
- The Group did not record a lease liability or right-of-use asset for leases with a remaining term of less than 12 months as at 1 January 2019
- The Group excluded initial direct costs from the measurement of right-of-use assets as at 1 January 2019

The judgements in the implementation were determining if a contract contained a lease, and the determination of whether the Group is reasonably certain that it will exercise extension options present in lease contracts. The estimates were the determination of incremental borrowing rates in the respective economic environments. The weighted average discount rate applied to lease liabilities on the transition date 1 January 2019 was 5.0 per cent.

The impact of IFRS 16 on the Group is primarily where the Group is a lessee in property lease contracts. On 1 January 2019, the Group recognised a lease liability, being the remaining lease payments, including extensions options where renewal is reasonably certain, discounted using the Group's incremental borrowing rate at the date of initial application in the economic environment of the lease. The corresponding right-of-use asset recognised is the amount of the lease liability adjusted by prepaid or accrued lease payments related to those leases. The balance sheet gross-up on 1 January 2019 as a result of recognition of the lease liability and right-of-use asset was \$1,421 million, with no adjustment to retained earnings. The comparative information is not restated, i.e. it is presented, as previously reported, under IAS 17 and related interpretations.

The asset is presented in 'Property, plant and equipment' and the liability is presented in 'Other liabilities'. Further information on these balances is shown in Notes 18 and 23.

IFRIC 23 Uncertainty over Income Tax Treatments

IFRIC 23 is effective from 1 January 2019 and has been endorsed by the EU. It clarifies the accounting for uncertainties in income taxes and has not resulted in a material impact to the Group's financial statements.

Amendments to IFRS 9, IAS 39 and IFRS 7: Interest rate benchmark reform

Interest rate benchmark reform is a global initiative to replace or reform interbank offered rates (IBORs) that are used to determine interest cash flows on financial instruments such as loans to customers, debt securities and derivatives. Historically IBORs such as USD LIBOR have been determined by panels of banks with a heavy reliance on expert judgement. The objective of the reforms is to replace IBORs with alternative nearly risk-free rates (RFRs) that are based on actual market transactions. The Financial Conduct Authority has stated that it will no longer compel panel banks to submit values for LIBORs after 31 December 2021 and it is expected that these benchmarks will cease to exist thereafter. Consequently, financial contracts referencing these benchmarks with a maturity beyond 2021 may need to be amended to reference the alternative RFR in the applicable currency.

1. Accounting policies continued

There remain many uncertainties associated with the IBOR transition, including the prospective assessment of hedge accounting effectiveness because it is not known when hedged items and hedging instruments will be amended to reference alternative RFRs, or how this will change the cash flows on these instruments. Other key risks and uncertainties that require monitoring are:

- It is possible that not all hedged items and corresponding hedging instruments will move to alternative RFRs at the same time
- The liquidity of the alternative RFR term structures has historically been mixed and may continue to be so prior to transition. This raises uncertainty over the appropriate inputs and valuation technique required to assess hedge effectiveness

The IFRS amendments include reliefs which apply to all hedging relationships that are directly affected by interest rate benchmark reform by allowing entities to assume the benchmark interest rate is not altered as a result of IBOR reform. A hedging relationship is affected if the reform gives rise to uncertainties about the timing or amount of benchmark-based cash flows of the hedged item or hedging instrument, since our accounting policy requires that forecast cash flows must be highly probable and that the hedging instrument is highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk.

Following endorsement of the amendments by the EU, the Group has elected to early adopt the interest rate benchmark reform amendments for the current period. The amendments would have otherwise taken mandatory effect from 1 January 2020. This election reduces the effects of any uncertainty arising from IBOR reform on the current period's financial statements. Had it not made this election, the Group would have been required to further assess the effect of uncertainty arising from IBOR reform on its existing hedge relationships, potentially resulting in discontinuation of hedge relationships. The amendments are applied retrospectively to all designated hedge relationships that were either in force as of the start of the reporting period or designated subsequently.

The amendments allow the Group to assume that the interest rate benchmark on which the cash flows of the hedged item and/or hedging instrument are based is not altered by IBOR reform for the following activities:

- Prospective hedge assessment
- Determining whether a cash flow or forecast transaction for a cash flow hedge is highly probable
- Determining when cumulative balances in the cash flow hedge reserve from de-designated hedges should be recycled to the income statement

For retrospective hedge assessment, the Group will not de-designate a hedge relationship if the actual result is outside the required 80-125 per cent range, but it can be demonstrated that this is solely caused by interest rate benchmark uncertainty and the hedge passes the prospective assessment.

For hedges of non-contractually specified benchmark portions of an interest rate the Group only assesses whether the designated benchmark is separately identifiable at hedge inception.

The Group expects that the IASB will issue further amendments to these standards concerning the potential financial reporting implications when an existing interest rate benchmark is replaced with an alternative RFR.

Further information on the extent to which the IFRS amendments apply to hedge accounting relationships is provided in Note 14 to these financial statements.

New accounting standards in issue but not yet effective IFRS 17 Insurance Contracts

IFRS 17 Insurance Contracts was issued in May 2017 to replace IFRS 4 Insurance Contracts and to establish a comprehensive standard for inceptors of insurance policies. The effective date is 1 January 2021, subject to IASB's approval of a deferral until 1 January 2022. The Group is assessing the likely implementation impact of adopting the standards on its financial statements.

Amendments to References to the Conceptual Framework in IFRS Standards

These amendments are effective 1 January 2020 and include limited revisions of definitions of an asset and a liability, as well as new guidance on measurement and derecognition, presentation and disclosure. The concept of prudence has been reintroduced with the statement that prudence supports neutrality.

Amendments to IFRS 3 Business Combinations

These amendments are effective 1 January 2020 on a prospective basis and assist entities in determining whether a transaction should be accounted for as a business combination or asset acquisition.

Amendments to IAS 1 and IAS 8: Definition of Material

Amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (the amendments) to align the definition of 'material' across the standards and to clarify certain aspects of the definition.

None of the amendments above are expected to result in a material impact on the Group's financial statements.

Going concern

These financial statements were approved by the Board of directors on 27 February 2020. The directors made an assessment of the Group's ability to continue as a going concern and confirm they are satisfied that the Group has adequate resources to continue in business for a period of at least 12 months from the date of approval of these financial statements (refer to the Viability Statement in the Strategic report on page 65). For this reason, the Group continues to adopt the going concern basis of accounting for preparing the financial statements.

2. Segmental information

The Group's segmental reporting is in accordance with IFRS 8 Operating Segments and is reported consistently with the internal performance framework and as presented to the Group's Management Team. The four client segments are: Corporate & Institutional Banking, Retail Banking, Commercial Banking and Private Banking. The four geographic regions are: Greater China & North Asia, ASEAN & South Asia, Africa & Middle East, and Europe & Americas. Activities not directly related to a client segment and/or geographic region are included in Central & other items. These mainly include Corporate Centre costs, treasury markets, treasury activities, certain strategic investments and the UK bank levy.

The following should also be noted:

- Transactions and funding between the segments are carried out on an arm's-length basis
- Corporate Centre costs represent stewardship and central management services roles and activities that are not directly attributable to business or country operations
- Treasury markets, joint ventures and associate investments are managed in the regions and are included within the applicable region. However, they are not managed directly by a client segment and are therefore included in the Central & other items segment
- In addition to treasury activities, Corporate Centre costs and other Group-related functions, Central & other items for regions includes globally run businesses or activities that are managed by the client segments but not directly by geographic management. These include Principal Finance and Portfolio Management
- The Group allocates central costs (excluding Corporate Centre costs) relating to client segments and geographic regions using appropriate business drivers (such as in proportion to the direct cost base of each segment before allocation of indirect costs) and these are reported within operating expenses

Basis of preparation

The analysis reflects how the client segments and geographic regions are managed internally. This is described as the Management View (on an underlying basis) and is principally the location from which a client relationship is managed, which may differ from where it is financially booked and may be shared between businesses and/or regions. In certain instances this approach is not appropriate and a Financial View is disclosed, that is, the location in which the transaction or balance was booked. Typically, the Financial View is used in areas such as the Market and Liquidity Risk reviews where actual booking location is more important for an assessment. Segmental information is therefore on a Management View unless otherwise stated.

Restructuring items excluded from underlying results

The provision for regulatory matters of \$226 million (2018: \$900 million) primarily relates to the agreement to pay monetary penalties to the US Authorities and the FCA following the resolution of investigations concerning historical violations of US sanction laws and regulations and the effectiveness and governance of historical financial crime controls, described further in Note 26.

The Group incurred net restructuring charges of \$254 million in 2019, of which \$148 million related to planned initiatives to reduce ongoing costs and \$60 million related to the Group's ship leasing business that the Group has decided to discontinue.

Reconciliations between underlying and statutory results are set out in the tables below:

Profit before taxation (PBT)

	2019						
	Underlying \$million	Provision for regulatory matters \$million	Restructuring \$million	Gains arising on repurchase of senior and subordinated liabilities \$million	Goodwill impairment \$million	Share of profits of PT Bank joint venture \$million	Statutory \$million
Operating income	15,271	–	146	–	–	–	15,417
Operating expenses	(10,409)	(226)	(298)	–	–	–	(10,933)
Operating profit/(loss) before impairment losses and taxation	4,862	(226)	(152)	–	–	–	4,484
Credit impairment	(906)	–	(2)	–	–	–	(908)
Other impairment	(38)	–	(98)	–	(27)	–	(163)
Profit from associates and joint ventures	254	–	(2)	–	–	48	300
Profit/(loss) before taxation	4,172	(226)	(254)	–	(27)	48	3,713

	2018						
	Underlying \$million	Provision for regulatory matters \$million	Restructuring \$million	Gains arising on repurchase of senior and subordinated liabilities \$million	Goodwill impairment \$million	Share of profits of PT Bank joint venture \$million	Statutory \$million
Operating income	14,968	–	(248)	69	–	–	14,789
Operating expenses	(10,464)	(900)	(283)	–	–	–	(11,647)
Operating profit/(loss) before impairment losses and taxation	4,504	(900)	(531)	69	–	–	3,142
Credit impairment	(740)	–	87	–	–	–	(653)
Other impairment	(148)	–	(34)	–	–	–	(182)
Profit from associates and joint ventures	241	–	–	–	–	–	241
Profit/(loss) before taxation	3,857	(900)	(478)	69	–	–	2,548

2. Segmental information continued

Underlying performance by client segment

	2019					
	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Operating income	7,185	5,171	1,478	577	860	15,271
External	7,356	4,223	1,539	329	1,824	15,271
Inter-segment	(171)	948	(61)	248	(964)	–
Operating expenses	(4,361)	(3,754)	(907)	(514)	(873)	(10,409)
Operating profit/(loss) before impairment losses and taxation	2,824	1,417	571	63	(13)	4,862
Credit impairment	(474)	(336)	(123)	31	(4)	(906)
Other impairment	(32)	2	–	–	(8)	(38)
Profit from associates and joint ventures	–	–	–	–	254	254
Underlying profit before taxation	2,318	1,083	448	94	229	4,172
Provision for regulatory matters	–	–	–	–	(226)	(226)
Restructuring	(110)	(63)	(11)	(11)	(59)	(254)
Goodwill impairment	–	–	–	–	(27)	(27)
Share of profits of PT Bank Permata Tbk joint venture	–	–	–	–	48	48
Statutory profit/(loss) before taxation	2,208	1,020	437	83	(35)	3,713
Total assets	329,866	108,801	31,244	14,922	235,565	720,398
Of which: loans and advances to customers including FVTPL	156,599	106,570	26,686	14,821	10,078	314,754
loans and advances to customers	111,304	106,332	25,990	14,821	10,076	268,523
loans held at fair value through profit or loss	45,295	238	696	–	2	46,231
Total liabilities	393,040	147,698	36,864	18,480	73,655	669,737
Of which: customer accounts	248,748	144,045	34,083	18,424	7,433	452,733

	2018					
	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Operating income	6,860	5,041	1,391	516	1,160	14,968
External	7,055	4,493	1,570	270	1,580	14,968
Inter-segment	(195)	548	(179)	246	(420)	–
Operating expenses	(4,396)	(3,736)	(923)	(530)	(879)	(10,464)
Operating profit/(loss) before impairment losses and taxation	2,464	1,305	468	(14)	281	4,504
Credit impairment	(242)	(267)	(244)	–	13	(740)
Other impairment	(150)	(5)	–	–	7	(148)
Profit from associates and joint ventures	–	–	–	–	241	241
Underlying profit/(loss) before taxation	2,072	1,033	224	(14)	542	3,857
Provision for regulatory matters	(50)	–	–	–	(850)	(900)
Restructuring	(350)	(68)	(12)	(24)	(24)	(478)
Gains arising on repurchase of senior and subordinated liabilities	3	–	–	–	66	69
Statutory profit/(loss) before taxation	1,675	965	212	(38)	(266)	2,548
Total assets	308,496	103,780	31,379	13,673	231,434	688,762
Of which: loans and advances to customers including FVTPL	146,575	101,635	27,271	13,616	10,274	299,371
loans and advances to customers	104,677	101,235	26,759	13,616	10,270	256,557
loans held at fair value through profit or loss	41,898	400	512	–	4	42,814
Total liabilities	369,316	140,328	37,260	19,733	71,773	638,410
Of which: customer accounts	243,019	136,691	34,860	19,622	2,989	437,181

2. Segmental information continued

Operating income by client segment

	2019					
	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Underlying operating income	7,185	5,171	1,478	577	860	15,271
Restructuring	146	–	4	–	(4)	146
Statutory operating income	7,331	5,171	1,482	577	856	15,417

	2018					
	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Underlying operating income	6,860	5,041	1,391	516	1,160	14,968
Restructuring	(257)	–	(1)	2	8	(248)
Gains arising on repurchase of senior and subordinated liabilities	3	–	–	–	66	69
Statutory operating income	6,606	5,041	1,390	518	1,234	14,789

Underlying performance by region

	2019					
	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Operating income	6,155	4,213	2,562	1,725	616	15,271
Operating expenses	(3,771)	(2,681)	(1,747)	(1,470)	(740)	(10,409)
Operating profit/(loss) before impairment losses and taxation	2,384	1,532	815	255	(124)	4,862
Credit impairment	(194)	(506)	(132)	(98)	24	(906)
Other impairment	(5)	(1)	1	–	(33)	(38)
Profit from associates and joint ventures	247	–	–	–	7	254
Underlying profit/(loss) before taxation	2,432	1,025	684	157	(126)	4,172
Provision for regulatory matters	–	–	–	–	(226)	(226)
Restructuring	(138)	(34)	(18)	(34)	(30)	(254)
Goodwill impairment	–	–	–	–	(27)	(27)
Share of profits of PT Bank Permata Tbk joint venture	–	48	–	–	–	48
Statutory profit/(loss) before taxation	2,294	1,039	666	123	(409)	3,713
Total assets	277,704	149,785	59,828	220,579	12,502	720,398
Of which: loans and advances to customers including FVTPL	139,977	80,885	31,487	62,405	–	314,754
loans and advances to customers	134,066	78,229	29,940	26,288	–	268,523
loans held at fair value through profit or loss	5,911	2,656	1,547	36,117	–	46,231
Total liabilities	249,004	126,213	36,144	218,794	39,582	669,737
Of which: customer accounts	204,286	97,459	29,280	121,708	–	452,733

2. Segmental information continued

	2018					
	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Operating income	6,157	3,971	2,604	1,670	566	14,968
Operating expenses	(3,812)	(2,711)	(1,810)	(1,453)	(678)	(10,464)
Operating profit/(loss) before impairment losses and taxation	2,345	1,260	794	217	(112)	4,504
Credit impairment	(71)	(322)	(262)	(83)	(2)	(740)
Other impairment	(110)	6	–	17	(61)	(148)
Profit from associates and joint ventures	205	26	–	3	7	241
Underlying profit/(loss) before taxation	2,369	970	532	154	(168)	3,857
Provision for regulatory matters	–	–	–	(50)	(850)	(900)
Restructuring	(106)	105	(100)	(8)	(369)	(478)
Gains arising on repurchase of senior and subordinated liabilities	–	–	–	3	66	69
Statutory profit/(loss) before taxation	2,263	1,075	432	99	(1,321)	2,548
Total assets	269,765	147,049	57,800	201,912	12,236	688,762
Of which: loans and advances to customers including FVTPL	130,669	81,905	29,870	56,927	–	299,371
Total liabilities	238,249	127,478	36,733	198,853	37,097	638,410
Of which: customer accounts	196,870	96,896	29,916	113,499	–	437,181

Operating income by region

	2019					
	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Underlying operating income	6,155	4,213	2,562	1,725	616	15,271
Restructuring	87	(2)	–	–	61	146
Statutory operating income	6,242	4,211	2,562	1,725	677	15,417

	2018					
	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Underlying operating income	6,157	3,971	2,604	1,670	566	14,968
Restructuring	(7)	21	1	6	(269)	(248)
Gains arising on repurchase of senior and subordinated liabilities	–	–	–	3	66	69
Statutory operating income	6,150	3,992	2,605	1,679	363	14,789

Additional segmental information (statutory)

	2019					
	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Net interest income	2,675	3,282	943	315	452	7,667
Net fees and commission income	1,559	1,505	285	223	(50)	3,522
Net trading and other income	3,097	384	254	39	454	4,228
Operating income	7,331	5,171	1,482	577	856	15,417

2. Segmental information continued

2018 (restated)¹

	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Net interest income	2,498	3,142	859	297	999	7,795
Net fees and commission income	1,496	1,579	284	192	(59)	3,492
Net trading and other income	2,612	320	247	29	294	3,502
Operating income	6,606	5,041	1,390	518	1,234	14,789

1 Refer to Note 1 Accounting policies

2019

	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Net interest income	3,276	2,068	1,456	149	718	7,667
Net fees and commission income	1,393	1,123	617	503	(114)	3,522
Net trading and other income	1,573	1,020	489	1,073	73	4,228
Operating income	6,242	4,211	2,562	1,725	677	15,417

2018 (restated)¹

	Greater China & North Asia \$million	ASEAN & South Asia \$million	Africa & Middle East \$million	Europe & Americas \$million	Central & other items \$million	Total \$million
Net interest income	3,213	2,047	1,495	345	695	7,795
Net fees and commission income	1,437	1,032	643	490	(110)	3,492
Net trading and other income	1,500	913	467	844	(222)	3,502
Operating income	6,150	3,992	2,605	1,679	363	14,789

1 Refer to Note 1 Accounting policies

2019

	Hong Kong \$million	Korea \$million	China \$million	Singapore \$million	India \$million	Indonesia \$million	UAE \$million	UK \$million	US \$million
Net interest income	1,893	659	562	731	564	112	365	(211)	256
Net fees and commission income	866	160	144	552	244	69	143	70	352
Net trading and other income	1,082	152	166	354	232	91	110	904	151
Operating income	3,841	971	872	1,637	1,040	272	618	763	759

2018 (restated)¹

	Hong Kong \$million	Korea \$million	China \$million	Singapore \$million	India \$million	Indonesia \$million	UAE \$million	UK \$million	US \$million
Net interest income	1,747	688	605	709	544	127	381	(48)	240
Net fees and commission income	908	192	114	490	210	84	164	71	343
Net trading and other income	1,092	129	100	349	182	59	92	805	84
Operating income	3,747	1,009	819	1,548	936	270	637	828	667

1 Refer to Note 1 Accounting policies

3. Net interest income

Accounting policy

Interest income for financial assets held at either fair value through other comprehensive income or amortised cost, and interest expense on all financial liabilities held at amortised cost is recognised in profit or loss using the effective interest method.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument (for example, prepayment options) but does not consider future credit losses. The calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts. Where the estimates of cash flows have been revised, the carrying amount of the financial asset or liability is adjusted to reflect the actual and revised cash flows, discounted at the instrument's original effective interest rate. The adjustment is recognised as interest income or expense in the period in which the revision is made.

Interest income for financial assets that are either held at fair value through other comprehensive income or amortised cost that have become credit-impaired subsequent to initial recognition (stage 3) and have had amounts written off, is recognised using the credit adjusted effective interest rate. This rate is calculated in the same manner as the effective interest rate except that expected credit losses are included in the expected cash flows. Interest income is therefore recognised on the amortised cost of the financial asset including expected credit losses. Should the credit risk on a stage 3 financial asset improve such that the financial asset is no longer considered credit-impaired, interest income recognition reverts to a computation based on the rehabilitated gross carrying value of the financial asset.

	2019 \$million	restated 2018 ¹ \$million
Balances at central banks	329	364
Loans and advances to banks	1,834	1,783
Loans and advances to customers	10,693	9,947
Listed debt securities	2,113	1,587
Unlisted debt securities	796	695
Other eligible bills	702	683
Accrued on impaired assets (discount unwind)	82	91
Interest income	16,549	15,150
Of which: financial instruments held at fair value through other comprehensive income	3,246	2,827
Deposits by banks	739	594
Customer accounts	6,202	5,006
Debt securities in issue	1,120	988
Subordinated liabilities and other borrowed funds	756	767
Interest expense on IFRS 16 lease liabilities	65	–
Interest expense	8,882	7,355
Net interest income	7,667	7,795

¹ In 2018 the Group reported net interest income of \$8,793 million, consisting of interest income of \$17,264 million and interest expense of \$8,471 million. The difference between this and restated 2018 net interest income of \$7,795 million is \$998 million of net contractual interest receivable on financial instruments measured at fair value through profit or loss being reclassified to net trading income

Had the financial statements been prepared under the previous year's accounting policy, under which contractual interest on financial instruments measured at fair value through profit or loss (except for fair value elected structured notes and structured deposits) was recorded in net interest income, interest income in the current period would have been \$19,594 million and interest expense would have been \$10,307 million.

4. Net fees and commission

Accounting policy

Fees and commissions charged for services provided by the Group are recognised as or when the service is completed or significant act performed.

Loan syndication fees are recognised as revenue when the syndication has been completed and the Group retained no part of the loan package for itself, or retained a part at the same effective interest rate as for the other participants.

The Group can act as trustee or in other fiduciary capacities that result in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. The assets and income arising thereon are excluded from these financial statements, as they are not assets and income of the Group.

The determination of the services performed for the customer, the transaction price, and when the services are completed depends on the nature of the product with the customer. The main considerations on income recognition by product are as follows:

Transaction Banking

The Group recognises fee income associated with transactional trade, cash management and custody activities at the point in time the service is provided. The Group recognises income associated with trade contingent risk exposures (such as letters of credit and guarantees) and periodic custody activities over the period in which the service is provided.

Payment of fees is usually received at the same time the service is provided. In some cases, letters of credit and guarantees issued by the Group have annual upfront premiums, which are amortised on a straight-line basis to fee income over the year.

Financial Markets and Corporate Finance

The Group recognises fee income at the point in time the service is provided. Fee income is recognised for a significant non-lending service when the transaction has been completed and the terms of the contract with the customer entitle the Group to the fee. Fees are usually received shortly after the service is provided.

Syndication fees are recognised when the syndication is complete. Fees are generally received before completion of the syndication, or within 12 months of the transaction date.

Wealth Management

Upfront consideration on bancassurance agreements is amortised straight-line over the contractual term. Commissions for bancassurance activities are recorded as they are earned through sales of third-party insurance products to customers. These commissions are received within a short time frame of the commission being earned. Target-linked fees are accrued based on a percentage of the target achieved, provided it is assessed as highly probable that the target will be met. Cash payment is received at a contractually specified date after achievement of a target has been confirmed.

Upfront and trailing commissions for managed investment placements are recorded as they are confirmed. Income from these activities is relatively even throughout the period, and cash is usually received within a short time frame after the commission is earned.

Retail Products

The Group recognises most income at the point in time the Group is entitled to the fee, since most services are provided at the time of the customer's request.

Credit card annual fees are recognised at the time the fee is received since, in most of our retail markets, there are contractual circumstances under which fees are waived, so income recognition is constrained until the uncertainties associated with the annual fee are resolved. The Group defers the fair value of reward points on its credit card reward programmes, and recognises income and costs associated with fulfilling the reward at the time of redemption.

	2019 \$million	2018 \$million
Fees and commissions income	4,111	4,029
Fees and commissions expense	(589)	(537)
Net fees and commission	3,522	3,492

Total fee income arising from financial instruments that are not fair valued through profit or loss is \$1,495 million (31 December 2018: \$1,478 million) and arising from trust and other fiduciary activities is \$166 million (31 December 2018: \$144 million).

Total fee expense arising from financial instruments that are not fair valued through profit or loss is \$138 million (31 December 2018: \$143 million) and arising from trust and other fiduciary activities is \$27 million (31 December 2018: \$27 million).

4. Net fees and commission continued

2019

	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Transaction Banking	1,053	11	212	–	–	1,276
Trade	434	11	154	–	–	599
Cash Management	431	–	58	–	–	489
Securities Services	188	–	–	–	–	188
Financial Markets	265	–	30	–	–	295
Corporate Finance	168	–	27	2	–	197
Lending and Portfolio Management	85	–	14	–	–	99
Principal Finance	(12)	–	–	–	–	(12)
Wealth Management	–	1,132	2	216	–	1,350
Retail Products	–	362	–	5	–	367
Treasury	–	–	–	–	(22)	(22)
Others	–	–	–	–	(28)	(28)
Net fees and commission	1,559	1,505	285	223	(50)	3,522

2018

	Corporate & Institutional Banking \$million	Retail Banking \$million	Commercial Banking \$million	Private Banking \$million	Central & other items \$million	Total \$million
Transaction Banking	1,066	12	223	–	–	1,301
Trade	448	12	163	–	–	623
Cash Management	429	–	60	–	–	489
Securities Services	189	–	–	–	–	189
Financial Markets	206	–	25	–	–	231
Corporate Finance	181	–	21	–	–	202
Lending and Portfolio Management	57	–	13	–	–	70
Principal Finance	(14)	–	–	–	–	(14)
Wealth Management	–	1,167	2	190	–	1,359
Retail Products	–	403	–	2	–	405
Treasury	–	–	–	–	(22)	(22)
Others	–	(3)	–	–	(37)	(40)
Net fees and commission	1,496	1,579	284	192	(59)	3,492

Upfront bancassurance consideration amounts are amortised on a straight-line basis over the contractual period to which the consideration relates. Deferred income on the balance sheet in respect of these activities is \$802 million (31 December 2018: \$886 million). The income will be earned evenly over the next 9.5 years (31 December 2018: 10.5 years).

5. Net trading income

Accounting policy

Gains and losses arising from changes in the fair value of financial instruments held at fair value through profit or loss are recorded in net trading income in the period in which they arise. This includes contractual interest receivable or payable.

Income is recognised from the sale and purchase of trading positions, margins on market making and customer business and fair value changes.

	2019 \$million	restated 2018 ¹ \$million
Net trading income	3,350	2,681
Significant items within net trading income include:		
Gains on instruments held for trading	3,296	2,756
Gains on financial assets mandatorily at fair value through profit or loss	1,557	788
Gains on financial assets designated at fair value through profit or loss	31	12
Losses on financial liabilities designated at fair value through profit or loss	(1,602)	(864)

1 In 2018 the Group reported net trading income of \$1,683 million. The difference between this and restated 2018 net trading income of \$2,681 million is \$998 million of net contractual interest receivable on financial instruments measured at fair value through profit or loss being reclassified to net trading income

Had the financial statements been prepared under the previous year's accounting policy, under which contractual interest on financial instruments measured at fair value through profit or loss (except for fair value elected structured notes and structured deposits) was recorded in net interest income, net trading income in the current period would have been \$1,730 million.

6. Other operating income

Accounting policy

Operating lease income is recognised on a straight-line basis over the period of the lease unless another systematic basis is more appropriate.

Dividends on equity instruments are recognised when the Group's right to receive payment is established.

On disposal of fair value through other comprehensive income debt instruments, the cumulative gain or loss recognised in other comprehensive income is recycled to the profit or loss in other operating income/expense.

When the Group loses control of the subsidiary or disposal group, the difference between the consideration received and the carrying amount of the subsidiary or disposal group is recognised as a gain or loss on sale of the business.

	2019 \$million	2018 \$million
Other operating income includes:		
Rental income from operating lease assets	540	573
Gains less losses on disposal of fair value through other comprehensive income debt instruments	170	(31)
Gains less losses on amortised cost financial assets	(12)	–
Net gain on sale of businesses	–	9
Dividend income	17	25
Gain on sale of aircrafts	71	74
Gains arising on repurchase of senior and subordinated liabilities ¹	–	69
Other	92	102
	878	821

1 On 14 June 2018, Standard Chartered PLC repurchased in part, £245.7 million of its £750 million 4.375 per cent senior debt 2038 and £372.5 million of its £900 million 5.125 per cent subordinated debt 2034. On the same date, Standard Chartered Bank repurchased in part, £95.1 million of its £200 million 7.75 per cent subordinated notes (callable 2022). This activity resulted in an overall gain of \$69 million for the Group

7. Operating expenses

Accounting policy

Short-term employee benefits: salaries and social security expenses are recognised over the period in which the employees provide the service. Variable compensation is included within share-based payments costs and wages and salaries. Further details are disclosed in the Directors' remuneration report (pages 108 to 137).

Pension costs: contributions to defined contribution pension schemes are recognised in profit or loss when payable. For defined benefit plans, net interest expense, service costs and expenses are recognised in the income statement. Further details are provided in Note 30.

Share-based compensation: the Group operates equity-settled and cash-settled share-based payment compensation plans. The fair value of the employee services (measured by the fair value of the options granted) received in exchange for the grant of the options is recognised as an expense. Further details are provided in Note 31.

	2019 \$million	2018 \$million
Staff costs:		
Wages and salaries	5,508	5,439
Social security costs	180	171
Other pension costs (Note 30)	372	365
Share-based payment costs	166	166
Other staff costs	896	933
	7,122	7,074

Other staff costs include redundancy expenses of \$173 million (31 December 2018: \$153 million). Further costs in this category include training, travel costs and other staff-related costs.

The following table summarises the number of employees within the Group:

	2019			2018 ¹		
	Business	Support services	Total	Business	Support services	Total
At 31 December	45,469	38,929	84,398	47,401	38,001	85,402
Average for the year	45,816	38,122	83,938	48,815	37,453	86,268

1 Prior year headcount has been re-presented due to a change in management view of segments

The Company employed nil staff as at 31 December 2019 (31 December 2018: nil) and it incurred costs of \$32 million (31 December 2018: \$5 million).

Details of directors' pay, benefits, pensions and interests in shares are disclosed in the Directors' remuneration report (pages 119, 120 and 126).

Transactions with directors, officers and other related parties are disclosed in Note 36.

7. Operating expenses continued

	2019 \$million	2018 \$million
Premises and equipment expenses:		
Rental of premises ¹	31	374
Other premises and equipment costs	372	395
Rental of computers and equipment	17	21
	420	790
General administrative expenses:		
UK bank levy	347	324
Provision for regulatory matters	226	900
Other general administrative expenses	1,638	1,702
	2,211	2,926
Depreciation and amortisation:		
Property, plant and equipment:		
Premises ¹	360	86
Equipment	112	94
Operating lease assets	263	304
	735	484
Intangibles:		
Software	436	363
Acquired on business combinations	9	10
	1,180	857
Total operating expenses	10,933	11,647

¹ As a result of IFRS 16, rental expenses of premises has decreased and has been replaced by depreciation on premises (being the right-of-use asset) and interest expenses (on the lease liability)

The UK bank levy is applied on the chargeable equities and liabilities on the Group's consolidated balance sheet. Key exclusions from chargeable equities and liabilities include Tier 1 capital, insured or guaranteed retail deposits, repos secured on certain sovereign debt and liabilities subject to netting. The rate of the levy for 2019 is 0.15 per cent for chargeable short-term liabilities, with a lower rate of 0.075 per cent generally applied to chargeable equity and long-term liabilities (i.e. liabilities with a remaining maturity greater than one year). The rates will reduce in 2020 and from 1 January 2021 they will be 0.10 per cent for short-term liabilities and 0.05 per cent for long-term liabilities. In addition, the scope of the bank levy will be restricted to the balance sheet of UK operations only from that date.

8. Credit impairment

Accounting policy

Significant accounting estimates and judgements

The Group's expected credit loss (ECL) calculations are outputs of complex models with a number of underlying assumptions. The significant judgements in determining expected credit loss include:

- The Group's criteria for assessing if there has been a significant increase in credit risk; and
- Development of expected credit loss models, including the choice of inputs relating to macroeconomic variables

The calculation of credit impairment provisions also involves expert credit judgement to be applied by the credit risk management team based upon counterparty information they receive from various sources, including relationship managers and on external market information. Details on the approach for determining expected credit loss can be found in the credit risk section, under IFRS 9 Methodology (page 182).

Estimates of forecasts of key macroeconomic variables underlying the expected credit loss calculation can be found within the Risk review, Key assumptions and judgements in determining expected credit loss (page 183).

Expected credit losses

Expected credit losses are determined for all financial debt instruments that are classified at amortised cost or fair value through other comprehensive income, undrawn commitments and financial guarantees.

An expected credit loss represents the present value of expected cash shortfalls over the residual term of a financial asset, undrawn commitment or financial guarantee.

A cash shortfall is the difference between the cash flows that are due in accordance with the contractual terms of the instrument and the cash flows that the Group expects to receive over the contractual life of the instrument.

8. Credit impairment continued

Measurement

Expected credit losses are computed as unbiased, probability-weighted amounts which are determined by evaluating a range of reasonably possible outcomes, the time value of money, and considering all reasonable and supportable information, including that which is forward-looking.

For material portfolios, the estimate of expected cash shortfalls is determined by multiplying the probability of default (PD) with the loss given default (LGD) with the expected exposure at the time of default (EAD). There may be multiple default events over the lifetime of an instrument. Further details on the components of PD, LGD and EAD are disclosed in the Credit Risk section. For less material Retail Banking loan portfolios, the Group has adopted less sophisticated approaches based on historical roll rates or loss rates.

Forward-looking economic assumptions are incorporated into the PD, LGD and EAD where relevant and where they influence credit risk, such as GDP growth rates, interest rates, house price indices and commodity prices, among others. These assumptions are incorporated using the Group's most likely forecast for a range of macroeconomic assumptions. These forecasts are determined using all reasonable and supportable information, which includes both internally developed forecasts and those available externally, and are consistent with those used for budgeting, forecasting and capital planning.

To account for the potential non-linearity in credit losses, multiple forward-looking scenarios are incorporated into the range of reasonably possible outcomes for all material portfolios. For example, where there is a greater risk of downside credit losses than upside gains, multiple forward-looking economic scenarios are incorporated into the range of reasonably possible outcomes, both in respect of determining the PD (and where relevant, the LGD and EAD) and in determining the overall expected credit loss amounts. These scenarios are determined using a Monte Carlo approach, centred around the Group's most likely forecast of macroeconomic assumptions.

The period over which cash shortfalls are determined is generally limited to the maximum contractual period for which the Group is exposed to credit risk. However, for certain revolving credit facilities, which include credit cards or overdrafts, the Group's exposure to credit risk is not limited to the contractual period. For these instruments, the Group estimates an appropriate life based on the period that the Group is exposed to credit risk, which includes the effect of credit risk management actions such as the withdrawal of undrawn facilities.

For credit-impaired financial instruments, the estimate of cash shortfalls may require the use of expert credit judgement.

The estimate of expected cash shortfalls on a collateralised financial instrument reflects the amount and timing of cash flows that are expected from foreclosure on the collateral less the costs of obtaining and selling the collateral, regardless of whether foreclosure is deemed probable.

Cash flows from unfunded credit enhancements held are included within the measurement of expected credit losses if they are part of, or integral to, the contractual terms of the instrument (this includes financial guarantees, unfunded risk participations and other non-derivative credit insurance). Although non-integral credit enhancements do not impact the measurement of expected credit losses, a reimbursement asset is recognised to the extent of the expected credit losses recorded.

Cash shortfalls are discounted using the effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impaired instruments (POCI)) on the financial instrument as calculated at initial recognition or if the instrument has a variable interest rate, the current effective interest rate determined under the contract.

Instruments	Location of expected credit loss provisions
Financial assets held at amortised cost	Loss provisions: netted against gross carrying value ¹
Financial assets held FVOCI – Debt instruments	Other comprehensive income (FVOCI expected credit loss reserve) ²
Loan commitments	Provisions for liabilities and charges ³
Financial guarantees	Provisions for liabilities and charges ³

- 1 Purchased or originated credit-impaired assets do not attract an expected credit loss provision on initial recognition. An expected credit loss provision will be recognised only if there is an increase in expected credit losses from that considered at initial recognition
- 2 Debt and treasury securities classified as fair value through other comprehensive income (FVOCI) are held at fair value on the face of the balance sheet. The expected credit loss attributed to these instruments is held as a separate reserve within other comprehensive income (OCI) and is recycled to the profit and loss account along with any fair value measurement gains or losses held within FVOCI when the applicable instruments are derecognised
- 3 Expected credit loss on loan commitments and financial guarantees is recognised as a liability provision. Where a financial instrument includes both a loan (i.e. financial asset component) and an undrawn commitment (i.e. loan commitment component), and it is not possible to separately identify the expected credit loss on these components, expected credit loss amounts on the loan commitment are recognised together with expected credit loss amounts on the financial asset. To the extent the combined expected credit loss exceeds the gross carrying amount of the financial asset, the expected credit loss is recognised as a liability provision

Recognition

12 months expected credit losses (stage 1)

Expected credit losses are recognised at the time of initial recognition of a financial instrument and represent the lifetime cash shortfalls arising from possible default events up to 12 months into the future from the balance sheet date. Expected credit losses continue to be determined on this basis until there is either a significant increase in the credit risk of an instrument or the instrument becomes credit-impaired. If an instrument is no longer considered to exhibit a significant increase in credit risk, expected credit losses will revert to being determined on a 12-month basis.

8. Credit impairment continued

Significant increase in credit risk (stage 2)

If a financial asset experiences a significant increase in credit risk (SICR) since initial recognition, an expected credit loss provision is recognised for default events that may occur over the lifetime of the asset.

Significant increase in credit risk is assessed by comparing the risk of default of an exposure at the reporting date to the risk of default at origination (after taking into account the passage of time). Significant does not mean statistically significant nor is it assessed in the context of changes in expected credit loss. Whether a change in the risk of default is significant or not is assessed using a number of quantitative and qualitative factors, the weight of which depends on the type of product and counterparty. Financial assets that are 30 or more days past due and not credit-impaired will always be considered to have experienced a significant increase in credit risk. For less material portfolios where a loss rate or roll rate approach is applied to compute expected credit loss, significant increase in credit risk is primarily based on 30 days past due.

Quantitative factors include an assessment of whether there has been significant increase in the forward-looking probability of default (PD) since origination. A forward-looking PD is one that is adjusted for future economic conditions to the extent that these are correlated to changes in credit risk. We compare the residual lifetime PD at the balance sheet date to the residual lifetime PD that was expected at the time of origination for the same point in the term structure and determine whether both the absolute and relative change between the two exceeds predetermined thresholds. To the extent that the differences between the measures of default outlined exceed the defined thresholds, the instrument is considered to have experienced a significant increase in credit risk.

Qualitative factors assessed include those linked to current credit risk management processes, such as lending placed on non-purely precautionary early alert (and subject to closer monitoring).

A non-purely precautionary early alert account is one which exhibits risk or potential weaknesses of a material nature requiring closer monitoring, supervision, or attention by management. Weaknesses in such a borrower's account, if left uncorrected, could result in deterioration of repayment prospects and the likelihood of being downgraded. Indicators could include a rapid erosion of position within the industry, concerns over management's ability to manage operations, weak/deteriorating operating results, liquidity strain and overdue balances among other factors.

Credit-impaired (or defaulted) exposures (stage 3)

Financial assets that are credit-impaired (or in default) represent those that are at least 90 days past due in respect of principal and/or interest. Financial assets are also considered to be credit-impaired where the obligors are unlikely to pay on the occurrence of one or more observable events that have a detrimental impact on the estimated future cash flows of the financial asset. It may not be possible to identify a single discrete event but instead the combined effect of several events may cause financial assets to become credit-impaired.

Evidence that a financial asset is credit-impaired includes observable data about the following events:

- Significant financial difficulty of the issuer or borrower
- Breach of contract such as default or a past due event
- For economic or contractual reasons relating to the borrower's financial difficulty, the lenders of the borrower have granted the borrower concession/s that lenders would not otherwise consider. This would include forbearance actions (page 170 to 171)
- Pending or actual bankruptcy or other financial reorganisation to avoid or delay discharge of the borrower's obligation/s
- The disappearance of an active market for the applicable financial asset due to financial difficulties of the borrower
- Purchase or origination of a financial asset at a deep discount that reflects incurred credit losses

Lending commitments to a credit-impaired obligor that have not yet been drawn down are included to the extent that the commitment cannot be withdrawn. Loss provisions against credit-impaired financial assets are determined based on an assessment of the recoverable cash flows under a range of scenarios, including the realisation of any collateral held where appropriate. The loss provisions held represent the difference between the present value of the expected cash shortfalls, discounted at the instrument's original effective interest rate, and the gross carrying value (including contractual interest due but not paid) of the instrument prior to any credit impairment. The Group's definition of default is aligned with the regulatory definition of default as set out in European Capital Requirements Regulation (CRR178) and related guidelines.

8. Credit impairment continued

Expert credit judgement

For Corporate & Institutional, Commercial and Private Banking, borrowers are graded by credit risk management on a credit grading (CG) scale from CG1 to CG14. Once a borrower starts to exhibit credit deterioration, it will move along the credit grading scale in the performing book and, when it is classified as CG12, the credit assessment and oversight of the loan will normally be performed by Group Special Assets Management (GSAM).

Borrowers graded CG12 exhibit well-defined weaknesses in areas such as management and/or performance but there is no current expectation of a loss of principal or interest. Where the impairment assessment indicates that there will be a loss of principal on a loan, the borrower is graded a CG14 while borrowers of other credit-impaired loans are graded CG13. Instruments graded CG13 or CG14 are regarded as stage 3.

For individually significant financial assets within stage 3, GSAM will consider all judgements that have an impact on the expected future cash flows of the asset. These include: the business prospects, industry and geopolitical climate of the customer, quality of realisable value of collateral, the Group's legal position relative to other claimants and any renegotiation/ forbearance/ modification options. The future cash flow calculation involves significant judgements and estimates. As new information becomes available and further negotiations/ forbearance measures are taken, the estimates of the future cash flows will be revised, and will have an impact on the future cash flow analysis.

For financial assets which are not individually significant, such as the Retail Banking portfolio or small business loans, which comprise a large number of homogenous loans that share similar characteristics, statistical estimates and techniques are used, as well as credit scoring analysis.

Retail Banking clients are considered credit-impaired where they are more 90 days past due. Retail Banking products are also considered credit-impaired if the borrower files for bankruptcy or other forbearance programme, the borrower is deceased or the business is closed in the case of a small business, or if the borrower surrenders the collateral, or there is an identified fraud on the account. Additionally, if the account is unsecured and the borrower has other credit accounts with the Group that are considered credit-impaired, the account may be also be credit-impaired.

Techniques used to compute impairment amounts use models which analyse historical repayment and default rates over a time horizon. Where various models are used, judgement is required to analyse the available information provided and select the appropriate model or combination of models to use.

Expert credit judgement is also applied to determine whether any post-model adjustments are required for credit risk elements which are not captured by the models.

Modified financial instruments

Where the original contractual terms of a financial asset have been modified for credit reasons and the instrument has not been derecognised (an instrument is derecognised when a modification results in a change in cash flows that the Group would consider substantial), the resulting modification loss is recognised within credit impairment in the income statement with a corresponding decrease in the gross carrying value of the asset. If the modification involved a concession that the bank would not otherwise consider, the instrument is considered to be credit-impaired and is considered forborne.

Expected credit loss for modified financial assets that have not been derecognised and are not considered to be credit-impaired will be recognised on a 12-month basis, or a lifetime basis, if there is a significant increase in credit risk. These assets are assessed (by comparison to the origination date) to determine whether there has been a significant increase in credit risk subsequent to the modification. Although loans may be modified for non-credit reasons, a significant increase in credit risk may occur. In addition to the recognition of modification gains and losses, the revised carrying value of modified financial assets will impact the calculation of expected credit losses, with any increase or decrease in expected credit loss recognised within impairment.

Forborne loans

Forborne loans are those loans that have been modified in response to a customer's financial difficulties. Forbearance strategies assist clients who are temporarily in financial distress and are unable to meet their original contractual repayment terms. Forbearance can be initiated by the client, the Group or a third party including government sponsored programmes or a conglomerate of credit institutions. Forbearance may include debt restructuring such as new repayment schedules, payment deferrals, tenor extensions, interest-only payments, lower interest rates, forgiveness of principal, interest or fees, or relaxation of loan covenants.

Forborne loans that have been modified (and not derecognised) on terms that are not consistent with those readily available in the market and/or where we have granted a concession compared with the original terms of the loans are considered credit-impaired if there is a detrimental impact on cash flows. The modification loss (see Classification and measurement – Modifications) is recognised in the profit or loss within credit impairment and the gross carrying value of the loan reduced by the same amount. The modified loan is disclosed as 'Loans subject to forbearance – credit-impaired'.

Loans that have been subject to a forbearance modification, but which are not considered credit-impaired (not classified as CG13 or CG14), are disclosed as 'Forborne – not credit-impaired'. This may include amendments to covenants within the contractual terms.

8. Credit impairment continued

Write-offs of credit-impaired instruments and reversal of impairment

To the extent a financial debt instrument is considered irrecoverable, the applicable portion of the gross carrying value is written off against the related loan provision. Such loans are written off after all the necessary procedures have been completed, it is decided that there is no realistic probability of recovery and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off decrease the amount of the provision for credit impairment in the income statement. If, in a subsequent period, the amount of the credit impairment loss decreases and the decrease can be related objectively to an event occurring after the credit impairment was recognised (such as an improvement in the debtor's credit rating), the previously recognised credit impairment loss is reversed by adjusting the provision account. The amount of the reversal is recognised in the income statement.

Loss provisions on purchased or originated credit-impaired instruments (POCI)

The Group measures expected credit loss on a lifetime basis for POCI instruments throughout the life of the instrument. However, expected credit loss is not recognised in a separate loss provision on initial recognition for POCI instruments as the lifetime expected credit loss is inherent within the gross carrying amount of the instruments. The Group recognises the change in lifetime expected credit losses arising subsequent to initial recognition in the income statement and the cumulative change as a loss provision. Where lifetime expected credit losses on POCI instruments are less than those at initial recognition, then the favourable differences are recognised as impairment gains in the income statement (and as impairment loss where the expected credit losses are greater).

Improvement in credit risk/curing

A period may elapse from the point at which instruments enter lifetime expected credit losses (stage 2 or stage 3) and are reclassified back to 12-month expected credit losses (stage 1). For financial assets that are credit-impaired (stage 3), a transfer to stage 2 or stage 1 is only permitted where the instrument is no longer considered to be credit-impaired. An instrument will no longer be considered credit-impaired when there is no shortfall of cash flows compared to the original contractual terms. When a previously credit-impaired asset transfers to stage 2 or stage 1, recoveries of any residual contractual interest earned while the asset was in stage 3 are recognised within the credit impairment line in the income statement.

For financial assets within stage 2, these can only be transferred to stage 1 when they are no longer considered to have experienced a significant increase in credit risk.

Where significant increase in credit risk was determined using quantitative measures, the instruments will automatically transfer back to stage 1 when the original PD based transfer criteria are no longer met. Where instruments were transferred to stage 2 due to an assessment of qualitative factors, the issues that led to the reclassification must be cured before the instruments can be reclassified to stage 1. This includes instances where management actions led to instruments being classified as stage 2, requiring that action to be resolved before loans are reclassified to stage 1.

A forbore loan can only be removed from being disclosed as forbore if the loan is performing (stage 1 or 2) and a further two-year probation period is met.

In order for a forbore loan to become performing, the following criteria have to be satisfied:

- At least a year has passed with no default based upon the forbore contract terms
- The customer is likely to repay its obligations in full without realising security
- The customer has no accumulated impairment against amount outstanding (except for ECL)

Subsequent to the criteria above, a further two-year probation period has to be fulfilled, whereby regular payments are made by the customer and none of the exposures to the customer are more than 30 days past due.

	2019 \$million	2018 \$million
Net credit impairment on loans and advances to banks and customers	856	607
Net credit impairment on debt securities	9	7
Net credit impairment relating to financial guarantees and loan commitments	35	39
Net credit impairment relating to other financial assets	8	–
Credit impairment¹	908	653

1 No material POCI assets

9. Other impairment

Accounting policy

Refer to the below referenced notes for the relevant accounting policy

	2019 \$million	2018 \$million
Impairment of goodwill (Note 17)	27	–
Impairment of fixed assets (Note 18)	122	150
Impairment of other intangible assets (Note 17)	12	46
Other	2	(14)
Other impairment	136	182
	163	182

10. Taxation

Accounting policy

Income tax payable on profits is based on the applicable tax law in each jurisdiction and is recognised as an expense in the period in which profits arise.

Deferred tax is provided on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted as at the balance sheet date, and that are expected to apply when the related deferred tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised where it is probable that future taxable profit will be available against which the temporary differences can be utilised. Where permitted, deferred tax assets and liabilities are offset on an entity basis and not by component of deferred taxation.

Current and deferred tax relating to items which are charged or credited directly to equity, is credited or charged directly to equity and is subsequently recognised in the income statement together with the current or deferred gain or loss.

Significant accounting estimates and judgements

- Determining the Group's tax charge for the year involves estimation and judgement, which includes an interpretation of local tax laws and an assessment of whether the tax authorities will accept the position taken. These judgements take account of external advice where appropriate, and the Group's view on settling with the relevant tax authorities
- The Group provides for current tax liabilities at the best estimate of the amount that is expected to be paid to the tax authorities where an outflow is probable. In making its estimates, the Group assumes that the tax authorities will examine all the amounts reported to them and have full knowledge of all relevant information
- The recoverability of the Group's deferred tax assets is based on management's judgement of the availability of future taxable profits against which the deferred tax assets will be utilised

The following table provides analysis of taxation charge in the year:

	2019 \$million	2018 \$million
The charge for taxation based upon the profit for the year comprises:		
Current tax:		
United Kingdom corporation tax at 19 per cent (2018: 19 per cent):		
Current tax charge on income for the year	–	1
Adjustments in respect of prior years (including double tax relief)	(6)	49
Foreign tax:		
Current tax charge on income for the year	1,427	1,109
Adjustments in respect of prior years	1	(105)
	1,422	1,054
Deferred tax:		
Origination/reversal of temporary differences	22	254
Adjustments in respect of prior years	(71)	131
	(49)	385
Tax on profits on ordinary activities	1,373	1,439
Effective tax rate	37.0%	56.5%

The tax charge for the year of \$1,373 million (31 December 2018: \$1,439 million) on a profit before tax of \$3,713 million (31 December 2018: \$2,548 million) reflects the impact of capital gains tax arising on internal restructuring to establish the Hong Kong hub, non-deductible expenses and the impact of countries with tax rates higher or lower than the UK, the most significant of which is India. The 2018 charge reflected the impact of non-deductible regulatory provisions and other non-deductible expenses, non-creditable withholding taxes and the impact of countries with tax rates higher or lower than the UK, the most significant of which is India.

Foreign tax includes current tax of \$206 million (31 December 2018: \$169 million) on the profits assessable in Hong Kong. Deferred tax includes origination or reversal of temporary differences of \$(1) million (31 December 2018: \$17 million) provided at a rate of 16.5 per cent (31 December 2018: 16.5 per cent) on the profits assessable in Hong Kong.

10. Taxation continued

Tax rate: The tax charge for the year is higher than the charge at the rate of corporation tax in the UK, 19 per cent. The differences are explained below:

	2019 \$million	2018 \$million
Profit on ordinary activities before tax	3,713	2,548
Tax at 19 per cent (2018: 19 per cent)	705	484
Lower tax rates on overseas earnings	(89)	(66)
Higher tax rates on overseas earnings	316	354
Non-creditable withholding taxes	144	158
Tax-free income	(138)	(113)
Share of associates and joint ventures	(51)	(39)
Non-deductible expenses	288	322
Provision for regulatory matters	27	164
Bank levy	66	62
Non-taxable losses on investments	9	79
Payments on financial instruments in reserves	(67)	(68)
Capital gains tax on internal restructuring	179	–
Goodwill impairment	5	–
Deferred tax not recognised	41	2
Deferred tax assets written-off	30	–
Deferred tax rate changes	(6)	–
Adjustments to tax charge in respect of prior years	(76)	75
Other items	(10)	25
Tax on profit on ordinary activities	1,373	1,439

Factors affecting the tax charge in future years: The Group's tax charge, and effective tax rate in future years could be affected by several factors including acquisitions, disposals and restructuring of our businesses, the mix of profits across jurisdictions with different statutory tax rates, changes in tax legislation and tax rates and resolution of uncertain tax positions.

The evaluation of uncertain tax positions involves an interpretation of local tax laws which could be subject to challenge by a tax authority, and an assessment of whether the tax authorities will accept the position taken. The Group does not currently consider that assumptions or judgements made in assessing tax liabilities have a significant risk of resulting in a material adjustment within the next financial year.

Tax recognised in other comprehensive income	2019			2018		
	Current tax \$million	Deferred tax \$million	Total \$million	Current tax \$million	Deferred tax \$million	Total \$million
Items that will not be reclassified to income statement	15	27	42	9	(38)	(29)
Own credit adjustment	17	35	52	9	(45)	(36)
Equity instruments at fair value through other comprehensive income	5	(10)	(5)	–	1	1
Retirement benefit obligations	(7)	2	(5)	–	6	6
Items that may be reclassified subsequently to income statement	2	(50)	(48)	–	14	14
Debt instruments at fair value through other comprehensive income	2	(44)	(42)	–	20	20
Cash flow hedges	–	(6)	(6)	–	(6)	(6)
Total tax credit/(charge) recognised in equity	17	(23)	(6)	9	(24)	(15)

10. Taxation continued

Current tax: The following are the movements in current tax during the year:

	2019 \$million	2018 \$million
Current tax comprises:		
Current tax assets	492	491
Current tax liabilities	(676)	(376)
Net current tax opening balance before transition	(184)	115
IFRS 9 transition	–	11
Net current tax opening balance after transition	(184)	126
Movements in income statement	(1,422)	(1,054)
Movements in other comprehensive income	17	9
Taxes paid	1,421	770
Other movements	4	(35)
Net current tax balance as at 31 December	(164)	(184)
Current tax assets	539	492
Current tax liabilities	(703)	(676)
Total	(164)	(184)

Deferred tax: The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the year:

	At 1 January 2019 \$million	Exchange & other adjustments \$million	(Charge)/credit to profit \$million	(Charge)/credit to equity \$million	At 31 December 2019 \$million
Deferred tax comprises:					
Accelerated tax depreciation	(494)	(5)	(27)	–	(526)
Impairment provisions on loans and advances	961	(13)	9	–	957
Tax losses carried forward	266	–	(3)	–	263
Fair value through other comprehensive income assets	3	1	1	(54)	(49)
Cash flow hedges	(7)	–	–	(6)	(13)
Own credit adjustment	(33)	–	–	35	2
Retirement benefit obligations	40	(3)	(8)	2	31
Share-based payments	15	–	1	–	16
Other temporary differences	(267)	4	76	–	(187)
Net deferred tax assets	484	(16)	49	(23)	494
	At 1 January 2018 \$million	Exchange & other adjustments \$million	(Charge)/credit to profit \$million	(Charge)/credit to equity \$million	At 31 December 2018 \$million
Deferred tax comprises:					
Accelerated tax depreciation	(413)	4	(85)	–	(494)
Impairment provisions on loans and advances	1,206	(99)	(146)	–	961
Tax losses carried forward	290	(4)	(20)	–	266
Fair value through other comprehensive income assets	(21)	4	(1)	21	3
Cash flow hedges	(2)	1	–	(6)	(7)
Own credit adjustment	11	1	–	(45)	(33)
Retirement benefit obligations	38	(2)	(2)	6	40
Share-based payments	16	–	(1)	–	15
Other temporary differences	(190)	53	(130)	–	(267)
Net deferred tax assets	935	(42)	(385)	(24)	484

10. Taxation continued

Deferred tax comprises assets and liabilities as follows:

	2019			2018		
	Total \$million	Asset \$million	Liability \$million	Total \$million	Asset \$million	Liability \$million
Deferred tax comprises:						
Accelerated tax depreciation	(526)	(9)	(517)	(494)	7	(501)
Impairment provisions on loans and advances	957	956	1	961	938	23
Tax losses carried forward	263	137	126	266	126	140
Fair value through other comprehensive income	(49)	(40)	(9)	3	(2)	5
Cash flow hedges	(13)	6	(19)	(7)	(12)	5
Own credit adjustment	2	4	(2)	(33)	(18)	(15)
Retirement benefit obligations	31	20	11	40	40	–
Share-based payments	16	14	2	15	15	–
Other temporary differences	(187)	17	(204)	(267)	(47)	(220)
	494	1,105	(611)	484	1,047	(563)

At 31 December 2019, the Group has net deferred tax assets of \$494 million (31 December 2018: \$484 million). The recoverability of the Group's deferred tax assets is based on management's judgement of the availability of future taxable profits against which the deferred tax assets will be utilised.

Of the Group's total deferred tax assets, \$263 million relates to tax losses carried forward. These tax losses have arisen in individual legal entities and will be offset as future taxable profits arise in those entities.

- \$108 million of the deferred tax assets relating to losses has arisen in Ireland, where there is no expiry date for unused tax losses. These losses relate to aircraft leasing and are expected to be fully utilised over the useful economical life of the assets, being up to 18 years
- \$52 million of the deferred tax assets relating to losses has arisen in Korea. These losses have no expiry date, and there is a defined profit stream against which they are forecast to be utilised
- \$69 million of the deferred tax assets relating to losses has arisen in the US. Management forecasts show that the losses are expected to be fully utilised over a period of nine years. The tax losses expire after 20 years

The remaining deferred tax assets of \$34 million relating to losses has arisen in other jurisdictions and is expected to be recovered in less than 10 years.

	2019 \$million	2018 \$million
No account has been taken of the following potential deferred tax assets/(liabilities):		
Withholding tax on unremitted earnings from overseas subsidiaries	(230)	(281)
Tax losses	1,297	1,283
Held over gains on incorporation of overseas branches	(410)	(413)
Other temporary differences	83	79

11. Dividends

Accounting policy

Dividends on ordinary shares and preference shares classified as equity are recognised in equity in the year in which they are declared.

Dividends on ordinary equity shares are recorded in the year in which they are declared and, in respect of the final dividend, have been approved by the shareholders.

The Board considers a number of factors prior to dividend declaration which includes the rate of recovery in the Group's financial performance, the macroeconomic environment, and opportunities to further invest in our business and grow profitably in our markets.

At half year the Board decided to adopt a formulaic approach to setting the interim dividend for 2019, being one-third of the prior year full-year dividend per share.

Ordinary equity shares

	2019		2018 ¹	
	Cents per share	\$million	Cents per share	\$million
2018/2017 final dividend declared and paid during the year	15	495	11	363
2019/2018 interim dividend declared and paid during the year	7	225	6	198

¹ The amounts are gross of scrip adjustments

Dividends on ordinary equity shares are recorded in the period in which they are declared and, in respect of the final dividend, have been approved by the shareholders. Accordingly, the final ordinary equity share dividends set out above relate to the respective prior years. The 2018 final dividend of 15 cents per ordinary share (\$495 million) was paid to eligible shareholders on 16 May 2019 and the 2019 interim dividend of seven cents per ordinary share (\$225 million) was paid to eligible shareholders on 21 October 2019.

2019 recommended final ordinary equity share dividend

The 2019 ordinary equity share dividend recommended by the Board is 20 cents per share. The financial statements for the year ended 31 December 2019 do not reflect this dividend as this will be accounted for in shareholders' equity as an appropriation of retained profits in the year ending 31 December 2020.

The dividend will be paid in either pounds sterling, Hong Kong dollars or US dollars on 14 May 2020 to shareholders on the UK register of members at the close of business in the UK on 6 March 2020. The dividend will be paid in Indian rupees on 14 May 2020 to Indian Depository Receipt holders on the Indian register at the close of business in India on 6 March 2020.

Preference shares and Additional Tier 1 securities

Dividends on these preference shares and securities classified as equity are recorded in the period in which they are declared.

		2019 \$million	2018 \$million
Non-cumulative redeemable preference shares:	7.014 per cent preference shares of \$5 each	53	53
	6.409 per cent preference shares of \$5 each	30	26
		83	79
Additional Tier 1 securities: \$5 billion fixed rate resetting perpetual subordinated contingent convertible securities		365	357
		448	436
Dividends on these preference shares are treated as interest expense and accrued accordingly.			
Non-cumulative irredeemable preference shares:	7 ³ / ₈ per cent preference shares of £1 each	9	9
	8 ¹ / ₄ per cent preference shares of £1 each	11	10
		20	19

12. Earnings per ordinary share

Accounting policy

The Group measures earnings per share on an underlying basis. This differs from earnings defined in IAS 33 Earnings per share. Underlying earnings is profit/(loss) attributable to ordinary shareholders adjusted for profits or losses of a capital nature; amounts consequent to investment transactions driven by strategic intent; and other infrequent and/or exceptional transactions that are significant or material in the context of the Group's normal business earnings for the period.

The table below provides the basis of underlying earnings.

	2019 \$million	2018 \$million
Profit for the year attributable to equity holders	2,340	1,109
Non-controlling interests	(37)	(55)
Dividend payable on preference shares and AT1 classified as equity	(448)	(436)
Profit for the year attributable to ordinary shareholders	1,855	618
Items normalised:		
Provision for regulatory matters	226	900
Restructuring	254	478
Profit from joint venture	(48)	–
Gains arising on repurchase of subordinated liabilities	–	(69)
Goodwill impairment (Note 9)	27	–
Tax on normalised items ¹	152	104
Underlying profit	2,466	2,031
Basic – Weighted average number of shares (millions)	3,256	3,306
Diluted – Weighted average number of shares (millions)	3,290	3,340
Basic earnings per ordinary share (cents)	57.0	18.7
Diluted earnings per ordinary share (cents)	56.4	18.5
Underlying basic earnings per ordinary share (cents)	75.7	61.4
Underlying diluted earnings per ordinary share (cents)	75.0	60.8

¹ No tax is included in respect of the impairment of goodwill as no tax relief is available

13. Financial instruments

Classification and measurement

Accounting policy

The Group classifies its financial assets into the following measurement categories: amortised cost; fair value through other comprehensive income; and fair value through profit or loss. Financial liabilities are classified as either amortised cost, or held at fair value through profit or loss. Management determines the classification of its financial assets and liabilities at initial recognition of the instrument or, where applicable, at the time of reclassification.

Financial assets held at amortised cost and fair value through other comprehensive income

Debt instruments held at amortised cost or held at fair value through other comprehensive income (FVOCI) have contractual terms that give rise to cash flows that are solely payments of principal and interest (SPPI characteristics). Principal is the fair value of the financial asset at initial recognition but this may change over the life of the instrument as amounts are repaid. Interest consists of consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period and for other basic lending risks and costs, as well as a profit margin.

In assessing whether the contractual cash flows have SPPI characteristics, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, the Group considers:

- Contingent events that would change the amount and timing of cash flows
- Leverage features
- Prepayment and extension terms
- Terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse asset arrangements)
- Features that modify consideration of the time value of money – e.g. periodical reset of interest rates

Whether financial assets are held at amortised cost, FVTPL or at FVOCI depends on the objectives of the business models under which the assets are held. A business model refers to how the Group manages financial assets to generate cash flows.

The Group makes an assessment of the objective of a business model in which an asset is held at the individual product business line, and where applicable, within business lines depending on the way the business is managed and information is provided to management. Factors considered include:

- How the performance of the product business line is evaluated and reported to the Group's management
- How managers of the business model are compensated, including whether management is compensated based on the fair value of assets or the contractual cash flows collected
- The risks that affect the performance of the business model and how those risks are managed
- The frequency, volume and timing of sales in prior periods, the reasons for such sales and expectations about future sales activity

The Group's business model assessment is as follows:

Business model	Business objective	Characteristics	Businesses	Products
Hold to collect	Intent is to originate financial assets and hold them to maturity, collecting the contractual cash flows over the term of the instrument	<ul style="list-style-type: none"> → Providing financing and originating assets to earn interest income as primary income stream → Performing credit risk management activities → Costs include funding costs, transaction costs and impairment losses 	<ul style="list-style-type: none"> → Corporate Lending → Corporate Finance → Transaction Banking → Retail Lending → Treasury Markets (Loans and Borrowings) → Financial Markets (selected) 	<ul style="list-style-type: none"> → Loans and advances → Debt securities
Hold to collect and sell	Business objective met through both hold to collect and by selling financial assets	<ul style="list-style-type: none"> → Portfolios held for liquidity needs; or where a certain interest yield profile is maintained; or that are normally rebalanced to achieve matching of duration of assets and liabilities → Income streams come from interest income, fair value changes, and impairment losses 	<ul style="list-style-type: none"> → Treasury Markets 	<ul style="list-style-type: none"> → Debt securities
Fair value through profit or loss	All other business objectives, including trading and managing financial assets on a fair value basis	<ul style="list-style-type: none"> → Assets held for trading → Assets that are originated, purchased, and sold for profit taking or underwriting activity → Performance of the portfolio is evaluated on a fair value basis → Income streams are from fair value changes or trading gains or losses 	<ul style="list-style-type: none"> → All other business lines 	<ul style="list-style-type: none"> → Derivatives → Trading portfolios → Financial Markets reverse repos

13. Financial instruments continued

Financial assets which have SPPI characteristics and that are held within a business model whose objective is to hold financial assets to collect contractual cash flows ('hold to collect') are recorded at amortised cost. Conversely, financial assets which have SPPI characteristics but are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets ('hold to collect and sell') are classified as held at FVOCI.

Both hold to collect business and a hold to collect and sell business models involve holding financial assets to collect the contractual cash flows. However, the business models are distinct by reference to the frequency and significance that asset sales play in meeting the objective under which a particular group of financial assets is managed. Hold to collect business models are characterised by asset sales that are incidental to meeting the objectives under which a group of assets is managed. Sales of assets under a hold to collect business model can be made to manage increases in the credit risk of financial assets but sales for other reasons should be infrequent or insignificant.

Cash flows from the sale of financial assets under a hold to collect and sell business model by contrast are integral to achieving the objectives under which a particular group of financial assets are managed. This may be the case where frequent sales of financial assets are required to manage the Group's daily liquidity requirements or to meet regulatory requirements to demonstrate liquidity of financial instruments. Sales of assets under hold to collect and sell business models are therefore both more frequent and more significant in value than those under the hold to collect model.

Equity instruments designated as held at FVOCI

Non-trading equity instruments acquired for strategic purposes rather than capital gain may be irrevocably designated at initial recognition as held at FVOCI on an instrument by instrument basis. Dividends received are recognised in profit or loss. Gains and losses arising from changes in the fair value of these instruments, including foreign exchange gains and losses, are recognised directly in equity and are never reclassified to profit or loss, even on derecognition.

Financial assets and liabilities held at fair value through profit or loss

Financial assets which are not held at amortised cost or that are not held at fair value through other comprehensive income are held at fair value through profit or loss. Financial assets and liabilities held at fair value through profit or loss are either mandatorily classified fair value through profit or loss or irrevocably designated at fair value through profit or loss at initial recognition.

Mandatorily classified at fair value through profit or loss

Financial assets and liabilities which are mandatorily held at fair value through profit or loss are split between two subcategories as follows:

Trading, including:

- Financial assets and liabilities held for trading, which are those acquired principally for the purpose of selling in the short-term; and
- Derivatives

Non-trading mandatorily at fair value through profit or loss, including:

- Instruments in a business which has a fair value business model (see the Group's business model assessment) which are not trading or derivatives
- Hybrid financial assets that contain one or more embedded derivatives
- Financial assets that would otherwise be measured at amortised cost or FVOCI but which do not have SPPI characteristics
- Equity instruments that have not been designated as held at FVOCI
- Financial liabilities that constitute contingent consideration in a business combination

Designated at fair value through profit or loss

Financial assets and liabilities may be designated at fair value through profit or loss when the designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities on a different basis ('accounting mismatch').

Interest rate swaps have been acquired by the Group with the intention of significantly reducing interest rate risk on certain debt securities with fixed rates of interest. To significantly reduce the accounting mismatch between assets and liabilities and measurement bases, these debt securities have been designated at fair value through profit or loss.

Similarly, to reduce accounting mismatches, the Group has designated certain financial liabilities at fair value through profit or loss where the liabilities either:

- Have fixed rates of interest and interest rate swaps or other interest rate derivatives have been entered with the intention of significantly reducing interest rate risk; or
- Are exposed to foreign currency risk and derivatives have been acquired with the intention of significantly reducing exposure to market changes; or
- Have been acquired to fund trading asset portfolios or assets

Financial liabilities may also be designated at fair value through profit or loss where they are managed on a fair value basis or have a embedded derivative where the Group is not able to bifurcate and separately value the embedded derivative component.

13. Financial instruments continued

Financial liabilities held at amortised cost

Financial liabilities that are not financial guarantees or loan commitments and that are not classified as financial liabilities held at fair value through profit or loss are classified as financial liabilities held at amortised cost.

Preference shares which carry a mandatory coupon that represents a market rate of interest at the issue date, or which are redeemable on a specific date or at the option of the shareholder are classified as financial liabilities and are presented in other borrowed funds. The dividends on these preference shares are recognised in the income statement as interest expense on an amortised cost basis using the effective interest method.

Financial guarantee contracts and loan commitments

The Group issues financial guarantee contracts and loan commitments in return for fees. Under a financial guarantee contract, the Group undertakes to meet a customer's obligations under the terms of a debt instrument if the customer fails to do so. Loan commitments are firm commitments to provide credit under prespecified terms and conditions. Financial guarantee contracts and loan commitments issued at below market interest rates are initially recognised as liabilities at fair value, while financial guarantees and loan commitments issued at market rates are recorded off-balance sheet. Subsequently, these instruments are measured at the higher of the expected credit loss provision, and the amount initially recognised less the cumulative amount of income recognised in accordance with the principles of IFRS 15 Revenue from Contracts with Customers. Refer to page 275 for expected credit loss on loan commitments and financial guarantees.

Fair value of financial assets and liabilities

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal market for the asset or liability, or in the absence of a principal market, the most advantageous market to which the Group has access at the date. The fair value of a liability includes the risk that the bank will not be able to honour its obligations.

The fair value of financial instruments is generally measured on the basis of the individual financial instrument. However, when a group of financial assets and financial liabilities is managed on the basis of its net exposure to either market risk or credit risk, the fair value of the group of financial instruments is measured on a net basis.

The fair values of quoted financial assets and liabilities in active markets are based on current prices. A market is regarded as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. If the market for a financial instrument, and for unlisted securities, is not active, the Group establishes fair value by using valuation techniques.

Initial recognition

Purchases and sales of financial assets and liabilities held at fair value through profit or loss, and debt securities classified as financial assets held at fair value through other comprehensive income are initially recognised on the trade-date (the date on which the Group commits to purchase or sell the asset). Loans and advances and other financial assets held at amortised cost are recognised on the settlement date (the date on which cash is advanced to the borrowers).

All financial instruments are initially recognised at fair value, which is normally the transaction price, plus directly attributable transaction costs for financial assets which are not subsequently measured at fair value through profit or loss.

In certain circumstances, the initial fair value may be based on a valuation technique which may lead to the recognition of profits or losses at the time of initial recognition. However, these profits or losses can only be recognised when the valuation technique used is based solely on observable market data. In those cases where the initially recognised fair value is based on a valuation model that uses unobservable inputs, the difference between the transaction price and the valuation model is not recognised immediately in the income statement but is amortised or released to the income statement as the inputs become observable, or the transaction matures or is terminated.

Subsequent measurement

Financial assets and financial liabilities held at amortised cost

Financial assets and financial liabilities held at amortised cost are subsequently carried at amortised cost using the effective interest method (see Interest income and expense). Foreign exchange gains and losses are recognised in the income statement.

Where a financial instrument carried at amortised cost is the hedged item in a qualifying fair value hedge relationship, its carrying value is adjusted by the fair value gain or loss attributable to the hedged risk.

Financial assets held at FVOCI

Debt instruments held at FVOCI are subsequently carried at fair value, with all unrealised gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in a separate component of equity. Interest income, impairment and foreign exchange gains and losses are recognised in profit or loss when they occur, with changes in expected credit losses accumulated in equity. On derecognition, the cumulative fair value gains or losses, net of the cumulative expected credit loss reserve, are transferred to the profit or loss.

Equity investments designated at FVOCI are subsequently carried at fair value with all unrealised gains and losses arising from changes in fair value (including any related foreign exchange gains or losses) recognised in other comprehensive income and accumulated in a separate component of equity. On derecognition, the cumulative reserve is transferred to retained earnings and is not recycled to profit or loss.

Financial assets and liabilities held at fair value through profit or loss

Financial assets and liabilities mandatorily held at fair value through profit or loss and financial assets designated at fair value through profit or loss are subsequently carried at fair value, with gains and losses arising from changes in fair value, including contractual interest income or expense, recorded in the net trading income line in the profit or loss unless the instrument is part of a cash flow hedging relationship.

13. Financial instruments continued

Financial liabilities designated at fair value through profit or loss

Financial liabilities designated at fair value through profit or loss are held at fair value, with changes in fair value recognised in the net trading income line in the profit or loss, other than that attributable to changes in credit risk. Fair value changes attributable to credit risk are recognised in other comprehensive income and recorded in a separate category of reserves unless this is expected to create or enlarge an accounting mismatch, in which case the entire change in fair value of the financial liability designated at fair value through profit or loss is recognised in profit or loss.

Derecognition of financial instruments

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where the Group has transferred substantially all risks and rewards of ownership. If substantially all the risks and rewards have been neither retained nor transferred and the Group has retained control, the assets continue to be recognised to the extent of the Group's continuing involvement.

Where financial assets have been modified, the modified terms are assessed on a qualitative and quantitative basis to determine whether a fundamental change in the nature of the instrument has occurred, such as whether the derecognition of the pre-existing instrument and the recognition of a new instrument is appropriate.

On derecognition of a financial asset, the difference between the carrying amount of the asset (or the carrying amount allocated to the portion of the asset derecognised) and the sum of the consideration received (including any new asset obtained, less any new liability assumed) and any cumulative gain or loss that had been recognised in other comprehensive income is recognised in profit or loss except for equity instruments elected FVOCI (see above) and cumulative fair value adjustments attributable to the credit risk of a liability that are held in other comprehensive income.

Financial liabilities are derecognised when they are extinguished. A financial liability is extinguished when the obligation is discharged, cancelled or expires and this is evaluated both qualitatively and quantitatively. However, where a financial liability has been modified, it is derecognised if the difference between the modified cash flows and the original cash flows is more than 10 per cent, or if less than 10 per cent, the Group will perform a qualitative assessment to determine whether the terms of the two instruments are substantially different.

If the Group purchases its own debt, it is derecognised and the difference between the carrying amount of the liability and the consideration paid is included in 'Other income' except for the cumulative fair value adjustments attributable to the credit risk of a liability that are held in other comprehensive income which are never recycled to the profit or loss.

Modified financial instruments

Financial assets and financial liabilities whose original contractual terms have been modified, including those loans subject to forbearance strategies, are considered to be modified instruments. Modifications may include changes to the tenor, cash flows and or interest rates, among other factors.

Where derecognition of financial assets is appropriate (see Derecognition), the newly recognised residual loans are assessed to determine whether the assets should be classified as purchased or originated credit-impaired assets (POCI).

Where derecognition is not appropriate, the gross carrying amount of the applicable instruments is recalculated as the present value of the renegotiated or modified contractual cash flows discounted at the original effective interest rate (or credit adjusted effective interest rate for POCI financial assets). The difference between the recalculated values and the pre-modified gross carrying values of the instruments are recorded as a modification gain or loss in the profit or loss.

Gains and losses arising from modifications for credit reasons are recorded as part of 'Credit Impairment' (see Credit impairment policy). Modification gains and losses arising for non-credit reasons are recognised either as part of 'Credit impairment' or within income, depending on whether there has been a change in the credit risk on the financial asset subsequent to the modification. Modification gains and losses arising on financial liabilities are recognised within income. The movements in the applicable expected credit loss loan positions are disclosed in further detail in Risk review.

Reclassifications

Financial liabilities are not reclassified subsequent to initial recognition. Reclassifications of financial assets are made when, and only when, the business model for those assets changes. Such changes are expected to be infrequent and arise as a result of significant external or internal changes such as the termination of a line of business or the purchase of a subsidiary whose business model is to realise the value of pre-existing held for trading financial assets through a hold to collect model.

Financial assets are reclassified at their fair value on the date of reclassification and previously recognised gains and losses are not restated. Moreover, reclassifications of financial assets between financial assets held at amortised cost and financial assets held at fair value through other comprehensive income do not affect effective interest rate or expected credit loss computations.

Reclassified from amortised cost

Where financial assets held at amortised cost are reclassified to financial assets held at fair value through profit or loss, the difference between the fair value of the assets at the date of reclassification and the previously recognised amortised cost is recognised in profit or loss.

For financial assets held at amortised cost that are reclassified to fair value through other comprehensive income, the difference between the fair value of the assets at the date of reclassification and the previously recognised gross carrying value is recognised in other comprehensive income. Additionally, the related cumulative expected credit loss amounts relating to the reclassified financial assets are reclassified from loan loss provisions to a separate reserve in other comprehensive income at the date of reclassification.

13. Financial instruments continued

Reclassified from fair value through other comprehensive income

Where financial assets held at fair value through other comprehensive income are reclassified to financial assets held at fair value through profit or loss, the cumulative gain or loss previously recognised in other comprehensive income is transferred to the profit or loss.

For financial assets held at fair value through other comprehensive income that are reclassified to financial assets held at amortised cost, the cumulative gain or loss previously recognised in other comprehensive income is adjusted against the fair value of the financial asset such that the financial asset is recorded at a value as if it had always been held at amortised cost. In addition, the related cumulative expected credit losses held within other comprehensive income are reversed against the gross carrying value of the reclassified assets at the date of reclassification.

Reclassified from fair value through profit or loss

Where financial assets held at fair value through profit or loss are reclassified to financial assets held at fair value through other comprehensive income or financial assets held at amortised cost, the fair value at the date of reclassification is used to determine the effective interest rate on the financial asset going forward. In addition, the date of reclassification is used as the date of initial recognition for the calculation of expected credit losses. Where financial assets held at fair value through profit or loss are reclassified to financial assets held at amortised cost, the fair value at the date of reclassification becomes the gross carrying value of the financial asset.

The Group's classification of its financial assets and liabilities is summarised in the following tables.

Assets	Notes	Assets at fair value						Assets held at amortised cost	Total
		Trading	Derivatives held for hedging	Non-trading mandatorily at fair value through profit or loss	Designated at fair value through profit or loss	Fair value through other comprehensive income	Total financial assets at fair value		
		\$million	\$million	\$million	\$million	\$million	\$million	\$million	\$million
Cash and balances at central banks		–	–	–	–	–	–	52,728	52,728
Financial assets held at fair value through profit or loss									
Loans and advances to banks ¹		198	–	3,330	–	–	3,528	–	3,528
Loans and advances to customers ¹		2,886	–	4,010	–	–	6,896	–	6,896
Reverse repurchase agreements and other similar secured lending	16	–	–	57,604	–	–	57,604	–	57,604
Debt securities, alternative tier one and other eligible bills		21,877	–	166	278	–	22,321	–	22,321
Equity shares		2,208	–	152	109	–	2,469	–	2,469
		27,169	–	65,262	387	–	92,818	–	92,818
Derivative financial instruments	14	46,424	788	–	–	–	47,212	–	47,212
Loans and advances to banks ¹	15	–	–	–	–	–	–	53,549	53,549
Of which: reverse repurchase agreements and other similar secured lending	16	–	–	–	–	–	–	1,341	1,341
Loans and advances to customers ¹	15	–	–	–	–	–	–	268,523	268,523
Of which: reverse repurchase agreements and other similar secured lending	16	–	–	–	–	–	–	1,469	1,469
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	129,471	129,471	13,969	143,440
Equity shares		–	–	–	–	291	291	–	291
		–	–	–	–	129,762	129,762	13,969	143,731
Other assets	20	–	–	–	–	–	–	36,161	36,161
Assets held for sale	21	–	–	87	243	–	330	90	420
Total as at 31 December 2019		73,593	788	65,349	630	129,762	270,122	425,020	695,142

1 Further analysed in Risk review and Capital review (pages 152 to 241)

13. Financial instruments continued

Assets	Notes	Assets at fair value						Assets held at amortised cost \$million	Total \$million
		Trading \$million	Derivatives held for hedging \$million	Non-trading mandatorily at fair value through profit or loss \$million	Designated at fair value through profit or loss \$million	Fair value through other comprehensive income \$million	Total financial assets at fair value \$million		
Cash and balances at central banks		–	–	–	–	–	–	57,511	57,511
Financial assets held at fair value through profit or loss									
Loans and advances to banks ¹		146	–	3,622	–	–	3,768	–	3,768
Loans and advances to customers ¹		1,074	–	3,854	–	–	4,928	–	4,928
Reverse repurchase agreements and other similar secured lending	16	–	–	54,769	–	–	54,769	–	54,769
Debt securities, alternative tier one and other eligible bills		21,246	–	393	337	–	21,976	–	21,976
Equity shares		1,347	–	233	111	–	1,691	–	1,691
		23,813	–	62,871	448	–	87,132	–	87,132
Derivative financial instruments	14	45,108	513	–	–	–	45,621	–	45,621
Loans and advances to banks ¹	15	–	–	–	–	–	–	61,414	61,414
Of which: reverse repurchase agreements and other similar secured lending	16	–	–	–	–	–	–	3,815	3,815
Loans and advances to customers ¹	15	–	–	–	–	–	–	256,557	256,557
Of which: reverse repurchase agreements and other similar secured lending	16	–	–	–	–	–	–	3,151	3,151
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	116,335	116,335	9,303	125,638
Equity shares		–	–	–	–	263	263	–	263
		–	–	–	–	116,598	116,598	9,303	125,901
Other assets	20	–	–	–	–	–	–	32,678	32,678
Assets held for sale	21	78	–	358	451	–	887	135	1,022
Total as at 31 December 2018		68,999	513	63,229	899	116,598	250,238	417,598	667,836

¹ Further analysed in Risk review and Capital review (pages 152 to 241)

13. Financial instruments continued

Liabilities	Notes	Liabilities at fair value				Amortised cost \$million	Total \$million
		Trading \$million	Derivatives held for hedging \$million	Designated at fair value through profit or loss \$million	Total financial liabilities at fair value \$million		
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	1,081	1,081	–	1,081
Customer accounts		–	–	6,947	6,947	–	6,947
Repurchase agreements and other similar secured borrowing	16	–	–	46,283	46,283	–	46,283
Debt securities in issue	22	–	–	8,510	8,510	–	8,510
Short positions		4,153	–	–	4,153	–	4,153
		4,153	–	62,821	66,974	–	66,974
Derivative financial instruments	14	46,906	1,578	–	48,484	–	48,484
Deposits by banks		–	–	–	–	28,562	28,562
Customer accounts		–	–	–	–	405,357	405,357
Repurchase agreements and other similar secured borrowing	16	–	–	–	–	1,935	1,935
Debt securities in issue	22	–	–	–	–	53,025	53,025
Other liabilities	23	–	–	–	–	41,149	41,149
Subordinated liabilities and other borrowed funds	27	–	–	–	–	16,207	16,207
Total as at 31 December 2019		51,059	1,578	62,821	115,458	546,235	661,693

Liabilities	Notes	Liabilities at fair value				Amortised cost \$million	Total \$million
		Trading \$million	Derivatives held for hedging \$million	Designated at fair value through profit or loss \$million	Total financial liabilities at fair value \$million		
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	318	318	–	318
Customer accounts		–	–	6,751	6,751	–	6,751
Repurchase agreements and other similar secured borrowing	16	–	–	43,000	43,000	–	43,000
Debt securities in issue	22	–	–	7,405	7,405	–	7,405
Short positions		3,226	–	–	3,226	–	3,226
		3,226	–	57,474	60,700	–	60,700
Derivative financial instruments	14	45,580	1,629	–	47,209	–	47,209
Deposits by banks		–	–	–	–	29,715	29,715
Customer accounts		–	–	–	–	391,013	391,013
Repurchase agreements and other similar secured borrowing	16	–	–	–	–	1,401	1,401
Debt securities in issue	22	–	–	–	–	46,454	46,454
Other liabilities	23	–	–	–	–	37,945	37,945
Subordinated liabilities and other borrowed funds	27	–	–	–	–	15,001	15,001
Liabilities included in disposal groups held for sale	21	198	–	–	198	–	198
Total as at 31 December 2018		49,004	1,629	57,474	108,107	521,529	629,636

13. Financial instruments continued

Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously.

In practice, for credit mitigation, the Group is able to offset assets and liabilities which do not meet the IAS 32 netting criteria set out above. Such arrangements include master netting arrangements for derivatives and global master repurchase agreements for repurchase and reverse repurchase transactions. These agreements generally allow that all outstanding transactions with a particular counterparty can be offset but only in the event of default or other predetermined events.

In addition, the Group also receives and pledges readily realisable collateral for derivative transactions to cover net exposure in the event of a default. Under repurchase and reverse repurchase agreements the Group pledges (legally sells) and obtains (legally purchases) respectively, highly liquid assets which can be sold in the event of a default.

The following tables set out the impact of netting on the balance sheet. This comprises derivative transactions settled through an enforceable netting agreement where we have the intent and ability to settle net and which are offset on the balance sheet.

	2019					
	Gross amounts of recognised financial instruments \$million	Impact of offset in the balance sheet \$million	Net amounts of financial instruments presented in the balance sheet \$million	Related amount not offset in the balance sheet		Net amount \$million
				Financial instruments \$million	Financial collateral \$million	
Assets						
Derivative financial instruments	63,854	(16,642)	47,212	(28,659)	(7,824)	10,729
Reverse repurchase agreements and other similar secured lending	63,535	(3,121)	60,414	–	(60,414)	–
As at 31 December 2019	127,389	(19,763)	107,626	(28,659)	(68,238)	10,729
Liabilities						
Derivative financial instruments	65,126	(16,642)	48,484	(28,659)	(9,169)	10,656
Repurchase agreements and other similar secured borrowing	51,339	(3,121)	48,218	–	(48,218)	–
As at 31 December 2019	116,465	(19,763)	96,702	(28,659)	(57,387)	10,656

	2018					
	Gross amounts of recognised financial instruments \$million	Impact of offset in the balance sheet \$million	Net amounts of financial instruments presented in the balance sheet \$million	Related amount not offset in the balance sheet		Net amount \$million
				Financial instruments \$million	Financial collateral \$million	
Assets						
Derivative financial instruments	55,274	(9,653)	45,621	(32,283)	(9,259)	4,079
Reverse repurchase agreements and other similar secured lending	65,191	(3,456)	61,735	–	(61,735)	–
As at 31 December 2018	120,465	(13,109)	107,356	(32,283)	(70,994)	4,079
Liabilities						
Derivative financial instruments	56,862	(9,653)	47,209	(32,283)	(10,323)	4,603
Repurchase agreements and other similar secured borrowing	47,857	(3,456)	44,401	–	(44,401)	–
As at 31 December 2018	104,719	(13,109)	91,610	(32,283)	(54,724)	4,603

Related amounts not offset in the balance sheet comprises:

- ➔ Financial instruments not offset in the balance sheet but covered by an enforceable netting arrangement. This comprises master netting arrangements held against derivative financial instruments and excludes the effect of over-collateralisation
- ➔ Financial instruments where we may not have sought or been able to obtain a legal opinion evidencing enforceability of the right of offset
- ➔ Financial collateral – This comprises cash collateral pledged and received for derivative financial instruments and collateral bought and sold for reverse repurchase and repurchase agreements respectively and excludes the effect of over-collateralisation

13. Financial instruments continued

Financial liabilities designated at fair value through profit or loss (restated)

	2019 \$million	2018 \$million
Carrying balance aggregate fair value	62,821	57,474
Amount contractually obliged to repay at maturity	62,505	57,974
Difference between aggregate fair value and contractually obliged to repay at maturity	316	(500)
Cumulative change in fair value accredited to Credit Risk difference	17	476

The net fair value loss on financial liabilities designated at fair value through profit or loss was \$1,602 million for the year (31 December 2018: net loss of \$864 million). Further details of the Group's own credit adjustment (OCA) valuation technique is described later in this Note. The net fair value loss on financial liabilities designated at fair value through profit or loss now includes contractual interests, refer to Note 1 Accounting policies.

Valuation of financial instruments

The fair values of quoted financial assets and liabilities in active markets are based on current prices. A market is regarded as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. Wherever possible, fair values have been calculated using unadjusted quoted market prices in active markets for identical instruments held by the Group. Where quoted market prices are not available, or are unreliable because of poor liquidity, fair values have been determined using valuation techniques which, to the extent possible, use market observable inputs, but in some cases use non-market observable inputs. Valuation techniques used include discounted cash flow analysis and pricing models and, where appropriate, comparison with instruments that have characteristics similar to those of the instruments held by the Group.

The Valuation Control function is responsible for independent price verification, oversight of fair value and appropriate value adjustments and escalation of valuation issues. Independent price verification is the process of determining that the valuations incorporated into the financial statements are validated independent of the business area responsible for the product. The Valuation Control function has oversight of the fair value adjustments to ensure that the financial instruments are priced to exit. These are key controls in ensuring the material accuracy of the valuations incorporated in the financial statements. The market data used for price verification may include data sourced from recent trade data involving external counterparties or third parties such as Bloomberg, Reuters, brokers and consensus pricing providers. Valuation Control performs a semi-annual review of the suitability of the market data used for price testing. Price verification uses independently sourced data that is deemed most representative of the market the instruments trade in. To determine the quality of the market data inputs, factors such as independence, relevance, reliability, availability of multiple data sources and methodology employed by the pricing provider are taken into consideration.

The Valuation and Benchmarks Committee (VBC) is the valuation governance forum consisting of representatives from Group Market Risk, Product Control, Valuation Control and the business, which meets monthly to discuss and approve the independent valuations of the inventory. For Principal Finance, the Investment Committee meeting is held on a quarterly basis to review investments and valuations.

Significant accounting estimates and judgements

The Group evaluates the significance of financial instruments and material accuracy of the valuations incorporated in the financial statements as they involve a high degree of judgement and estimation uncertainty in determining the carrying values of financial assets and liabilities at the balance sheet date.

- Fair value of financial instruments is determined using valuation techniques and estimates (see below) which, to the extent possible, use market observable inputs, but in some cases use non-market observable inputs. Changes in the observability of significant valuation inputs can materially affect the fair values of financial instruments
- When establishing the exit price of a financial instrument using a valuation technique, the Group estimates valuation adjustments in determining the fair value (page 294)
- In determining the valuation of financial instruments, the Group makes judgements on the amounts reserved to cater for model and valuation risks, which cover both Level 2 and Level 3 assets, and the significant valuation judgements in respect of Level 3 instruments (page 296)
- Where the estimated measurement of fair value is more judgemental in respect of Level 3 assets, these are valued based on models that use a significant degree of non-market-based unobservable inputs

13. Financial instruments continued

Valuation techniques

Refer to the fair value hierarchy explanation – Level 1, 2 and 3 (page 296)

→ Financial instruments held at fair value

- **Debt securities – asset-backed securities:** Asset-backed securities are valued based on external prices obtained from consensus pricing providers, broker quotes, recent trades, arrangers' quotes, etc. Where an observable price is available for a given security, it is classified as Level 2. In instances where third-party prices are not available or reliable, the security is classified as Level 3. The fair value of Level 3 securities is estimated using market standard cash flow models with input parameter assumptions which include prepayment speeds, default rates, discount margins derived from comparable securities with similar vintage, collateral type, and credit ratings
- **Debt securities in issue:** These debt securities relate to structured notes issued by the Group. Where independent market data is available through pricing vendors and broker sources, these positions are classified as Level 2. Where such liquid external prices are not available, valuations of these debt securities are implied using input parameters such as bond spreads and credit spreads, and are classified as Level 3. These input parameters are determined with reference to the same issuer (if available) or proxies from comparable issuers or assets
- **Derivatives:** Derivative products are classified as Level 2 if the valuation of the product is based upon input parameters which are observable from independent and reliable market data sources. Derivative products are classified as Level 3 if there are significant valuation input parameters which are unobservable in the market, such as products where the performance is linked to more than one underlying variable. Examples are foreign exchange basket options, equity options based on the performance of two or more underlying indices and interest rate products with quanto payouts. In most cases these unobservable correlation parameters cannot be implied from the market, and methods such as historical analysis and comparison with historical levels or other benchmark data must be employed
- **Equity shares – private equity:** The majority of private equity unlisted investments are valued based on earning multiples – Price-to-Earnings (P/E) or enterprise value to earnings before income tax, depreciation and amortisation (EV/EBITDA) ratios – of comparable listed companies. The two primary inputs for the valuation of these investments are the actual or forecast earnings of the investee companies and earning multiples for the comparable listed companies. To ensure comparability between these unquoted investments and the comparable listed companies, appropriate adjustments are also applied (for example, liquidity and size) in the valuation. In circumstances where an investment does not have direct comparables or where the multiples for the comparable companies cannot be sourced from reliable external sources, alternative valuation techniques (for example, discounted cash flow models), which use predominantly unobservable inputs or Level 3 inputs, may be applied. Even though earning multiples for the comparable listed companies can be sourced from third-party sources (for example, Bloomberg), and those inputs can be deemed Level 2 inputs, all unlisted investments (excluding those where observable inputs are available, for example, over-the-counter (OTC) prices) are classified as Level 3 on the basis that the valuation methods involve judgements ranging from determining comparable companies to discount rates where the discounted cash flow method is applied
- **Loans and advances:** These primarily include loans in the global syndications business which were not syndicated as of the balance sheet date and other financing transactions within Financial Markets and loans and advances including reverse repurchase agreements that do not have SPPI cash flows or are managed on a fair value basis. These loans are generally bilateral in nature and, where available, their valuation is based on observable clean sales transactions prices or market observable spreads. If observable credit spreads are not available, proxy spreads based on comparable loans with similar credit grade, sector and region, are used. Where observable credit spreads and market standard proxy methods are available, these loans are classified as Level 2. Where there are no recent transactions or comparable loans, these loans are classified as Level 3
- **Other debt securities:** These debt securities include convertible bonds, corporate bonds, credit and structured notes. Where quoted prices are available through pricing vendors, brokers or observable trading activities from liquid markets, these are classified as Level 2 and valued using such quotes. Where there are significant valuation inputs which are unobservable in the market, due to illiquid trading or the complexity of the product, these are classified as Level 3. The valuations of these debt securities are implied using input parameters such as bond spreads and credit spreads. These input parameters are determined with reference to the same issuer (if available) or proxied from comparable issuers or assets

13. Financial instruments continued

→ Financial instruments held at amortised cost

The following sets out the Group's basis for establishing fair values of amortised cost financial instruments and their classification between Levels 1, 2 and 3. As certain categories of financial instruments are not actively traded, there is a significant level of management judgement involved in calculating the fair values:

- **Cash and balances at central banks:** The fair value of cash and balances at central banks is their carrying amounts
- **Debt securities in issue, subordinated liabilities and other borrowed funds:** The aggregate fair values are calculated based on quoted market prices. For those notes where quoted market prices are not available, a discounted cash flow model is used based on a current market related yield curve appropriate for the remaining term to maturity
- **Deposits and borrowings:** The estimated fair value of deposits with no stated maturity is the amount repayable on demand. The estimated fair value of fixed interest-bearing deposits and other borrowings without quoted market prices is based on discounted cash flows using the prevailing market rates for debts with a similar Credit Risk and remaining maturity
- **Investment securities:** For investment securities that do not have directly observable market values, the Group utilises a number of valuation techniques to determine fair value. Where available, securities are valued using input proxies from the same or closely related underlying (for example, bond spreads from the same or closely related issuer) or input proxies from a different underlying (for example, a similar bond but using spreads for a particular sector and rating). Certain instruments cannot be proxies as set out above, and in such cases the positions are valued using non-market observable inputs. This includes those instruments held at amortised cost and predominantly relates to asset-backed securities. The fair value for such instruments is usually proxies from internal assessments of the underlying cash flows
- **Loans and advances to banks and customers:** For loans and advances to banks, the fair value of floating rate placements and overnight deposits is their carrying amounts. The estimated fair value of fixed interest-bearing deposits is based on discounted cash flows using the prevailing money market rates for debts with a similar Credit Risk and remaining maturity. The Group's loans and advances to customers' portfolio is well diversified by geography and industry. Approximately a quarter of the portfolio re-prices within one month, and approximately half re-prices within 12 months. Loans and advances are presented net of provisions for impairment. The fair value of loans and advances to customers with a residual maturity of less than one year generally approximates the carrying value. The estimated fair value of loans and advances with a residual maturity of more than one year represents the discounted amount of future cash flows expected to be received, including assumptions relating to prepayment rates and Credit Risk. Expected cash flows are discounted at current market rates to determine fair value. The Group has a wide range of individual instruments within its loans and advances portfolio and, as a result, providing quantification of the key assumptions used to value such instruments is impractical
- **Other assets:** Other assets comprise primarily of cash collateral and trades pending settlement. The carrying amount of these financial instruments is considered to be a reasonable approximation of fair value as they are either short-term in nature or re-price to current market rates frequently

Fair value adjustments

When establishing the exit price of a financial instrument using a valuation technique, the Group considers adjustments to the modelled price which market participants would make when pricing that instrument. The main valuation adjustments (described further below) in determining fair value for financial assets and financial liabilities are as follows:

	01.01.19 \$million	Movement during the year \$million	31.12.19 \$million	01.01.18 \$million	Movement during the year \$million	31.12.18 \$million
Bid-offer valuation adjustment	67	12	79	82	(15)	67
Credit valuation adjustment	196	(60)	136	229	(33)	196
Debit valuation adjustment	(143)	100	(43)	(66)	(77)	(143)
Model valuation adjustment	6	1	7	6	–	6
Funding valuation adjustment	60	(34)	26	79	(19)	60
Other fair value adjustments	59	(14)	45	65	(6)	59
Total	245	5	250	395	(150)	245
Income deferrals						
Day 1 and other deferrals	100	3	103	83	17	100
Total	100	3	103	83	17	100

Note: Bracket represents an asset and credit to the income statement

13. Financial instruments continued

Fair value adjustments continued

- **Bid-offer valuation adjustment:** Generally, market parameters are marked on a mid-market basis in the revaluation systems, and a bid-offer valuation adjustment is required to quantify the expected cost of neutralising the business' positions through dealing away in the market, thereby bringing long positions to bid and short positions to offer. The methodology to calculate the bid-offer adjustment for a derivative portfolio involves netting between long and short positions and the grouping of risk by strike and tenor based on the hedging strategy where long positions are marked to bid and short positions marked to offer in the systems
- **Credit valuation adjustment (CVA):** The Group accounts for CVA against the fair value of derivative products. CVA is an adjustment to the fair value of the transactions to reflect the possibility that our counterparties may default and we may not receive the full market value of the outstanding transactions. It represents an estimate of the adjustment a market participant would include when deriving a purchase price to acquire our exposures. CVA is calculated for each subsidiary, and within each entity for each counterparty to which the entity has exposure and takes account of any collateral we may hold. The Group calculates the CVA by using estimates of future positive exposure, market-implied probability of default (PD) and recovery rates. Where market-implied data is not readily available, we use market-based proxies to estimate the PD. Wrong-way risk occurs when the exposure to a counterparty is adversely correlated with the credit quality of that counterparty, and the Group has implemented a model to capture this impact for key wrong-way exposures. The Group also captures the uncertainties associated with wrong-way risk in the Group's Prudential Valuation Adjustments framework
- **Debit valuation adjustment (DVA):** The Group calculates DVA adjustments on its derivative liabilities to reflect changes in its own credit standing. The Group's DVA adjustments will increase if its credit standing worsens and conversely, decrease if its credit standing improves. For derivative liabilities, a DVA adjustment is determined by applying the Group's probability of default to the Group's negative expected exposure against the counterparty. The Group's probability of default and loss expected in the event of default is derived based on bond and CDS spreads associated with the Group's issuances and market standard recovery levels. The expected exposure is modelled based on the simulation of the underlying risk factors over the expected life of the deal. This simulation methodology incorporates the collateral posted by the Group and the effects of master netting agreements
- **Model valuation adjustment:** Valuation models may have pricing deficiencies or limitations that require a valuation adjustment. These pricing deficiencies or limitations arise due to the choice, implementation and calibration of the pricing model
- **Funding valuation adjustment (FVA):** The Group makes FVA adjustments against derivative products. FVA reflects an estimate of the adjustment to its fair value that a market participant would make to incorporate funding costs or benefits that could arise in relation to the exposure. FVA is calculated by determining the net expected exposure at a counterparty level and then applying a funding rate to those exposures that reflect the market cost of funding. The FVA for uncollateralised (including partially collateralised) derivatives incorporates the estimated present value of the market funding cost or benefit associated with funding these transactions
- **Other fair value adjustments:** The Group calculates the fair value on the interest rate callable products by calibrating to a set of market prices with differing maturity, expiry and strike of the trades
- **Day one and other deferrals:** In certain circumstances the initial fair value may be based on a valuation technique which may lead to the recognition of profits or losses at the time of initial recognition. However, these profits or losses can only be recognised when the valuation technique used is based primarily on observable market data. In those cases where the initially recognised fair value is based on a valuation model that uses inputs which are not observable in the market, the difference between the transaction price and the valuation model is not recognised immediately in the income statement. The difference is amortised to the income statement until the inputs become observable, or the transaction matures or is terminated. Other deferrals primarily represent adjustments taken to reflect the specific terms and conditions of certain derivative contracts which affect the termination value at the measurement date

In addition, the Group calculates OCA on its issued debt designated at fair value, including structured notes, in order to reflect changes in its own credit standing. The Group's OCA reserve will increase if its credit standing worsens and conversely, decrease if its credit standing improves. The Group's OCA reserve will reverse over time as its liabilities mature. For issued debt and structured notes designated at fair value, an OCA adjustment is determined by discounting the contractual cash flows using a yield curve adjusted for market observed secondary senior unsecured credit spreads. The OCA as at 31 December 2019 is \$17 million, other comprehensive income loss \$462 million (31 December 2018: \$476 million, other comprehensive income gain \$394 million).

Fair value hierarchy – financial instruments held at fair value

Assets and liabilities carried at fair value or for which fair values are disclosed have been classified into three levels according to the observability of the significant inputs used to determine the fair values. Changes in the observability of significant valuation inputs during the reporting period may result in a transfer of assets and liabilities within the fair value hierarchy. The Group recognises transfers between levels of the fair value hierarchy when there is a significant change in either its principal market or the level of observability of the inputs to the valuation techniques as at the end of the reporting period.

- **Level 1:** Fair value measurements are those derived from unadjusted quoted prices in active markets for identical assets or liabilities
- **Level 2:** Fair value measurements are those with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable
- **Level 3:** Fair value measurements are those where inputs which could have a significant effect on the instrument's valuation are not based on observable market data

13. Financial instruments continued

Fair value hierarchy – financial instruments held at fair value continued

The following tables show the classification of financial instruments held at fair value into the valuation hierarchy:

Assets	Level 1 \$million	Level 2 \$million	Level 3 \$million	Total \$million
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	3,163	365	3,528
Loans and advances to customers	–	6,453	443	6,896
Reverse repurchase agreements and other similar secured lending	–	57,604	–	57,604
Debt securities, alternative tier one and other eligible bills	5,963	16,158	200	22,321
Of which:				
Government bonds and treasury bills	5,656	7,898	–	13,554
Issued by corporates other than financial institutions ¹	7	5,090	200	5,297
Issued by financial institutions ¹	300	3,170	–	3,470
Equity shares	2,241	–	228	2,469
Derivative financial instruments	466	46,729	17	47,212
Of which:				
Foreign exchange	69	25,929	8	26,006
Interest rate	28	19,342	4	19,374
Credit	–	1,231	1	1,232
Equity and stock index options	–	23	4	27
Commodity	369	204	–	573
Investment securities				
Debt securities, alternative tier one and other eligible bills	73,699	55,734	38	129,471
Of which:				
Government bonds and treasury bills	54,637	19,664	33	74,334
Issued by corporates other than financial institutions ¹	11,667	14,505	5	26,177
Issued by financial institutions ¹	7,395	21,565	–	28,960
Equity shares	30	4	257	291
Total financial instruments as at 31 December 2019 ²	82,399	185,845	1,548	269,792
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	1,025	56	1,081
Customer accounts	–	6,907	40	6,947
Repurchase agreements and other similar secured borrowing	–	46,283	–	46,283
Debt securities in issue	–	8,100	410	8,510
Short positions	2,499	1,654	–	4,153
Derivative financial instruments	515	47,912	57	48,484
Of which:				
Foreign exchange	97	26,824	5	26,926
Interest rate	31	18,891	9	18,931
Credit	–	1,892	23	1,915
Equity and stock index options	–	76	20	96
Commodity	387	229	–	616
Total financial instruments as at 31 December 2019 ²	3,014	111,881	563	115,458

¹ Includes covered bonds of \$3,499 million, securities issued by Multilateral Development Banks/International Organisations of \$11,894 million and State-owned agencies and development banks of \$17,936 million

² The above table does not include held for sale assets of \$330 million and liabilities of \$nil. These are reported in Note 21 together with their fair value hierarchy

There were no significant changes to valuation or levelling approaches in 2019.

There were no significant transfers of financial assets and liabilities measured at fair value between Level 1 and Level 2 during the year.

13. Financial instruments continued

Fair value hierarchy – financial instruments held at fair value continued

	Level 1 \$million	restated Level 2 \$million	restated Level 3 \$million	Total \$million
Assets				
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	3,136 ³	632 ³	3,768
Loans and advances to customers	–	4,436	492	4,928
Reverse repurchase agreements and other similar secured lending	–	54,769	–	54,769
Debt securities, alternative tier one and other eligible bills	8,097	13,562	317	21,976
Of which:				
Government bonds and treasury bills	6,699	6,851	–	13,550
Issued by corporates other than financial institutions ¹	178	3,241	317	3,736
Issued by financial institutions ¹	1,220	3,470	–	4,690
Equity shares	1,364	–	327	1,691
Derivative financial instruments	907	44,702	12	45,621
Of which:				
Foreign exchange	149	31,242	7	31,398
Interest rate	4	12,237	5	12,246
Credit	–	252	–	252
Equity and stock index options	–	89	–	89
Commodity	754	882	–	1,636
Investment securities				
Debt securities, alternative tier one and other eligible bills	67,624	48,299	412	116,335
Of which:				
Government bonds and treasury bills	52,329	17,928	412	70,669
Issued by corporates other than financial institutions ¹	8,366	9,839	–	18,205
Issued by financial institutions ¹	6,929	20,532	–	27,461
Equity shares	29	4	230	263
Total financial instruments as at 31 December 2018 ²	78,021	168,908	2,422	249,351
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	314	4	318
Customer accounts	–	6,751	–	6,751
Repurchase agreements and other similar secured borrowing	–	43,000	–	43,000
Debt securities in issue	–	6,966	439	7,405
Short positions	1,999	1,227	–	3,226
Derivative financial instruments	809	46,335 ³	65 ³	47,209
Of which:				
Foreign exchange	137	32,655	7	32,799
Interest rate	15	12,923 ³	15 ³	12,953
Credit	–	273	8	281
Equity and stock index options	–	32	35	67
Commodity	657	452	–	1,109
Total financial instruments as at 31 December 2018 ²	2,808	104,593	508	107,909

1 Includes covered bonds of \$5,466 million, securities issued by Multilateral Development Banks/International Organisations of \$7,432 million and State-owned agencies and development banks of \$7,549 million. The above table does not include held for sale assets of \$887 million and liabilities of \$198 million

2 The above table does not include held for sale assets of \$887 million and liabilities of \$198 million. These are reported in Note 21 together with their fair value hierarchy

3 Prior year balances have been restated due to review of observability parameters. The impact was to reclassify \$632 million from Level 2 loans and advances to banks to Level 3 and \$340 million from Level 3 interest rate derivative financial instruments liabilities to Level 2

There were no significant transfers of financial assets and liabilities measured at fair value between Level 1 and Level 2 during the year.

13. Financial instruments continued

Fair value hierarchy – financial instruments measured at amortised cost

The following table shows the carrying amounts and incorporates the Group's estimate of fair values of those financial assets and liabilities not presented on the Group's balance sheet at fair value. These fair values may be different from the actual amount that will be received or paid on the settlement or maturity of the financial instrument. For certain instruments, the fair value may be determined using assumptions for which no observable prices are available.

	Carrying value \$million	Fair value			Total \$million
		Level 1 \$million	Level 2 \$million	Level 3 \$million	
Assets					
Cash and balances at central banks ¹	52,728	–	52,728	–	52,728
Loans and advances to banks	53,549	–	53,431	–	53,431
Of which – reverse repurchase agreements and other similar secured lending	1,341	–	1,356	–	1,356
Loans and advances to customers	268,523	–	22,829	246,632	269,461
Of which – reverse repurchase agreements and other similar secured lending	1,469	–	1,341	130	1,471
Investment securities ²	13,969	–	13,107	20	13,127
Other assets ¹	36,161	–	36,161	–	36,161
Assets held for sale	90	–	70	20	90
As at 31 December 2019	425,020	–	178,326	246,672	424,998
Liabilities					
Deposits by banks	28,562	–	28,577	–	28,577
Customer accounts	405,357	–	405,361	–	405,361
Repurchase agreements and other similar secured borrowing	1,935	–	1,935	–	1,935
Debt securities in issue	53,025	20,031	33,269	–	53,300
Subordinated liabilities and other borrowed funds	16,207	15,986	803	–	16,789
Other liabilities ¹	41,149	–	41,149	–	41,149
As at 31 December 2019	546,235	36,017	511,094	–	547,111

	Carrying value \$million	Fair value			Total \$million
		Level 1 \$million	Level 2 \$million	Level 3 \$million	
Assets					
Cash and balances at central banks ¹	57,511	–	57,511	–	57,511
Loans and advances to banks	61,414	–	61,357	–	61,357
Of which – reverse repurchase agreements and other similar secured lending	3,815	–	3,842	–	3,842
Loans and advances to customers	256,557	–	18,514	238,797	257,311
Of which – reverse repurchase agreements and other similar secured lending	3,151	–	2,409	744	3,153
Investment securities ²	9,303	–	8,953	8	8,961
Other assets ¹	32,678	–	32,673	–	32,673
Assets held for sale	135	–	135	–	135
As at 31 December 2018	417,598	–	179,143	238,805	417,948
Liabilities					
Deposits by banks	29,715	–	29,715	–	29,715
Customer accounts	391,013	–	391,018	–	391,018
Repurchase agreements and other similar secured borrowing	1,401	–	1,401	–	1,401
Debt securities in issue	46,454	17,009	29,195	–	46,204
Subordinated liabilities and other borrowed funds	15,001	14,505	23	–	14,528
Other liabilities ¹	37,945	–	37,945	–	37,945
As at 31 December 2018	521,529	31,514	489,297	–	520,811

1 The carrying amount of these financial instruments is considered to be a reasonable approximation of fair value as they are short-term in nature or reprice to current market rates frequently

2 Includes Government bonds and Treasury bills of \$5,973 million as at 31 December 2019 and \$4,716 million as at 31 December 2018

13. Financial instruments continued**Loans and advances to customers by client segment¹****IFRS 9**

	2019					
	Carrying value			Fair value		
	Stage 3 \$million	Stage 1 and stage 2 \$million	Total \$million	Stage 3 \$million	Stage 1 and stage 2 \$million	Total \$million
Corporate & Institutional Banking	1,193	110,006	111,199	1,244	109,996	111,240
Retail Banking	472	105,896	106,368	482	106,939	107,421
Commercial Banking	510	25,607	26,117	541	25,463	26,004
Private Banking	219	14,522	14,741	219	14,471	14,690
Central & other items	–	10,098	10,098	–	10,106	10,106
As at 31 December 2019	2,394	266,129	268,523	2,486	266,975	269,461

	2018					
	Carrying value			Fair value		
	Stage 3 \$million	Stage 1 and stage 2 \$million	Total \$million	Stage 3 \$million	Stage 1 and stage 2 \$million	Total \$million
Corporate & Institutional Banking	1,758	102,919	104,677	1,818	102,791	104,609
Retail Banking	436	100,799	101,235	447	101,810	102,257
Commercial Banking	539	26,220	26,759	652	25,989	26,641
Private Banking	135	13,481	13,616	134	13,442	13,576
Central & other items	–	10,270	10,270	–	10,228	10,228
As at 31 December 2018	2,868	253,689	256,557	3,051	254,260	257,311

¹ Loans and advances includes reverse repurchase agreements and other similar secured lending: carrying value \$1,469 million and fair value \$1,471 million (31 December 2018: \$3,151 million and \$3,153 million respectively)

13. Financial instruments continued

Fair value of financial instruments

Level 3 Summary and significant unobservable inputs

The following table presents the Group's primary Level 3 financial instruments which are held at fair value. The table also presents the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and the weighted average of those inputs:

Instrument	Value as at 31 December 2019		Principal valuation technique	Significant unobservable inputs	Range ¹	Weighted average ²
	Assets \$million	Liabilities \$million				
Loans and advances to banks	365	-	Discounted cash flows	Price/yield	1.0 – 15.6%	10.8%
Loans and advances to customers	443	-	Discounted cash flows	Price/yield	0.5% – 6.9%	4.2%
				Recovery rates	18.9% – 100%	92.1%
Debt securities, alternative tier one and other eligible securities	184	-	Discounted cash flows	Price/Yield	3.8% – 18.7%	11.6%
Government bonds and treasury bills	33	-	Discounted cash flows	Price/Yield	2.9% – 5.5%	3.7%
Asset-backed securities	21	-	Discounted cash flows	Price/Yield	1.4% – 3.2%	2.7%
Equity shares (includes private equity investments) ³	485	-	Comparable pricing/yield	EV/EBITDA multiples	3.5x – 7.3x	4.6x
				P/E multiples	17.4x	17.4x
				P/B multiples	0.6x – 1.0x	0.9x
				P/S multiples	N/A	N/A
				Liquidity discount	10.0% – 20.0%	15.9%
			Discounted cash flows	Discount rates	8.4% – 16.2%	9.5%
Derivative financial instruments of which:						
Foreign exchange	8	5	Option Pricing Model	Foreign Exchange Option Implied Volatility	4.4% – 18.9%	16.7%
			Discounted cash flows	Foreign Exchange Curves	7.8% – 8.0%	7.9%
Interest rate	4	9	Discounted cash flows	Interest rate curves	5.3% – 19.6%	8.6%
			Option Pricing Model	Bond Option Implied Volatility	17.0% – 28.0%	24.0%
Credit	1	23	Discounted cash flows	Credit spreads	1.0% – 7.9%	1.1%
Equity and stock index	4	20	Internal pricing model	Equity Correlation	1.0% – 90.0%	58.0%
				Equity-FX Correlation	(80.0)% – 70.0%	(29.0)%
Deposits by banks	-	56	Discounted cash flows	Credit Spreads	1.0% – 1.8%	1.4%
Customer accounts	-	40	Discounted cash flows	Credit Spreads	1.0% – 5.8%	2.7%
Debt securities in issue	-	410	Discounted cash flows	Credit Spreads	0.1% – 1.4%	0.9%
			Internal Pricing Model	Equity Correlation	1.0% – 90.0%	58.0%
				Equity-FX Correlation	(80.0)% – 70.0%	(29.0)%
Total	1,548	563				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2019. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

3 The Group has an equity investment in the Series B preferred shares of Ripple Labs, Inc., which owns a digital currency (XRP) and is being carried at a fair value based on the shares' initial offering price

13. Financial instruments continued

Level 3 Summary and significant unobservable inputs continued

Instrument	Value as at 31 December 2018		Principal valuation technique	Significant unobservable inputs	restated Range ¹	restated Weighted average ²
	Assets \$million	Liabilities \$million				
Loans and advances to banks	632	–	Comparable pricing/yield	Price/yield	1.0% – 28.5% ⁴	17.7% ⁴
Loans and advances to customers	492	–	Comparable pricing/yield	Price/yield	N/A	N/A
			Discounted cash flows	Recovery rates	25.5% – 100%	94.7%
Debt securities, alternative tier one and other eligible securities	73	–	Comparable pricing/yield	Price/yield	5.4% – 6.3%	5.6%
Government bonds and treasury bills	412	–	Discounted cash flows	Price/yield	2.9% – 38.1%	11.2%
Asset-backed securities	244	–	Discounted cash flows	Price/yield	1.0% – 11.0%	3.4%
Equity shares (includes private equity investments) ³	557	–	Comparable pricing/yield	EV/EBITDA multiples	5.2x – 9.1x	8.5x
				P/E multiples	14.5x	14.5x
				P/B multiples	0.6x – 1.0x	1.0x
				P/S multiples	N/A	N/A
				Liquidity discount	10.0% – 20.0%	14.8%
			Discounted cash flows	Discount rates	7.3% – 13.2%	9.6%
Derivative financial instruments of which:						
Foreign exchange	7	7	Option pricing model	Foreign exchange option implied volatility	5.2% – 5.4%	5.4%
			Discounted cash flows	Foreign exchange curves	(0.4)% – 3.7%	0.4%
Interest rate	5	15	Discounted cash flows	Interest rate curves	6.4% – 16.8%	8.3%
Credit	–	8	Discounted cash flows	Credit spreads	0.4% – 2.8% ⁴	0.8% ⁴
Equity and stock index	–	35	Internal pricing model	Equity correlation	4.5% – 89.5%	N/A
				Equity-FX correlation	(80.0)% – 80.0%	N/A
Deposits by banks	–	4	Discounted cash flows	Credit spreads	1.0% – 1.0%	1.0%
Debt securities in issue		439	Discounted cash flows	Credit spreads	0.4% – 4.0%	1.4%
			Internal pricing model	Equity correlation	4.5% – 89.5%	N/A
				Equity FX correlation	(80.0)% – 80.0%	N/A
Total	2,422	508				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2018. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

3 The Group has an equity investment in the Series B preferred shares of Ripple Labs, Inc., which owns a digital currency (XRP) and is being carried at a fair value based on the shares' initial offering price

4 Prior year input ranges and weighted averages have been recalculated due to the prior year restatement of fair value hierarchy balances

13. Financial instruments continued

Level 3 Summary and significant unobservable inputs continued

The following section describes the significant unobservable inputs identified in the valuation technique table:

- **Comparable price/yield** is a valuation methodology in which the price of a comparable instrument is used to estimate the fair value where there are no direct observable prices. Yield is the interest rate that is used to discount the future cash flows in a discounted cash flow model. Valuation using comparable instruments can be done by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable instrument, then adjusting that yield (or spread) to derive a value for the instrument. The adjustment should account for relevant differences in the financial instruments such as maturity and/or credit quality. Alternatively, a price-to-price basis can be assumed between the comparable instrument and the instrument being valued in order to establish the value of the instrument (for example, deriving a fair value for a junior unsecured bond from the price of a senior secured bond). An increase in price, in isolation, would result in a favourable movement in the fair value of the asset. An increase in yield, in isolation, would result in an unfavourable movement in the fair value of the asset
- **Correlation** is the measure of how movement in one variable influences the movement in another variable. An equity correlation is the correlation between two equity instruments while an interest rate correlation refers to the correlation between two swap rates
- **Credit spread** represents the additional yield that a market participant would demand for taking exposure to the Credit Risk of an instrument
- **Discount rate** refers to the rate of return used to convert expected cash flows into present value
- **Equity-FX correlation** is the correlation between equity instrument and foreign exchange instrument
- **EV/EBITDA ratio multiples** is the ratio of Enterprise Value (EV) to Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA). EV is the aggregate market capitalisation and debt minus the cash and cash equivalents. An increase in EV/EBITDA multiples in isolation, will result in a favourable movement in the fair value of the unlisted firm
- **Foreign exchange curves** is the term structure for forward rates and swap rates between currency pairs over a specified period
- **Interest rate curves** is the term structure of interest rates and measure of future interest rates at a particular point in time
- **Liquidity discounts in the valuation of unlisted investments** primarily applied to the valuation of unlisted firms' investments to reflect the fact that these stocks are not actively traded. An increase in liquidity discount will result in unfavourable movement in the fair value of the unlisted firm
- **Price-Earnings (P/E) multiples** is the ratio of the Market Capitalisation to the net income after tax. The multiples are determined from multiples of listed comparables, which are observable. An increase in P/E multiple will result in a favourable movement in the fair value of the unlisted firm
- **Price-Book (P/B) multiple** is the ratio of the market value of equity to the book value of equity. An increase in P/B multiple will result in a favourable movement in the fair value of the unlisted firm
- **Price-Sales (P/S) multiple** is the ratio of the market value of equity to sales. An increase in P/S multiple will result in a favourable movement in the fair value of the unlisted firm
- **Recovery rates** are the expectation of the rate of return resulting from the liquidation of a particular loan. As the probability of default increases for a given instrument, the valuation of that instrument will increasingly reflect its expected recovery level, assuming default. An increase in the recovery rate, in isolation, would result in a favourable movement in the fair value of the loan
- **Volatility** represents an estimate of how much a particular instrument, parameter or index will change in value over time. Generally, the higher the volatility, the more expensive the option will be

13. Financial instruments continued**Level 3 movement tables – financial assets**

The table below analyses movements in Level 3 financial assets carried at fair value.

Assets	Held at fair value through profit or loss					Investment securities		
	Loans and advances to banks \$million	Loans and advances to customers \$million	Debt securities, alternative tier one and other eligible bills \$million	Equity shares \$million	Derivative financial instruments \$million	Debt securities, alternative tier one and other eligible bills \$million	Equity shares \$million	Total \$million
As at 1 January 2019	632	492	317	327	12	412	230	2,422
Total (losses)/gains recognised in income statement	(25)	(31)	(14)	(26)	(15)	2	–	(109)
Net trading income	(25)	(31)	(14)	(26)	(15)	–	–	(111)
Other operating income	–	–	–	–	–	2	–	2
Total (losses)/gains recognised in other comprehensive income (OCI)	–	–	–	–	–	(341)	5	(336)
Fair value through OCI reserve	–	–	–	–	–	(4)	12	8
Exchange difference	–	–	–	–	–	(337)	(7)	(344)
Purchases	826	133	106	139	109	156	26	1,495
Sales	–	(8)	(248)	(153)	(26)	(1)	(7)	(443)
Settlements	(1,068)	(253)	(3)	–	(5)	(34)	–	(1,363)
Transfers out ¹	–	(6)	(86)	(134)	(75)	(161)	–	(462)
Transfers in ²	–	116	128	75	17	5	3	344
As at 31 December 2019	365	443	200	228	17	38	257	1,548
Total unrealised losses recognised in the income statement, within net trading income, relating to change in fair value of assets held as at 31 December 2019	–	–	(1)	–	(1)	–	–	(2)

1 Transfers out include debt securities, alternative tier one and other eligible bills, equity shares, derivative financial instruments and loans and advances where the valuation parameters became observable during the year and were transferred to Level 1 and Level 2. Transfers out further relates to \$74 million equity shares held for sale

2 Transfers in primarily relate to debt securities, alternative tier one and other eligible bills, loans and advances, equity shares and derivative financial instruments where the valuation parameters become unobservable during the year

13. Financial instruments continued

Level 3 movement tables – financial assets continued

The table below analyses movements in Level 3 financial assets carried at fair value.

	Held at fair value through profit or loss					Investment securities			
	restated Loans and advances to banks \$million	Loans and advances to customers \$million	Reverse repurchase agreements and other similar secured lending \$million	Debt securities, alternative tier one and other eligible bills \$million	Equity shares \$million	Derivative financial instruments \$million	Debt securities, alternative tier one and other eligible bills \$million	Equity shares \$million	restated Total \$million
Assets									
As at 1 January 2018	71	717	–	431	1,100	40	318	150	2,827
Total gains/(losses) recognised in income statement	1 ³	13	–	(44)	(10)	(3)	22	–	(21)
Net trading income	1	13	–	(44)	(10)	(3)	–	–	(43)
Other operating income	–	–	–	–	–	–	22	–	22
Total (losses)/gains recognised in other comprehensive income (OCI)	–	–	–	–	–	–	(2)	40	38
Fair value through OCI reserve	–	–	–	–	–	–	–	41	41
Exchange difference	–	–	–	–	–	–	(2)	(1)	(3)
Purchases	532 ³	328	55	120	143	70	445	38	1,731
Sales	–	(254)	–	(215)	(176)	(40)	–	(5)	(690)
Settlements	(71)	(261)	–	(6)	–	(14)	(210)	–	(562)
Transfers out ¹	– ³	(112)	(55)	(8)	(743)	(43)	(161)	(1)	(1,123)
Transfers in ²	99	61	–	39	13	2	–	8	222
As at 31 December 2018	632	492	–	317	327	12	412	230	2,422
Total unrealised (losses)/gains recognised in the income statement, within net trading income, relating to change in fair value of assets held as at 31 December 2018	–	(2)	–	–	22	(3)	–	–	17

1 Transfers out include equity shares, debt securities, alternative tier one and other eligible bills, loans and advances, reverse repurchase agreements, and derivative financial instruments where the valuation parameters became observable during the year, and were transferred to Level 1 and Level 2. Transfers out further relates to \$743 million equity shares held for sale

2 Transfers in primarily relate to loans and advances, debt securities, alternative tier one and other eligible bills, equity shares and derivative financial instruments where the valuation parameters become unobservable during the year

3 Prior year movements have been restated due to the prior year restatement of fair value hierarchy balances

13. Financial instruments continued**Level 3 movement tables – financial liabilities**

	2019				
	Deposits by banks \$million	Customer accounts \$million	Debt securities in issue \$million	Derivative financial instruments \$million	Total \$million
As at 1 January 2019	4	–	439	65	508
Total (gains)/losses recognised in income statement – net trading income	(1)	(2)	22	45	64
Issues	53	41	592	436	1,122
Settlements	–	–	(522)	(561)	(1,083)
Transfers out ¹	–	–	(121)	(13)	(134)
Transfers in ²	–	1	–	85	86
As at 31 December 2019	56	40	410	57	563
Total unrealised (gains)/losses recognised in the income statement, within net trading income, relating to change in fair value of liabilities held as at 31 December 2019	–	(2)	16	2	16

	2018			
	Deposits by banks \$million	Debt securities in issue \$million	restated Derivative financial instruments \$million	restated Total \$million
As at 1 January 2018	69	442	25	536
Total losses/(gains) recognised in income statement – net trading income	1	(22)	8 ³	(13)
Issues	4	167	21 ³	192
Settlements	(70)	(148)	(3) ³	(221)
Transfers out ¹	–	–	(2)	(2)
Transfers in ²	–	–	16	16
As at 31 December 2018	4	439	65	508
Total unrealised (gains)/losses recognised in the income statement, within net trading income, relating to change in fair value of liabilities held as at 31 December 2018	–	(5)	8	3

1 Transfers out during the year primarily relate to debt securities in issue and derivative financial instruments where the valuation parameters became observable during the year and were transferred to Level 2 financial liabilities

2 Transfers in during the year primarily relate to derivative financial instruments and customer accounts where the valuation parameters become unobservable during the year

3 Prior year movements have been restated due to the prior year restatement of fair value hierarchy balances

Sensitivities in respect of the fair values of Level 3 assets and liabilities

Sensitivity analysis is performed on products with significant unobservable inputs. The Group applies a 10 per cent increase or decrease on the values of these unobservable inputs, to generate a range of reasonably possible alternative valuations. The percentage shift is determined by statistical analysis performed on a set of reference prices based on the composition of the Group's Level 3 inventory as the measurement date. Favourable and unfavourable changes (which show the balance adjusted for input change) are determined on the basis of changes in the value of the instrument as a result of varying the levels of the unobservable parameters. The Level 3 sensitivity analysis assumes a one-way market move and does not consider offsets for hedges.

	Held at fair value through profit or loss			Fair value through other comprehensive income		
	Net exposure \$million	Favourable changes \$million	Unfavourable changes \$million	Net exposure \$million	Favourable changes \$million	Unfavourable changes \$million
Financial instruments held at fair value						
Loans and advances	808	820	787	–	–	–
Asset backed securities	21	21	21	–	–	–
Debt securities, alternative tier one and other eligible bills	179	189	170	38	38	38
Equity shares	228	255	201	257	283	231
Derivative financial instruments	(40)	(34)	(46)	–	–	–
Customer accounts	(40)	(40)	(40)	–	–	–
Deposits by banks	(56)	(56)	(56)	–	–	–
Debt securities in issue	(410)	(379)	(441)	–	–	–
As at 31 December 2019	690	776	596	295	321	269

Financial instruments held at fair value						
Loans and advances	1,124 ¹	1,149 ¹	1,095 ¹	–	–	–
Asset backed securities ²	244	246	242	–	–	–
Debt securities, alternative tier one and other eligible bills	73	78	68	412	415	409
Equity shares	327	360	294	230	253	207
Derivative financial instruments	(53) ¹	(40) ¹	(66) ¹	–	–	–
Deposits by banks	(4)	(4)	(4)	–	–	–
Debt securities in issue	(439)	(417)	(461)	–	–	–
As at 31 December 2018	1,272	1,372	1,168	642	668	616

1 Prior year sensitivities have been recalculated due to the prior year restatement of fair value hierarchy balances

2 Asset backed securities are now presented separately. In the prior year these were included in debt securities and other eligible bills

Reasonably possible alternatives could have increased or decreased the fair values of financial instruments held at fair value through profit or loss and those classified as fair value through other comprehensive income by the amounts disclosed below.

Financial instruments	Fair value changes	2019 \$million	2018 \$million
Held at fair value through profit or loss	Possible increase	86	100
	Possible decrease	(94)	(104)
Fair value through other comprehensive income	Possible increase	26	26
	Possible decrease	(26)	(26)

14. Derivative financial instruments

Accounting policy

Derivatives are financial instruments that derive their value in response to changes in interest rates, financial instrument prices, commodity prices, foreign exchange rates, credit risk and indices. Derivatives are categorised as trading unless they are designated as hedging instruments.

Derivatives are initially recognised and subsequently measured at fair value, with revaluation gains recognised in profit or loss (except where cash flow or net investment hedging has been achieved, in which case the effective portion of changes in fair value is recognised within other comprehensive income).

Fair values may be obtained from quoted market prices in active markets, recent market transactions, and valuation techniques, including discounted cash flow models and option pricing models, as appropriate. Where the initially recognised fair value of a derivative contract is based on a valuation model that uses inputs which are not observable in the market, it follows the same initial recognition accounting policy as for other financial assets and liabilities. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative.

Hedge accounting

Under certain conditions, the Group may designate a recognised asset or liability, a firm commitment, highly probable forecast transaction or net investment of a foreign operation into a formal hedge accounting relationship with a derivative that has been entered to manage interest rate and/or foreign exchange risks present in the hedged item. The Group continues to apply the hedge accounting requirements of IAS 39 Financial Instruments: Recognition and Measurement, and has early adopted the amendments to IAS 39 in respect of interest rate benchmark reform. There are three categories of hedge relationships:

- **Fair value hedge:** to manage the fair value of interest rate and/or foreign currency risks of recognised assets or liabilities or firm commitments
- **Cash flow hedge:** to manage interest rate or foreign exchange risk of highly probable future cash flows attributable to a recognised asset or liability, or a forecasted transaction
- **Net investment hedge:** to manage the structural foreign exchange risk of an investment in a foreign operation

The Group formally documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking hedge transactions. This is described in more detail in the categories of hedges below.

The Group assesses, both at hedge inception and on a quarterly basis, whether the derivatives designated in hedge relationships are highly effective in offsetting changes in fair values or cash flows of hedged items. Hedges are considered to be highly effective if all the following criteria are met:

- At inception of the hedge and throughout its life, the hedge is prospectively expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk
- Actual results of the hedge are within a range of 80–125 per cent. This is tested using regression analysis
- The regression co-efficient (R squared), which measures the correlation between the variables in the regression, is at least 80 per cent
- In the case of the hedge of a forecast transaction, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that are expected to affect reported profit or loss. The Group assumes that any interest rate benchmarks on which hedged item cash flows are based are not altered by IBOR reform

The Group discontinues hedge accounting in any of the following circumstances:

- The hedging instrument is not, or has ceased to be, highly effective as a hedge
- The hedging instrument has expired, is sold, terminated or exercised
- The hedged item matures, is sold or repaid
- The forecast transaction is no longer deemed highly probable
- The Group elects to discontinue hedge accounting voluntarily

For interest rate benchmarks deemed in scope of IBOR reform, if the actual result of a hedge is outside the 80-125 per cent range, but it can be demonstrated that this is caused by interest rate benchmark uncertainty and the hedge passes the prospective assessment, then the Group will not de-designate the hedge relationship.

Fair value hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedging instruments are recorded in net trading income, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortised to the income statement over the remaining term to maturity of the hedged item. If the hedged item is sold or repaid, the unamortised fair value adjustment is recognised immediately in the income statement. For financial assets classified as fair value through other comprehensive income, the hedge accounting adjustment is included in other comprehensive income.

14. Derivative financial instruments continued

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedging instruments are initially recognised in other comprehensive income, accumulating in the cash flow hedge reserve within equity. These amounts are subsequently recycled to the income statement in the periods when the hedged item affects profit or loss. Both the derivative fair value movement and any recycled amount are recorded in the 'Cashflow hedges' line item in other comprehensive income.

The Group assesses hedge effectiveness using the hypothetical derivative method, which creates a derivative instrument to serve as a proxy for the hedged transaction. The terms of the hypothetical derivative match the critical terms of the hedged item and it has a fair value of zero at inception. The hypothetical derivative and the actual derivative are regressed to establish the statistical significance of the hedge relationship. Any ineffective portion of the gain or loss on the hedging instrument is recognised in the net trading income immediately.

For interest rate benchmarks deemed in scope of IBOR reform, the Group will retain the cumulative gain or loss in the cash flow hedge reserve for designated cash flow hedges, even though there is uncertainty arising from these reforms with respect to the timing and amount of the cash flows of the hedged items. Should the Group consider that the hedged future cash flows are no longer expected to occur due to reasons other than IBOR reform, the cumulative gain or loss will be immediately reclassified to profit or loss.

Net investment hedge

Hedges of net investments are accounted for in a similar manner to cash flow hedges, with gains and losses arising on the effective portion of the hedges recorded in the line 'Exchange differences on translation of foreign operations' in other comprehensive income, accumulating in the translation reserve within equity. These amounts remain in equity until the net investment is disposed of. The ineffective portion of the hedges is recognised in the net trading income immediately.

The tables below analyse the notional principal amounts and the positive and negative fair values of derivative financial instruments. Notional principal amounts are the amounts of principal underlying the contract at the reporting date.

Derivatives

	2019			2018		
	Notional principal amounts \$million	Assets \$million	Liabilities \$million	Notional principal amounts \$million	Assets \$million	Liabilities \$million
Foreign exchange derivative contracts:						
Forward foreign exchange contracts	2,290,781	16,281	16,396	2,080,513	16,457	17,264
Currency swaps and options	806,226	9,725	10,530	856,660	14,941	15,535
	3,097,007	26,006	26,926	2,937,173	31,398	32,799
Interest rate derivative contracts:						
Swaps	4,046,209	34,011	33,351	3,693,897	20,378	20,909
Forward rate agreements and options	284,973	1,826	2,061	489,943	1,400	1,586
Exchange traded futures and options	359,031	179	161	775,518	121	111
	4,690,213	36,016	35,573	4,959,358	21,899	22,606
Credit derivative contracts	80,972	1,232	1,915	39,343	252	281
Equity and stock index options	3,412	27	96	2,960	89	67
Commodity derivative contracts	79,458	573	616	69,601	1,636	1,109
Gross total derivatives	7,951,062	63,854	65,126	8,008,435	55,274	56,862
Offset	–	(16,642)	(16,642)	–	(9,653)	(9,653)
Total derivatives	7,951,062	47,212	48,484	8,008,435	45,621	47,209

The Group limits exposure to credit losses in the event of default by entering into master netting agreements with certain market counterparties. As required by IAS 32, exposures are only presented net in these accounts where they are subject to legal right of offset and intended to be settled net in the ordinary course of business.

The Group may enter into economic hedges that do not qualify for IAS 39 hedge accounting treatment, including derivative such as interest rate swaps, interest rate futures and cross currency swaps to manage interest rate and currency risks of the Group. These derivatives are measured at fair value, with fair value changes recognised in net trading income: refer to Market Risk (page 191).

The Derivatives and Hedging sections of the Risk review and Capital review (page 177) explain the Group's risk management of derivative contracts and application of hedging.

14. Derivative financial instruments continued

Derivatives held for hedging

The Group enters into derivative contracts for the purpose of hedging interest rate, currency and structural foreign exchange risks inherent in assets, liabilities and forecast transactions. The table below summarises the notional principal amounts and carrying values of derivatives designated in hedge accounting relationships at the reporting date.

	2019			2018		
	Notional principal amounts \$million	Assets \$million	Liabilities \$million	Notional principal amounts \$million	Assets \$million	Liabilities \$million
Derivatives designated as fair value hedges:						
Interest rate swaps	69,121	617	589	63,675	306	573
Currency swaps	8,405	47	774	8,963	30	942
	77,526	664	1,363	72,638	336	1,515
Derivatives designated as cash flow hedges:						
Interest rate swaps	9,277	53	74	10,733	59	67
Forward foreign exchange contracts	289	6	20	184	–	18
Currency swaps	5,254	34	51	2,701	57	22
	14,820	93	145	13,618	116	107
Derivatives designated as net investment hedges:						
Forward foreign exchange contracts	5,103	31	70	5,200	61	7
Total derivatives held for hedging	97,449	788	1,578	91,456	513	1,629

Fair value hedges

The Group issues various long-term fixed rate debt issuances that are measured at amortised cost, including some denominated in foreign currency, such as unsecured senior and subordinated debt (see Notes 22 and 27). The Group also holds various fixed rate debt securities such as government and corporate bonds, including some denominated in foreign currency (see Note 13). These assets and liabilities held are exposed to changes in fair value due to movements in market interest and foreign currency rates.

The Group uses interest rate swaps to exchange fixed rates for floating rates on funding to match floating rates received on assets, or exchange fixed rates on assets to match floating rates paid on funding. The Group further uses cross currency swaps to match the currency of the issued debt or held asset with that of the entity's functional currency.

Hedge ineffectiveness from fair value hedges is driven by cross currency basis risk. The amortisation of fair value hedge adjustments for hedged items no longer designated is recognised in net trading income. In future periods hedge relationships linked to an interest rate benchmark deemed in scope of benchmark reform may experience ineffectiveness due to market participants' expectations for when the change from the existing IBOR benchmark to an alternative risk-free rate will occur, since the transition may occur at different times for the hedged item and hedging instrument.

As at 31 December 2019 the Group held the following interest rate and cross currency swaps as hedging instruments in fair value hedges of interest and currency risk.

Hedging instruments and ineffectiveness

	2019				
	Notional \$million	Carrying amount		Change in fair value used to calculate hedge ineffectiveness \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million
		Asset \$million	Liability \$million		
Interest rate and currency risk¹					
Interest rate swaps – issued notes	22,029	559	44	511	–
Cross currency swaps – subordinated notes issued	5,451	17	751	32	6
Interest rate swaps – loans and advances	1,410	1	24	(22)	(1)
Interest rate swaps – debt securities and other eligible bills	45,682	57	521	(589)	12
Cross currency swaps – debt securities and other eligible bills	2,954	30	23	(18)	1
Total as at 31 December 2019	77,526	664	1,363	(86)	18

¹ Interest rate swaps are designated in hedges of the fair value of interest rate risk attributable to the hedged item. Cross currency swaps are used to hedge both interest rate and currency risks. All of the hedging instruments are derivatives, with changes in fair value, including hedge ineffectiveness recorded within net trading income

14. Derivative financial instruments continued

Fair value hedges continued

	2018				
	Notional \$million	Carrying amount		Change in fair value used to calculate hedge ineffectiveness \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million
		Asset \$million	Liability \$million		
Interest rate and currency risk¹					
Interest rate swaps – issued notes	19,112	270	310	(73)	–
Cross currency swaps – subordinated notes issued	7,349	–	938	(622)	(93)
Interest rate swaps – loans and advances	1,757	4	7	(6)	–
Interest rate swaps – debt securities and other eligible bills	42,806	32	256	(164)	(3)
Cross currency swaps – debt securities and other eligible bills	1,614	30	4	14	1
Total as at 31 December 2018	72,638	336	1,515	(851)	(95)

¹ Interest rate swaps are designated in hedges of the fair value of interest rate risk attributable to the hedged item. Cross currency swaps are used to hedge both interest rate and currency risks. All of the hedging instruments are derivatives, with changes in fair value, including hedge ineffectiveness recorded within net trading income

Hedged items in fair value hedges

	2019					
	Carrying amount		Accumulated amount of fair value hedge adjustments included in the carrying amount		Change in fair value used for calculating hedge ineffectiveness \$million	Cumulative balance of fair value adjustments from de-designated hedge relationships ¹ \$million
	Asset \$million	Liability \$million	Asset \$million	Liability \$million		
Issued notes	–	27,921	–	271	(537)	611
Debt securities and other eligible bills	49,190	–	373	–	620	(120)
Loans and advances to customers	1,431	–	22	–	21	–
Total as at 31 December 2019	50,621	27,921	395	271	104	491

	2018					
	Carrying amount		Accumulated amount of fair value hedge adjustments included in the carrying amount		Change in fair value used for calculating hedge ineffectiveness \$million	Cumulative balance of fair value adjustments from de-designated hedge relationships ¹ \$million
	Asset \$million	Liability \$million	Asset \$million	Liability \$million		
Issued notes	–	26,646	–	982	602	443
Debt securities and other eligible bills	44,885	–	129	–	155	37
Loans and advances to customers	1,147	–	5	–	1	7
Total as at 31 December 2018	46,032	26,646	134	982	758	487

¹ This represents a credit/(debit) to the balance sheet value

Income statement impact of fair value hedges

	2019 Income/(expense) \$million	2018 Income/(expense) \$million
Change in fair value of hedging instruments	(86)	(851)
Change in fair value of hedged risks attributable to hedged items	104	758
Net ineffectiveness gain/(loss) to net trading income	18	(93)
Amortisation (loss)/gain to net interest income	(5)	27

14. Derivative financial instruments continued

Cash flow hedges

The Group has exposure to market movements in future interest cash flows on portfolios of customer accounts, debt securities and loans and advances to customers. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults.

The hedging strategy of the Group involves using interest rate swaps to manage the variability in future cash flows on assets and liabilities that have floating rates of interest by exchanging the floating rates for fixed rates. It also uses foreign exchange contracts and currency swaps to manage the variability in future exchange rates on its assets and liabilities and costs in foreign currencies. This is done on both a micro basis whereby a single interest rate or cross currency swap is designated in a separate relationship with a single hedged item (such as a floating rate loan to a customer), and on a portfolio basis whereby each hedging instrument is designated against a group of hedged items that share the same risk (such as a group of customer accounts).

The hedged risk is determined as the variability of future cash flows arising from changes in the designated benchmark interest rate, e.g. one-month or three-month LIBOR.

Hedging instruments and ineffectiveness

	2019						
	Notional \$million	Carrying amount Asset \$million Liability \$million		Change in fair value used to calculate hedge ineffectiveness \$million	Gain/(loss) recognised in OCI \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million	Amount reclassified from reserves to income \$million
Interest rate risk							
Interest rate swaps	9,277	53	74	(87)	(87)	–	–
Currency risk							
Forward foreign exchange contracts	289	6	20	6	6	–	–
Cross currency swaps	5,254	34	51	(5)	(5)	–	(2)
Total as at 31 December 2019	14,820	93	145	(86)	(86)	–	(2)

	2018						
	Notional \$million	Carrying amount Asset \$million Liability \$million		Change in fair value used to calculate hedge ineffectiveness \$million	Gain/(loss) recognised in OCI \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million	Amount reclassified from reserves to income \$million
Interest rate risk							
Interest rate swaps	10,733	59	67	17	17	–	(1)
Currency risk							
Forward foreign exchange contracts	184	–	18	9	9	–	–
Cross currency swaps	2,701	57	22	57	57	–	8
Total as at 31 December 2018	13,618	116	107	83	83	–	7

14. Derivative financial instruments continued

Hedged items in cash flow hedges

	2019		
	Change in fair value used for calculating hedge ineffectiveness \$million	Cash flow hedge reserve \$million	Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships \$million
Customer accounts	86	(58)	(4)
Debt securities and other eligible bills	(3)	1	–
Loans and advances to customers	(28)	(10)	(4)
Forecast cashflow currency hedge	40	–	–
Intragroup lending currency hedge	(9)	(6)	–
Total as at 31 December 2019	86	(73)	(8)

	2018		
	Change in fair value used for calculating hedge ineffectiveness \$million	Cash flow hedge reserve \$million	Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships \$million
Customer accounts	(66)	18	33
Debt securities and other eligible bills	(9)	(3)	(1)
Loans and advances to customers	(9)	(39)	(12)
Total as at 31 December 2018	(84)	(24)	20

Impact of cash flow hedges on profit and loss and other comprehensive income

	2019 Income/(expense) \$million	2018 Income/(expense) \$million
Cash flow hedge reserve balance as at 1 January	(10)	(45)
(Loss)/gain recognised in other comprehensive income on effective portion of changes in fair value of hedging instruments	(64)	34
Gain transferred to net trading income on hedging instruments no longer in a hedging relationship	10	8
Gain/(loss) reclassified to income statement when hedged item affected net profit	11	(1)
Taxation charge relating to cash flow hedges	(6)	(6)
Cash flow hedge reserve balance as at 31 December	(59)	(10)

14. Derivative financial instruments continued

Net investment hedges

Foreign currency exposures arise from investments in subsidiaries that have a different functional currency from that of the presentation currency of the Group. This risk arises from the fluctuation in spot exchange rates between the functional currency of the subsidiaries and the Group's presentation currency, which causes the value of the investment to vary.

The Group's policy is to hedge these exposures only when not doing so would be expected to have a significant impact on the regulatory ratios of the Group and its banking subsidiaries. The Group uses foreign exchange forwards to manage the effect of exchange rates on its net investments in foreign subsidiaries.

Hedging instruments and ineffectiveness

	2019						
	Notional \$million	Carrying amount		Change in fair value used to calculate hedge ineffectiveness \$million	Gain recognised in OCI \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million	Amount reclassified from reserves to income \$million
		Asset \$million	Liability \$million				
Forward foreign exchange contracts ¹	5,103	31	70	98	98	–	–

	2018						
	Notional \$million	Carrying amount		Change in fair value used to calculate hedge ineffectiveness \$million	Gain recognised in OCI \$million	Ineffectiveness gain/(loss) recognised in net trading income \$million	Amount reclassified from reserves to income \$million
		Asset \$million	Liability \$million				
Forward foreign exchange contracts ¹	5,200	61	7	54	54	–	–

¹ These derivative forward currency contracts have a maturity of less than one year. The hedges are rolled on a periodic basis

Hedged items in net investment hedges

	2019		
	Change in fair value used for calculating hedge ineffectiveness \$million	Translation reserve \$million	Balances remaining in the translation reserve from de-designated hedge relationships \$million
Net investments	(98)	98	–

	2018		
	Change in fair value used for calculating hedge ineffectiveness \$million	Translation reserve \$million	Balances remaining in the translation reserve from de-designated hedge relationships \$million
Net investments	(54)	54	–

Impact of net investment hedges on other comprehensive income

	2019 Income/(expense) \$million	2018 Income/(expense) \$million
Gains recognised in other comprehensive income	191	282

14. Derivative financial instruments continued

Maturity of hedging instruments

		2019			
		Less than one month	More than one month and less than one year	One to five years	More than five years
Fair value hedges					
Interest rate swap					
Notional	\$million	433	12,032	46,229	10,427
Average fixed interest rate	USD	2.78%	2.50%	2.47%	4.05%
Cross currency swap					
Notional	\$million	92	4,267	3,379	667
Average fixed interest rate (to USD)	EUR	–	4.00%	2.61%	–
	GBP	–	5.38%	4.71%	4.38%
	JPY	(0.16)%	(0.17)%	–	–
Average exchange rate	EUR/USD	–	0.74	0.77	–
	GBP/USD	–	0.55	0.63	0.62
	JPY/USD	107.90	109.90	–	–
Cash flow hedges					
Interest rate swap					
Notional	\$million	193	4,440	3,891	753
Average fixed interest rate	HKD	1.91%	1.95%	1.80%	–
	USD	–	2.72%	1.65%	2.46%
Cross currency swap					
Notional	\$million	403	4,121	730	–
Average fixed interest rate	CNY ¹	3.22%	3.49%	3.94%	–
	HKD	–	2.52%	–	–
	INR ¹	–	4.32%	3.85%	–
	KRW ¹	–	1.25%	–	–
Average exchange rate	CNY ¹ /USD	6.86	6.93	7.08	–
	HKD/USD	–	7.84	–	–
	INR ¹ /USD	–	69.43	68.85	–
	KRW ¹ /USD	–	1,201.23	–	–
Forward foreign exchange contracts					
Notional	\$million	196	93	–	–
Average exchange rate	INR ¹ /USD	81.20	–	–	–
	INR/USD	81.01	–	–	–
	GBP/USD	0.80	0.79	–	–
Net investment hedges					
Foreign exchange derivatives					
Notional	\$million	5,103	–	–	–
Average exchange rate	CNY/USD	6.90	–	–	–
	KRW/USD	1,188.90	–	–	–
	TWD/USD	30.56	–	–	–

1 Offshore currency

14. Derivative financial instruments continued

Maturity of hedging instruments continued

		2018			
		Less than one month	More than one month and less than one year	One to five years	More than five years
Fair value hedges					
Interest rate swap					
Notional	\$million	323	15,692	40,698	6,962
Average fixed interest rate	EUR	–	–	0.38%	1.16%
	GBP	0.71%	0.97%	1.67%	1.50%
	USD	2.00%	2.53%	3.09%	4.37%
Cross currency swap					
Notional	\$million	1,030	1,451	4,550	1,932
Average fixed interest rate (to USD)	EUR	4.13%	–	3.10%	3.13%
	GBP	–	–	5.44%	4.69%
	JPY	–	(0.10)%	–	–
Average exchange rate	EUR/USD	0.79	–	0.75	0.80
	JPY/USD	–	110.54	–	–
	GBP/USD	–	–	0.57	0.61
Cash flow hedges					
Interest rate swap					
Notional	\$million	–	6,549	2,811	1,373
Average fixed interest rate	HKD	–	1.92%	2.64%	–
	USD	–	2.62%	1.86%	2.42%
Cross currency swap					
Notional	\$million	400	2,220	81	–
Average fixed interest rate	CNY ¹	4.01%	3.87%	–	–
	TWD	–	(0.45)%	–	–
	KRW	1.10%	1.70%	0.89%	–
Average exchange rate	CNY ¹ /USD	6.45	6.62	–	–
	KRW/USD	1,064.68	1,151.14	1,165.30	–
	TWD ¹ /USD	–	30.72	–	–
Foreign exchange derivatives					
Notional	\$million	–	–	184	–
Average exchange rate	INR ¹ /USD	–	–	81.20	–
	INR/USD	–	–	81.03	–
Net investment hedges					
Foreign exchange derivatives					
Notional	\$million	5,200	–	–	–
Average exchange rate	CNY/USD	6.72	–	–	–
	INR/USD	70.26	–	–	–
	KRW/USD	1,111.10	–	–	–
	TWD/USD	30.14	–	–	–

1 Offshore currency

14. Derivative financial instruments continued

Interest rate benchmark reform

As explained in Note 1 on page 262, the Group has early adopted the 'Interest Rate Benchmark Reform Amendments to IFRS 9, IAS 39 and IFRS 7' which allow the Group to assume that the interest rate benchmark on which cash flows for the hedged item and/or hedging instrument are based is altered as a result of IBOR reform for the following activities:

- Prospective hedge assessment
- Determining whether a cash flow or forecast transaction for a cash flow hedge is highly probable. However, the Group otherwise assesses whether the cash flows are considered highly probable
- Determining when cumulative balances in the cash flow hedge reserve from de-designated hedges should be recycled to the income statement

For retrospective hedge assessment, the Group will not de-designate a hedge relationship if the actual result is outside the required 80-125% range, but it can be demonstrated that this is solely caused by interest rate benchmark uncertainty and the hedge passes the prospective assessment. Any hedge ineffectiveness continues to be recorded in net trading income.

For hedges of non-contractually specified benchmark portions of an interest rate (such as fair value hedges of interest rate risk on fixed rate debt instruments) the Group only assesses whether the designated benchmark is separately identifiable at hedge inception. The choice of designated benchmark is not revisited for existing hedge relationships.

In applying these amendments the Group has made the following key assumptions for the period end, to be reviewed on an ongoing basis:

- The interest rate benchmarks applicable to the Group that are in scope of the IFRS amendments are USD LIBOR, GBP LIBOR, JPY LIBOR and Singapore Swap Offer Rate (SGD SOR), which is dependent on USD LIBOR and expected to be replaced by the Singapore Overnight Rate Average (SORA) for derivative financial instruments
- EURIBOR is not in scope of the IFRS amendments because its revised methodology incorporates market transaction data, hence the benchmark is expected to continue to exist in future reporting periods
- The Group believes it is too early to reliably estimate when interest rate benchmark uncertainty will be resolved for all benchmarks assumed to be in scope of the amendments. It therefore assumes that the uncertainty arising from interest rate benchmark reform will be present until 31 December 2021, at which time the amendments to IFRS no longer apply

The Group has established an IBOR Transition Programme that is overseen by the Group's Chief Operating Officer, and updates a number of committees including the Board Risk Committee and Group Risk Committee regularly updated. The programme comprises a series of business and function workstreams, with oversight and coordination of the specific areas and risks provided by a central project team. The key objectives of these workstreams include identifying all contracts in scope of benchmark reform, upgrading internal systems to support business in the alternative RFR product suite, identifying and communicating to customers with whom repricing and/or re-papering IBOR-referenced contracts is required and executing the necessary change in contracts. Workstreams actively participate in industry-wide working groups to ensure they are kept informed of the latest developments and are consistent with the approaches of other market participants.

As at 31 December 2019, the following populations of derivative instruments designated in fair value or cash flow hedge accounting relationships were linked to IBOR reference rates:

	Fair value hedges		Cash flow hedges			
	Notional designated up to 31 December 2021 \$million	Notional designated beyond 31 December 2021 \$million	Notional designated up to 31 December 2021 \$million	Notional designated beyond 31 December 2021 \$million	Total \$million	Weighted average exposure years
Interest rate swaps						
USD LIBOR	26,159	25,622	950	2,559	55,290	2.7
GBP LIBOR	613	4,049	–	–	4,662	5.5
JPY LIBOR	1,429	569	–	–	1,998	2.4
SGD SOR	563	132	–	–	695	1.7
	28,764	30,372	950	2,559	62,645	2.9
Cross currency swaps						
USD LIBOR vs Fixed rate foreign currency	6,216	2,189	–	–	8,405	2.7
Total notional of hedging instruments in scope of IFRS amendments	34,980	32,561	950	2,559	71,050	2.9

The Group's primary exposure is to USD LIBOR due to the extent of fixed rate debt security assets and issued notes denominated in USD that are designated in fair value hedge relationships. Where fixed rate instruments are in other currencies, cross currency swaps are used to achieve an equivalent floating USD exposure.

15. Loans and advances to banks and customers

Accounting policy

Refer to Note 13 Financial instruments for the relevant accounting policy.

	2019 \$million	2018 \$million
Loans and advances to banks	53,558	61,420
Expected credit loss	(9)	(6)
	53,549	61,414
Loans and advances to customers	274,306	262,985
Expected credit loss	(5,783)	(6,428)
	268,523	256,557
Total loans and advances to banks and customers	322,072	317,971

The Group has outstanding residential mortgage loans to Korea residents of \$17.8 billion (31 December 2018: \$16.9 billion) and Hong Kong residents of \$29.9 billion (31 December 2018: \$27.8 billion).

Analysis of loans and advances to customers by geographic region and client segments and related impairment provisions is set out within the Risk review and Capital review (pages 162).

16. Reverse repurchase and repurchase agreements including other similar secured lending and borrowing

Accounting policy

The Group purchases securities (a reverse repurchase agreement – ‘reverse repo’) typically with financial institutions subject to a commitment to resell or return the securities at a predetermined price. These securities are not included in the balance sheet as the Group does not acquire the risks and rewards of ownership; however, they are recorded off-balance sheet as collateral received. Consideration paid (or cash collateral provided) is accounted for as a loan asset at amortised cost, unless it is managed on a fair value basis or designated at fair value through profit or loss. In the majority of cases through the contractual terms of a reverse repo arrangement, the Group as the transferee of the security collateral has the right to sell or repledge the asset concerned.

The Group also sells securities (a repurchase agreement – ‘repo’) subject to a commitment to repurchase or redeem the securities at a predetermined price. The securities are retained on the balance sheet as the Group retains substantially all the risks and rewards of ownership and these securities are disclosed as pledged collateral. Consideration received (or cash collateral received) is accounted for as a financial liability at amortised cost, unless it is either mandatorily classified as fair value through profit or loss or irrevocably designated at fair value through profit or loss at initial recognition.

Financial assets are pledged as collateral as part of sales and repurchases, securities borrowing and securitisation transactions under terms that are usual and customary for such activities. The Group is obliged to return equivalent securities.

Repo and reverse repo transactions typically entitle the Group and its counterparties to have recourse to assets similar to those provided as collateral in the event of a default. Securities sold subject to repos, either by way of a Global Master Repurchase Agreement (GMRA), or through a securities sale and Total Return Swap (TRS) continue to be recognised on the balance sheet as the Group retains substantially the associated risks and rewards of the securities (the TRS is not recognised). The counterparty liability is included in deposits by banks or customer accounts, as appropriate. Assets sold under repurchase agreements are considered encumbered as the Group cannot pledge these to obtain funding.

Reverse repurchase agreements and other similar secured lending

	2019 \$million	2018 \$million
Banks	19,610	20,698
Customers	40,804	41,037
	60,414	61,735
Of which:		
Fair value through profit or loss	57,604	54,769
Banks	18,269	16,883
Customers	39,335	37,886
Held at amortised cost	2,810	6,966
Banks	1,341	3,815
Customers	1,469	3,151

16. Reverse repurchase and repurchase agreements including other similar secured lending and borrowing continued

Reverse repurchase agreements and other similar secured lending continued

Under reverse repurchase and securities borrowing arrangements, the Group obtains securities on terms which permit it to repledge or resell the securities to others. Amounts on such terms are:

	2019 \$million	2018 \$million
Securities and collateral received (at fair value)	86,308	84,557
Securities and collateral which can be repledged or sold (at fair value)	85,415	82,534
Amounts repledged/transferred to others for financing activities, to satisfy liabilities under sale and repurchase agreements (at fair value)	44,530	40,552

Repurchase agreements and other similar secured borrowing

	2019 \$million	2018 \$million
Banks	7,789	4,984
Customers	40,429	39,417
	48,218	44,401
Of which:		
Fair value through profit or loss	46,283	43,000
Banks	7,401	4,777
Customers	38,882	38,223
Held at amortised cost	1,935	1,401
Banks	388	207
Customers	1,547	1,194

The tables below set out the financial assets provided as collateral for repurchase and other secured borrowing transactions:

2019					
	Fair value through profit or loss \$million	Fair value through other comprehensive income \$million	Amortised cost \$million	Off-balance sheet \$million	Total \$million
Collateral pledged against repurchase agreements					
On-balance sheet					
Debt securities, alternative tier one and other eligible bills	1,036	2,137	1,023	–	4,196
Off-balance sheet					
Repledged collateral received	–	–	–	44,530	44,530
As at 31 December 2019	1,036	2,137	1,023	44,530	48,726

2018					
	Fair value through profit or loss \$million	Fair value through other comprehensive income \$million	Amortised cost \$million	Off-balance sheet \$million	Total \$million
Collateral pledged against repurchase agreements					
On-balance sheet					
Debt securities, alternative tier one and other eligible bills	2,060	1,974	49	–	4,083
Off-balance sheet					
Repledged collateral received	–	–	–	40,552	40,552
As at 31 December 2018	2,060	1,974	49	40,552	44,635

17. Goodwill and intangible assets

Accounting policy

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the identifiable net assets and contingent liabilities of the acquired subsidiary, associate or joint venture at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associates is included in Investments in associates. Goodwill included in intangible assets is assessed at each balance sheet date for impairment and carried at cost less any accumulated impairment losses. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold. Detailed calculations are performed based on discounting expected cash flows of the relevant cash generating units (CGUs) and discounting these at an appropriate discount rate, the determination of which requires the exercise of judgement. Goodwill is allocated to CGUs for the purpose of impairment testing. CGUs represent the lowest level within the Group which generate separate cash inflows and at which the goodwill is monitored for internal management purposes. These are equal to or smaller than the Group's reportable segments (as set out in Note 2) as the Group views its reportable segments on a global basis. The major CGUs to which goodwill has been allocated are set out in the CGU table (page 322).

Significant accounting estimates and judgements

The carrying amount of goodwill is based on the application of judgements including the basis of goodwill impairment calculation assumptions. Judgement is also applied in determination of cash generating units.

Estimates include forecasts used for determining cash flows for CGUs and discount rates which factor in country risk-free rates and applicable risk premiums. The Group undertakes an annual assessment to evaluate whether the carrying value of goodwill on-balance sheet is impaired. The estimation of future cash flows and the level to which they are discounted is inherently uncertain and requires significant judgement and is subject to potential change over time.

Acquired intangibles

At the date of acquisition of a subsidiary or associate, intangible assets which are deemed separable and that arise from contractual or other legal rights are capitalised and included within the net identifiable assets acquired. These intangible assets are initially measured at fair value, which reflects market expectations of the probability that the future economic benefits embodied in the asset will flow to the entity, and are amortised on the basis of their expected useful lives (4 to 16 years). At each balance sheet date, these assets are assessed for indicators of impairment. In the event that an asset's carrying amount is determined to be greater than its recoverable amount, the asset is written down immediately.

Computer software

Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Internally generated software represents substantially all of the total software capitalised. Direct costs of the development of separately identifiable internally generated software are capitalised where it is probable that future economic benefits attributable to the asset will flow from its use (internally generated software). These costs include salaries and wages, materials, service providers and contractors, and directly attributable overheads. Costs incurred in the ongoing maintenance of software are expensed immediately when incurred. Internally generated software is amortised over a three to five year time period. On an annual basis, software assets' residual values and useful lives are reviewed, including assessing for indicators of impairment. Indicators of impairment include loss of business relevance, obsolescence of asset, exit of the business to which the software relates, technological changes, change in use of the asset, reduction in useful life, plans to reduce usage or scope.

For capitalised software, judgement is required to determine which costs relate to research (and are therefore expensed) and which costs relate to development (capitalised). Further judgement is required to determine the technical feasibility of completing the software such that it will be available for use. Estimates are used to determine how the software will generate probable future economic benefits. These estimates include: cost savings, income increases, balance sheet improvements, improved functionality or improved asset safeguarding.

17. Goodwill and intangible assets continued

	2019				2018			
	Goodwill \$million	Acquired intangibles \$million	Computer software \$million	Total \$million	Goodwill \$million	Acquired intangibles \$million	Computer software \$million	Total \$million
Cost								
At 1 January	3,116	510	2,835	6,461	3,252	578	2,529	6,359
Exchange translation differences	(10)	(5)	26	11	(105)	(24)	(67)	(196)
Additions	–	1	753	754	–	1	695	696
Disposals	–	(1)	(3)	(4)	–	–	–	–
Impairment	(27)	–	–	(27)	–	–	–	–
Amounts written off	–	(44)	(372)	(416)	–	(5)	(322)	(327)
Classified as held for sale	–	–	–	–	(31)	(40)	–	(71)
At 31 December	3,079	461	3,239	6,779	3,116	510	2,835	6,461
Provision for amortisation								
At 1 January	–	458	947	1,405	–	470	876	1,346
Exchange translation differences	–	(5)	6	1	–	(22)	(21)	(43)
Amortisation	–	9	436	445	–	10	363	373
Impairment charge	–	–	12	12	–	–	46	46
Disposals	–	(1)	–	(1)	–	–	–	–
Amounts written off	–	(30)	(343)	(373)	–	–	(317)	(317)
At 31 December	–	431	1,058	1,489	–	458	947	1,405
Net book value	3,079	30	2,181	5,290	3,116	52	1,888	5,056

At 31 December 2019, accumulated goodwill impairment losses incurred from 1 January 2005 amounted to \$2,828 million (31 December 2018: \$2,801 million), of which \$27 million was recognised in 2019 (31 December 2018: nil).

Goodwill

CGU structure

During the year, the Group reviewed its CGU structure. In determining the level at which management monitor goodwill and level at which independent cash flows are generated, the Group determined that CIB as a global business segment should be a single CGU and combined the prior period Corporate Finance and Transaction Banking product level CGUs. As a result of the change, CIB and Private Banking are considered global CGUs which are managed on a Global basis, while Retail Banking, Commercial Banking, Central, including Treasury Market activities are managed on a country basis.

Testing of goodwill for impairment

An annual assessment is made as to whether the current carrying value of goodwill is impaired. For the purposes of impairment testing, goodwill is allocated at the date of acquisition to a CGU. Goodwill is considered to be impaired if the carrying amount of the relevant CGU exceeds its recoverable amount. Indicators of impairment include changes in the economic performance and outlook of the region, including geopolitical changes, changes in market value of regional investments, large credit defaults and strategic decisions to exit certain regions. The recoverable amounts for all the CGUs were measured based on value-in-use (ViU). The calculation of ViU for each CGU is calculated using five-year cash flow projections and an estimated terminal value based on a perpetuity value after year five. The cash flow projections are based on forecasts approved by management up to 2024. The perpetuity terminal value amount is calculated using year five cash flows using long-term GDP growth rates. All cash flows are discounted using discount rates which reflect market rates appropriate to the CGU.

17. Goodwill and intangible assets continued

Goodwill continued

The goodwill allocated to each CGU and key assumptions used in determining the recoverable amounts are set out below and are solely estimates for the purposes of assessing impairment of acquired goodwill.

Cash generating unit	2019			restated 2018		
	Goodwill \$million	Pre-tax discount rate per cent	Long-term forecast GDP growth rates per cent	Goodwill \$million	Pre-tax discount rate per cent	Long-term forecast GDP growth rates per cent
Country CGUs						
Greater China & North Asia	900			887		
Hong Kong	358	10.6	2.4	357	13.2	3.0
Taiwan	542	13.2	2.0	530	13.0	2.1
Africa & Middle East	512			520		
Pakistan	188	31.4	4.0	194	22.8	3.4
UAE	204	8.5	2.5	204	9.0	3.3
Others (5) ¹	120	8.9–16.6	2.5–4.9	122	10.6–19.0	2.6–5.3
ASEAN & South Asia	706			734		
India	259	23.2	7.3	262	19.9	7.7
Singapore	342	12.2	1.9	339	15.9	2.7
Others (6) ²	105	13.8–17.3	3.3–7.3	133	15.4–20.5	4.4–7.0
Global CGUs	961			975		
Global Private Banking	84	11.4	3.5	84	10.3	3.6
Global Corporate & Institutional Banking ³	877	11.9	3.5	891	10.3	3.6
	3,079			3,116		

1 Bahrain, Ghana, Jordan, Oman and Qatar

2 Bangladesh, Brunei, Indonesia, Nepal, Sri Lanka and Vietnam

3 Global Corporate Finance and Global Transaction Banking CGUs are now combined into a single Global Corporate & Institutional Banking CGU

Three country CGUs; Sri Lanka, Nepal and Oman have had all of the goodwill allocated to them written off, totalling \$27 million. This was a result of insufficient cash flows in the ViU calculation such that the carrying amount of each CGU, which included goodwill, was greater than the recoverable amount.

The Group has performed sensitivity analysis on the key assumptions for each CGU's recoverable amount. The following CGUs are considered sensitive to the key variables and any individual movements on the estimates (cashflow, discount rate and GDP growth rate) up to the levels disclosed below would eliminate the current headroom.

	2019				
	Goodwill \$million	Headroom \$million	Cash flow reduction per cent	Discount rate increase per cent	GDP growth rate decline per cent
Taiwan	542	63	4	1	1
India	259	11	1	1	1
Pakistan	188	16	6	1	2

Acquired intangibles

These primarily comprise those items recognised as part of the acquisitions of Union Bank (now amalgamated into Standard Chartered Bank (Pakistan) Limited), Hsinchu (now amalgamated into Standard Chartered Bank (Taiwan) Limited), Pembroke, American Express Bank and ABSA's custody business in Africa. Maintenance intangible assets represent the value in the difference between the contractual right under acquired leases to receive aircraft in a specified maintenance condition at the end of the lease and the actual physical condition of the aircraft at the date of acquisition.

The acquired intangibles are amortised over periods from four years to a maximum of 16 years. The constituents are as follows:

	2019 \$million	2018 \$million
Acquired intangibles comprise:		
Aircraft maintenance	10	24
Core deposits	1	2
Customer relationships	12	19
Licences	7	7
Net book value	30	52

18. Property, plant and equipment

Accounting policy

All property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the assets. Subsequent costs are included in the asset's carrying amount or are recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

At each balance sheet date the assets' residual values and useful lives are reviewed, and adjusted if appropriate, including assessing for indicators of impairment. In the event that an asset's carrying amount is determined to be greater than its recoverable amount, the asset is written down to the recoverable amount. Gains and losses on disposals are included in the income statement.

Repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Land and buildings comprise mainly branches and offices. Freehold land is not depreciated although it is subject to impairment testing.

Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

- Buildings up to 50 years
- Leasehold improvements life of lease up to 50 years
- Equipment and motor vehicles three to 15 years
- Aircraft up to 18 years
- Ships up to 15 years

Where the Group is a lessee of a right-of-use asset, the leased assets are capitalised and included in Property, plant and equipment with a corresponding liability to the lessor recognised in Other liabilities, in accordance with the Group's leased assets accounting policy in Note 19.

All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

	2019					
	Premises \$million	Equipment \$million	Operating lease assets \$million	Leased premises assets ³ \$million	Leased equipment assets ³ \$million	Total \$million
Cost or valuation						
At 1 January	2,070	766	6,323	1,408	13	10,580
Exchange translation differences	(31)	(17)	(5)	(35)	–	(88)
Additions	96 ¹	123 ¹	299	128	10	656
Disposals and fully depreciated assets written off	(62) ²	(72) ²	(694)	(8)	–	(836)
Transfers to assets held for sale	(15)	–	(1,462)	–	–	(1,477)
As at 31 December	2,058	800	4,461	1,493	23	8,835
Depreciation						
Accumulated at 1 January	706	494	1,469	–	1	2,670
Exchange translation differences	(7)	(10)	(5)	7	–	(15)
Charge for the year	77	106	263	283	6	735
Impairment (release)/charge	1	–	121	–	–	122
Attributable to assets sold, transferred or written off	(35) ²	(72) ²	(155)	(4)	–	(266)
Transfers to assets held for sale	(5)	–	(626)	–	–	(631)
Accumulated at 31 December	737	518	1,067	286	7	2,615
Net book amount at 31 December	1,321	282	3,394	1,207	16	6,220

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of \$219 million on page 258

2 Disposals for property, plant and equipment during the year of \$119 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed

3 Leased premises assets and leased equipment assets were newly recognised on 1 January 2019 due to the adoption of IFRS 16 Leases (refer to Note 1). The Group applied the modified retrospective transition approach, such that the right-of-use asset recognised equals the lease liability, adjusted for prepayments and accruals recognised under IAS 17 as of 31 December 2018

18. Property, plant and equipment continued

	2018			
	Premises \$million	Equipment \$million	Operating lease assets \$million	Total \$million
Cost or valuation				
At 1 January	2,216	767	7,000	9,983
Exchange translation differences	(80)	(38)	(8)	(126)
Additions	46 ¹	125 ¹	866	1,037
Disposals and fully depreciated assets written off	(92) ²	(87) ²	(1,244)	(1,423)
Transfers to assets held for sale	(20)	(1)	(291)	(312)
As at 31 December	2,070	766	6,323	9,159
Depreciation				
Accumulated at 1 January	753	513	1,506	2,772
Exchange translation differences	(25)	(26)	(9)	(60)
Charge for the year	86	94	304	484
Impairment (release)/charge	(5)	–	155	150
Attributable to assets sold, transferred or written off	(91) ²	(86) ²	(358)	(535)
Transfers to assets held for sale	(12)	(1)	(129)	(142)
Accumulated at 31 December	706	494	1,469	2,669
Net book amount at 31 December	1,364	272	4,854	6,490

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of \$171 million on page 258

2 Disposals for property, plant and equipment during the year of \$85 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed

Operating lease assets

Assets leased to customers under operating leases consist of commercial aircraft which is included within property, plant and equipment. The leases are classified as operating leases as they do not transfer substantially all the risks and rewards incidental to the ownership of the assets, and rental income from operating lease assets is disclosed in Note 6. At 31 December 2019, these assets had a net book value of \$3,394 million (31 December 2018: \$4,854 million).

	2019 Minimum lease receivables under operating leases falling due: \$million	2018 Minimum lease receivables under operating leases falling due: \$million
Within one year	473	527
One to two years	451	499
Two to three years	403	467
Three to four years	337	405
Four to five years	82	341
After five years	789	997
	2,535	3,236

19. Leased assets

Accounting policy

The Group assesses whether a contract is a lease in scope of this policy by determining whether the contract gives it the right to use a specified underlying physical asset for a lease term greater than 12 months, unless the underlying asset is of low value.

Where the Group is a lessee and the lease is deemed in scope, it recognises a liability equal to the present value of lease payments over the lease term, discounted using the incremental borrowing rate applicable in the economic environment of the lease. The liability is recognised in 'Other liabilities'. A corresponding right-of-use asset equal to the liability, adjusted for any lease payments made at or before the commencement date, is recognised in 'Property, plant and equipment'. The lease term includes any extension options contained in the contract that the Group is reasonably certain it will exercise.

The Group subsequently depreciates the right-of-use asset using the straight-line method over the lease term and measures the lease liability using the effective interest method. Depreciation on the asset is recognised in 'Depreciation and amortisation', and interest on the lease liability is recognised in 'Interest expense'.

The judgements in determining lease balances are the determination of whether the Group is reasonably certain that it will exercise extension options present in lease contracts. On initial recognition, the Group considers a range of characteristics such as premises function, regional trends and the term remaining on the lease to determine whether it is reasonably certain that a contractual right to extend a lease will be exercised. Where a change in assumption is confirmed by the local property management team, a remeasurement is performed in the Group-managed vendor system.

The estimates were the determination of incremental borrowing rates in the respective economic environments. The Group uses third party broker quotes to estimate its USD cost of senior unsecured borrowing, then uses cross currency swap pricing information to determine the equivalent cost of borrowing in other currencies. Quotes from different brokers are compared to ensure they are reflective of prevailing market conditions.

Prior period information is not restated, i.e. it is presented, as previously reported, under IAS 17 and related interpretations in which the Group as lessee recognised lease payments in operating expenses on a straight-line basis and disclosed future minimum lease payments. The difference between operating lease commitments of \$907 million disclosed in the Group's 2018 Annual Report and newly recognised lease liabilities of \$1,421 million on 1 January 2019 is driven by different requirements between the old and new standard on which expected cash flows to include. IFRS 16 requires the lease term used to measure lease liabilities to include "reasonably certain" renewal options, whereas previously IAS 17 required disclosure of "non-cancellable" lease commitments. The consequences of this are:

- Under IFRS 16, for some leases the Group includes lease renewal options which it is reasonably certain will be exercised in the measurement of lease liabilities. The cash flows associated with renewal options were not included in the previous operating lease commitment disclosures
- In certain jurisdictions, the Group has a unilateral right to cancel building leases with notice of fewer than three months without incurring a significant financial penalty. In previous disclosures, the Group would exclude cash flows beyond the non-cancellable period as permitted under IAS 17, but under IFRS 16 the Group would only exclude these cashflows from lease measurement if it was reasonably certain the termination clause would be exercised

Existing lease liabilities may change in future periods due to changes in assumptions or decisions to exercise lease renewal or termination options, changes in payments due to renegotiations of market rental rates as permitted by those contracts and changes to payments due to rent being contractually linked to an inflation index. In general the remeasurement of a lease liability under these circumstances leads to an equal change to the right-of-use asset balance, with no immediate effect on the income statement.

The total cash outflow during the year for premises and equipment leases was \$397 million.

The total expense during the year in respect of leases with a term less than or equal to 12 months was \$20 million.

The right-of-use asset balances and depreciation charges are disclosed in Note 18. The lease liability balances are disclosed in Note 23 and the interest expense on lease liabilities is disclosed in Note 3.

Maturity analysis

The maturity profile for lease liabilities associated with leased premises and equipment assets is as follows:

	One year or less \$million	Between one year and two years \$million	Between two years and five years \$million	More than five years \$million	Total \$million
Other liabilities – lease liabilities	24	53	326	892	1,295

20. Other assets

Accounting policy

Refer to Note 13 Financial instruments for the relevant accounting policy.

Commodities represent physical holdings where the Group has title and exposure to the market risk associated with the holding. Commodities are fair valued with the fair value derived from observable spot or short-term futures prices from relevant exchanges.

Other assets include:

	2019 \$million	2018 \$million
Financial assets held at amortised cost (Note 13)		
Hong Kong SAR Government certificates of indebtedness (Note 23) ¹	6,911	5,964
Cash collateral	9,169	10,323
Acceptances and endorsements ²	5,518	4,923
Unsettled trades and other financial assets	14,563	11,468
	36,161	32,678
Non-financial assets:		
Commodities ³	5,465	2,488
Other assets	396	235
	42,022	35,401

1 The Hong Kong SAR Government certificates of indebtedness are subordinated to the claims of other parties in respect of bank notes issued

2 Trade finance whereby the Group offers a guarantee of payment between trade counterparties for a fee

3 Commodities are carried at fair value and classified as Level 2

21. Assets held for sale and associated liabilities

Accounting policy

Financial instruments can be reclassified as held for sale if they are non-current assets or if they are part of a disposal group; however, the measurement provisions for the financial instruments remain governed by the requirements of IFRS 9 Financial Instruments. Refer to Note 13 Financial instruments for the relevant accounting policy.

Non-current assets are classified as held for sale and measured at the lower of their carrying amount and fair value less cost to sell when:

- a) Their carrying amounts will be recovered principally through sale
- b) They are available for immediate sale in their present condition
- c) Their sale is highly probable

Immediately before the initial classification as held for sale, the carrying amounts of the assets are measured in accordance with the applicable accounting policies related to the asset or liability before reclassification as held for sale.

The assets below have been presented as held for sale following the approval of Group management and the transactions are expected to complete in 2020.

Following a decision by the Board of directors to exit the ship leasing business within CIB, the shipping portfolio has been moved to held for sale.

The financial assets reported below are classified under Level 1 \$70 million (31 December 2018: \$82 million), Level 2 nil (31 December 2018: \$14 million) and Level 3 \$260 million (31 December 2018: \$791 million).

21. Assets held for sale and associated liabilities continued

	2019 \$million	2018 \$million
Assets held for sale		
Debt securities	–	14
Equity shares	330	873
Financial assets held at fair value through profit or loss ¹	330	887
Loans and advances to banks	–	112
Loans and advances to customers	32	23
Debt securities held at amortised cost	58	–
Financial assets held at amortised cost	90	135
Interests in joint venture	800	–
Goodwill and intangible assets	–	71
Property, plant and equipment ²	833	170
Others	–	65
	2,053	1,328

1 Principal Finance assets of \$330 million (31 December 2018: \$887 million), classified as financial assets held at fair value through profit or loss is expected to be disposed of by the end of 2020

2 Aircraft classified as held for sale by Pembroke Air Leasing Finance \$50 million (31 December 2018: \$162 million) and vessels classified as held for sale \$769 million (31 December 2018: Nil) totalling to \$819 million is included within property, plant and equipment

Interests in joint venture

	2019 \$million	2018 \$million
As at 1 January	717	775
Exchange translation difference	32	(49)
Expected credit loss, net ¹	–	(33)
Share of profit	48	26
Share of FVOCI and other reserves	3	(2)
As at 31 December	800	717

1 IFRS 9 transition impact from joint venture is reported here

The Group's principal joint venture is PT Bank Permata Tbk (Permata). The Group has a 44.56 per cent (31 December 2018: 44.56 per cent) equity investment in Permata. The Group has determined that it has joint control of Permata through its shareholding, which is held alongside a third party that holds the same percentage. The Group has made the judgement that, through these equity holdings, and in making decisions pertaining to Permata, that both parties require each other's unanimous consent when making decisions over the relevant activities of Permata. Permata is based in Indonesia and provides financial services to consumer and commercial banking clients. The Group's share of profit of Permata amounts to \$48 million (31 December 2018: \$26 million) and the Group's share of net assets was \$800 million (31 December 2018: \$717 million). Permata is listed on the Indonesia Stock Exchange with a share price of IDR1265 as at 30 December 2019, resulting in a share capitalisation value of the Group's investment of \$1,140 million.

21. Assets held for sale and associated liabilities continued**Interests in joint venture** continued

The following table sets out the summarised financial statements of PT Bank Permata Tbk prior to the Group's share of joint ventures being applied:

	2019 \$million	2018 \$million
Cash and balances at central banks	749	766
Loans and advances to banks	1,281	929
Loans and advances to customers	7,621	6,862
Other assets	1,780	1,882
Total Assets	11,431	10,439
Deposits by banks	557	171
Customer accounts	8,886	8,171
Other financial liabilities	6	8
Other liabilities	436	648
Total liabilities	9,885	8,998
Total Equity	1,546	1,441
Operating income	550	517
Of which:		
Interest income	830	779
Interest expense	(426)	(399)
Expenses	(333)	(312)
Of which:		
Depreciation and amortisation	(13)	(5)
Impairment	(72)	(117)
Operating profit	145	88
Taxation	(37)	(23)
Profit after tax	108	65
The financial statements of PT Bank Permata Tbk includes the following:		
Other comprehensive profit/(loss) for the year	6	(8)
Total comprehensive income for the year	114	57

Dividends received from PT Bank Permata Tbk were nil (2018: nil).

Reconciliation of the net assets above to the carrying amount of the investments in PT Bank Permata Tbk recognised in the consolidated financial statements:

	2019 \$million	2018 \$million
Net assets of PT Bank Permata Tbk	1,546	1,441
Proportion of the Group's ownership interest in joint ventures	688	642
Notional goodwill	112	108
Other adjustments ¹	–	(33)
Carrying amount of the Group's interest in PT Bank Permata Tbk	800	717

¹ Relates to IFRS 9 transition adjustments

In December 2019 the Group signed a conditional share purchase agreement to sell their 44.56 per cent equity interest in Permata, subject to regulatory and purchaser shareholder approvals. The purchase price will be 1.77 times Permata's Book Value based on the most recent financial results published prior to completion. The estimated consideration payable to SCB in cash is approximately \$1.3 billion. Upon completion of the transaction, SCB will cease to have any equity interest in Permata. The Group has classified its interest in the joint venture as held for sale.

21. Assets held for sale and associated liabilities continued

Liabilities held for sale

As at 31 December 2019, there were no held for sale financial liabilities associated with the Principal Finance business (31 December 2018: \$198 million).

	2019 \$million	2018 \$million
Derivative financial instruments	–	198 ¹
Financial liabilities held at fair value through profit or loss	–	198
Other liabilities	9	48
Provisions for liabilities and charges	–	1
	9	247

¹ The derivative liability was a fixed price forward sale contract to sell the Principal Finance assets, which settled during 2019

22. Debt securities in issue

Accounting policy

Refer to Note 13 Financial instruments for the relevant accounting policy.

	2019			2018		
	Certificates of deposit of \$100,000 or more \$million	Other debt securities in issue \$million	Total \$million	Certificates of deposit of \$100,000 or more \$million	Other debt securities in issue \$million	Total \$million
Debt securities in issue	22,242	30,783	53,025	20,949	25,505	46,454
Debt securities in issue included within:						
Financial liabilities held at fair value through profit or loss (Note 13)	–	8,510	8,510	–	7,405	7,405
Total debt securities in issue	22,242	39,293	61,535	20,949	32,910	53,859

In 2019, the Company issued a total of \$6.1 billion senior notes for general business purposes of the Group as shown below:

Securities	\$million
\$1,500 million callable floating rate senior notes due 2022 (callable 2021)	1,500
\$1,250 million callable fixed rate senior notes due 2022 (callable 2021)	1,250
\$1,000 million callable fixed rate senior notes due 2025 (callable 2024)	1,000
\$1,000 million callable fixed rate senior notes due 2030 (callable 2029)	1,000
EUR 500 million callable fixed rate senior notes due 2027 (callable 2026)	567
AUD 600 million callable fixed rate senior notes due 2025 (callable 2024)	417
AUD 400 million callable fixed rate senior notes due 2025 (callable 2024)	278
\$100 million zero coupon callable bond due 2049 (callable 2024)	100
Total senior notes issued	6,112

In 2018, the Company issued a total of \$4.6 billion senior notes for general business purposes of the Group as shown below:

Securities	\$million
\$1,400 million callable fixed rate senior notes due 2023 (callable 2022)	1,400
\$1,250 million callable fixed rate senior notes due 2024 (callable 2023)	1,250
JPY 111 billion callable fixed rate senior notes due 2024 (callable 2023)	1,011
\$600 million callable floating rate senior notes due 2024 (callable 2023)	600
JPY 18.9 billion fixed rate senior notes due 2025	172
\$28 million fixed rate senior notes due 2026	28
JPY 10 billion callable fixed rate senior notes due 2029 (callable 2028)	91
Total senior notes issued	4,552

Where a debt instrument is callable, the issuer has the right to call.

23. Other liabilities

Accounting policy

Refer to Note 13 Financial instruments for the relevant accounting policy for financial liabilities, Note 19 Leased assets for the accounting policy for leases and Note 31 Share-based payments for the accounting policy for cash-settled share-based payments.

	2019 \$million	2018 \$million
Financial liabilities held at amortised cost (Note 13)		
Notes in circulation ¹	6,911	5,964
Acceptances and endorsements ²	5,518	4,923
Cash collateral	7,824	9,259
Property leases ³	1,275	–
Equipment leases ³	20	–
Unsettled trades and other financial liabilities	19,601	17,799
	41,149	37,945
Non-financial liabilities		
Cash-settled share-based payments	50	32
Other liabilities	384	332
	41,583	38,309

1 Hong Kong currency notes in circulation of \$6,911 million (31 December 2018: \$5,964 million) that are secured by the Government of Hong Kong SAR certificates of indebtedness of the same amount included in other assets (Note 20)

2 Trade finance whereby the Group offers a guarantee of payment between trade counterparties for a fee

3 Other financial liabilities now include the present value of lease liabilities, as required by IFRS 16 from 1 January 2019, refer to Note 19

24. Provisions for liabilities and charges

Accounting policy

The Group recognises a provision for a present legal or constructive obligation resulting from a past event when it is more likely than not that it will be required to transfer economic benefits to settle the obligation and the amount of the obligation can be estimated reliably. Where a liability arises based on participation in a market at a specified date, the obligation is recognised in the financial statements on that date and is not accrued over the period.

Significant accounting estimates and judgements

The recognition and measurement of provisions for liabilities and charges requires significant judgement and the use of estimates about uncertain future conditions or events.

Estimates include the best estimate of the probability of outflow of economic resources, cost of settling a provision and timing of settlement. Judgements are required for inherently uncertain areas such as legal decisions (including external advice obtained), and outcome of regulator reviews.

	2019			2018		
	Provision for credit commitments \$million	Other provisions \$million	Total \$million	Provision for credit commitments \$million	Other provisions \$million	Total \$million
At 1 January	281	1,049	1,330	259	100	359
Exchange translation differences	5	4	9	(9)	(1)	(10)
Transfer	–	–	–	–	39	39
Charge against profit	35	239	274	39	956	995
Provisions utilised	(4)	(1,160)	(1,164)	(8)	(45)	(53)
At 31 December	317	132	449	281	1,049	1,330

Provision for credit commitment comprises those undrawn contractually committed facilities where there is doubt as to the borrowers' ability to meet their repayment obligations.

Other provisions consist mainly of provisions for regulatory settlements and legal claims, the nature of which are described in Note 26 (page 332).

25. Contingent liabilities and commitments

Accounting policy

Contingent liabilities are possible obligations arising from past events, whose existence will be confirmed only by uncertain future events or present obligations arising from past events that are not recognised because either an outflow of economic benefits is not probable or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognised but information about them is disclosed unless the possibility of any outflow of economic benefits in settlement is remote.

Where the Group undertakes to make a payment on behalf of its customers for guarantees issued such as for performance bonds or as irrevocable letters of credit as part of the Group's Transaction Banking business, for which an obligation to make a payment has not arisen at the reporting date, those are included in these financial statements as contingent liabilities.

Other contingent liabilities primarily include revocable letters of credit and bonds issued on behalf of customers to customs officials, for bids or offers and as shipping guarantees.

Commitments are where the Group has confirmed its intention to provide funds to a customer or on behalf of a customer in the form of loans, overdrafts, future guarantees, whether cancellable or not, or letters of credit, and the Group has not made payments at the balance sheet date; those instruments are included in these financial statements as commitments. Commitments and contingent liabilities are generally considered on demand as the Group may have to honour them, or client may draw down at any time.

Capital commitments are contractual commitments the Group has entered into to purchase non-financial assets.

The table below shows the contract or underlying principal amounts of unmatured off-balance sheet transactions at the balance sheet date. The contract or underlying principal amounts indicate the volume of business outstanding and do not represent amounts at risk.

	2019 \$million	2018 \$million
Contingent liabilities		
Guarantees and irrevocable letters of credit	37,007	36,511
Other contingent liabilities	5,425	5,441
	42,432	41,952
Commitments		
Documentary credits and short-term trade-related transactions	4,282	3,982
Undrawn formal standby facilities, credit lines and other commitments to lend		
One year and over	64,450	71,467
Less than one year	34,925	37,041
Unconditionally cancellable	41,819	39,220
	145,476	151,710
Capital commitments		
Contracted capital expenditure approved by the directors but not provided for in these accounts ¹	419	450

¹ Of which the Group has commitments totalling \$400 million to purchase aircraft for delivery in 2020 (31 December 2018: \$439 million). No pre-delivery payments have been made in respect of these commitments (2018: \$5 million)

The Group's share of contingent liabilities and commitments relating to joint ventures is \$251 million (31 December 2018: \$205 million). As set out in Note 26, the Group has contingent liabilities in respect of certain legal and regulatory matters for which it is not practicable to estimate the financial impact as there are many factors that may affect the range of possible outcomes.

26. Legal and regulatory matters

Accounting policy

Where appropriate, the Group recognises a provision for liabilities when it is probable that an outflow of economic resources embodying economic benefits will be required and for which a reliable estimate can be made of the obligation. The uncertainties inherent in legal and regulatory matters affect the amount and timing of any potential outflows with respect to which provisions have been established. These uncertainties also mean that it is not possible to give an aggregate estimate of contingent liabilities arising from such legal and regulatory matters.

Claims and other proceedings

The Group receives legal claims against it in a number of jurisdictions and is subject to regulatory and enforcement investigations and proceedings from time to time.

Apart from the matters described below, the Group currently considers none of these claims, investigations or proceedings to be material. However, in light of the uncertainties involved in such matters there can be no assurance that the outcome of a particular matter or matters currently not considered to be material may not ultimately be material to the Group's results in a particular reporting period depending on, among other things, the amount of the loss resulting from the matter(s) and the results otherwise reported for such period.

Investigations into, and resolutions with respect to, historical sanctions and financial crime control issues

In April 2019, the Group announced that it had resolved the previously disclosed investigations by (i) the New York Department of Financial Services (NYDFS), the Board of Governors of the Federal Reserve System, the Department of Justice (DOJ), the New York County District Attorney's Office (DANY) and the Office of Foreign Assets Control (together the 'US Authorities') concerning historical violations of US sanctions laws and regulations from 2007 through to 2014 and (ii) the Financial Conduct Authority (FCA) concerning the effectiveness and governance of historical financial crime controls in the Group's UK correspondent banking business and in its UAE branches (the 2019 Resolutions). Under the terms of the 2019 Resolutions, the Group agreed to pay a total of \$947 million in monetary penalties to the US Authorities and £102 million to the FCA. As part of the 2019 Resolutions, the Group's Deferred Prosecution Agreements, which were originally entered into with the DOJ and DANY (and subsequently extended) as part of settlements in 2012 with the US Authorities relating to US sanctions compliance, were further extended to 9 April 2021. The monitorship previously imposed by the DOJ expired on 31 March 2019. As of 31 December 2019, the term of the independent consultant appointed by the NYDFS terminated and the business restrictions previously imposed by the NYDFS are no longer in effect.

Other proceedings

Since November 2014, a number of lawsuits have been filed in the United States District Courts for the Southern and Eastern Districts of New York against a number of banks (including Standard Chartered Bank) on behalf of plaintiffs who are, or are relatives of, victims of various terrorist attacks in Iraq. Five of the lawsuits were filed in late December 2018. The plaintiffs allege that the defendant banks aided and abetted the unlawful conduct of US sanctioned parties in breach of the US Anti-Terrorism Act. In March and September 2019, the New York District Courts ruled in favour of the banks' motion to dismiss two lawsuits. Following those rulings, in one lawsuit the plaintiffs are seeking to amend their complaint, and in the other the plaintiffs have filed an appeal against the dismissal. Two other lawsuits will likely join in that appeal and the remaining lawsuits are still at an early procedural stage. Based on the facts currently known, it is not possible for the Group to predict the outcome of these lawsuits.

In January 2020, a shareholder derivative complaint was filed by the City of Philadelphia in the New York State Court against 45 current and former directors and senior officers of the Group. The complaint purports to be brought on behalf of all shareholders of Standard Chartered PLC (SC PLC). It is alleged that the individuals breached their duties to the Group and caused a waste of corporate assets by permitting the conduct that gave rise to the costs and losses to the Group of the 2019 Resolutions. SC PLC, Standard Chartered Holdings Limited and Standard Chartered Bank are each named as "nominal defendants" in the complaint. The case is at a very early stage, as the complaint is yet to be served.

In February 2019, the Kenyan Director of Public Prosecutions (DPP) and related agencies in Kenya commenced an investigation into five banks, including Standard Chartered Bank Kenya Limited (SCBK), in connection with the alleged theft of funds from Kenya's National Youth Service. This investigation followed fines imposed on the banks, including SCBK, by the Central Bank of Kenya regarding adequacy of controls related to the processing of the allegedly stolen funds. Following the investigation, the DPP announced that it had received recommendations from the Kenyan Directorate of Criminal Investigations that charges should be brought against the five banks, plus bank officials and other individuals. In December 2019, SCBK agreed a settlement of this matter with the DPP. Under the terms of SCBK's settlement, the DPP agreed to defer prosecution against both SCBK and any persons affiliated with SCBK and the DPP imposed a penalty of KES100 million (\$964,000) on SCBK.

27. Subordinated liabilities and other borrowed funds

Accounting policy

Subordinated liabilities and other borrowed funds are classified as financial instruments. Refer to Note 13 Financial instruments for the accounting policy.

All subordinated liabilities are unsecured, unguaranteed and subordinated to the claims of other creditors including without limitation, customer deposits and deposits by banks. The Group has the right to settle these debt instruments in certain circumstances as set out in the contractual agreements. Where a debt instrument is callable, the issuer has the right to call.

	2019 \$million	2018 \$million
Subordinated loan capital – issued by subsidiary undertakings		
£675 million 5.375 per cent undated step up subordinated notes (callable 2020) ¹	298	296
£200 million 7.75 per cent subordinated notes (callable 2022) ¹	53	53
\$750 million 5.875 per cent subordinated notes due 2020 ²	754	754
\$700 million 8.0 per cent subordinated notes due 2031 ¹	429	405
BWP 127.26 million 8.2 per cent subordinated notes 2022 ³	–	12
BWP 70 million floating rate subordinated notes 2021 ³	–	7
BWP 50 million floating rate notes 2022 ³	–	5
	1,534	1,532
Subordinated loan capital – issued by the Company⁴		
Primary capital floating rate notes:		
\$400 million floating rate undated subordinated notes	16	16
\$300 million floating rate undated subordinated notes (Series 2)	69	69
\$400 million floating rate undated subordinated notes (Series 3)	50	50
\$200 million floating rate undated subordinated notes (Series 4)	26	26
£150 million floating rate undated subordinated notes	16	15
£900 million 5.125 per cent subordinated notes due 2034	855	797
\$2 billion 5.7 per cent subordinated notes due 2044	2,379	2,387
\$2 billion 3.95 per cent subordinated notes due 2023	2,009	1,941
\$1 billion 5.7 per cent subordinated notes due 2022	1,002	1,003
\$1 billion 5.2 per cent subordinated notes due 2024	1,069	1,001
\$750 million 5.3 per cent subordinated notes due 2043	786	787
€1.25 billion 4 per cent subordinated notes due 2025 (callable 2020)	1,421	1,472
€750 million 3.625 per cent subordinated notes due 2022	884	907
€500 million 3.125 per cent subordinated notes due 2024	585	587
SGD 700 million 4.4 per cent subordinated notes due 2026 (callable 2021)	525	516
\$1.25 billion 4.3 per cent subordinated notes due 2027	1,214	1,129
\$1 billion 3.516 per cent subordinated notes due 2030 (callable 2025)	996	–
\$500 million 4.886 per cent subordinated notes due 2033 (callable 2028)	499	498
Other subordinated borrowings – issued by Company ⁵	272	268
	14,673	13,469
Total	16,207	15,001

1 Issued by Standard Chartered Bank

2 Issued by Standard Chartered Bank (Hong Kong) Limited

3 Issued by Standard Chartered Bank Botswana Limited

4 In the balance sheet of the Company, the amount recognised is \$14,588 million (2018: \$13,436 million), with the difference being the effect of hedge accounting achieved on a Group basis

5 Other subordinated borrowings includes irredeemable preference shares which are classified as debt

27. Subordinated liabilities and other borrowed funds continued

	2019				
	USD \$million	GBP \$million	EUR \$million	Others \$million	Total \$million
Fixed rate subordinated debt	11,137	1,478	2,890	525	16,030
Floating rate subordinated debt	161	16	–	–	177
Total	11,298	1,494	2,890	525	16,207

	2018				
	USD \$million	GBP \$million	EUR \$million	Others \$million	Total \$million
Fixed rate subordinated debt	9,905	1,414	2,966	528	14,813
Floating rate subordinated debt	161	15	–	12	188
Total	10,066	1,429	2,966	540	15,001

Redemptions and repurchases during the year

On 27 June 2019, Standard Chartered Bank Botswana Limited exercised its right to redeem BWP 127.26 million 8.2 per cent subordinated notes 2022 (callable 2017).

On 27 March 2019, Standard Chartered Bank Botswana Limited exercised its right to redeem BWP 50 million floating rate notes 2022 (callable 2017).

On 12 February 2019, Standard Chartered Bank Botswana Limited exercised its right to redeem BWP 70 million floating rate subordinated notes 2021 (callable 2016).

Issuance during the year

On 12 November 2019, Standard Chartered PLC issued \$1 billion 3.516 per cent subordinated debt 2030 (callable 2025).

28. Share capital, other equity instruments and reserves**Accounting policy**

Financial instruments issued are classified as equity when there is no contractual obligation to transfer cash, other financial assets or issue available number of own equity instruments. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Securities which carry a discretionary coupon and have no fixed maturity or redemption date are classified as other equity instruments. Interest payments on these securities are recognised, net of tax, as distributions from equity in the period in which they are paid.

Where the Company or other members of the consolidated Group purchase the Company's equity share capital, the consideration paid is deducted from the total shareholders' equity of the Group and/or of the Company as treasury shares until they are cancelled. Where such shares are subsequently sold or reissued, any consideration received is included in shareholders' equity of the Group and/or the Company.

	Number of ordinary shares millions	Ordinary share capital ¹ \$million	Ordinary share premium \$million	Preference share premium ² \$million	Total share capital and share premium \$million	Other equity instruments \$million
At 1 January 2018	3,296	1,648	3,955	1,494	7,097	4,961
Capitalised on scrip dividend	2	1	(1)	–	–	–
Shares issued	10	5	9	–	14	–
At 31 December 2018	3,308	1,654	3,963	1,494	7,111	4,961
Shares issued	4	2	23	–	25	552
Cancellation of shares including share buy-back	(116)	(58)	–	–	(58)	–
At 31 December 2019	3,196	1,598	3,986	1,494	7,078	5,513

1 Issued and fully paid ordinary shares of 50 cents each

2 Includes preference share capital of \$75,000

28. Share capital, other equity instruments and reserves continued

Share buy-back

On 1 May 2019, the Group commenced a share buy-back of its ordinary shares of \$0.50 each up to a maximum consideration of \$1 billion. This was completed on 25 September 2019.

The buy-back reduced the number of outstanding ordinary shares and was debited against the Group's retained earnings. Further, the nominal value of the shares was transferred from the share capital to the Capital Redemption Reserve account within equity. The Group repurchased 116,103,483 ordinary shares for an aggregate consideration of approximately \$1 billion at a volume-weighted average price of 686.3p per ordinary share. The nominal value of ordinary shares purchased during the buy-back was \$58 million. The shares were subsequently cancelled, reducing the total issued share capital by 3.5 per cent.

Month	Number of ordinary shares	Highest price paid per share £	Lowest price paid per share £	Average price paid per share £	Average GBP USD FX rate per share	Aggregate price paid \$
Share buy-back of 2019						
May – 2019	27,546,739	7.1740	6.6160	6.8586	1.2821	242,225,052
Jun – 2019	27,338,417	7.1580	6.6960	6.9581	1.2678	241,168,240
Jul – 2019	32,126,639	7.4260	6.8200	7.1412	1.2474	286,175,164
Aug – 2019	18,022,387	7.0980	5.9840	6.3264	1.2151	138,541,855
Sep – 2019	11,069,301	7.0400	6.2320	6.7076	1.2375	91,881,038
	116,103,483					999,991,349 ¹

¹ The aggregate price paid in pounds sterling was GBP 796,844,949

The above excludes \$6m transaction costs which were taken against equity

Ordinary share capital

In accordance with the Companies Act 2006 the Company does not have authorised share capital. The nominal value of each ordinary share is 50 cents.

During the period 3,368,576 shares were issued under employee share plans at prices between nil and 620 pence.

Preference share capital

At 31 December 2019, the Company has 15,000 \$5 non-cumulative redeemable preference shares in issue, with a premium of \$99,995 making a paid up amount per preference share of \$100,000. The preference shares are redeemable at the option of the Company and are classified in equity.

The available profits of the Company are distributed to the holders of the issued preference shares in priority to payments made to holders of the ordinary shares and in priority to, or pari passu with, any payments to the holders of any other class of shares in issue. On a winding up, the assets of the Company are applied to the holders of the preference shares in priority to any payment to the ordinary shareholders and in priority to, or pari passu with, the holders of any other shares in issue, for an amount equal to any dividends payable (on approval of the board) and the nominal value of the shares together with any premium as determined by the Board. The redeemable preference shares are redeemable at the paid up amount (which includes premium) at the option of the Company in accordance with the terms of the shares. The holders of the preference shares are not entitled to attend or vote at any general meeting, except where any relevant dividend due is not paid in full or where a resolution is proposed varying the rights of the preference shares.

Other equity instruments

On 2 April 2015, Standard Chartered PLC issued \$2,000 million Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities as Additional Tier 1 (AT1) securities, raising \$1,987 million after issue costs. On 18 August 2016, Standard Chartered PLC issued \$2,000 million Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities as AT1 securities, raising \$1,982 million after issue costs. On 18 January 2017, Standard Chartered PLC issued \$1,000 million Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities as AT1 securities, raising \$992 million after issue costs. On 3 July 2019, Standard Chartered PLC issued SGD 750 million Fixed Rate Resetting Perpetual Subordinated Contingent Convertible Securities as AT1 securities, raising \$552 million after issue costs. All issuances are made for general business purposes and to increase the regulatory capital base of the Group.

The principal terms of the AT1 securities are described below:

- The securities are perpetual and redeemable, at the option of Standard Chartered PLC in whole but not in part, on the first interest reset date and each date falling five years after the first reset date
- The securities are also redeemable for certain regulatory or tax reasons on any date at 100 per cent of their principal amount together with any accrued but unpaid interest up to (but excluding) the date fixed for redemption. Any redemption is subject to Standard Chartered PLC giving notice to the relevant regulator and the regulator granting permission to redeem
- The interest rate in respect of the securities issued on 2 April 2015 for the period from (and including) the issue date to (but excluding) 2 April 2020 is a fixed rate of 6.50 per cent per annum. The first reset date for the interest rate is 2 April 2020 and each date falling five, or an integral multiple of five years after the first reset date
- The interest rate in respect of the securities issued on 18 August 2016 for the period from (and including) the issue date to (but excluding) 2 April 2022 is a fixed rate of 7.50 per cent per annum. The first reset date for the interest rate is 2 April 2022 and each date falling five years, or an integral multiple of five years, after the first reset date
- The interest rate in respect of the securities issued on 18 January 2017 for the period from (and including) the issue date to (but excluding) 2 April 2023 is a fixed rate of 7.75 per cent per annum. The first reset date for the interest rate is 2 April 2023 and each date falling five years, or an integral multiple of five years, after the first reset date

28. Share capital, other equity instruments and reserves continued

Other equity instruments continued

- The interest rate in respect of the securities issued on 3 July 2019 for the period from (and including) the issue date to (but excluding) 3 October 2024 is a fixed rate of 5.375 per cent per annum. The first reset date for the interest rate is 3 October 2024 and each date falling five years, or an integral multiple of five years, after the first reset date
- The interest on each of the USD securities will be payable semi-annually in arrears on 2 April and 2 October in each year, accounted for as a dividend. The interest on the SGD security will be payable semi-annually in arrears on 3 April and 3 October in each year, accounted for as a dividend
- Interest on the securities is due and payable only at the sole and absolute discretion of Standard Chartered PLC, subject to certain additional restrictions set out in the terms and conditions. Accordingly, Standard Chartered PLC may at any time elect to cancel any interest payment (or part thereof) which would otherwise be payable on any interest payment date
- The securities convert into ordinary shares of Standard Chartered PLC, at a predetermined price detailed in the table below, should the fully loaded Common Equity Tier 1 ratio of the Group fall below 7.0 per cent. Approximately 641 million ordinary shares would be required to satisfy the conversion of all the securities mentioned above

Issuance date	Nominal value	Conversion price per ordinary share
2 April 2015	USD 2,000 million	USD 10.865
18 August 2016	USD 2,000 million	USD 7.732
18 January 2017	USD 1,000 million	USD 7.732
3 July 2019	SGD 750 million	SGD 10.909

The securities rank behind the claims against Standard Chartered PLC of: (a) unsubordinated creditors; (b) which are expressed to be subordinated to the claims of unsubordinated creditors of Standard Chartered PLC but not further or otherwise; or (c) which are, or are expressed to be, junior to the claims of other creditors of Standard Chartered PLC, whether subordinated or unsubordinated, other than claims which rank, or are expressed to rank, *pari passu* with, or junior to, the claims of holders of the AT1 securities in a winding-up occurring prior to the conversion trigger.

Reserves

The constituents of the reserves are summarised as follows:

- The capital reserve represents the exchange difference on redenomination of share capital and share premium from sterling to US dollars in 2001. The capital redemption reserve represents the nominal value of preference shares redeemed
- Merger reserve represents the premium arising on shares issued using a cash box financing structure, which required the Company to create a merger reserve under section 612 of the Companies Act 2006. Shares were issued using this structure in 2005 and 2006 to assist in the funding of certain acquisitions, in 2008, 2010 and 2015 for the shares issued by way of a rights issue, primarily for capital maintenance requirements and for the shares issued in 2009 by way of an accelerated book build, the proceeds of which were used in the ordinary course of business of the Group. The funding raised by the 2008, 2010 and 2015 rights issues and 2009 share issue was fully retained within the Company
- Own credit adjustment reserve represents the cumulative gains and losses on financial liabilities designated at fair value through profit or loss relating to own credit. Gains and losses on financial liabilities designated at fair value through profit or loss relating to own credit in the year have been taken through other comprehensive income into this reserve. On derecognition of applicable instruments, the balance of any OCA will not be recycled to the income statement, but will be transferred within equity to retained earnings
- Fair value through other comprehensive income (FVOCI) debt reserve represents the unrealised fair value gains and losses in respect of financial assets classified as FVOCI, net of expected credit losses and taxation. Gains and losses are deferred in this reserve and are reclassified to the income statement when the underlying asset is sold, matures or becomes impaired. FVOCI equity reserve represents unrealised fair value gains and losses in respect of financial assets classified as FVOCI, net of taxation. Gains and losses are recorded in this reserve and never recycled to the income statement
- Cash flow hedge reserve represents the effective portion of the gains and losses on derivatives that meet the criteria for these types of hedges. Gains and losses are deferred in this reserve and are reclassified to the income statement when the underlying hedged item affects profit and loss or when a forecast transaction is no longer expected to occur
- Translation reserve represents the cumulative foreign exchange gains and losses on translation of the net investment of the Group in foreign operations. Since 1 January 2004, gains and losses are deferred to this reserve and are reclassified to the income statement when the underlying foreign operation is disposed. Gains and losses arising from derivatives used as hedges of net investments are netted against the foreign exchange gains and losses on translation of the net investment of the foreign operations
- Retained earnings represents profits and other comprehensive income earned by the Group and Company in the current and prior periods, together with the after tax increase relating to equity-settled share options, less dividend distributions, own shares held (treasury shares) and share buy-backs

A substantial part of the Group's reserves is held in overseas subsidiary undertakings and branches, principally to support local operations or to comply with local regulations. The maintenance of local regulatory capital ratios could potentially restrict the amount of reserves which can be remitted. In addition, if these overseas reserves were to be remitted, further unprovided taxation liabilities might arise.

As at 31 December 2019, the distributable reserves of Standard Chartered PLC (the Company) were \$14.3 billion (31 December 2018: \$15.1 billion). These comprised retained earnings and \$12.5 billion of the merger reserve account. Distribution of reserves is subject to maintaining minimum capital requirements.

28. Share capital, other equity instruments and reserves continued

Own shares

Computershare Trustees (Jersey) Limited is the trustee of the 2004 Employee Benefit Trust ('2004 Trust') and Ocorian Trustees (Jersey) Limited (formerly known as Bedell Trustees Limited) is the trustee of the 1995 Employees' Share Ownership Plan Trust ('1995 Trust'). The 2004 Trust is used in conjunction with the Group's employee share schemes and the 1995 Trust is used for the delivery of other employee share-based payments (such as upfront shares and fixed pay allowances). Group companies fund these trusts from time to time to enable the trustees to acquire shares to satisfy these arrangements.

Except as disclosed, neither the Company nor any of its subsidiaries has bought, sold or redeemed any securities of the Company listed on The Stock Exchange of Hong Kong Limited during the period. Details of the shares purchased and held by the trusts are set out below.

Number of shares	1995 Trust		2004 Trust		Total	
	2019	2018	2019	2018	2019	2018
Shares purchased during the year	646,283	1,017,941	24,065,354	–	24,711,637	1,017,941
Market price of shares purchased (\$million)	5	8	201	–	206	8
Shares held at the end of the year	–	2,354,820	5,113,455	16,755	5,113,455	2,371,575
Maximum number of shares held during the year					15,070,923	3,787,015

Changes in share capital and other equity instruments of Standard Chartered PLC subsidiaries

The table below details the transactions in equity instruments (including convertible and hybrid instruments) of the Group's subsidiaries, including issuances, conversions, redemptions, purchase or cancellation. This is required under the Hong Kong Listing requirements, appendix 16 paragraph 10.

Subsidiary Undertakings

Name and registered address	Country of incorporation	Description of shares	Issued/(redeemed) capital	Issued/(redeemed) shares	Proportion of shares held (%)
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom					
FinVentures UK Limited	United Kingdom	\$1.00 Ordinary shares	\$140,000,000	140,000,000	100
SCMB Overseas Limited	United Kingdom	£0.10 Ordinary shares	£22,400,000	224,000,000	100
Standard Chartered Bank	United Kingdom	\$1.00 Ordinary shares	(\$7,500,000,000)	(7,500,000,000)	100
Standard Chartered Holdings Limited	United Kingdom	\$2.00 Ordinary shares	(\$2,600,000,000)	(1,300,000,000)	100
Standard Chartered I H Limited	United Kingdom	\$1.00 Ordinary shares	\$141,000,000	141,000,000	100
Standard Chartered NEA Limited	United Kingdom	\$1.00 Ordinary shares	\$1,593,884,872	1,593,884,872	100
Standard Chartered UK Holdings Limited	United Kingdom	£10.00 Ordinary shares	£21,692,310	2,169,231	100
The following company has the address of 8th Floor, 20 Farringdon Street, London, EC4A 4AB, United Kingdom					
SC Ventures G.P. Limited	United Kingdom	£1.00 Ordinary shares	£1.00	1	100
The following company has the address of Rua Gamal Abdel Nasser, Edifício Tres Torres, Eixo Viário, Distrito Urbano da Ingombota, Município de Luanda, Província de Luanda, Angola					
Standard Chartered Bank Angola S.A.	Angola	AOK8,742.05 Ordinary shares	AOK8,742,050,000	1,000,000	60
		AOK6,475.62 Ordinary shares	(AOK6,475,620,000)	(1,000,000)	60
The following company has the address of Av. Brigadeiro Faria Lima, 3600 – 7º andar, conj 72 04538-132, São Paulo, Brazil.					
Standard Chartered Representação Ltda	Brazil	BRL1.00 Ordinary shares	BRL3,800,000	3,800,000	100
The following company has the address of Walkers Corporate Limited, Cayman Corporate Centre, 27 Hospital Road George Town, Grand Cayman KY1-9008, Cayman Islands					
Standard Chartered Principal Finance (Cayman) Limited	Cayman Islands	\$0.0001 Ordinary shares	\$500	5,000,000	100
The following company has the address of Taunusanlage 16, 60325, Frankfurt am Main, Germany					
Standard Chartered Bank AG	Germany	€ Ordinary shares	€175,000,001	175,000,001	100

28. Share capital, other equity instruments and reserves continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Issued/(redeemed) capital	Issued/(redeemed) shares	Proportion of shares held (%)
The following company has the address of 14th Floor, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong					
Standard Chartered PF Real Estate (Hong Kong) Limited	Hong Kong	\$1.00 Ordinary shares	\$39,000,001	39,000,001	100
		HKD10.00 Ordinary shares	(HKD10.00)	(1)	100
The following company has the address of 25/F, Standard Chartered Bank Building, 4-4A Des Voeux Road, Central, Hong Kong					
SC Digital Solutions Limited	Hong Kong	HKD10.00 Ordinary shares	HKD1,610,920,000	161,092,000	65.1
The following company has the address of 3/F Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong					
Standard Chartered Private Equity Limited	Hong Kong	\$1.00 Ordinary shares	\$185,000,000	185,000,000	100
The following company has the address of 32/F, Standard Chartered Bank Building, 4-4A Des Voeux Road, Central, Hong Kong					
Standard Chartered Bank (Hong Kong) Limited	Hong Kong	\$ D Ordinary shares	\$3,010,485,610	3,010,485,610	100
		\$ C Ordinary shares	\$2,698,156,122	341,971,625	100
The following company has the address of Second Floor, Indique Edge, Khata No. 571/630/6/4, Sy.No.6/4, Ambalipura Village, Varthur Hobli, Marathahalli Sub-Division, Ward No. 150, Bengaluru, 560102, India					
Standard Chartered Research and Technology India Private Limited	India	INR10.00 Ordinary shares	INR350,000,000	35,000,000	100
The following company has the address of 1st Floor, Goldie House, 1-4 Goldie Terrace, Upper Church Street, Douglas, IM1 1EB, Isle of Man					
Standard Chartered Insurance Limited	Isle of Man	\$1.00 Ordinary shares	(\$4,180,300)	(4,180,300)	100
The following company has the address of 17/F, 100, Gongpyeong-dong, Jongno-gu, Seoul, Korea, Republic of					
Ascenta II	Korea, Republic of	KRW1,000,000.00 Partnership interest	(KRW100,000,000)	(100)	100
The following company has the address of SGG Corporate Services (Mauritius) Ltd, 33, Edith Cavell St, Port Louis, 11324, Mauritius					
Actis Asia Real Estate (Mauritius) Limited	Mauritius	Class A \$1.00 Ordinary shares	(\$9,757,406)	(9,757,406)	100
		Class B \$1.00 Ordinary shares	(\$9,757,406)	(9,757,406)	100
The following companies have the address of c/o Abax Corporate Services Ltd, 6/F, Tower A, 1 CYBERCITY, Ebene, Mauritius					
Standard Chartered Financial Holdings	Mauritius	\$1.00 Ordinary shares	\$6,000,000	6,000,000	100
Standard Chartered Private Equity (Mauritius) II Limited	Mauritius	\$1.00 Ordinary shares	\$17,000,000	17,000,000	100
Standard Chartered Private Equity (Mauritius) III Limited	Mauritius	\$1.00 Ordinary shares	\$168,000,000	168,000,000	100

28. Share capital, other equity instruments and reserves continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Issued/(redeemed) capital	Issued/(redeemed) shares	Proportion of shares held (%)
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom					
Standard Chartered Holdings (International) B.V.	Netherlands	€4.50 Ordinary shares	EUR45,000	10,000	100
Standard Chartered MB Holdings B.V.	Netherlands	€4.50 Ordinary shares	EUR45,000	10,000	100
The following company has the address of 142 Ahmadu Bello Way, Victoria Island, Lagos, Nigeria					
Cherroots Nigeria Limited	Nigeria	NGN1.00 Ordinary Shares	(NGN12,500)	(12,500)	100
The following company has the address of 8 Marina Boulevard, Level 23, Marina Bay Financial Centre, Tower 1, 018981, Singapore					
Standard Chartered Private Equity (Singapore) Pte. Ltd	Singapore	\$ Ordinary shares	nil	49,000,000	100
The following companies have the address of 8 Marina Boulevard, Level 27, Marina Bay Financial Centre, Tower 1, 018981, Singapore					
Standard Chartered Bank (Singapore) Limited	Singapore	SGD Preference shares	SGD750,000,000	3,750	100
		\$ Ordinary shares	\$2,590,000,000	2,590,000,000	100
		\$ Preference shares	\$500,000,000	2,500	100
Standard Chartered Holdings (Singapore) Private Limited	Singapore	\$ Ordinary shares	\$2,590,000,000	2,590,000,000	100
The following companies has the address of Abogado Pte Ltd, No. 8 Marina Boulevard, #05-02 MBFC Tower 1, 018981, Singapore					
Standard Chartered PF Managers Pte. Limited	Singapore	\$1.00 Ordinary shares	\$8,312,499	8,312,499	100
Standard Chartered Real Estate Investment Holdings (Singapore) Private Limited	Singapore	\$1.00 Ordinary shares	\$39,000,001	39,000,001	100
		SGD1.00 Ordinary shares	(SGD1)	(1)	100
The following company has the address of Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, Virgin Islands, British					
Sky Harmony Holdings Limited	Virgin Islands, British	\$1.00 Ordinary shares	\$1	1	100
The following company has the address of Deloitte LLP, Hill House, 1 Little New Street, London, EC4A 3TR, United Kingdom					
Standard Chartered APR Limited	United Kingdom	\$1.00 Ordinary shares	(\$21,971,714)	(21,971,714)	100

Please see Note 22 Debt securities in issue for issuances and redemptions of senior notes.

Please see Note 27 Subordinated liabilities and other borrowed funds for issuance and redemptions of subordinated liabilities and AT1 securities

Please see Note 40 Related undertakings of the Group for subsidiaries liquidated, dissolved or sold during the year.

29. Non-controlling interests

Accounting policy

Non-controlling interests are measured either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

	\$million
At 1 January 2018	333
Income in equity attributable to non-controlling interests	(21)
Profits attributable to non-controlling interests	55
Comprehensive income for the year	34
Distributions	(97)
Other increases ¹	3
At 31 December 2018	273
Income in equity attributable to non-controlling interests	(17)
Profits attributable to non-controlling interests	37
Comprehensive income for the year	20
Distributions	(35)
Other increases ²	55
At 31 December 2019	313

1 Mainly due to additional shares issued by Standard Chartered Bank Angola S.A.

2 Comprises \$72 million of non-controlling interest in SC Digital Solutions offset by \$17 million disposal of non-controlling interest of Phoon Huat Ltd, Sirat Holdings Limited and Ori Private Limited

30. Retirement benefit obligations

Accounting policy

The Group operates pension and other post-retirement benefit plans around the world, which can be categorised into defined contribution plans and defined benefit plans.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension plans on a statutory or contractual basis, and such amounts are charged to operating expenses. The Group has no further payment obligations once the contributions have been paid.

For funded defined benefit plans, the liability recognised in the balance sheet is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. For unfunded defined benefit plans, the liability recognised at the balance sheet date is the present value of the defined benefit obligation.

The defined benefit obligation is calculated annually by independent actuaries using the projected unit method.

Actuarial gains and losses that arise are recognised in shareholders' equity and presented in the statement of other comprehensive income in the period they arise. The Group determines the net interest expense on the net defined benefit liability for the year by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability, taking into account any changes in the net defined benefit liability during the year as a result of contributions and benefit payments. Net interest expense, the cost of the accrual of new benefits, benefit enhancements (or reductions) and administration expenses met directly from plan assets are recognised in the income statement in the period in which they were incurred.

Accounting estimates and judgements

There are many factors that affect the measurement of the retirement benefit obligations of the UK Fund and Overseas Plans. This measurement requires the use of estimates, such as discount rates, inflation, pension increases, salary increases, and life expectancies which are inherently uncertain. Discount rates are determined by reference to market yields at the end of the reporting period on high quality corporate bonds (or, in countries where there is no deep market in such bonds, government bonds) of a currency and term consistent with the currency and term of the post-employment benefit obligations. This is the approach adopted across our geographies. Where there are inflation-linked bonds available (e.g. United Kingdom and the eurozone), the Group derives inflation based on the market on those bonds, with the market yield adjusted in respect of the United Kingdom to take account of the fact that liabilities are linked to Consumer Price Index inflation, whereas the reference bonds are linked to Retail Price Index inflation. Where no inflation-linked bonds exist, we determine inflation assumptions based on long-term forecasts. Salary growth assumptions reflect the Group's long-term expectations, taking into account future business plans and macroeconomic data (primarily expected future long-term inflation). Demographic assumptions, including mortality and turnover rates, are typically set based on the assumptions used in the most recent actuarial funding valuation, and will generally use industry standard tables, adjusted where appropriate to reflect recent historic experience and/or future expectations. The sensitivity of the liabilities to changes in these assumptions is shown on page 342.

30. Retirement benefit obligations continued

Retirement benefit obligations comprise:

	2019 \$million	2018 \$million
Defined benefit plans obligation	458	386
Defined contribution plans obligation	11	13
Net obligation	469	399

Retirement benefit charge comprises:

	2019 \$million	2018 \$million
Defined benefit plans	73	81
Defined contribution plans	299	284
Charge against profit (Note 7)	372	365

The Group operates over 50 defined benefit plans across its geographies, many of which are closed to new entrants who now join defined contribution arrangements. The aim of all these plans is, as part of the Group's commitment to financial wellbeing for employees, to give employees the opportunity to save appropriately for retirement in a way that is consistent with local regulations, taxation requirements and market conditions. The defined benefit plans expose the Group to currency risk, interest rate risk, investment risk and actuarial risks such as longevity risk.

The material holdings of government and corporate bonds shown on page 343 partially hedge movements in the liabilities resulting from interest rate and inflation changes. Setting aside movements from other drivers such as currency fluctuation, the reductions in discount rates in most geographies over 2019 have led to higher liabilities. These have been somewhat offset by increases in the value of bonds held and good stock market performance. These movements are shown as actuarial losses versus gains respectively in the tables below. Contributions into a number of plans in excess of the amounts required to fund benefits accruing have also helped to reduce the net deficit over the year.

The disclosures required under IAS 19 have been calculated by independent qualified actuaries based on the most recent full actuarial valuations updated, where necessary, to 31 December 2019.

UK Fund

The Standard Chartered Pension Fund (the 'UK Fund') is the Group's largest pension plan, representing 60 per cent (31 December 2018: 58 per cent) of total pension liabilities. The UK Fund is set up under a trust that is legally separate from the Bank (its formal sponsor) and, as required by UK legislation, at least one third of the trustee directors are nominated by members; the remainder are appointed by the Bank. The trustee directors have a fiduciary duty to members and are responsible for governing the UK Fund in accordance with its Trust Deed and Rules.

The UK Fund was closed to new entrants from 1 July 1998 and new employees were offered membership of a defined contribution plan. The UK Fund was closed to the accrual of new benefits from 1 April 2018: there was no accounting impact as a result of the closure as the liabilities represented by the benefits already accrued are not expected to be significantly altered by the closure.

The financial position of the UK Fund is regularly assessed by an independent qualified actuary. The funding valuation as at 31 December 2017 was completed in December 2018 by the Scheme Actuary, A Zegleman of Willis Towers Watson, using assumptions different from those on page 342. and agreed with the UK Fund trustee. It revealed a past service deficit of \$210 million (£159 million). To repair the deficit, four annual cash payments of \$43.5 million (£32.9 million) were agreed, with the first two of these having been paid in December 2018 and December 2019. The agreement allows that, if the funding position improves to being at or near a surplus in future years, the two payments from December 2020 will be reduced or eliminated. In addition, an escrow account of \$145 million (£110 million) exists to provide security for future contributions.

As at 31 December 2019, the weighted average duration of the UK Fund was 16 years (31 December 2018: 14 years).

The Group is not required to recognise any additional liability under IFRIC 14 or the 2015 exposure draft of proposed amendments to it, as the Bank has control of any pension surplus under the Trust Deed and Rules.

30. Retirement benefit obligations continued

Overseas plans

The principal overseas defined benefit arrangements operated by the Group are in Germany, Hong Kong, India, Jersey, Korea, Taiwan, United Arab Emirates (UAE) and the United States of America (US).

Key assumptions

The principal financial assumptions used at 31 December 2019 were:

	Funded plans			
	UK Fund		Overseas Plans ¹	
	31.12.19 %	31.12.18 %	31.12.19 %	31.12.18 %
Discount rate	2.0	2.8	0.7 – 3.4	0.9 – 4.4
Price inflation	2.1	2.1	1.0 – 3.0	1.0 – 3.2
Salary increases	n/a	n/a	3.0 – 4.0	2.1 – 4.0
Pension increases	2.1	2.1	1.4 – 3.0	1.4 – 3.2

1 The range of assumptions shown is for the main defined benefit overseas plans in Germany, Hong Kong, Jersey, Korea, Taiwan, UAE and the US. These comprise over 85 per cent of the total liabilities of overseas defined benefit plans

	Unfunded plans			
	US post-retirement medical		Other ¹	
	31.12.19 %	31.12.18 %	31.12.19 %	31.12.18 %
Discount rate	3.4	4.4	1.5 – 7.0	2.7 – 7.6
Price inflation	2.5	2.5	2.0 – 4.0	2.0 – 5.0
Salary increases	N/A	N/A	3.5 – 7.0	3.5 – 7.0
Pension increases	N/A	N/A	0.0 – 2.1	0.0 – 2.1
Post-retirement medical rate	8% in 2019 reducing by 1% per annum to 5% in 2022	9% in 2018 reducing by 1% per annum to 5% in 2022	N/A	N/A

1 The range of assumptions shown is for the main unfunded plans in India, Korea, Thailand, UAE and the UK. They comprise over 90 per cent of the total liabilities of other unfunded plans

The principal non-financial assumptions are those made for UK life expectancy. The assumptions for life expectancy for the UK Fund are that a male member currently aged 60 will live for 28 years (31 December 2018: 28 years) and a female member for 29 years (31 December 2018: 29 years) and a male member currently aged 40 will live for 31 years (31 December 2018: 30 years) and a female member for 30 years (31 December 2018: 30 years) after their 60th birthdays.

Both financial and non-financial assumptions can be expected to change in the future, which would affect the value placed on the liabilities. For example, changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

- If the discount rate increased by 25 basis points, the liability would reduce by approximately \$65 million for the UK Fund (31 December 2018: \$55 million) and \$35 million for the other plans (31 December 2018: \$30 million)
- If the rate of inflation increased by 25 basis points, the liability, allowing for the consequent impact on pension and salary increases, would increase by approximately \$45 million for the UK Fund (31 December 2018: \$40 million) and \$25 million for the other plans (31 December 2018: \$20 million)
- If the rate salaries increase compared with inflation increased by 25 basis points, the liability would increase by nil for the UK Fund (31 December 2018: nil) and approximately \$15 million for the other plans (31 December 2018: \$15 million)
- If longevity expectations increased by one year, the liability would increase by approximately \$60 million for the UK Fund (31 December 2018: \$45 million) and \$15 million for the other plans (31 December 2018: \$15 million)

Although this analysis does not take account of the full distribution of cash flows expected under the UK Fund, it does provide an approximation of the sensitivity to the main assumptions. While changes in other assumptions would also have an impact, the effect would not be as significant.

30. Retirement benefit obligations continued

Key assumptions continued

Fund values:

The fair value of assets and present value of liabilities of the plans attributable to defined benefit members were:

	31.12.19				31.12.18			
	Funded plans		Unfunded plans		Funded plans		Unfunded plans	
	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million
At 31 December								
Equities	102	349	N/A	N/A	166	310	N/A	N/A
Government bonds	956	196	N/A	N/A	762	176	N/A	N/A
Corporate bonds	189	121	N/A	N/A	147	87	N/A	N/A
Absolute Return Fund	158	–	N/A	N/A	147	–	N/A	N/A
Hedge funds ¹	100	–	N/A	N/A	110	–	N/A	N/A
Insurance linked funds ¹	37	–	N/A	N/A	36	–	N/A	N/A
Opportunistic credit ¹	–	–	N/A	N/A	15	–	N/A	N/A
Property	75	32	N/A	N/A	44	14	N/A	N/A
Derivatives	13	3	N/A	N/A	(7)	3	N/A	N/A
Cash and equivalents	77	163	N/A	N/A	136	221	N/A	N/A
Others ¹	8	31	N/A	N/A	9	34	N/A	N/A
Total fair value of assets ²	1,715	895	N/A	N/A	1,565	845	N/A	N/A
Present value of liabilities	(1,832)	(1,010)	(16)	(210)	(1,615)	(974)	(17)	(190)
Net pension plan obligation	(117)	(115)	(16)	(210)	(50)	(129)	(17)	(190)

1 Unquoted assets

2 Self-investment is monitored closely and is less than \$1 million of Standard Chartered equities and bonds for 2019 (31 December 2018: less than \$1 million). Self-investment is only allowed where it is not practical to exclude it – for example through investment in index-tracking funds where the Group is a constituent of the relevant index

The pension cost for defined benefit plans was:

	Funded plans		Unfunded plans		Total \$million
	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million	
2019					
Current service cost ¹	–	49	–	12	61
Past service cost and curtailments ²	–	2	–	(1)	1
Settlement cost	–	–	–	–	–
Interest income on pension plan assets	(43)	(26)	–	–	(69)
Interest on pension plan liabilities	44	29	1	6	80
Total charge to profit before deduction of tax	1	54	1	17	73
Net gain on plan assets ³	(86)	(88)	–	–	(174)
Losses on liabilities	196	77	(2)	27	298
Total losses/(gains) recognised directly in statement of comprehensive income before tax	110	(11)	(2)	27	124
Deferred taxation	5	–	–	–	5
Total losses/(gains) after tax	115	(11)	(2)	27	129

1 Includes administrative expenses paid out of plan assets of \$1 million (31 December 2018: \$2 million)

2 Past service costs arose primarily due to plan changes in Thailand and US, and were largely offset by past service credits due to plan changes in UAE

3 The actual return on the UK Fund assets was a gain of \$129 million and on overseas plan assets was a gain of \$114 million

30. Retirement benefit obligations continued**Key assumptions** continued

The pension cost for defined benefit plans was:

	Funded plans		Unfunded plans		
	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million	Total \$million
2018					
Current service cost ¹	1	54	–	12	67
Past service cost and curtailments ²	2	–	–	–	2
Settlement cost ³	–	–	–	1	1
Interest income on pension plan assets	(41)	(27)	–	–	(68)
Interest on pension plan liabilities	44	29	1	5	79
Total charge to profit before deduction of tax	6	56	1	18	81
Losses on plan assets excluding interest income ⁴	67	46	–	–	113
(Gains)/Losses on liabilities	(76)	(17)	(2)	1	(94)
Total (gains)/losses recognised directly in statement of comprehensive income before tax	(9)	29	(2)	1	19
Deferred taxation	2	(8)	–	–	(6)
Total losses/(gains) after tax	(7)	21	(2)	1	13

1 Includes administrative expenses paid out of plan assets of \$2 million (31 December 2017: \$1 million)

2 The past service cost in the UK Fund is due to the impact of the Lloyds judgement on 26 October 2018 confirming the requirement for UK defined benefit pension schemes to equalise the impact of Guaranteed Minimum Pensions (GMPs) for males and females

3 The costs arise primarily from the settlement of benefits in Thailand

4 The actual return on the UK Fund assets was a loss of \$26 million and on overseas plan assets was a loss of \$19 million

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans		Unfunded plans		
	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million	Total \$million
Deficit as at 1 January 2019	(50)	(129)	(17)	(190)	(386)
Contributions	44	73	–	20	137
Current service cost ¹	–	(49)	–	(12)	(61)
Past service cost and curtailments	–	(2)	–	1	(1)
Settlement costs and transfers impact	–	–	–	–	–
Net interest on the net defined benefit asset/liability	(1)	(3)	(1)	(6)	(11)
Actuarial (losses)/gains	(110)	11	2	(27)	(124)
Exchange rate adjustment	–	(16)	–	4	(12)
Deficit as at 31 December 2019 ²	(117)	(115)	(16)	(210)	(458)

1 Includes administrative expenses paid out of plan assets of \$1 million (31 December 2018: \$2 million)

2 The deficit total of \$458 million is made up of plans in deficit of \$486 million (31 December 2018: \$421 million) net of plans in surplus with assets totalling \$28 million (31 December 2018: \$35 million)

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans		Unfunded plans		
	UK Fund \$million	Overseas plans \$million	Post- retirement medical \$million	Other \$million	Total \$million
Deficit as at 1 January 2018	(120)	(111)	(18)	(194)	(443)
Contributions	62	64	–	17	143
Current service cost ¹	(1)	(54)	–	(12)	(67)
Past service cost and curtailments	(2)	–	–	–	(2)
Settlement costs and transfers impact	–	–	–	(1)	(1)
Net interest on the net defined benefit asset/liability	(3)	(2)	(1)	(5)	(11)
Actuarial (losses)/gains	9	(29)	2	(1)	(19)
Exchange rate adjustment	5	3	–	6	14
Deficit as at 31 December 2018 ²	(50)	(129)	(17)	(190)	(386)

1 Includes administrative expenses paid out of plan assets of \$2 million (31 December 2017: \$1 million)

2 Deficit at 31 December 2018 of \$386 million is made up of plans in deficit of \$421 million (2017: \$483 million) net of plans in surplus with assets totalling \$35 million (2017: \$40 million)

30. Retirement benefit obligations continued

Key assumptions continued

The Group's expected contribution to its defined benefit pension plans in 2020 is \$112 million.

	2019			2018		
	Assets \$million	Obligations \$million	Total \$million	Assets \$million	Obligations \$million	Total \$million
As at 1 January	2,410	(2,796)	(386)	2,592	(3,035)	(443)
Contributions ¹	137	–	137	144	(1)	143
Current service cost ²	–	(61)	(61)	–	(67)	(67)
Past service cost and curtailments	–	(1)	(1)	–	(2)	(2)
Settlement costs	(7)	7	–	–	(1)	(1)
Interest cost on pension plan liabilities	–	(80)	(80)	–	(79)	(79)
Interest income on pension plan assets	69	–	69	68	–	68
Benefits paid out ²	(165)	165	–	(168)	168	–
Actuarial (losses)/gains ³	174	(298)	(124)	(113)	94	(19)
Exchange rate adjustment	(8)	(4)	(12)	(113)	127	14
As at 31 December	2,610	(3,068)	(458)	2,410	(2,796)	(386)

1 Includes employee contributions of nil (31 December 2018: \$1 million)

2 Includes administrative expenses paid out of plan assets of \$1 million (31 December 2018: \$2 million)

3 Actuarial loss on obligation comprises \$267 million loss (31 December 2018: \$114 million gain) from financial assumption changes, \$4 million loss (31 December 2018: nil) from demographic assumption changes and \$18 million loss (31 December 2018: \$20 million loss) from experience

31. Share-based payments

Accounting policy

The Group operates equity-settled and cash-settled share-based compensation plans. The fair value of the employee services (measured by the fair value of the options granted) received in exchange for the grant of the shares and options is recognised as an expense. For deferred share awards granted as part of an annual performance award, the expense is recognised over the period from the start of the performance period to the vesting date. For example, the expense for awards granted in 2020 in respect of 2019 performance, which vest in 2021-2023, is recognised as an expense over the period from 1 January 2019 to the vesting dates in 2021-2023. For all other awards, the expense is recognised over the period from the date of grant to the vesting date.

For equity-settled awards, the total amount to be expensed over the vesting period is determined by reference to the fair value of the shares and options at the date of grant, which excludes the impact of any non-market vesting conditions (for example, profitability and growth targets). The fair value of equity instruments granted is based on market prices, if available, at the date of grant. In the absence of market prices, the fair value of the instruments is estimated using an appropriate valuation technique, such as a binomial option pricing model. Non-market vesting conditions are included in assumptions about the number of shares and options that are expected to vest.

At each balance sheet date, the Group revises its estimates of the number of shares and options that are expected to vest. It recognises the impact of the revision of original estimates, if any, in the income statement, and a corresponding adjustment to equity over the remaining vesting period. Forfeitures prior to vesting attributable to factors other than the failure to satisfy service conditions and non-market vesting condition are treated as a cancellation and the remaining unamortised charge is debited to the income statement at the time of cancellation. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

Cash-settled awards are revalued at each balance sheet date and a liability recognised on the balance sheet for all unpaid amounts, with any changes in fair value charged or credited to staff costs in the income statement until the awards are exercised. Where forfeitures occur prior to vesting that are attributable to factors other than a failure to satisfy service conditions or market-based performance conditions, the cumulative charge incurred up to the date of forfeiture is credited to the income statement. Any revaluation related to cash-settled awards is recorded as an amount due from subsidiary undertakings.

The Group operates a number of share-based arrangements for its executive directors and employees. Details of the share-based payment charge are set out below.

	31.12.19 ¹			31.12.18 ¹		
	Cash \$million	Equity \$million	Total \$million	Cash \$million	Equity \$million	Total \$million
Deferred share awards	13	88	101	3	89	92
Other share awards	12	53	65	(3)	77	74
Total share-based payments	25	141	166	–	166	166

1 No forfeiture assumed

31. Share-based payments continued

2011 Standard Chartered Share Plan (the '2011 Plan')

The 2011 Plan was approved by shareholders in May 2011 and is the Group's main share plan. Since approval, it has been used to deliver various types of share awards:

- Long Term Incentive Plan (LTIP) awards: granted with vesting subject to performance measures. Performance measures attached to awards granted previously include: total shareholder return (TSR); return on equity (RoE) and return on tangible equity (RoTE) (in the case of both RoE and RoTE, with a Common Equity Tier 1 (CET1) underpin); strategic measures; earnings per share (EPS) growth; and return on risk-weighted assets (RoRWA). Each measure is assessed independently over a three-year period. Awards granted from 2016 have an individual conduct gateway requirement that results in the award lapsing if not met
- Deferred awards are used to deliver the deferred portion of variable remuneration, in line with both market practice and regulatory requirements. These awards vest in instalments on anniversaries of the award date specified at the time of grant. Deferred awards are not subject to any plan limit. This enables the Group to meet regulatory requirements relating to deferral levels, and is in line with market practice
- Restricted share awards, made outside of the annual performance process as replacement buy-out awards to new joiners who forfeit awards on leaving their previous employers, vest in instalments on the anniversaries of the award date specified at the time of grant. This enables the Group to meet regulatory requirements relating to buy-outs, and is in line with market practice. In line with similar plans operated by our competitors, restricted share awards are not subject to an annual limit and do not have any performance measures

Under the 2011 Plan, no grant price is payable to receive an award. The remaining life of the 2011 Plan during which new awards can be made is two years.

Valuation – LTIP awards

The vesting of awards granted in both 2018 and 2019 is subject to relative TSR performance measures and achievement of a strategic scorecard. The vesting of awards granted in 2018 is subject to the satisfaction of RoE, and the vesting of awards granted in 2019 is subject to the satisfaction of RoTE, in both cases subject to a capital CET1 underpin. The fair value of the TSR component is calculated using the probability of meeting the measures over a three-year performance period, using a Monte Carlo simulation model. The number of shares expected to vest is evaluated at each reporting date, based on the expected performance against the RoE and strategic measures in the scorecard, to determine the accounting charge.

No dividend equivalents accrue for the LTIP awards made in 2018 or 2019 and the fair value takes this into account, calculated by reference to market consensus dividend yield.

	31.12.19	31.12.18
Grant date	11 March	9 March
Share price at grant date (£)	6.11	7.78
Vesting period (years)	3–7	3–7
Expected dividend yield (%)	4.2	5.0
Fair value (RoTE) (£)	2.02, 2.02	2.59, 2.59
Fair value (TSR) (£)	0.97, 0.91	1.14, 1.11
Fair value (Strategic) (£)	2.02, 2.02	2.59, 2.59

Valuation – deferred shares and restricted shares

The fair value for deferred awards which are not granted to material risk takers is based on 100 per cent of the face value of the shares at the date of grant as the share price will reflect expectations of all future dividends. For awards granted to material risk takers in 2019, the fair value of awards takes into account the lack of dividend equivalents, calculated by reference to market consensus dividend yield.

Deferred share awards

Grant date	31.12.19			
	24 June		11 March	
Share price at grant date (£)	7.03		6.11	
	Expected dividend yield (%)	Fair value (£)	Expected dividend yield (%)	Fair value (£)
Vesting period (years)				
1–3 years	N/A, 4.2, 4.2	7.03, 6.47, 6.21	N/A, 4.2, 4.2	6.11, 5.62, 5.40
1–5 years	–	–	4.2, 4.2	5.29, 5.40
3–7 years	–	–	4.2, 4.2	4.77, 4.97

31. Share-based payments continued

Grant date	31.12.18			
	18 June		9 March	
Share price at grant date (£)	7.12		7.78	
Vesting period (years)	Expected dividend yield (%)		Expected dividend yield (%)	
	Fair value (£)		Fair value (£)	
1-3 years	N/A, 5.0, 5.0		N/A, 5.0, 5.0	
1-5 years	5.0		5.0, 5.0	
3-7 years	–		5.0, 5.0	

Other restricted share awards

Grant date	31.12.19							
	28 November		1 October		24 June		11 March	
Share price at grant date (£)	7.04		6.84		7.03		6.11	
Vesting period (years)	Expected dividend yield (%)		Expected dividend yield (%)		Expected dividend yield (%)		Expected dividend yield (%)	
	Fair value (£)		Fair value (£)		Fair value (£)		Fair value (£)	
1 year	4.2	6.75	4.2	6.57	4.2	6.74	4.2	5.86, 5.62, 5.74
2 years	4.2	6.48	4.2	6.30	4.2	6.47	4.2	5.62, 5.40
2-3 years	–	–	–	–	–	–	–	–
3 years	4.2	6.22	4.2	6.05	4.2	6.21	4.2	5.40
4 years	–	–	4.2	5.80	4.2	5.96	4.2	5.18
5 years	–	–	4.2	5.57	4.2	5.72	–	–

Grant date	31.12.18							
	28 November		2 October		18 June		9 March	
Share price at grant date (£)	6.11		6.16		7.12		7.78	
Vesting period (years)	Expected dividend yield (%)		Expected dividend yield (%)		Expected dividend yield (%)		Expected dividend yield (%)	
	Fair value (£)		Fair value (£)		Fair value (£)		Fair value (£)	
1 year	5.0	5.82	5.0	5.86	5.0	6.78, 6.45	5.0	7.41
2 years	5.0	5.54	5.0	5.58	5.0	6.45, 6.15	5.0	7.06
2-3 years	5.0	5.41	–	–	–	–	–	–
3 years	5.0	5.28	5.0	5.32	5.0	6.15, 5.85	5.0	6.72
4 years	–	–	5.0	5.06	5.0	5.57	5.0	6.40
5 years	–	–	5.0	4.82	–	–	5.0	6.10

2001 Performance Share Plan (2001 PSP) – closed

The Group's previous plan for delivering performance shares was the 2001 PSP. There are no outstanding vested awards under this plan. This plan is closed and no further awards will be granted under this plan.

All Employee Sharesave Plans

2013 Sharesave Plan

Under the 2013 Sharesave Plan, employees may open a savings contract. Within a maturity period of six months after the third anniversary, employees may save up to £250 per month over three years to purchase ordinary shares in the Company at a discount of up to 20 per cent on the share price at the date of invitation (this is known as the 'option exercise price'). There are no performance measures attached to options granted under the 2013 Sharesave Plan and no grant price is payable to receive an option. In some countries in which the Group operates, it is not possible to operate Sharesave plans, typically due to securities law and regulatory restrictions. In these countries, where possible, the Group offers an equivalent cash-based plan to its employees.

The 2013 Sharesave Plan was approved by shareholders in May 2013 and all future Sharesave invitations are made under this plan. The remaining life of the 2013 Sharesave Plan is three years.

31. Share-based payments continued

All Employee Sharesave Plans continued

Valuation – Sharesave

Options under the Sharesave plans are valued using a binomial option-pricing model. The same fair value is applied to all employees, including executive directors. The fair value per option granted and the assumptions used in the calculation are as follows:

All Employee Sharesave Plan (Sharesave)

	31.12.19	31.12.18
	1 October	2 October
Grant date		
Share price at grant date (£)	6.84	6.16
Exercise price (£)	4.98	5.13
Vesting period (years)	3	3
Expected volatility (%)	25.3	33.8
Expected option life (years)	3.33	3.33
Risk-free rate (%)	0.26	0.87
Expected dividend yield (%)	4.2	5.0
Fair value (£)	1.62	1.39

The expected volatility is based on historical volatility over the last three years, or three years prior to grant. The expected life is the average expected period to exercise. The risk-free rate of return is the yield on zero-coupon UK Government bonds of a term consistent with the assumed option life. The expected dividend yield is based on historical dividend for three years prior to grant.

Limits

An award shall not be granted under the 2011 Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares allocated in the period of 10 calendar years ending with that calendar year under the 2011 Plan and under any other discretionary share plan operated by Standard Chartered PLC to exceed such number as represents 5 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

An award shall not be granted under the 2011 Plan or 2013 Sharesave Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares allocated in the period of 10 calendar years ending with that calendar year under the 2011 Plan or 2013 Sharesave Plan and under any other employee share plan operated by Standard Chartered PLC to exceed such number as represents 10 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

An award shall not be granted under the 2011 Plan or 2013 Sharesave Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares which may be issued or transferred pursuant to awards then outstanding under the 2011 Plan or 2013 Sharesave Plan as relevant to exceed such number as represents 10 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

The number of Standard Chartered PLC ordinary shares which may be issued pursuant to awards granted under the 2011 Plan in any 12-month period must not exceed such number as represents 1 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time. The number of Standard Chartered PLC ordinary shares which may be issued pursuant to awards granted under the 2013 Sharesave Plan in any 12-month period must not exceed such number as represents 1 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

Issuances

Reason for issuance	Number of shares issued	Aggregate nominal value (USD) ¹	Option exercise price per share (GBP)	Total issuance price (USD) ¹	Sum of funds raised (USD) ²
2015 Sharesave ³	2,192,633	1,096,317	5.58	15,599,018	15,599,018
2016 Sharesave ³	5,404	2,702	5.30	36,532	36,532
2017 Sharesave ³	393	197	6.20	3,108	3,108
2018 Sharesave ³	2,035	1,018	5.13	13,316	13,316
Discretionary award ⁴	1,168,111	584,056	N/A	584,056	584,056
Total	3,368,576	1,684,290		16,236,030	16,236,030

1 All issuances above are of Standard Chartered PLC ordinary shares, nominal value USD 0.50 per share ('Shares'), and took place between January and May 2019

2 Funds received from the payment of Sharesave option exercise prices were applied on behalf of the Sharesave participants in subscribing for Shares in accordance with the rules of the Standard Chartered 2013 Sharesave Plan. The subscription price of USD 0.50 per Share paid by trustees of the 2004 employee benefit trust was applied on behalf of participants in the 2011 Standard Chartered Plan in subscribing for Shares in accordance with the rules of the 2011 Standard Chartered Share Plan

3 Sharesave options were granted to employees under the Standard Chartered 2013 Sharesave Plan, which was approved by shareholders on 8 May 2013. The closing share price on 7 May 2013 was GBP 16.1806. Details of each grant are disclosed in the share-based payments note to the annual report for each year of grant

4 Discretionary awards were granted to employees under the 2011 Standard Chartered Share Plan, which was approved by shareholders on 5 May 2011. The closing share price on 4 May 2011 was GBP 15.2668. Details of each grant are disclosed in the share-based payments note to the annual report for each year of grant. The trustees of the 2004 employee benefit trust subscribed for Shares on behalf of participants who received Shares through the exercise of discretionary awards at a price of USD 0.50 per Share in accordance with the rules of the 2011 Standard Chartered Share Plan

31. Share-based payments continued

Reconciliation of share award movements for the year to 31 December 2019

	2011 Plan ¹		PSP ¹	Sharesave	Weighted average Sharesave exercise price (£)
	LTIP	Deferred/ Restricted shares			
Outstanding at 1 January 2019	27,003,333	26,612,980	4,270	13,724,361	5.48
Granted ^{2,3}	2,777,179	15,140,609	–	5,025,310	–
Lapsed	(2,824,549)	(1,441,046)	–	(1,821,467)	5.50
Exercised	(6,043,284)	(12,077,082)	(4,270)	(4,325,362)	5.49
Outstanding at 31 December	20,912,679	28,235,461	–	12,602,842	5.28
Total number of securities available for issue under the plan	20,912,679	28,235,461	–	12,602,842	
Percentage of the issued shares this represents as at 31 December	0.7%	0.9%	–	0.4%	
Exercisable as at 31 December	53,986	2,539,752	–	1,231,333	5.30
Range of exercise prices (£) ³	–	–	–	4.98 – 6.20	
Intrinsic value of vested but not exercised options (\$ million)	0.51	24.13	–	3.06	
Weighted average contractual remaining life (years)	6.85	8.25	–	2.44	
Weighted average share price for awards exercised during the period (£)	6.37	6.33	6.95	6.72	

1 Employees do not contribute towards the cost of these awards

2 14,346,920 (DRSA/RSA) granted on 11 March 2019, 186,955 (DRSA/RSA) granted as notional dividend on 08 March 2019, 2,530,325 (LTIP) granted on 11 March 2019, 232,895 (LTIP) granted as notional dividend on 08 March 2019, 278,813 (DRSA/RSA) granted on 24 June 2019, 74,125 (DRSA/RSA) granted as notional dividend on 09 August 2019, 13,959 (MLTIP/LTIP) granted as notional dividend on 09 August 2019, 151,751 (RSA) granted on 01 October 2019, 5,025,310 (Sharesave) granted on 01 October 2019 and 102,045 (RSA) granted on 28 November 2019

3 For Sharesave granted in 2019, the exercise price is £4.98 per share, which was a 20 per cent discount to the closing share price on 30 August 2019. The closing share price on 30 August 2019 was £6.22

Reconciliation of share award movements for the year to 31 December 2018

	2011 Plan ¹		PSP ¹	RSS ¹	SRSS ¹	Sharesave	Weighted average Sharesave exercise price (£)
	Performance shares	Deferred/ Restricted shares					
Outstanding at 1 January 2018	25,477,368	23,311,221	17,222	185,943	1,249	12,818,234	6.06
Granted ^{2,3}	2,481,485	13,649,191				4,769,917	5.13
Lapsed	(935,037)	(1,375,715)	(553)	(50,484)		(2,995,333)	7.36
Exercised	(20,483)	(8,971,717)	(12,399)	(135,459)	(1,249)	(868,457)	5.57
Outstanding at 31 December	27,003,333	26,612,980	4,270	–	–	13,724,361	5.48
Exercisable as at 31 December	43,241	3,657,278	4,270	–	–	3,483,196	5.57
Range of exercise prices (£) ³						5.13 – 6.20	
Intrinsic value of vested but not exercised options (\$ million)	0.04	2.59	0.02	–	–	–	
Weighted average contractual remaining life (years)	7.43	8.18	0.48	0	0	2.04	
Weighted average share price for awards exercised during the period (£)	7.18	7.17	6.76	7.84	7.85	6.20	

1 Employees do not contribute towards the cost of these awards

2 12,508,120 (DRSA/RSA) granted on 9 March 2018, 39,945 (notional dividend) granted on 11 March 2018, 63,350 (notional dividend) granted on 13 March 2018, 37,774 (notional dividend) granted on 19 March 2018, 2,076,370 (LTIP) granted on 9 March 2018, 216,127 (notional dividend) granted on 11 March 2018, 22,317 (notional dividend) granted on 13 March 2018, 815 (notional dividend) granted on 19 March 2018, 246,367 (DRSA/RSA) granted on 18 June 2018, 165,856 (LTIP) and 75755 (DRSA/RSA) granted on 22 Aug 2018, and 423,038 (DRSA/RA) and 4,769,917 (Sharesave) granted on 2 October 2018, and 254,842 (DRSA/RSA) granted on 28 November 2018

3 For Sharesave granted in 2018, the exercise price is £5.13 per share, which was the average of the closing prices over the five days to the invitation date of 3 September. The closing share price on 31 August 2018 was £6.271

32. Investments in subsidiary undertakings, joint ventures and associates

Accounting policy

Subsidiaries

Subsidiaries are all entities, including structured entities, which the Group controls. The Group controls an entity when it is exposed to, and has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the investee. The assessment of power is based on the Group's practical ability to direct the relevant activities of the entity unilaterally for the Group's own benefit and is subject to reassessment if and when one or more of the elements of control change. Subsidiaries are fully consolidated from the date on which the Group effectively obtains control. They are deconsolidated from the date that control ceases, and where any interest in the subsidiary remains, this is remeasured to its fair value and the change in carrying amount is recognised in the income statement.

Associates and joint arrangements

Joint arrangements are where two or more parties either have rights to the assets, and obligations of the joint arrangement (joint operations), or have rights to the net assets of the joint arrangement (joint venture). The Group evaluates the contractual terms of joint arrangements to determine whether a joint arrangement is a joint operation or a joint venture. The Group does not have any contractual interest in joint operations.

An associate is an entity over which the Group has significant influence.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost. The Group's investment in associates and joint ventures includes goodwill identified on acquisition (net of any accumulated impairment loss).

The Group's share of its associates' and joint ventures' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised in reserves. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Unrealised gains and losses on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. At each balance sheet date, the Group assesses whether there is any objective evidence of impairment in the investment in associates and joint ventures. Such evidence includes a significant or prolonged decline in the fair value of the Group's investment in an associate or joint venture below its cost, among other factors.

Significant accounting estimates and judgements

The Group applies judgement in determining if it has control, joint control or significant influence over subsidiaries, joint ventures and associates respectively. These judgements are based upon identifying the relevant activities of counterparties, being those activities that significantly affect the entities returns, and further making a decision of if the Group has control over those entities, joint control, or has significant influence (being the power to participate in the financial and operating policy decisions but not control them).

These judgements are at times determined by equity holdings, and the voting rights associated with those holdings. However, further considerations including but not limited to board seats, advisory committee members and specialist knowledge of some decision-makers are also taken into account. Further judgement is required when determining if the Group has de-facto control over an entity even though it may hold less than 50 per cent of the voting shares of that entity. Judgement is required to determine the relative size of the Group's shareholding when compared with the size and dispersion of other shareholders.

Impairment testing of investments in associates and joint ventures is performed if there is a possible indicator of impairment. Judgement is used to determine if there is objective evidence of impairment. Objective evidence may be observable data such as losses incurred on the investment when applying the equity method, the granting of concessions as a result of financial difficulty, or breaches of contracts/regulatory fines of the associate or joint venture. Further judgement is required when considering broader indicators of impairment such as losses of active markets or ratings downgrades across key markets in which the associate or joint venture operate.

Impairment testing is based on estimates, including forecasting the expected cash flows from the investments, growth rates, terminal values and the discount rate used in calculation of the present values of those cash flows. The estimation of future cash flows and the level to which they are discounted is inherently uncertain and requires significant judgement.

32. Investments in subsidiary undertakings, joint ventures and associates continued

Accounting policy continued

Business combinations

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group. The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, together with the fair value of any contingent consideration payable. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets and contingent liabilities acquired is recorded as goodwill (see Note 17 for details on goodwill recognised by the Group). If the cost of acquisition is less than the fair value of the net assets and contingent liabilities of the subsidiary acquired, the difference is recognised directly in the income statement.

Where the fair values of the identifiable net assets and contingent liabilities acquired have been determined provisionally, or where contingent or deferred consideration is payable, adjustments arising from their subsequent finalisation are not reflected in the income statement if: (i) they arise within 12 months of the acquisition date (or relate to acquisitions completed before 1 January 2014); and (ii) the adjustments arise from better information about conditions existing at the acquisition date (measurement period adjustments). Such adjustments are applied as at the date of acquisition and, if applicable, prior year amounts are restated. All changes that are not measurement period adjustments are reported in income other than changes in contingent consideration not classified as financial instruments, which are accounted for in accordance with the appropriate accounting policy, and changes in contingent consideration classified as equity, which is not remeasured.

Changes in ownership interest in a subsidiary, which do not result in a loss of control, are treated as transactions between equity holders and are reported in equity. Where a business combination is achieved in stages, the previously held equity interest is remeasured at the acquisition date fair value with the resulting gain or loss recognised in the income statement.

In the Company's financial statements, investment in subsidiaries, associates and joint ventures are held at cost less impairment and dividends from pre-acquisition profits received prior to 1 January 2009, if any. Inter-company transactions, balances and unrealised gains and losses on transactions between Group companies are eliminated in the Group accounts.

Investments in subsidiary undertakings	2019 \$million	2018 \$million
As at 1 January	34,853	34,853
Additions	23,184 ¹	—
As at 31 December	58,037	34,853

1 Includes internal Additional Tier 1 issuances of \$900 million by Standard Chartered Bank (Hong Kong) Limited and \$500 million and SGD750 million by Standard Chartered Bank (Singapore) Limited

At 31 December 2019, the principal subsidiary undertakings, all indirectly held except for Standard Chartered Bank (Hong Kong) Limited, and principally engaged in the business of banking and provision of other financial services, were as follows:

Country and place of incorporation or registration	Main areas of operation	Group interest in ordinary share capital %
Standard Chartered Bank, England and Wales	United Kingdom, Middle East, South Asia, Asia Pacific, Americas and, through Group companies, Africa	100
Standard Chartered Bank (China) Limited, China	China	100
Standard Chartered Bank (Hong Kong) Limited, Hong Kong	Hong Kong	100
Standard Chartered Bank Korea Limited, Korea	Korea	100
Standard Chartered Bank Malaysia Berhad, Malaysia	Malaysia	100
Standard Chartered Private Equity Limited, Hong Kong	Hong Kong	100
Standard Chartered Bank Nigeria Limited, Nigeria	Nigeria	100
Standard Chartered Bank (Singapore) Limited, Singapore	Singapore	100
Standard Chartered Bank (Taiwan) Limited, Taiwan	Taiwan	100
Standard Chartered Bank (Pakistan) Limited, Pakistan	Pakistan	98.99
Standard Chartered Bank (Thai) Public Company Limited, Thailand	Thailand	99.87
Standard Chartered Bank Kenya Limited, Kenya	Kenya	74.30

A complete list of subsidiary undertaking is included in Note 40.

The Group does not have any material non-controlling interests in any of its subsidiaries except the 25.7 per cent non-controlling interest in Standard Chartered Bank Kenya Limited. This contributes \$20 million (31 December 2018: \$21 million) of the profit attributable to non-controlling interests and \$111 million (31 December 2018: \$108 million) of the equity attributable to non-controlling interests.

While the Group's subsidiaries are subject to local statutory capital and liquidity requirements in relation to foreign exchange remittance, these restrictions arise in the normal course of business and do not significantly restrict the Group's ability to access or use assets and settle liabilities of the Group.

32. Investments in subsidiary undertakings, joint ventures and associates continued

The Group does not have significant restrictions on its ability to access or use its assets and settle its liabilities other than those resulting from the regulatory framework within which the banking subsidiaries operate. These frameworks require banking operations to keep certain levels of regulatory capital, liquid assets, exposure limits and comply with other required ratios. These restrictions are summarised below:

Regulatory and liquidity requirements

The Group's subsidiaries are required to maintain minimum capital, leverage ratios, liquidity and exposure ratios which therefore restrict the ability of these subsidiaries to distribute cash or other assets to the parent company.

The subsidiaries are also required to maintain balances with central banks and other regulatory authorities in the countries in which they operate. At 31 December 2019, the total cash and balances with central banks was \$53 billion (31 December 2018: \$58 billion) of which \$10 billion (31 December 2018: \$8 billion) is restricted.

Statutory requirements

The Group's subsidiaries are subject to statutory requirements not to make distributions of capital and unrealised profits to the parent company, generally to maintain solvency. These requirements restrict the ability of subsidiaries to remit dividends to the Group. Certain subsidiaries are also subject to local exchange control regulations which provide for restrictions on exporting capital from the country other than through normal dividends.

Contractual requirements

The encumbered assets in the balance sheet of the Group's subsidiaries are not available for transfer around the Group. Encumbered assets are disclosed in Risk review and Capital review (page 198).

Share of profit from investment in associates and joint ventures comprises:

	2019 \$million	2018 \$million
Profit from investment in joint ventures	48	29
Profit from investment in associates	252	212
Total	300	241

Interests in joint ventures

	2019 \$million	2018 \$million
As at 1 January	717	783
Exchange translation difference	32	(49)
Expected credit loss, net ¹	–	(33)
Share of profit	48	29
Disposals	–	(11)
Share of fair value through other comprehensive income/available-for-sale and Other reserves	3	(2)
Transfer to held for sale assets ²	(800)	–
As at 31 December	–	717

1 Relates to IFRS 9 transition adjustments

2 Refer to Note 21 Assets held for sale and associated liabilities where our joint venture PT Bank Permata Tbk (Permata) is disclosed

Interests in associates

	China Bohai Bank		Other		Total	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million	2019 \$million	2018 \$million
As at 1 January	1,551	1,489	39	35	1,590	1,524
Exchange translation differences	(17)	(95)	–	–	(17)	(95)
Expected credit loss, net ¹	–	(19)	–	–	–	(19)
Additions	–	–	64	–	64	–
Share of profits	247	205	5	7	252	212
Dividends received	–	(64)	(3)	(3)	(3)	(67)
Share of fair value through other comprehensive income/available-for-sale and Other reserves	22	35	–	–	22	35
As at 31 December	1,803	1,551	105	39	1,908	1,590

1 IFRS 9 transition impact from associates is reported here

32. Investments in subsidiary undertakings, joint ventures and associates continued

A complete list of the Group's interest in associates is included in Note 40. The Group's principal associate is:

Associate	Nature of activities	Main areas of operation	Group interest in ordinary share capital %
China Bohai Bank	Banking	China	19.99

The Group's investment in China Bohai Bank is less than 20 per cent but it is considered to be an associate because of the significant influence the Group is able to exercise over the management and financial and operating policies. The Group applies the equity method of accounting for investments in associates. The reported financials up to November 2019 of this associate are within three months of the Group's reporting date.

The following table sets out the summarised financial statements of China Bohai Bank prior to the Group's share of the associates being applied:

	China Bohai Bank	
	30 Nov 2019 \$million	30 Nov 2018 \$million
Cash and balances at central banks	12,532	18,358
Loans and advances to banks	3,297	3,719
Loans and advances to customers	97,133	78,050
Other assets	43,467	47,632
Total Assets	156,429	147,759
Deposits by banks	14,502	18,674
Customer accounts	89,917	84,426
Debt securities in issue	4,913	1,912
Other financial liabilities	36,970	34,735
Other liabilities	1,105	252
Total liabilities	147,407	140,000
Total equity	9,022	7,759
Operating income	3,769	3,427
Of which:		
Interest income	6,717	6,699
Interest expense	(3,783)	(4,430)
Expenses	(2,394)	(2,244)
Of which:		
Depreciation and amortisation	(5)	(5)
Impairment	(1,275)	(971)
Operating profit	1,375	1,183
Taxation	(212)	(160)
Profit after tax	1,163	1,023
The financial statements of China Bohai Bank include the following:		
Other comprehensive profit for the year	(63)	175
Total comprehensive income for the year	1,100	1,198

During the year, there were no indicators of impairment for the Group's investment in China Bohai Bank. The carrying value of the investment as of 31 December 2019 was \$1,803 million (31 December 2018: \$1,551 million).

33. Structured entities

Accounting policy

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Contractual arrangements determine the rights and therefore relevant activities of the structured entity. Structured entities are generally created to achieve a narrow and well-defined objective with restrictions around their activities. Structured entities are consolidated when the substance of the relationship between the Group and the structured entity indicates the Group has power over the contractual relevant activities of the structured entity, is exposed to variable returns, and can use that power to affect the variable return exposure.

In determining whether to consolidate a structured entity to which assets have been transferred, the Group takes into account its ability to direct the relevant activities of the structured entity. These relevant activities are generally evidenced through a unilateral right to liquidate the structured entity, investment in a substantial proportion of the securities issued by the structured entity or where the Group holds specific subordinate securities that embody certain controlling rights. The Group may further consider relevant activities embedded within contractual arrangements such as call options which give the practical ability to direct the entity, special relationships between the structured entity and investors, and if a single investor has a large exposure to variable returns of the structured entity.

Judgement is required in determining control over structured entities. The purpose and design of the entity is considered, along with a determination of what the relevant activities are of the entity and who directs these. Further judgements are made around which investor is exposed to, and absorbs the variable returns of the structured entity. The Group will have to weigh up all of these facts to consider whether the Group, or another involved party is acting as a principal in its own right or as an agent on behalf of others. Judgement is further required in the ongoing assessment of control over structured entities, specifically if market conditions have an effect on the variable return exposure of different investors.

The Group has involvement with both consolidated and unconsolidated structured entities, which may be established by the Group as a sponsor or by a third-party.

Interests in consolidated structured entities: A structured entity is consolidated into the Group's financial statements where the Group controls the structured entity, as per the determination in the accounting policy above.

The following table presents the Group's interests in consolidated structured entities.

	2019 \$million	2018 \$million
Aircraft and ship leasing	4,312	5,200 ¹
Principal and other structured finance	816	1,452
Total	5,128	6,652

¹ Re-presented to include total non-Group assets. Previously, only operating lease assets were disclosed

Interests in unconsolidated structured entities: Unconsolidated structured entities are all structured entities that are not controlled by the Group. The Group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities. An interest in a structured entity is contractual or non-contractual involvement which creates variability of the returns of the Group arising from the performance of the structured entity.

The table below presents the carrying amount of the assets recognised in the financial statements relating to variable interests held in unconsolidated structured entities, the maximum exposure to loss relating to those interests and the total assets of the structured entities. Maximum exposure to loss is primarily limited to the carrying amount of the Group's on-balance sheet exposure to the structured entity. For derivatives, the maximum exposure to loss represents the on-balance sheet valuation and not the notional amount. For commitments and guarantees, the maximum exposure to loss is the notional amount of potential future losses.

	2019					2018				
	Asset-backed securities \$million	Structured finance \$million	Principal Finance funds \$million	Other activities \$million	Total \$million	Asset-backed securities \$million	Structured finance \$million	Principal Finance funds \$million	Other activities \$million	Total \$million
Group's interest – assets										
Financial assets held at fair value through profit or loss	1,055	–	105	181	1,341	1,094	–	72	247	1,413
Loans and advances/Investment securities at amortised cost	4,939	2,020	343	251	7,553	2,556	1,403	252	190	4,401
Investment securities (fair value through other comprehensive income)	3,158	–	–	–	3,158	3,812	–	–	–	3,812
Other assets	–	–	289	–	289	–	–	336	–	336
Total assets	9,152	2,020	737	432	12,341	7,462	1,403	660	437	9,962
Off-balance sheet	65	572	109	–	746	116	553	79	–	748
Group's maximum exposure to loss	9,217	2,592	846	432	13,087	7,578	1,956	739	437	10,710
Total assets of structured entities	153,948	6,594	3,028	7,976	171,546	205,837	2,785	3,395	11,872	223,889

33. Structured entities continued

The main types of activities for which the Group utilises unconsolidated structured entities cover synthetic credit default swaps for managed investment funds (including specialised Principal Finance funds), portfolio management purposes, structured finance and asset-backed securities. These are detailed as follows:

- **Asset-backed securities (ABS):** The Group also has investments in asset-backed securities issued by third-party sponsored and managed structured entities. For the purpose of market making and at the discretion of ABS trading desk, the Group may hold an immaterial amount of debt securities from structured entities originated by credit portfolio management. This is disclosed in the ABS column above
- **Portfolio management (Group sponsored entities):** For the purposes of portfolio management, the Group purchased credit protection via synthetic credit default swaps from note-issuing structured entities. This credit protection creates credit risk which the structured entity and subsequently the end investor absorbs. The referenced assets remain on the Group's balance sheet as they are not assigned to these structured entities. The Group continues to own or hold all of the risks and returns relating to these assets. The credit protection obtained from the regulatory-compliant securitisation only serves to protect the Group against losses upon the occurrence of eligible credit events and the underlying assets are not derecognised from the Group's balance sheet. The Group does not hold any equity interests in the structured entities, but may hold an insignificant amount of the issued notes for market making purposes. This is disclosed in the ABS section above. The proceeds of the notes' issuance are typically held as cash collateral in the issuer's account operated by a trustee or invested in AAA-rated government-backed securities to collateralise the structured entities swap obligations to the Group, and to repay the principal to investors at maturity. The structured entities reimburse the Group on actual losses incurred, through the use of the cash collateral or realisation of the collateral security. Correspondingly, the structured entities write down the notes issued by an equal amount of the losses incurred, in reverse order of seniority. All funding is committed for the life of these vehicles and the Group has no indirect exposure in respect of the vehicles' liquidity position. The Group has reputational risk in respect of certain portfolio management vehicles and investment funds either because the Group is the arranger and lead manager or because the structured entities have Standard Chartered branding
- **Structured finance:** Structured finance comprises interests in transactions that the Group or, more usually, a customer has structured, using one or more structured entities, which provide beneficial arrangements for customers. The Group's exposure primarily represents the provision of funding to these structures as a financial intermediary, for which it receives a lender's return. The transactions largely relate to real estate financing and the provision of aircraft leasing and ship finance
- **Principal Finance Fund:** The Group's exposure to Principal Finance Funds represents committed or invested capital in unleveraged investment funds, primarily investing in pan-Asian infrastructure, real estate and private equity
- **Other activities:** Other activities include structured entities created to support margin financing transactions, the refinancing of existing credit and debt facilities, as well as setting up of bankruptcy remote structured entities

34. Cash flow statement

Adjustment for non-cash items and other adjustments included within income statement

	Group		Company	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million
Amortisation of discounts and premiums of investment securities	(818)	(375)	–	–
Interest expense on subordinated liabilities	756	767	688	673
Interest expense on senior debt securities in issue	677	606	606	503
Other non-cash items	792	796	(75)	91
Pension costs for defined benefit schemes	73	81	–	–
Share-based payment costs	166	166	–	–
Impairment losses on loans and advances and other credit risk provisions	908	653	–	–
Dividend income from subsidiaries	–	–	(17,979)	(1,035)
Other impairment	163	182	–	–
Net gain on derecognition of investment in associate	–	–	–	–
Profit from associates and joint ventures	(300)	(241)	–	–
Total	2,417	2,635	(16,760)	232

Change in operating assets

	Group		Company	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million
Decrease in derivative financial instruments	(1,603)	1,051	(220)	61
(Increase)/decrease in debt securities, treasury bills and equity shares held at fair value through profit or loss	(5,579)	4,171	(4,502)	–
Increase in loans and advances to banks and customers	(19,108)	(16,883)	–	–
Net increase in prepayments and accrued income	(199)	(252)	–	–
Net increase in other assets	(8,796)	(924)	(751)	–
Total	(35,285)	(12,837)	(5,473)	61

34. Cash flow statement continued**Change in operating liabilities**

	Group		Company	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million
Increase/(decrease) in derivative financial instruments	1,290	(493)	(390)	636
Net increase/(decrease) in deposits from banks, customer accounts, debt securities in issue, Hong Kong notes in circulation and short positions	27,850	31,216	1,131	(22)
(Decrease)/increase in accruals and deferred income	(15)	3	(18)	6
Net increase/(decrease) in other liabilities	810	3,133	(4,905)	(1,082)
Total	29,935	33,859	(4,182)	(462)

Disclosures

	Group		Company	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million
Subordinated debt (including accrued interest):				
Opening balance	15,227	17,550	13,648	14,109
Proceeds from the issue	1,000	500	1,000	500
Interest paid	(603)	(602)	(547)	(507)
Repayment	(23)	(2,097)	–	(474)
Foreign exchange movements	(2)	(220)	(14)	(237)
Fair value changes	227	(373)	147	(248)
Other	619	469	503	505
Closing balance	16,445	15,227	14,737	13,648
Senior debt (including accrued interest):				
Opening balance	21,998	19,738	17,361	16,307
Proceeds from the issue	9,169	9,766	6,012	4,552
Interest paid	(797)	(507)	(740)	(355)
Repayment	(7,692)	(7,030)	(3,780)	(3,141)
Foreign exchange movements	(1)	(347)	(1)	(199)
Fair value changes	360	(904)	283	(182)
Other	852	1,282	714	379
Closing balance	23,889	21,998	19,849	17,361

35. Cash and cash equivalents**Accounting policy**

For the purposes of the cash flow statement, cash and cash equivalents comprise cash, on demand and overnight balances with central banks (unless restricted) and balances with less than three months' maturity from the date of acquisition, including treasury bills and other eligible bills, loans and advances to banks, and short-term government securities.

The following balances with less than three months' maturity from the date of acquisition have been identified by the Group as being cash and cash equivalents.

	Group		Company	
	2019 \$million	2018 \$million	2019 \$million	2018 \$million
Cash and balances at central banks	52,728	57,511	–	–
Less: restricted balances	(9,843)	(8,152)	–	–
Treasury bills and other eligible bills	10,078	15,393	–	–
Loans and advances to banks	21,556	30,449	–	–
Trading securities	2,935	2,299	–	–
Amounts owed by and due to subsidiary undertakings	–	–	11,622	17,606
Total	77,454	97,500	11,622	17,606

Restricted balances comprise minimum balances required to be held at central banks.

36. Related party transactions

Directors and officers

Details of directors' remuneration and interests in shares are disclosed in the Directors' remuneration report.

IAS 24 Related party disclosures requires the following additional information for key management compensation. Key management comprises non-executive directors, executive directors of Standard Chartered PLC, the Court directors of Standard Chartered Bank and the persons discharging managerial responsibilities (PDMP) of Standard Chartered PLC.

	31.12.19 \$million	31.12.18 \$million
Salaries, allowances and benefits in kind ¹	37	33
Share-based payments	28	29
Bonuses paid or receivable	4	10
Total	69	72

1 Cash bonus for 2019 receivable within 12 months have been included as short-term employee benefits alongside salaries, allowances and benefits in kind in accordance with IAS 24

Transactions with directors and others

At 31 December 2019, the total amounts to be disclosed under the Companies Act 2006 (the Act) and the Listing Rules of the Hong Kong Stock Exchange Limited (HK Listing Rules) about loans to directors were as follows:

	31.12.19		31.12.18	
	Number	\$million	Number	\$million
Directors	3	–	1	–

The loan transactions provided to the directors of Standard Chartered PLC were a connected transaction under Chapter 14A of the HK Listing Rules. It was fully exempt as financial assistance under Rule 14A.87(1), as it was provided in our ordinary and usual course of business and on normal commercial terms.

As at 31 December 2019, Standard Chartered Bank had created a charge over \$86 million (31 December 2018: \$83 million) of cash assets in favour of the on-consolidated independent trustee of its employer financed retirement benefit scheme.

Other than as disclosed in the Annual Report, there were no other transactions, arrangements or agreements outstanding for any director, connected person or officer of the Company which have to be disclosed under the Act, the rules of the UK Listing Authority or the HK Listing Rules.

Company

The Company has received \$1,006 million (31 December 2018: \$965 million) of net interest income from its subsidiaries. The Company issues debt externally and lends proceeds to Group companies.

The Company has an agreement with Standard Chartered Bank that, in the event of Standard Chartered Bank defaulting on its debt coupon interest payments, where the terms of such debt requires it, the Company shall issue shares as settlement for non-payment of the coupon interest.

	31.12.2019			31.12.2018		
	Standard Chartered Bank \$million	Standard Chartered Bank (Hong Kong) Limited \$million	Others ¹ \$million	Standard Chartered Bank \$million	Standard Chartered Bank (Hong Kong) Limited \$million	Others ¹ \$million
Assets						
Due from subsidiaries ²	11,068	32	346	17,030	–	399
Derivative financial instruments	212	17	–	9	–	–
Debt securities ²	13,665	3,953	548	11,537	–	–
Total assets	24,945	4,002	894	28,576	–	399
Liabilities						
Due to subsidiaries	26	–	–	–	–	–
Derivative financial instruments ²	738	–	–	1,126	–	–
Total liabilities	764	–	–	1,126	–	–

1 Prior year comparatives have been re-presented

2 Others include Standard Chartered Bank (Singapore) Limited, Standard Chartered Holdings Limited and Standard Chartered I H Limited

36. Related party transactions continued

Associate and joint ventures

The following transactions with related parties are on an arm's-length basis:

	2019				2018			
	China Bohai Bank \$million	Clifford Capital \$million	PT Bank Permata \$million	Seychelles International Mercantile Banking Corporation Limited \$million	China Bohai Bank \$million	Clifford Capital \$million	PT Bank Permata \$million	Seychelles International Mercantile Banking Corporation Limited \$million
Assets								
Loans and advances ¹	–	–	2	–	–	22	2	–
Debt securities ¹	–	21	58	–	–	–	56	–
Derivative assets	–	–	–	–	2	–	–	–
Total assets	–	21	60	–	2	22	58	–
Liabilities								
Deposits	193	–	29	3	266	–	35	11
Total liabilities	193	–	29	3	266	–	35	11
Loan commitments and other guarantees ²	–	50	3	–	–	–	–	–
Total net income	2	2	5	–	6	–	6	–

1 Prior year comparatives have been re-presented

2 The maximum loan commitments and other guarantees during the year was \$53 million

37. Post balance sheet events

On 14 January 2020, Standard Chartered PLC issued \$2,000 million 2.8190 per cent senior debt due 2026 (callable 2025).

On 16 January 2020, Standard Chartered PLC issued €750 million 0.850 per cent senior debt due 2028 (callable 2027).

A final dividend for 2019 of 20 cents per ordinary share was declared by the directors after 31 December 2019.

The existence of novel coronavirus (Covid-19) was confirmed in early 2020 and has spread across mainland China and beyond, causing disruptions to businesses and economic activity. The Group considers this outbreak to be a non-adjusting post balance sheet event. As the situation is fluid and rapidly evolving, we do not consider it practicable to provide a quantitative estimate of the potential impact of this outbreak on the Group. The impact of this outbreak on the macroeconomic forecasts will be incorporated into the Group's IFRS9 estimates of expected credit loss provisions in 2020.

38. Auditor's remuneration

Auditor's remuneration is included within other general administration expenses. The amounts paid by the Group to their principal auditor, KPMG LLP and its associates (together KPMG), are set out below. All services are approved by the Group Audit Committee and are subject to controls to ensure the external auditor's independence is unaffected by the provision of other services.

	2019 \$million	2018 \$million
Audit fees for the Group statutory audit	10.0	9.2
Fees payable to KPMG for other services provided to the Group:		
Audit of Standard Chartered PLC subsidiaries	8.4	8.3
Total audit fees	18.4	17.5
Audit-related services	7.6	7.0
Other assurance services	0.1	0.3
Tax compliance and advisory services	–	0.1
Corporate finance services	0.6	0.2
Total fees payable	26.7	25.1

The following is a description of the type of services included within the categories listed above:

- ➔ Audit fees for the Group statutory audit are in respect of fees payable to KPMG LLP for the statutory audit of the consolidated financial statements of the Group and the separate financial statements of Standard Chartered PLC
- ➔ Audit-related fees consist of fees such as those for services required by law or regulation to be provided by the auditor, reviews of interim financial information, reporting on regulatory returns, reporting to a regulator on client assets and extended work performed over financial information and controls authorised by those charged with governance
- ➔ Other assurance services include agreed-upon procedures in relation to statutory and regulatory filings
- ➔ Tax services include services which are not prohibited by the European Directive on Statutory Audits of Annual and Consolidated Accounts and the Regulation on Statutory Audits of Public Interest Entities
- ➔ Corporate finance services are fees payable to KPMG for issuing comfort letters
- ➔ Included within the Group statutory audit fees is \$0.4 million of fees related to the 2018 year-end audit and \$0.2 million related to the transition of the audit to EY

Expenses incurred during the provision of services and which have been reimbursed by the Group are not included within auditor's remuneration. Expenses incurred for 2019 were \$1.1 million (2018: \$0.6 million).

39. Standard Chartered PLC (Company)

Group reorganisation

The Board of the Group approved in 2018 an in-principle group reorganisation which would result in Standard Chartered Bank (SCB) transferring its ordinary shares in Standard Chartered Bank (Hong Kong) Limited (SCB HK), Standard Chartered Bank (China) Limited (SCB China), Standard Chartered NEA Limited (SC NEA) and Standard Chartered Bank (Taiwan) Limited (SCB TW) to other entities within the Standard Chartered PLC Group, subject to the receipt of appropriate regulatory approvals.

On 4 March 2019, SCB transferred via a dividend in specie its ordinary shares in SCB HK to Standard Chartered Holdings Limited (SCH). SCH in turn transferred via a dividend in specie 100 per cent of the ordinary shares of SCB HK to Standard Chartered PLC (SC PLC), the Group's ultimate parent.

On 1 June 2019, the Company transferred its shareholding in SCB China to SCB HK in exchange for ordinary shares in SCB HK. On 3 June 2019, the Company transferred via dividend in specie such SCB HK shares to SCH and in turn, SCH transferred via dividend in specie such SCB HK shares to SC PLC.

On 1 October 2019, the Company transferred its ordinary shares in SC NEA, the holding company of Standard Chartered Bank Korea Limited, to SCB HK, and on the same day, its ordinary shares in SCB TW to SC NEA.

All of the transfers were done on a fair value basis in the Standard Chartered PLC (Company) accounts. The result of these transfers was an increase in Investment in Subsidiaries and corresponding dividend income of \$20,989 million. This resulted in an increase to retained earnings but no change to distributable reserves.

In addition to the group reorganisation, Additional Tier 1 issuances of \$900 million by Standard Chartered Bank (Hong Kong) Limited and \$500 million and SGD750 million by Standard Chartered Bank (Singapore) Limited have increased Investments in Subsidiaries.

Classification and measurement of financial instruments

	2019				2018		
	Derivatives held for hedging \$million	Amortised cost \$million	Non-trading mandatorily at fair value through profit or loss \$million	Total \$million	Derivatives held for hedging \$million	Amortised cost \$million	Total \$million
Financial assets							
Derivatives	229	–	–	229	9	–	9
Investment securities	–	13,665	4,502 ¹	18,167	–	11,537	11,537
Amounts owed by subsidiary undertakings	–	11,622	–	11,622	–	17,606	17,606
Total	229	25,287	4,502	30,018	9	29,143	29,152

1 Standard Chartered Bank (Hong Kong) Limited and Standard Chartered Bank (Singapore) Limited issued Loss Absorbing Capacity (LAC) eligible debt securities (2018: nil)

Instruments classified as amortised cost are recorded in stage 1.

Derivatives held for hedging are held at fair value and are classified as Level 2 while the counterparty is Standard Chartered Bank.

Debt securities comprise corporate securities issued by Standard Chartered Bank and have a fair value equal to carrying value of \$13,665 million (31 December 2018: \$11,537 million).

In 2019 and 2018, amounts owed by subsidiary undertakings have a fair value equal to carrying value.

	2019				2018		
	Derivatives held for hedging \$million	Amortised cost \$million	Designated at fair value through profit or loss \$million	Total \$million	Derivatives held for hedging \$million	Amortised cost \$million	Total \$million
Financial liabilities							
Derivatives	738	–	–	738	1,128	–	1,128
Debt securities in issue	–	19,713	112	19,825	–	17,202	17,202
Subordinated liabilities and other borrowed funds	–	14,588	–	14,588	–	13,436	13,436
Amounts owed to subsidiary undertakings	–	26	–	26	–	–	–
Total	738	34,327	112	35,177	1,128	30,638	31,766

Derivatives held for hedging are held at fair value and are classified as Level 2 while the counterparty is Standard Chartered Bank.

The fair value of debt securities in issue is \$19,713 million (31 December 2018: \$17,202 million) and have fair value equal to carrying value.

The fair value of subordinated liabilities and other borrowed funds is \$15,238 million (31 December 2018: \$14,314 million).

39. Standard Chartered PLC (Company) continued**Derivative financial instruments**

Derivatives	2019			2018		
	Notional principal amounts \$million	Assets \$million	Liabilities \$million	Notional principal amounts \$million	Assets \$million	Liabilities \$million
Foreign exchange derivative contracts:						
Forward foreign exchange	–	17	–	–	–	–
Currency swaps	5,114	–	642	6,864	–	818
Other foreign exchange (OTC)	1,564	34	–	–	–	–
Interest rate derivative contracts:						
Swaps	13,201	178	96	10,939	9	310
Total	19,879	229	738	17,803	9	1,128

Credit risk**Maximum exposure to credit risk**

	2019 \$million	2018 \$million
Derivative financial instruments	229	9
Debt securities	18,167	11,537
Amounts owed by subsidiary undertakings	11,622	17,606
Total	30,018	29,152

In 2019 and 2018, amounts owed by subsidiary undertakings were neither past due nor impaired; the Company had no individually impaired loans.

In 2019 and 2018, the Company had no impaired debt securities. The debt securities held by the Group are issued by Standard Chartered Bank, a wholly owned subsidiary undertaking with credit ratings of A+/A1.

There is no material expected credit loss on these instruments as they are stage 1 assets, short term in nature and of a high quality.

Liquidity risk

The following table analyses the residual contractual maturity of the assets and liabilities of the Company on a discounted basis:

	2019								
	One month or less \$million	Between one month and three months \$million	Between three months and six months \$million	Between six months and nine months \$million	Between nine months and one year \$million	Between one year and two years \$million	Between two years and five years \$million	More than five years and undated \$million	Total \$million
Assets									
Derivative financial instruments	34	–	1	–	–	8	52	134	229
Investment securities	–	–	–	–	–	–	7,024	11,143	18,167
Amount owed by subsidiary undertakings	–	5	2,104	–	–	1,025	5,249	3,239	11,622
Investments in subsidiary undertakings	–	–	–	–	–	–	–	58,037	58,037
Other assets	–	–	–	–	–	–	–	15	15
Total assets	34	5	2,105	–	–	1,033	12,325	72,568	88,070
Liabilities									
Derivative financial instruments	–	–	3	–	286	229	127	93	738
Senior debt	–	–	2,104	–	–	2,547	7,734	7,328	19,713
Amount owed to subsidiary undertakings	–	–	–	–	–	–	–	26	26
Other liabilities	298	86	68	7	20	–	–	36	515
Subordinated liabilities and other borrowed funds	–	–	–	–	–	–	5,478	9,110	14,588
Total liabilities	298	86	2,175	7	306	2,776	13,339	16,593	35,580
Net liquidity gap	(264)	(81)	(70)	(7)	(306)	(1,743)	(1,014)	55,975	52,490

39. Standard Chartered PLC (Company) continued

Liquidity risk continued

	2018								
	One month or less \$million	Between one month and three months \$million	Between three months and six months \$million	Between six months and nine months \$million	Between nine months and one year \$million	Between one year and two years \$million	Between two years and five years \$million	More than five years and undated \$million	Total \$million
Assets									
Derivative financial instruments	–	–	–	–	–	3	–	6	9
Investment securities	–	–	–	–	–	1,698	3,960	5,879	11,537
Amount owed by subsidiary undertakings	1,318	–	–	2,759	–	2,093	7,070	4,366	17,606
Investments in subsidiary undertakings	–	–	–	–	–	–	–	34,853	34,853
Other assets	–	–	–	–	–	–	–	–	–
Total assets	1,318	–	–	2,759	–	3,794	11,030	45,104	64,005
Liabilities									
Derivative financial instruments	83	–	–	9	–	260	324	452	1,128
Senior debt	1,031	–	–	2,731	–	2,079	5,402	5,959	17,202
Other liabilities	201	91	59	–	21	–	–	19	391
Subordinated liabilities and other borrowed funds	–	–	–	–	–	1,472	4,368	7,596	13,436
Total liabilities	1,315	91	59	2,740	21	3,811	10,094	14,026	32,157
Net liquidity gap	3	(91)	(59)	19	(21)	(17)	936	31,078	31,848

Financial liabilities on an undiscounted basis

	2019								
	One month or less \$million	Between one month and three months \$million	Between three months and six months \$million	Between six months and nine months \$million	Between nine months and one year \$million	Between one year and two years \$million	Between two years and five years \$million	More than five years and undated \$million	Total \$million
Derivative financial instruments	–	–	–	–	–	–	–	–	–
Debt securities in issue	–	18	2,331	18	250	3,030	8,879	8,145	22,671
Subordinated liabilities and other borrowed funds	–	–	221	26	361	618	7,002	14,166	22,394
Other liabilities	172	86	68	7	20	–	–	13	366
Total liabilities	172	104	2,620	51	631	3,648	15,881	22,324	45,431
	2018								
	One month or less \$million	Between one month and three months \$million	Between three months and six months \$million	Between six months and nine months \$million	Between nine months and one year \$million	Between one year and two years \$million	Between two years and five years \$million	More than five years and undated \$million	Total \$million
Derivative financial instruments	83	–	–	9	–	260	324	452	1,128
Debt securities in issue	1,031	7	172	2,765	241	2,408	6,175	6,633	19,432
Subordinated liabilities and other borrowed funds	–	–	221	–	362	2,055	5,975	12,789	21,402
Other liabilities	201	91	59	–	21	–	–	20	392
Total liabilities	1,315	98	452	2,774	624	4,723	12,474	19,894	42,354

40. Related undertakings of the Group

As at 31 December 2019, the Group's interests in related undertakings are disclosed below. Unless otherwise stated, the share capital disclosed comprises ordinary or common shares which are held by subsidiaries of the Group. Standard Chartered Bank (Hong Kong) Limited, Standard Chartered Funding (Jersey) Limited, Stanchart Nominees Limited, Standard Chartered Holdings Limited and Standard Chartered Nominees Limited are directly held subsidiaries, all other related undertakings are held indirectly. Unless otherwise stated, the principal country of operation of each subsidiary is the same as its country of incorporation. Note 32 details undertakings that have a significant contribution to the Group's net profit or net assets.

Subsidiary Undertakings

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom</i>			
BWA Dependents Limited	United Kingdom	£1.00 Ordinary shares	100
FinVentures UK Limited	United Kingdom	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing (UK) Limited	United Kingdom	£1.00 Ordinary shares	100
SC (Secretaries) Limited	United Kingdom	£1.00 Ordinary shares	100
SC Transport Leasing 1 Limited	United Kingdom	£1.00 Ordinary shares	100
SC Transport Leasing 2 Limited	United Kingdom	£1.00 Ordinary shares	100
SC Ventures Innovation Investment L.P.	United Kingdom	Limited Partnership interest	100
SCMB Overseas Limited	United Kingdom	£0.10 Ordinary shares	100
Stanchart Nominees Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Africa Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Bank	United Kingdom	\$0.01 Non-Cumulative Irredeemable Preference shares	100
		\$5.00 Non-Cumulative Redeemable Preference shares	100
		\$1.00 Ordinary shares	100
Standard Chartered Foundation ¹	United Kingdom	Guarantor	100
Standard Chartered Health Trustee (UK) Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Holdings Limited	United Kingdom	\$2.00 Ordinary shares	100
Standard Chartered I H Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Leasing (UK) 2 Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Leasing (UK) 3 Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Leasing (UK) Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Masterbrand Licensing Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered NEA Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Nominees Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Nominees (Private Clients UK) Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Overseas Holdings Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Securities (Africa) Holdings Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Trustees (UK) Limited	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered UK Holdings Limited	United Kingdom	£10.00 Ordinary shares	100
The SC Transport Leasing Partnership 1	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 2	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 3	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 4	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 1 LP ¹	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 2 LP ¹	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 3 LP ¹	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 4 LP ¹	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 5 LP ¹	United Kingdom	Limited Partnership interest	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of 2 More London Riverside, London SE1 2JT, United Kingdom</i>			
Bricks (C&K) LP ¹	United Kingdom	Limited Partnership interest	100
Bricks (C) LP ¹	United Kingdom	Limited Partnership interest	100
Bricks (M) LP	United Kingdom	Limited Partnership interest	100
Bricks (P) LP ¹	United Kingdom	Limited Partnership interest	100
Bricks (T) LP ¹	United Kingdom	Limited Partnership interest	100
<i>The following company has the address of 8th Floor, 20 Farringdon Street, London, EC4A 4AB, United Kingdom.</i>			
SC Ventures G.P. Limited	United Kingdom	£1.00 Ordinary shares	100
<i>The following company has the address of Rua Gamal Abdel Nasser, Edifício Tres Torres, Eixo Viário, Distrito Urbano da Ingombota, Município de Luanda, Provincia de Luanda, Angola</i>			
Standard Chartered Bank Angola S.A.	Angola	AOK8,742.05 Ordinary shares	60
<i>The following company has the address of Level 5, 345 George St, Sydney NSW 2000, Australia</i>			
Standard Chartered Grindlays Pty Limited	Australia	AUD Ordinary shares	100
<i>The following companies have the address of 5th Floor Standard House Bldg, The Mall, Queens Road, PO Box 496, Gaborone, Botswana</i>			
Standard Chartered Bank Insurance Agency (Proprietary) Limited	Botswana	BWP Ordinary shares	100
Standard Chartered Investment Services (Proprietary) Limited	Botswana	BWP Ordinary shares	100
Standard Chartered Bank Botswana Limited	Botswana	BWP Ordinary shares	75.8
Standard Chartered Botswana Education Trust ²	Botswana	Interest in trust	100
Standard Chartered Botswana Nominees (Proprietary) Limited	Botswana	BWP Ordinary shares	100
<i>The following company has the address of Avenida Brigadeiro Faria Lima, 3600 – 7th floor, Sao Paulo, Sao Paulo, 04538-132, Brazil</i>			
Standard Chartered Bank (Brasil) S.A. – Banco de Investimento	Brazil	BRL Ordinary shares	100
<i>The following company has the address of Av. Brigadeiro Faria Lima, 3600 – 7º andar, conj 72 04538-132, São Paulo, Brazil.</i>			
Standard Chartered Representação Ltda	Brazil	BRL1.00 Ordinary shares	100
<i>The following company has the address of 51-55 Jalan Sultan, Complex Jalan sultan, Bandar Seri Begawan, BS8811, Brunei Darussalam</i>			
Standard Chartered Finance (Brunei) Bhd	Brunei Darussalam	BND1.00 Ordinary shares	100
<i>The following company has the address of G01-02, Wisma Haji Mohd Taha Building, Jalan Gadong, BE4119, Brunei Darussalam</i>			
Standard Chartered Securities (B) Sdn Bhd	Brunei Darussalam	BND1.00 Ordinary shares	100
<i>The following company has the address of 1155, Boulevard de la Liberté, Douala, B.P. 1784, Cameroon</i>			
Standard Chartered Bank Cameroon S.A	Cameroon	XAF10,000.00 Ordinary shares	100
<i>The following company has the address of 20 Adelaide Street, Suite 1105, Toronto ON M5C 2T6 Canada</i>			
Standard Chartered (Canada) Limited	Canada	CAD1.00 Ordinary shares	100
<i>The following company has the address of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands</i>			
Cerulean Investments LP	Cayman Islands	Limited Partnership interest	100
<i>The following company has the address of Maples Finance Limited, PO Box 1093 GT, Queensgate House, Georgetown, Grand Cayman, Cayman Islands</i>			
SCB Investment Holding Company Limited	Cayman Islands	\$1,000.00 A Ordinary shares	100
		\$1.00 Class X shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of Walkers Corporate Limited, Cayman Corporate Centre, 27 Hospital Road George Town, Grand Cayman KY1-9008, Cayman Islands</i>			
Sirat Holdings Limited	Cayman Islands	\$0.01 Ordinary shares	100
		\$0.01 Preference shares	100
Standard Chartered Principal Finance (Cayman) Limited ⁴	Cayman Islands	\$0.0001 Ordinary shares	100
<i>The following company has the address of Maurant Ozannes Corporate Services (Cayman) Limited, Harbour Centre, 42 North Church Street, PO Box 1348, Grand Cayman KY1-1108, Cayman Islands</i>			
Sunflower Cayman SPC	Cayman Islands	\$1.00 Management shares	100
<i>The following company has the address of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands</i>			
Standard Chartered Saadiq Mudarib Company Limited	Cayman Islands	\$1.00 Ordinary shares	100
<i>The following company has the address of No. 1034, Managed by Tianjin Dongjiang Secretarial Services, Co., Ltd., Room 202, Office Area of Inspection Warehouse, No.6262 Ao Zhou Road, Dongjiang Free Trade Port Zone, Tianjin Pilot Free Trade Zone, China</i>			
Pembroke Aircraft Leasing (Tianjin) Limited ³	China	\$1.00 Ordinary shares	100
<i>The following company has the address of No. 1035, Managed by Tianjin Dongjiang Secretarial Services, Co., Ltd., Room 202, Office Area of Inspection Warehouse, No.6262 Ao Zhou Road, Dongjiang Free Trade Port Zone, Tianjin Pilot Free Trade Zone, China</i>			
Pembroke Aircraft Leasing Tianjin 1 Limited ³	China	CNY1.00 Ordinary shares	100
<i>The following company has the address of No. 1036, Managed by Tianjin Dongjiang Secretarial Services, Co., Ltd., Room 202, Office Area of Inspection Warehouse, No.6262 Ao Zhou Road, Dongjiang Free Trade Port Zone, Tianjin Pilot Free Trade Zone, China</i>			
Pembroke Aircraft Leasing Tianjin 2 Limited ³	China	CNY1.00 Ordinary shares	100
<i>The following company has the address of Standard Chartered Tower, 201 Century Avenue, Pudong, Shanghai 200120, China</i>			
Standard Chartered Bank (China) Limited ³	China	CNY Ordinary shares	100
<i>The following company has the address of 26F, Fortune Financial Centre, #5, Dong San Huan Zhong Lu, Chaoyang District, Beijing, P. R. China.</i>			
Standard Chartered Corporate Advisory Co. Ltd ³	China	\$1.00 Ordinary shares	100
<i>The following company has the address of No. 188 Yeshen Rd, 11F, A-1161 RM, Pudong New District, Shanghai 31201308, China</i>			
Standard Chartered Trading (Shanghai) Limited ³	China	\$15,000,000.00 Ordinary shares	100
<i>The following company has the address of No. 35, Xinhuanbei Road, TEDA, Tianjin, 300457, China</i>			
Standard Chartered Global Business Services Co. Limited ³	China	\$ Ordinary shares	100
<i>The following company has the address of Standard Chartered Bank Cote d'Ivoire, 23 Boulevard de la République, Abidjan 17, 17 B.P. 1141, Cote d'Ivoire</i>			
Standard Chartered Bank Cote d'Ivoire SA	Cote d'Ivoire	XOF100,000.00 Ordinary shares	100
<i>The following company has the address of Standard Chartered Bank France, 32 Rue de Monceau, 75008, Paris, France</i>			
Pembroke Lease France SAS	France	€1.00 Ordinary shares	100
<i>The following company has the address of 8 Ecowas Avenue, PMB 259 Banjul, The Gambia</i>			
Standard Chartered Bank Gambia Limited	The Gambia	GMD1.00 Ordinary shares	74.8
<i>The following company has the address of Taunusanlage 16, 60325, Frankfurt am Main, Germany</i>			
Standard Chartered Bank AG	Germany	€ Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of Standard Chartered Bank Building, 87 Independence Avenue, P.O. Box 768, Accra, Ghana</i>			
Standard Chartered Bank Ghana Limited	Ghana	GHS Ordinary shares	69.4
		GHS0.52 Preference shares	87.0
Standard Chartered Ghana Nominees Limited	Ghana	GHS Ordinary shares	100
<i>The following companies have the address of Bordeaux Court, Les Echelons, South Esplanade, St. Peter Port, Guernsey</i>			
Birdsong Limited	Guernsey	£1.00 Ordinary shares	100
Nominees One Limited	Guernsey	£1.00 Ordinary shares	100
Nominees Two Limited	Guernsey	£1.00 Ordinary shares	100
Songbird Limited	Guernsey	£1.00 Ordinary shares	100
Standard Chartered Secretaries (Guernsey) Limited	Guernsey	£1.00 Ordinary shares	100
Standard Chartered Trust (Guernsey) Limited	Guernsey	£1.00 Ordinary shares	100
<i>The following company has the address of 15/F, Standard Chartered Tower, 388 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong</i>			
Horsford Nominees Limited	Hong Kong	HKD Ordinary shares	100
<i>The following companies have the address of 14th Floor, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong</i>			
Kozagi Limited	Hong Kong	HKD Ordinary shares	100
Majestic Legend Limited	Hong Kong	HKD Ordinary shares	100
Ori Private Limited	Hong Kong	\$ Ordinary shares	100
		\$ A Ordinary shares	90.7
		\$ B Ordinary shares	100
Standard Chartered PF Real Estate (Hong Kong) Limited	Hong Kong	\$ Ordinary shares	100
<i>The following companies have the address of 25/F, Standard Chartered Bank Building, 4-4A Des Voeux Road, Central, Hong Kong</i>			
Marina Acacia Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Amaryllis Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Amethyst Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Ametrine Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Angelite Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Apollo Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Beryl Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Carnelian Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Emerald Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Flax Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Gloxinia Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Hazel Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Honor Shipping Limited	Hong Kong	HKD Ordinary shares	100
		\$ Ordinary shares	100
Marina Ilex Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Iridot Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Kunzite Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Leasing Limited	Hong Kong	\$ Ordinary shares	100
Marina Mimosa Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Moonstone Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Peridot Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Sapphire Shipping Limited	Hong Kong	\$ Ordinary shares	100
Marina Splendor Shipping Limited	Hong Kong	HKD Ordinary shares	100
		\$ Ordinary shares	100
Marina Tourmaline Shipping Limited	Hong Kong	\$ Ordinary shares	100
SC Digital Solutions Limited	Hong Kong	HKD Ordinary shares	65.1
Standard Chartered Leasing Group Limited	Hong Kong	\$ Ordinary shares	100
Standard Chartered Trade Support (HK) Limited	Hong Kong	HKD Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 3/F Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong			
Standard Chartered Private Equity Limited	Hong Kong	HKD Ordinary shares	100
		\$ Ordinary shares	100
The following company has the address of 13/F, Standard Chartered Bank Building, 4-4A Des Voeux Road, Central, Hong Kong			
Standard Chartered Trust (Hong Kong) Limited	Hong Kong	HKD Ordinary shares	100
The following company has the address of 3/F Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong			
Standard Chartered Private Equity Managers (Hong Kong) Limited	Hong Kong	HKD Ordinary shares	100
The following company has the address of 15/F, Two International Finance Centre, No. 8 Finance Street, Central, Hong Kong			
Standard Chartered Securities (Hong Kong) Limited	Hong Kong	HKD Ordinary shares	100
The following company has the address of 21/F, Standard Chartered Tower, 388 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong			
Standard Chartered Asia Limited	Hong Kong	HKD Deferred shares	100
		HKD Ordinary shares	100
		\$ Ordinary shares	100
The following companies have the address of 32/F, Standard Chartered Bank Building, 4-4A Des Voeux Road, Central, Hong Kong			
Standard Chartered Sherwood (HK) Limited	Hong Kong	HKD Ordinary shares	100
Standard Chartered Bank (Hong Kong) Limited	Hong Kong	HKD A Ordinary shares	100
		HKD B Ordinary shares	100
		\$ D Ordinary shares	100
		\$ C Ordinary shares	100
		\$ Preference shares	100
The following company has the address of 1st Floor, Europe Building, No.1, Haddows Road, Nungambakkam, Chennai, 600 006, India			
Standard Chartered Global Business Services Private Limited	India	INR10.00 Ordinary shares	100
The following company has the address of 90 M.G.Road, II Floor, Fort, Mumbai, Maharashtra, 400 001, India			
Standard Chartered Finance Private Limited	India	INR10.00 Ordinary shares	98.7
The following companies have the address of Crescenzo, 6th Floor, Plot No 38-39, G Block, Bandra Kurla Complex, Bandra East, Mumbai, Maharashtra, 400051, India			
Standard Chartered (India) Modeling and Analytics Centre Private Limited	India	INR10.00 Ordinary shares	100
Standard Chartered Investments and Loans (India) Limited	India	INR10.00 Ordinary shares	100
St Helen's Nominees India Private Limited	India	INR10.00 Ordinary shares	100
The following company has the address of Crescenzo, 7th Floor, Plot No 38-39, G Block, Bandra Kurla Complex, Bandra East, Mumbai, Maharashtra, 400051, India			
Standard Chartered Private Equity Advisory (India) Private Limited	India	INR1,000.00 Ordinary shares	100
The following company has the address of Second Floor, Indique Edge, Khata No. 571/630/6/4, Sy.No.6/4, Ambalipura Village, Varthur Hobli, Marathahalli Sub-Division, Ward No. 150, Bengaluru, 560102, India.			
Standard Chartered Research and Technology India Private Limited	India	INR10.00 Ordinary shares	100
The following company has the address of 2nd Floor, 23-25 M.G. Road, Fort, Mumbai, 400 001, India			
Standard Chartered Securities (India) Limited	India	INR10.00 Ordinary shares	100
The following company has the address of No. 157-157 A, Jakarta Barat, 11130, Indonesia.			
PT. Price Solutions Indonesia (dalam likuidasi)	Indonesia	\$100.00 Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of 32 Molesworth Street, Dublin 2, D02 Y512, Ireland</i>			
Inishbrophy Leasing Limited	Ireland	€1.00 Ordinary shares	100
Inishcannon Leasing Limited	Ireland	\$1.00 Ordinary shares	100
Inishcrean Leasing Limited	Ireland	\$1.00 Ordinary shares	100
Inishdawson Leasing Limited	Ireland	€1.00 Ordinary shares	100
Inisherkin Leasing Limited	Ireland	\$1.00 Ordinary shares	100
Inishlynch Leasing Limited	Ireland	€1.00 Ordinary shares	100
Inishoo Leasing Limited	Ireland	\$1.00 Ordinary shares	100
Nightjar Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 1 Limited	Ireland	€1.00 Ordinary shares	100
Pembroke Aircraft Leasing 2 Limited	Ireland	€1.00 Ordinary shares	100
Pembroke Aircraft Leasing 3 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 4 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 5 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 6 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 7 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 8 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 9 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 10 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 11 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 12 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 13 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 14 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 15 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing 16 Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Aircraft Leasing Holdings Limited	Ireland	\$1.00 Ordinary shares	100
Pembroke Capital Limited	Ireland	€1.25 Ordinary shares	100
		\$1.00 Ordinary shares	100
Pembroke Capital Shannon Limited	Ireland	€1.25 Ordinary shares	100
Skua Limited	Ireland	\$1.00 Ordinary shares	100
<i>The following company has the address of First Names House, Victoria Road, Douglas, IM2 4DF, Isle of Man</i>			
Pembroke Group Limited ⁵	Isle of Man	\$0.01 Ordinary shares	100
<i>The following companies have the address of 1st Floor, Goldie House, 1-4 Goldie Terrace, Upper Church Street, Douglas, IM1 1EB, Isle of Man</i>			
Standard Chartered Assurance Limited	Isle of Man	\$1.00 Ordinary shares	100
		\$1.00 Redeemable Preference shares	100
Standard Chartered Insurance Limited ⁶	Isle of Man	\$1.00 Ordinary shares	100
<i>The following company has the address of 21/F, Sanno Park Tower, 2-11-1 Nagatacho, Chiyoda-ku, Tokyo, 100-6155, Japan</i>			
Standard Chartered Securities (Japan) Limited	Japan	JPY50,000 Ordinary shares	100
<i>The following company has the address of 15 Castle Street, St Helier, JE4 8PT, Jersey</i>			
SCB Nominees (CI) Limited	Jersey	\$1.00 Ordinary shares	100
<i>The following company has the address of IFC 5, St Helier, JE1 1ST, Jersey</i>			
Standard Chartered Funding (Jersey) Limited ⁶	Jersey	£1.00 Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of StandardChartered@Chiromo, Number 48, Westlands Road, P. O. Box 30003 – 00100, Nairobi, Kenya</i>			
Standard Chartered Investment Services Limited	Kenya	KES20.00 Ordinary shares	100
Standard Chartered Bank Kenya Limited	Kenya	KES5.00 Ordinary shares	74.3
		KES5.00 Preference shares	100
Standard Chartered Securities (Kenya) Limited	Kenya	KES10.00 Ordinary shares	100
Standard Chartered Financial Services Limited	Kenya	KES20.00 Ordinary shares	100
Standard Chartered Insurance Agency Limited	Kenya	KES100.00 Ordinary shares	100
Standard Chartered Kenya Nominees Limited	Kenya	KES20.00 Ordinary shares	100
<i>The following company has the address of M6-2701, West 27Fl, Suha-dong, 26, Eulji-ro 5-gil, Jung-gu, Seoul, Korea, Republic of</i>			
Resolution Alliance Korea Ltd ⁴	Korea, Republic of	KRW5,000.00 Ordinary shares	100
<i>The following companies have the address of 2/F, 47 Jongno, Jongno-gu, Seoul, 110-702, Korea, Republic of</i>			
Standard Chartered Bank Korea Limited	Korea, Republic of	KRW5,000.00 Ordinary shares	100
Standard Chartered Securities Korea Limited	Korea, Republic of	KRW5,000.00 Ordinary shares	100
<i>The following company has the address of 17/F, 100, Gongpyeong-dong, Jongno-gu, Seoul, Korea, Republic of</i>			
Ascenta II	Korea, Republic of	Partnership interest	100
<i>The following company has the address of Atrium Building, Maarad Street, 3rd Floor, P.O.Box: 11-4081 Riad El Solh, Beirut, Beirut Central District, Lebanon</i>			
Standard Chartered Metropolitan Holdings SAL	Lebanon	\$10.00 Ordinary A shares	100
<i>The following companies have the address of Level 16, Menara Standard Chartered, 30, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia</i>			
Cartaban (Malaya) Nominees Sdn Berhad	Malaysia	RM Ordinary shares	100
Cartaban Nominees (Asing) Sdn Bhd	Malaysia	RM Ordinary shares	100
Cartaban Nominees (Tempatan) Sdn Bhd	Malaysia	RM Ordinary shares	100
Golden Maestro Sdn Bhd	Malaysia	RM Ordinary shares	100
Popular Ambience Sdn Bhd	Malaysia	RM Ordinary shares	100
Price Solutions Sdn Bhd	Malaysia	RM Ordinary shares	100
SCBMB Trustee Berhad	Malaysia	RM Ordinary shares	100
Standard Chartered Bank Malaysia Berhad	Malaysia	RM Irredeemable Cumulative Preference shares	100
		RM Ordinary shares	100
Standard Chartered Saadiq Berhad	Malaysia	RM Ordinary shares	100
<i>The following companies have the address of Brumby Centre, Lot 42, Jalan Muhibbah, 87000 Labuan F.T., Malaysia</i>			
Marina Morganite Shipping Limited ⁷	Malaysia	\$ Ordinary shares	100
Marina Moss Shipping Limited ⁷	Malaysia	\$ Ordinary shares	100
Marina Tanzanite Shipping Limited ⁷	Malaysia	\$ Ordinary shares	100
Pembroke Leasing (Labuan) 3 Berhad	Malaysia	\$ Ordinary shares	100
<i>The following company has the address of N8, Jalan Kerinchi, 59200 Kuala Lumpur, Wilayah Persekutuan, Malaysia</i>			
Resolution Alliance Sdn Bhd ¹	Malaysia	RM Ordinary shares	91
<i>The following company has the address of Level 7, Wisma Standard Chartered, Jalan Teknologi 8, Taman Teknologi Malaysia, 57000 Bukit Jalil, Kuala Lumpur, Wilayah Persekutuan, Malaysia</i>			
Standard Chartered Global Business Services Sdn Bhd	Malaysia	RM Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of Trust Company Complex, Ajeltake Road, Ajeltake Island, Majuro, MH96960, Marshall Islands			
Marina Alysse Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Amandier Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Ambroisee Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Angelica Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Aventurine Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Buxus Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Celsie Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Citrine Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Dahlia Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Dittany Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Dorado Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Lilac Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Lolite Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Obsidian Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Pissenlet Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Protea Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Quartz Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Remora Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Turquoise Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
Marina Zircon Shipping Limited ⁷	Marshall Islands	\$1.00 Ordinary shares	100
The following companies have the address of SGG Corporate Services (Mauritius) Ltd, 33, Edith Cavell St, Port Louis, 11324, Mauritius			
Actis Asia Real Estate (Mauritius) Limited	Mauritius	\$1.00 Class A shares	100
		\$1.00 Class B shares	100
Actis Treit Holdings (Mauritius) Limited ¹	Mauritius	\$1.00 Class A shares	62
		\$1.00 Class B shares	62
The following company has the address of 6/F, Standard Chartered Tower, 19, Bank Street, Cybercity, Ebene, 72201, Mauritius			
Standard Chartered Bank (Mauritius) Limited	Mauritius	\$ Ordinary shares	100
The following companies have the address of c/o Abax Corporate Services Ltd, 6/F, Tower A, 1 CYBERCITY, Ebene, Mauritius			
Standard Chartered Financial Holdings	Mauritius	\$1.00 Ordinary shares	100
Standard Chartered Private Equity (Mauritius) II Limited	Mauritius	\$1.00 Ordinary shares	100
Standard Chartered Private Equity (Mauritius) Limited	Mauritius	\$1.00 Ordinary shares	100
		\$ Redeemable Preference shares	100
Standard Chartered Private Equity (Mauritius) III Limited	Mauritius	\$1.00 Ordinary shares	100
The following company has the address of 5/F, Ebene Esplanade, 24 Bank Street, Cybercity, Ebene, Mauritius			
Subcontinental Equities Limited	Mauritius	\$1.00 Ordinary shares	100
The following company has the address of Standard Chartered Bank Nepal Limited, Madan Bhandari Marg, Ward No.34, Kathmandu Metropolitan City, Kathmandu District, Bagmati Zone, Kathmandu, Nepal			
Standard Chartered Bank Nepal Limited	Nepal	NPR100.00 Ordinary shares	70.2
The following company has the address of Hoogoorddreef 15, 1101 BA, Amsterdam, Netherlands			
Pembroke Holland B.V.	Netherlands	€450.00 Ordinary shares	100
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom			
Standard Chartered Holdings (Africa) B.V. ⁶	Netherlands	€4.50 Ordinary shares	100
Standard Chartered Holdings (Asia Pacific) B.V. ⁶	Netherlands	€4.50 Ordinary shares	100
Standard Chartered Holdings (International) B.V. ⁶	Netherlands	€4.50 Ordinary shares	100
Standard Chartered MB Holdings B.V. ⁶	Netherlands	€4.50 Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following companies have the address of 142 Ahmadu Bello Way, Victoria Island, Lagos, Nigeria</i>			
Cheroots Nigeria Limited	Nigeria	NGN1.00 Ordinary Shares	100
Standard Chartered Bank Nigeria Limited	Nigeria	NGN1.00 Irredeemable Non Cumulative Preference shares	100
		NGN1.00 Ordinary shares	100
		NGN1.00 Redeemable Preference shares	100
Standard Chartered Capital & Advisory Nigeria Limited	Nigeria	NGN1.00 Ordinary shares	100
Standard Chartered Nominees (Nigeria) Limited	Nigeria	NGN1.00 Ordinary shares	100
<i>The following company has the address of 3/F Main SCB Building, I.I. Chundrigar Road, Karachi, Sindh, 74000, Pakistan</i>			
Price Solution Pakistan (Private) Limited	Pakistan	PKR10.00 Ordinary shares	100
<i>The following company has the address of P.O. Box No. 5556 I.I. Chundrigar Road, Karachi, 74000, Pakistan</i>			
Standard Chartered Bank (Pakistan) Limited	Pakistan	PKR10.00 Ordinary shares	98.9
<i>The following company has the address of ul. Towarowa 25A, 00-869 Warszawa, Poland</i>			
Standard Chartered Global Business Services spółka z ograniczona odpowiedzialnoscia	Poland	PLN50.00 Ordinary shares	100
<i>The following company has the address of Offshore Chambers, PO Box 217, Apia, Western Samoa</i>			
Standard Chartered Nominees (Western Samoa) Limited	Samoa	\$1.00 Ordinary shares	100
<i>The following company has the address of Al Faisaliah Office Tower, 7/F, King Fahad Highway, Olaya District, Riyadh P.O box 295522, Riyadh, 11351, Saudi Arabia</i>			
Standard Chartered Capital (Saudi Arabia)	Saudi Arabia	SAR10.00 Ordinary shares	100
<i>The following company has the address of 9 & 11, Lightfoot Boston Street, Freetown, Sierra Leone</i>			
Standard Chartered Bank Sierra Leone Limited	Sierra Leone	SLL1.00 Ordinary shares	80.7
<i>The following company has the address of 8 Marina Boulevard, Level 23, Marina Bay Financial Centre, Tower 1, 018981, Singapore</i>			
Standard Chartered Private Equity (Singapore) Pte. Ltd	Singapore	\$ Ordinary shares	100
<i>The following companies have the address of 8 Marina Boulevard, Level 26, Marina Bay Financial Centre, Tower 1, 018981, Singapore</i>			
Marina Aquata Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100
Marina Aruana Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
		\$ Ordinary shares	100
		\$ Ordinary shares	100
Marina Aster Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
Marina Cobia Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
		\$ Ordinary shares	100
		\$ Ordinary shares	100
Marina Daffodil Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
Marina Fatmarini Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100
Marina Frabandari Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100
Marina Freesia Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
Marina Gerbera Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100
Marina Mars Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
Marina Mercury Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
Marina Opah Shipping Pte. Ltd.	Singapore	SGD Ordinary shares	100
		\$ Ordinary shares	100
Marina Partawati Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100
Marina Poise Shipping Pte. Ltd.	Singapore	\$ Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of 9 Raffles Place, #27-00 Republic Plaza, 048619, Singapore.			
Actis RE Investment 1 Private Limited¹	Singapore	SGD Ordinary shares	100
Actis RE Investment 2 Private Limited¹	Singapore	SGD Ordinary shares	100
Actis RE Investment 3 Private Limited¹	Singapore	SGD Ordinary shares	100
Actis RE Investment 4 Private Limited¹	Singapore	SGD Ordinary shares	100
Actis Treit Holdings No.1 (Singapore) Private Limited¹	Singapore	SGD Ordinary shares	100
Actis Treit Holdings No.2 (Singapore) Private Limited¹	Singapore	SGD Ordinary shares	100
The following company has the address of 7 Changi Business Park Crescent, #03-00 Standard Chartered @ Changi, 486028, Singapore			
Raffles Nominees (Pte.) Limited	Singapore	SGD Ordinary shares	100
The following companies have the address of 8 Marina Boulevard, Level 27, Marina Bay Financial Centre, Tower 1, 018981, Singapore			
SCTS Capital Pte. Ltd	Singapore	SGD Ordinary shares	100
SCTS Management Pte. Ltd.	Singapore	SGD Ordinary shares	100
Standard Chartered Bank (Singapore) Limited	Singapore	SGD Ordinary shares	100
		SGD Preference shares	100
		\$ Ordinary shares	100
		\$ Preference shares	100
Standard Chartered Trust (Singapore) Limited	Singapore	SGD Ordinary shares	100
Standard Chartered Holdings (Singapore) Private Limited	Singapore	SGD Ordinary shares	100
		\$ Ordinary shares	100
The following companies have the address of Abogado Pte Ltd, No. 8 Marina Boulevard, #05-02 MBFC Tower 1, 018981, Singapore			
Standard Chartered IL&FS Management (Singapore) Pte. Limited	Singapore	\$ Ordinary shares	50
Standard Chartered PF Managers Pte. Limited	Singapore	\$ Ordinary shares	100
Standard Chartered Real Estate Investment Holdings (Singapore) Private Limited	Singapore	\$ Ordinary shares	100
The following company has the address of 9 Battery Road, #15-01 Straits Trading Building, 049910, Singapore			
Standard Chartered Nominees (Singapore) Pte Ltd	Singapore	SGD Ordinary shares	100
The following company has the address of 5/F, 4 Sandown Valley Crescent, Sandton, Gauteng, 2196, South Africa			
CMB Nominees (RF) PTY Limited	South Africa	ZAR1.00 Ordinary shares	100
The following company has the address of 2nd Floor, 115 West Street, Sandton, Johannesburg, 2196, South Africa			
Standard Chartered Nominees South Africa Proprietary Limited (RF)	South Africa	ZAR Ordinary shares	100
The following company has the address of 1, 2, 4, 7, 9, 10F, No. 168/170 & 8F, 12F, No.168, Tun Hwa N. Rd., Songshan Dist., Taipei, 105, Taiwan			
Standard Chartered Bank (Taiwan) Limited	Taiwan	TWD10.00 Ordinary shares	100
The following companies have the address of 1 Floor, International House, Shaaban Robert Street / Garden Avenue, PO Box 9011, Dar Es Salaam, Tanzania, United Republic of			
Standard Chartered Bank Tanzania Limited	Tanzania, United Republic of	TZS1,000.00 Ordinary shares	100
		TZS1,000.00 Preference shares	100
Standard Chartered Tanzania Nominees Limited	Tanzania, United Republic of	TZS1,000.00 Ordinary shares	100
The following company has the address of 100 North Sathorn Road, Silom, Bangrak Bangkok , 10500, Thailand			
Standard Chartered Bank (Thai) Public Company Limited	Thailand	THB10.00 Ordinary shares	99.9
The following company has the address of Buyukdere Cad. Yapi Kredi Plaza C Blok, Kat 15, Levent, Istanbul, 34330, Turkey			
Standard Chartered Yatirim Bankasi Turk Anonim Sirketi	Turkey	TRL0.10 Ordinary shares	100

40. Related undertakings of the Group continued

Subsidiary Undertakings continued

Name and registered address	Country of incorporation	Description of shares	Proportion of shares held (%)
<i>The following company has the address of Standard Chartered Bank Bldg, 5 Speke Road, PO Box 7111, Kampala, Uganda</i>			
Standard Chartered Bank Uganda Limited	Uganda	UGS1,000.00 Ordinary shares	100
<i>The following company has the address of 505 Howard St. #201, San Francisco, CA 94105, United States</i>			
SC Studios, LLC	United States	Membership Interest	100
<i>The following company has the address of Standard Chartered Bank, 37F, 1095 Avenue of the Americas, New York 10036, United States</i>			
Standard Chartered Bank International (Americas) Limited	United States	\$1,000.00 Ordinary shares	100
<i>The following companies have the address of Corporation Trust Centre, 1209 Orange Street, Wilmington DE 19801, United States</i>			
Standard Chartered Holdings Inc.	United States	\$100.00 Common shares	100
Standard Chartered Capital Management (Jersey), LLC	United States	\$ Ordinary shares	100
Standard Chartered Securities (North America) LLC	United States	Membership Interest	100
StanChart Securities International LLC	United States	Membership Interest	100
Standard Chartered International (USA) LLC	United States	Membership Interest	100
<i>The following company has the address of 50 Fremont Street, San Francisco CA 94105, United States</i>			
Standard Chartered Overseas Investment, Inc.	United States	\$10.00 Ordinary shares	100
<i>The following company has the address of C/O Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, United States</i>			
Standard Chartered Trade Services Corporation	United States	\$0.01 Common shares	100
<i>The following company has the address of Room 1810-1815, Level 18, Building 72, Keangnam Hanoi Landmark Tower, Pham Hung Road, Cau Giay New Urban Area, Me Tri Ward, Nam Tu Liem District, Hanoi 10000, Vietnam</i>			
Standard Chartered Bank (Vietnam) Limited	Vietnam	VND Charter Capital shares	100
<i>The following companies have the address of Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, Virgin Islands, British</i>			
Sky Favour Investments Limited ⁷	Virgin Islands, British	\$1.00 Ordinary shares	100
Sky Harmony Holdings Limited ⁷	Virgin Islands, British	\$1.00 Ordinary shares	100
<i>The following companies have the address of Standard Chartered House, Cairo Road, Lusaka, PO BOX 32238, Zambia</i>			
Standard Chartered Bank Zambia Plc	Zambia	ZMW0.25 Ordinary shares	90
Standard Chartered Zambia Securities Services Nominees Limited	Zambia	ZMW1.00 Ordinary shares	100
<i>The following companies have the address of Africa Unity Square Building, 68 Nelson Mandela Avenue, Harare, Zimbabwe</i>			
Africa Enterprise Network Trust ²	Zimbabwe	Interest in Trust	100
Standard Chartered Bank Zimbabwe Limited	Zimbabwe	\$1.00 Ordinary shares	100
Standard Chartered Nominees Zimbabwe (Private) Limited	Zimbabwe	\$2.00 Ordinary shares	100

1 The Group has determined that these undertakings are excluded from being consolidated into the Group's accounts, and do not meet the definition of a Subsidiary under IFRS. See Notes 32 and 33 for the consolidation policy and disclosure of the undertaking

2 No share capital by virtue of being a trust

3 Limited liability company

4 The Group has determined the principle country of operation to be Singapore

5 The Group has determined the principle country of operation to be Ireland

6 The Group has determined the principle country of operation to be the United Kingdom

7 The Group has determined the principle country of operation to be Hong Kong

40. Related undertakings of the Group continued

Joint ventures

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
<i>The following company has the address of WTC II Building, Jalan Jenderal Sudirman Kav29-31, Jakarta, 12920* Indonesia</i>			
PT Bank Permata Tbk	Indonesia	IDR125.00 B shares	44.6
<i>The following company has the address of 100/36 Sathorn Nakorn Tower, Fl 21 North Sathorn Road, Silom Sub-District, Bangrak District, Bangkok, 10500, Thailand</i>			
Resolution Alliance Limited	Thailand	THB10.00 Ordinary shares	49

Associates

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
<i>The following company has the address of 3 More London Riverside, London, England, SE1 2AQ, United Kingdom</i>			
Trade Information Network Limited	United Kingdom	\$1.00 Ordinary shares	16.7
<i>The following company has the address of Bohai Bank Building, No.218 Hai He Dong Lu, Hedong District, Tianjin, China, 300012, China</i>			
China Bohai Bank Co. Ltd	China	CNY Ordinary shares	19.9
<i>The following companies have the address of 17/F, 100, Gongpyeong-dong, Jongno-gu, Seoul, Korea, Republic of</i>			
Ascenta IV	Korea, Republic of	Partnership Interest	39.1
<i>The following company has the address of C/o CIM Corporate Services Ltd, Les Cascades, Edith Cavell Street, Port Louis, Mauritius</i>			
FAI Limited	Mauritius	\$1.00 Ordinary shares	25
<i>The following company has the address of Victoria House, State House Avenue, Victoria, MAHE, Seychelles</i>			
Seychelles International Mercantile Banking Corporation Limited	Seychelles	SCR1,000.00 Ordinary shares	22
<i>The following company has the address of 1 Raffles Quay, #23-01, One Raffles Quay, 048583, Singapore</i>			
Clifford Capital Pte. Ltd	Singapore	\$1.00 Ordinary shares	9.9

Significant investment holdings and other related undertakings

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 65A Basinghall Street, London, EC2V 5DZ, United Kingdom			
Cyber Defence Alliance Limited	United Kingdom	Membership interest	25
The following company has the address of Intertrust Corporate Services (Cayman) Limited, 190 Elgin Avenue, George Town, Grand Cayman, KY1-9005, Cayman Islands			
ATSC Cayman Holdco Limited	Cayman Islands	\$0.01 A Ordinary shares	5.3
		\$0.01 B Ordinary shares	100
The following companies have the address of Harbour Centre #42 North Church Street, , PO Box 1348, Grand Cayman, KY1-1108 Cayman Islands, Cayman Islands			
Standard Chartered IL&FS Asia Infrastructure (Cayman) Limited	Cayman Islands	\$0.01 Ordinary shares	50
Standard Chartered IL&FS Asia Infrastructure Growth Fund Company Limited	Cayman Islands	\$1.00 Ordinary shares	50
Standard Chartered IL&FS Asia Infrastructure Growth Fund, L.P.	Cayman Islands	Partnership interest	38.6
The following company has the address of 3, Floor 1, No.1, Shiner Wuxingcaiyan, West Er Huan Rd, Xi Shan District, Kunming, Yunnan Province, PRC, China			
Yunnan Golden Shiner Property Development Co., Ltd.	China	CNY1.00 Ordinary shares	42.5

40. Related undertakings of the Group continued

Significant investment holdings and other related undertakings continued

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of Unit 605-08, 6/F Wing On Centre, 111 Connaught Rd, Central Sheung Wan, Hong Kong			
Actis Carrock Holdings (HK) Limited	Hong Kong	\$ Class A shares	39.7
		\$ Class B shares	39.7
Actis Jack Holdings (HK) Limited	Hong Kong	\$ Class A shares	39.7
		\$ Class B shares	39.7
Actis Rivendell Holdings (HK) Limited	Hong Kong	\$ Class A shares	39.7
		\$ Class B shares	39.7
Actis Temple Stay Holdings (HK) Limited	Hong Kong	\$ Class A shares	39.7
		\$ Class B shares	39.7
Actis Young City Holdings (HK) Limited	Hong Kong	\$ Class A shares	39.7
		\$ Class B shares	39.7
The following company has the address of 1221 A, Devika Tower, 12th Floor, 6 Nehru Place, New Delhi 110019, New Delhi, 110019, India			
Mikado Realtors Private Limited	India	INR10.00 Ordinary shares	26
The following company has the address of Elphinstone Building, 2nd Floor,10 Veer Nariman Road, Fort, Mumbai -400001, Maharashtra, India			
TRIL IT4 Private Limited	India	INR10.00 Ordinary shares	26
The following company has the address of 4/F, 274, Chitalia House, Dr. Cawasji Hormusji Road, Dhobi Talao, Mumbai City, Maharashtra, India 400 002, Mumbai, 400 002, India			
Industrial Minerals and Chemical Co. Pvt. Ltd	India	INR100.00 Ordinary shares	26
The following company has the address of TRIO Building, 8/F, Jl, Kebon Sirih Raya Kav, 63, Jakarta, 10340, Indonesia			
PT Trikonsel Oke Tbk	Indonesia	IDR50.00 Series B shares	29.2
The following companies have the address of 4/F St Pauls Gate, 22-24 New Street, St Helier, JE1 4TR, Jersey			
Standard Jazeera Limited	Jersey	\$1.00 Class C Redeemable Preference Shares	100
		\$1.00 Ordinary Shares	20
Standard Topaz Limited	Jersey	\$1,000.00 Ordinary shares	20.1
		\$1.00 Class C Redeemable Preference Shares	100
The following company has the address of 17/F (Gongpyung-dong), 100, Jongno-gu, Seoul, Korea, Republic of			
Ascenta III	Korea, Republic of	Partnership interest	31
The following company has the address of 1 Venture Avenue, #07-07 Big Box, 608521, Singapore			
Omni Centre Pte. Ltd.	Singapore	SGD Redeemable Convertible Preference shares	100
The following company has the address of 152 Beach Road, #28-00 Gateway East, Singapore, 189721			
Socash Pte. Ltd.	Singapore	\$ Class B Preference shares	33.3
The following company has the address of 251 Little Falls Drive, Wilmington, New Castle DE 19808, United States			
Paxata, Inc.	United States	\$0.0001 Series C2 Preferred Stock	40.7

40. Related undertakings of the Group continued

In liquidation

Subsidiary Undertakings

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of Deloitte LLP, Hill House, 1 Little New Street, London, EC4A 3TR, United Kingdom			
SC Leaseco Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered APR Limited	United Kingdom	\$1.00 Ordinary shares	100
Standard Chartered Capital Markets Limited	United Kingdom	£1.00 Ordinary shares	100
		\$1.00 Ordinary shares	100
Standard Chartered Debt Trading Limited	United Kingdom	£1.00 Ordinary shares	100
Compass Estates Limited	United Kingdom	£1.00 Ordinary shares	100
Chartered Financial Holdings Limited	United Kingdom	£5.00 Ordinary shares	100
		£1.00 Preference shares	100
The following company has the address of Cra 7 Nro 71-52 TA if 702, Bogata, Colombia			
Sociedad Fiduciaria Extebandes S.A.	Colombia	COP1.00 Ordinary shares	100
The following companies have the address of Schottegatweg Oost, 44, Curacao, Netherlands Antilles			
American Express International Finance Corp.N.V.	Curaçao	\$1,000.00 Ordinary shares	100
Ricanex Participations N.V.	Curaçao	\$1,000.00 Ordinary shares	100
The following company has the address of L5 The Forum, Exchange Square, 8 Connaught Place,Central, Hong Kong			
Standard Chartered Global Trading Investments Limited	Hong Kong	HKD Ordinary shares	100
The following company has the address of 13/F, Standard Chartered Tower, 388 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong			
SC Learning Limited	Hong Kong	HKD Ordinary shares	100
The following company has the address of 8/Floor, Gloucester Tower, The Landmark, 15 Queen's Road Central, Hong Kong			
Leopard Hong Kong Limited	Hong Kong	\$ Ordinary shares	100
The following company has the address of Menara Standard Chartered, 3rd floor, Jl. Prof. DR. Satrio No. 164, Jakarta, 12930, Indonesia			
PT Solusi Cakra Indonesia	Indonesia	IDR23,809,600.00 Ordinary shares	99
The following company has the address of Standard Chartered@Chiromo, Number 48, Westlands Road, P. O. Box 30003 – 00100, Nairobi, Kenya			
Standard Chartered Management Services Limited	Kenya	KES20.00 Ordinary shares	100
The following company has the address of 30 Rue Schrobilgen, 2526, Luxembourg			
Standard Chartered Financial Services (Luxembourg) S.A.	Luxembourg	€25.00 Ordinary shares	100
The following company has the address of Level 16, Menara Standard Chartered, 30, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia			
Amphissa Corporation Sdn Bhd	Malaysia	RM1.00 Ordinary shares	100
The following companies have the address of Brumby Centre, Lot 42, Jalan Muhibbah, 87000 Labuan F.T., Malaysia			
Pembroke Leasing (Labuan) 2 Berhad	Malaysia	\$1.00 Ordinary shares	100
Pembroke Leasing (Labuan) Pte Limited	Malaysia	\$1.00 Ordinary shares	100
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom			
Smart Application Investment B.V.	Netherlands	€45.00 Ordinary shares	100
The following company has the address of Jiron Huascar 2055, Jesus Maria, Lima 15072, Peru			
Banco Standard Chartered en Liquidacion	Peru	\$75.133 Ordinary shares	100
The following company has the address of 8 Marina Boulevard, Level 27, Marina Bay Financial Centre, Tower 1, 018981, Singapore			
Standard Chartered (2000) Limited	Singapore	SGD Ordinary shares	100
		\$ Class A Preference shares	100
		£ Class B Preference shares	100

40. Related undertakings of the Group continued

In liquidation continued

Subsidiary Undertakings continued

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
<i>The following company has the address of Quai du General Guisan 38, 8022, Zurich, Switzerland, Switzerland</i>			
Standard Chartered Bank (Switzerland) S.A.	Switzerland	CHF1,000.00 Ordinary shares	100
		CHF100.00 Participation Capital shares	100
<i>The following company has the address of 6/F, Hewlett Packard Building, 337 Fu Hsing North Road, Taipei, Taiwan</i>			
Kwang Hua Mocatta Company Ltd.	Taiwan	TWD1,000.00 Ordinary shares	97.9
<i>The following company has the address of Luis Alberto de Herrera 1248, Torre II, Piso 11, Esc. 1111, Uruguay</i>			
Standard Chartered Uruguay Representacion S.A.	Uruguay	UYU1.00 Ordinary shares	100

Significant investment holdings and other related undertakings

Name	Country of Incorporation	Description of shares	Proportion of shares held (%)
<i>The following company has the address of Lot 6.05, Level 6, KPMG Tower, 8 First Avenue, Bandar Utama, 47800 Petaling Jaya, Selangor, Malaysia</i>			
House Network SDN BHD	Malaysia	RM1.00 Ordinary shares	25

Liquidated/dissolved/sold

Subsidiary Undertakings

Name	Country of Incorporation	Description of shares
SC Overseas Investments Limited	United Kingdom	AUD1.00 Ordinary shares
		\$1.00 Ordinary shares
Standard Chartered (GCT) Limited	United Kingdom	£1.00 Ordinary shares
Ocean Horizon Holdings South Ltd	Cayman Islands	\$1.00 Ordinary shares
Standard Chartered Corporate Private Equity (Cayman) Limited	Cayman Islands	\$0.001 Ordinary shares
Standard Chartered International Partners	Cayman Islands	\$0.001 Ordinary shares
Standard Chartered Private Equity (Cayman) Limited	Cayman Islands	\$0.001 Ordinary shares
Pembroke 7006 Leasing Limited	Ireland	€1.25 Ordinary shares
Pembroke Alpha Limited	Ireland	€1.00 Ordinary shares
Ocean Horizon Holdings East Limited	Jersey	\$1.00 Ordinary shares
Ocean Horizon Holdings West Limited	Jersey	\$1.00 Ordinary shares
Standard Chartered Private Equity Managers (Korea) Limited	Korea, Republic of	KRW5,000.00 Ordinary shares
Marina Aquamarine Shipping Limited	Marshall Islands	\$1.00 Ordinary shares
Marina Poseidon Shipping Limited	Marshall Islands	\$1.00 Ordinary shares
Marina Zeus Shipping Limited	Marshall Islands	\$1.00 Ordinary shares
Actis Place Holdings (Mauritius) Limited	Mauritius	\$1.00 Class A Ordinary shares
		\$1.00 Class B Ordinary shares
Pembroke B717 Holdings B.V.	Netherlands	€1.00 Ordinary shares
Actis Mahi Holdings (Singapore) Private Limited	Singapore	SGD 1.00 Ordinary shares
Augusta Viet Pte. Ltd.	Singapore	\$1.00 Ordinary shares
Greenman Pte. Ltd.	Singapore	SGD1.00 Class A Preferred shares
		SGD1.00 Class B Preferred shares
		SGD1.00 Ordinary shares
Phoon Huat Pte. Ltd.	Singapore	SGD1.00 Ordinary shares
Redman Pte. Ltd.	Singapore	SGD1.00 Ordinary shares
Standard Chartered Private Equity Managers (Singapore) Pte. Ltd	Singapore	\$ Ordinary shares
Actis Place Holdings No.1 (Singapore) Private Limited	Singapore	SGD 1.00 Ordinary shares
Actis Place Holdings No.2 (Singapore) Private Limited	Singapore	SGD 1.00 Ordinary shares
Standard Chartered (Thailand) Company Limited	Thailand	THB10.00 Ordinary shares
Standard Chartered Asset Management Limited	Zimbabwe	\$0.001 Ordinary shares

40. Related undertakings of the Group continued

Joint ventures

Name	Country of Incorporation	Description of shares
Canas Leasing Limited	Ireland	\$1 Ordinary shares
Elviria Leasing Limited	Ireland	\$1 Ordinary shares

Associates

Name	Country of Incorporation	Description of shares
McAshback Limited	United Kingdom	£0.01 Ordinary shares

Significant investment holdings and other related undertakings

Name	Country of Incorporation	Description of shares
Greathorse Chemical Limited	Cayman Islands	\$1.00 Ordinary shares
Asia Trading Holdings Limited	Cayman Islands	\$0.01 Ordinary shares
Joyville Shapoorji Housing Private Limited	India	INR10.00 Common Equity shares
Mahindra Homes Private Limited	India	INR10.00 Compulsorily Convertible Preference shares INR10.00 A Ordinary shares INR10.00 B Ordinary shares
Northern Arc Capital Limited	India	INR20.00 Compulsorily Convertible Preference shares INR10.00 Equity shares
PT Travira Air	Indonesia	IDR1,000,000.00 Ordinary shares
Daiyang Metal Company Ltd	Korea, Republic of	KRW 500 Ordinary shares KRW 500 Preferred shares KRW 500 Convertible Preference shares
Haram Trade Co. Ltd.	Korea, Republic of	KRW 1,000,000,000 Ordinary shares KRW 1,000,000,000 redeemable convertible preferred shares
Maesong Trading Co. Ltd.	Korea, Republic of	KRW 1,000,000,000 Ordinary shares KRW 1,000,000,000 redeemable convertible preferred shares
Sameun Trade Co. Ltd.	Korea, Republic of	KRW 500,000,000 Ordinary shares KRW 500,000,000 redeemable convertible preferred shares
Taebong Prime Co. Ltd	Korea, Republic of	KRW 10,000,000,000 Ordinary shares KRW 10,000,000,000 redeemable convertible preferred shares
Crystal Jade Group Holdings Pte Ltd	Singapore	\$ Ordinary shares
MMI Technoventures Pte Ltd	Singapore	SGD Ordinary shares SGD 0.01 Redeemable Preference shares
Polaris Limited	Singapore	SGD Ordinary shares
THSC Investments Pte. Ltd.	Singapore	SGD0.50 Ordinary Shares
New Lifestyle Service Corporation	Vietnam	VND Dividend Preference shares VND Redeemable Preference shares
Online Mobile Services Joint Stock Company	Vietnam	VND10,000 Class A1 Redeemable Preference shares VND10,000 Class A1 Dividend Preference shares VND10,000 Class C Dividend Preference shares
Ecoplast Technologies Inc	Virgin Islands, British	\$0.0001 Class C Preferred shares