HSBC Bank Middle East Limited

Annual Report and Accounts 2019

HSBC

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Presentation of Information

This document comprises the *Annual Report and Accounts 2019* for HSBC Bank Middle East Limited ('the bank') and its subsidiary undertakings (together 'the group'). It contains the Directors' Report and Accounts, together with the Auditor's report. References to 'HSBC' or 'the HSBC Group' within this document mean HSBC Holdings plc together with its subsidiaries.

Board of Directors

David Eldon, Chairman
Martin Tricaud, Deputy Chairman
Dr. Raja Al Gurg
Amina Alrustamani
David Dew
John Raine
Neslihan Erkazanci
John Bartlett
Chris D Spooner

Change in Directors

- Amina Alrustamani appointed as a Director on 27 March 2019.
- Neslihan Erkazanci appointed as a Director on 18 April 2019.
- Martin Tricaud appointed as a Director and Deputy Chairman on 14 May 2019.
- John Raine appointed as a Director on 1 August 2019.
- Abdul Hakeem Mostafawi resigned as a Director on 28 February 2019.
- Abdulfattah Sharaf resigned as a Director on 28 February 2019.
- Georges Elhedery resigned as a Director and Deputy Chairman on 14 May 2019.
- Sir William Patey resigned as a Director on 31 July 2019.

Principal activities

The group through its branch network and subsidiary undertakings provides a range of banking and related financial services in the Middle East and North Africa.

Attributable profit and dividends

The profit attributable to the shareholders of the parent company amounted to US$554m (2018: US$541m) as set out in the consolidated income statement on page 8.

During the year, a second and third interim dividend for 2018 of US$100m each (2018: US$190m) were declared on 12 February 2019 and 26 May 2019 respectively.

Registered office

The bank is a 'Company Limited by Shares' incorporated in the Dubai International Financial Centre ('DIFC') under the Companies Law (DIFC Law No. 2 of 2009) on 30 June 2016 with registered number 2199. Its head office and registered office is located at Level 1, Gate Village Building 8, Dubai International Financial Centre, Dubai, United Arab Emirates.

Auditor

PricewaterhouseCoopers Limited has expressed its willingness to continue in office and the Board recommends that it be reappointed. A resolution proposing the reappointment of PricewaterhouseCoopers Limited as auditor of the group and giving authority to the Directors to determine its remuneration will be submitted to the forthcoming Annual General Meeting.

On behalf of the Board

J A Tothill

Secretary

Report on the audit of the consolidated financial statements

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of HSBC Bank Middle East Limited (the 'Company') and its subsidiaries (the 'group') as at 31 December 2019, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ('IFRS') as endorsed by the European Union.

What we have audited

The group's consolidated financial statements comprise:

- the consolidated statement of financial position as at 31 December 2019;
- the consolidated income statement for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing ('ISAs'). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

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

Independence

We are independent of the group in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ('IESBA Code') and the requirements of the Dubai Financial Services Authority (the 'DFSA'). We have fulfilled our other ethical responsibilities in accordance with these requirements and with the IESBA Code.

Our audit approach

Overview

Group scoping	The scope of our audit and the nature, timing and extent of audit procedures performed were determined by our risk assessment, the financial significance of the components and other qualitative factors.
Materiality	Overall group materiality: USD 32 million, which represents 5% of profit before tax.
Key audit matters	The key audit matters identified during the year are: • Impairment of loans and advances • Valuation of unquoted debt instruments • IT access management

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the consolidated financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

How we tailored our group audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the group, the accounting processes and controls, and the industry in which the group operates.

Given the geographically dispersed nature of the group's operations in the Middle East and North Africa and the diversity of its banking activities, our approach was designed to cover each of the significant locations, being the United Arab Emirates ('UAE') and Qatar. We audited the operations of the group in the UAE and instructed a PwC member firm to perform work and issue an audit opinion to us in respect of the group's operations in Qatar. Each location that was not individually significant was assessed for any significant risks or material balances and, where appropriate, we instructed PwC member firms in those locations to perform and report on specific procedures relating to matters which were judgemental in nature and/or material to the overall group. The work in these locations was carried out by applying standard benchmarks on materiality and reflected the size and complexity of the operations.

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PricewaterhouseCoopers Limited is registered with the Dubai Financial Services Authority.

Our audit approach (continued)

How we tailored our group audit scope (continued)

A significant amount of the group's operational processes which are critical to financial reporting are undertaken in shared service centres run by HSBC Operations Services and Technology (HOST) across 11 individual locations. The audit work over the shared service centre processes and controls was performed by PwC member firms in each of the global shared service centre locations and coordinated by the PwC member firm in the UK, with oversight from us. This work enabled us to evaluate the effectiveness of the controls over key processes that supported material balances, classes of transactions and disclosures within the group consolidated financial statements, and to consider the implications on our audit work.

In aggregate, the audit work performed across the locations above provided us with the audit evidence required to form an opinion on the group consolidated financial statements.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate on the consolidated financial statements as a whole.

Overall group materiality	USD 32 million
How we determined it	5% of profit before tax
Rationale for the materiality benchmark applied	We chose profit before tax as the benchmark because, in our view, it is the benchmark against which the performance of the group is most commonly measured by users, and is a generally accepted benchmark. We chose 5% which is within the range of acceptable quantitative materiality thresholds in auditing standards.

We agreed with those charged with governance that we would report to them misstatements identified during our audit above USD 1.6 million as well as misstatements that, in our view, warranted reporting for qualitative reasons.

Key audit matters

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

Key audit matter	How our audit addressed the key audit matter
Impairment of loans and advances	
We focused on the Expected Credit Losses ('ECL') for loans and advances due to the materiality of the loan balances and the associated allowances for ECL. In addition, the compliance with IFRS in this area requires considerable judgement and interpretation in their application. As disclosed in note 31, as at 31 December 2019, the group has recognised an allowance for ECL for loans and advances of USD 955 million. The largest loan portfolios and significant ECL allowances are in the UAE, Qatar and Bahrain. There are a number of significant judgements which are required in measuring ECL, including: • determining the criteria for a significant increase in credit risk ('SICR'); • the application of future economic scenarios; and • techniques used to determine the Probability of Default ('PD') and Loss Given Default ('LGD'). For defaulted exposures, the group exercises judgement to estimate the expected future cash flows related to individual exposures, including the value of collateral.	We performed risk based substantive testing of models that were updated during the year. We tested the controls over the inputs of critical data into source systems, and the flow and transfer of data between source systems to the impairment calculation engine. Substantive testing was performed over the critical data used in the year end ECL calculation. Further, we obtained reporting from our PwC member firm in the UK containing the results of certain audit procedures in respect of ECL. We reviewed the reporting received and the work performed and concluded that the nature, timing and extent of work performed was appropriate for the purposes of our audit. Their work included the following procedures: • testing of the review and challenge of multiple economic scenarios by HSBC group's expert panel and internal governance committee. • assessment of the reasonableness and likelihood of these scenarios using the UK PwC member firm's economic experts. For the alternative downside economic scenarios developed for the main geopolitical risks, their reasonableness was assessed against the known or likely economic, political and other relevant events. The severity and magnitude of the scenarios were compared to external forecasts and data from historical economic downturns, and the sensitivities of the scenarios on the ECL were considered. • independent review of the updates to the scripts used in the underlying tool to calculate ECL to validate that they reflected approved updates to models, parameters and inputs. We observed management's review and challenge forums to assess the ECL output and approval of post model adjustments. We also tested the approval of the key inputs, assumptions and discounted cash-flows that support the impairments of significant wholesale exposures, and substantively tested a sample of significant wholesale exposures. We assessed the disclosures included in the consolidated financial statements and assessed their compliance with the requirements of IFRS.

Our audit approach (continued)

Key audit matters (continued)

Key audit matter	How our audit addressed the key audit matter
Valuation of unquoted debt instruments	
We focused on the valuation of unquoted debt instruments with significant unobservable inputs due to the materiality of the instruments and the subjective nature of their valuation which involves the use of judgemental assumptions. As of 31 December 2019, the group has unquoted debt instruments reported within Trading Assets of USD 80 million with significant unobservable inputs.	We assessed and tested the design and operating effectiveness of the key controls that management has established to support the review and approval of the valuations, including fair value adjustments. We assessed the appropriateness of the valuation method used by management with the assistance of our valuation experts. Our valuation experts also performed an independent valuation of the unquoted debt instruments.

Key audit matter	How our audit addressed the key audit matter
IT access management	
We focused on this area as the audit relies extensively on automated controls and therefore on the effectiveness of controls over IT systems. In previous years, our PwC member firm in the UK identified and reported that controls over access to applications, operating systems and data in the financial reporting process required improvement. Access management controls are critical to ensure that changes to applications and underlying data are made in an appropriate manner. Appropriate access and change controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data. Management implemented remediation activities that have contributed to reducing the risk over access management in the financial reporting process.	We obtained reporting from our PwC member firm in the UK on the results of work performed by them and other PwC member firms in relation to group-wide systems used by the HSBC group. We reviewed the reporting received and work performed and concluded that the nature, timing and extent of work performed was appropriate for the purposes of our audit. The reporting included the results of the testing of access rights over applications, operating systems and databases relied upon for financial reporting. Specifically, the other member firms tested that: • new access requests for joiners were properly reviewed and authorised; • user access rights were removed on a timely basis when an individual left or changed role; • access rights to applications, operating systems and databases were periodically monitored for appropriateness; and • highly privileged access is restricted to appropriate personnel. Other areas that were independently assessed included password policies, security configurations, controls over changes to applications and infrastructure and that the ability to change applications, the operating system or databases in the production environment was appropriately restricted. Where control deficiencies were identified, a range of other procedures were performed which included obtaining appropriate reporting from our PwC member firm in the UK on the work performed by them and other PwC member firms. We reviewed the reporting received and the work performed and considered the nature, timing and extent of testing to be appropriate for the purposes of our audit. Their work included the following procedures: • where access outside of policy was identified by our PwC member firm in the UK, they performed procedures to understand the nature of the access, and, where possible, obtained additional evidence on whether that access had been exploited; • testing of controls to manage the monitoring of business access, in particular, automation implemented to identify and resolve cases where users are found to have access which represent a possible toxic combination of privileges; and • substantive testing procedures. In addition to the above, we performed the following audit procedures: • additional substantive testing in respect of selected year-end reconciliations (i.e. custodian, bank account and suspense account reconciliations) and confirmed balances with external counterparties; • testing of other compensating controls such as business performance reviews; and • for systems impacted by control failures relating to inappropriate access or segregation of duties we tested compensating manual controls.

Other information

The Board of Directors is responsible for the other information. The other information comprises the Report of the Directors (but does not include the consolidated financial statements and our auditor's report thereon).

Our opinion on the consolidated financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

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

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

Responsibilities of management and those charged with governance for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS as endorsed by the European Union and in accordance with the applicable regulatory requirements of the DFSA, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the group or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

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

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the group to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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

Report on other legal and regulatory requirements

As required by the applicable provisions of the DFSA Rulebook, we report that the consolidated financial statements have been properly prepared in accordance with the applicable requirements of the DFSA.

PricewaterhouseCoopers

Dubai, United Arab Emirates

18 February 2020

Audit Principal: Tamsin King

Consolidated income statement

for the year ended 31 December

	Notes	2019 US$000	2018 US$000
Net interest income		**974,440**	985,963
– interest income		**1,277,600**	1,209,267
– interest expense		**(303,160)**	(223,304)
Net fee income	3	**453,515**	407,300
– fee income		**568,101**	513,402
– fee expense		**(114,586)**	(106,102)
Net income from financial instruments held for trading or managed on a fair value basis		**212,754**	207,796
Changes in fair value of designated debt and related derivatives	4	**4,016**	1,558
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss		**(996)**	(2,081)
Gains less losses from financial investments		**164**	(7,064)
Dividend income		**363**	1,242
Other operating income, net		**55,423**	87,197
Net operating income before change in expected credit losses and other credit impairment charges		**1,699,679**	1,681,911
Change in expected credit losses and other credit impairment charges	5	**(99,990)**	(127,620)
Net operating income		**1,599,689**	1,554,291
Employee compensation and benefits	6	**(575,113)**	(548,790)
General and administrative expenses		**(335,353)**	(342,803)
Depreciation and impairment of property, plant and equipment and right-of-use assets		**(34,878)**	(14,045)
Amortisation and impairment of intangible assets		**(9,753)**	(6,109)
Total operating expenses		**(955,097)**	(911,747)
Operating profit	5	**644,592**	642,544
Share of profit in associates	17	**651**	475
Profit before tax		**645,243**	643,019
Tax expense	8	**(90,686)**	(101,869)
Profit for the year		**554,557**	541,150
Attributable to:			
– shareholders of the parent company		**554,459**	541,092
– non-controlling interests		**98**	58
Profit for the year		**554,557**	541,150

The accompanying notes on pages 13 to 76 form an integral part of these financial statements.

Consolidated statement of comprehensive income

for the year ended 31 December

	2019	2018
	US$000	US$000
Profit for the year	**554,557**	541,150
Other comprehensive income/(expense)		
Items that will be reclassified subsequently to profit or loss when specific conditions are met:		
Debt instruments at fair value through other comprehensive income	**33,001**	(6,434)
– fair value gains/(losses)	**34,691**	(6,762)
– fair value (losses)/gains transferred to the income statement on disposal	**(424)**	160
– expected credit losses recognised in income statement	**373**	(161)
– income taxes	**(1,639)**	329
Cash flow hedges	**39,966**	(12,043)
– fair value gains/(losses)	**44,413**	(13,381)
– income taxes	**(4,447)**	1,338
Exchange differences	**(2,129)**	(7,399)
Items that will not be reclassified subsequently to profit or loss:		
Remeasurement of defined benefit asset/liability	**19,368**	23,859
– before income taxes	**28,116**	23,859
– income taxes	**(8,748)**	—
Equity instruments designated at fair value through other comprehensive income	**5,972**	(20,819)
– fair value gains/(losses)	**5,972**	(20,819)
– income taxes	**—**	—
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	**(6,430)**	18,801
– fair value (losses)/gains	**(6,430)**	18,801
– income taxes	**—**	—
Other comprehensive income / (expense) for the year, net of tax	**89,748**	(4,035)
Total comprehensive income for the year	**644,305**	537,115
Attributable to:		
– shareholders of the parent company	**644,207**	537,057
– non-controlling interests	**98**	58
Total comprehensive income for the year	**644,305**	537,115

The accompanying notes on pages 13 to 76 form an integral part of these financial statements.

Consolidated statement of financial position

at 31 December

	Notes	2019 US$000	2018 US$000
Assets			
Cash and balances at central banks		**896,608**	1,170,359
Items in the course of collection from other banks		**78,992**	81,984
Trading assets	11	**194,800**	246,156
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		**40,731**	47,839
Derivatives	14	**1,176,296**	953,222
Loans and advances to banks	26	**5,797,423**	5,057,308
Loans and advances to customers	26	**19,661,235**	20,073,375
Reverse repurchase agreements – non-trading		**741,633**	755,076
Financial investments	15	**10,483,891**	5,734,776
Prepayments, accrued income and other assets	19	**1,566,770**	1,170,067
Current tax assets		**10**	19
Interests in associates	17	**3,074**	2,423
Intangible assets	20	**62,997**	31,465
Deferred tax assets	8	**170,979**	204,982
Total assets		**40,875,439**	35,529,051
Liabilities and equity			
Liabilities			
Deposits by banks	26	**3,806,270**	1,582,477
Customer accounts	26	**23,726,514**	21,823,507
Repurchase agreements – non-trading		**—**	2,999
Items in the course of transmission to other banks		**186,234**	263,907
Trading liabilities	21	**47,989**	59,023
Financial liabilities designated at fair value	22	**2,514,102**	2,017,966
Derivatives	14	**1,091,651**	951,976
Debt securities in issue	23	**1,788,486**	2,490,371
Accruals, deferred income and other liabilities	24	**2,550,378**	1,615,180
Current tax liabilities		**99,126**	106,394
Provisions	25	**71,201**	66,151
Total liabilities		**35,881,951**	30,979,951
Equity			
Called up share capital	29	**931,055**	931,055
Share premium account	29	**61,346**	61,346
Other reserves		**(112,172)**	(190,204)
Retained earnings		**4,108,865**	3,742,607
Total shareholders' equity		**4,989,094**	4,544,804
Non-controlling interests		**4,394**	4,296
Total equity		**4,993,488**	4,549,100
Total liabilities and equity at 31 Dec		**40,875,439**	35,529,051

The accompanying notes on pages 13 to 76 form an integral part of these financial statements.

Martin Tricaud

Chief Executive Officer and Deputy Chairman

Consolidated statement of cash flows

for the year ended 31 December

	Notes	2019 US$000	2018 US$000
Cash flows from operating activities			
Profit before tax		**645,243**	643,019
Adjustments for:			
Net (gain)/loss from investing activities		**1,473**	56
Share of profits in associates		**(651)**	(475)
Other non-cash items included in profit before tax	30	**173,639**	241,422
Change in operating assets	30	**590,597**	(3,431,228)
Change in operating liabilities	30	**5,072,121**	687,072
Elimination of exchange differences[1]		**(1,542)**	(8,639)
Tax paid		**(77,539)**	(104,252)
Net cash generated from/(used) in operating activities		**6,403,341**	(1,973,025)
Cash flows from investing activities			
Net cash flows from purchase and sale/maturity of financial investments		**(4,323,646)**	982,902
Net cash flows from the purchase and sale of property, plant and equipment		**(20,705)**	(264,685)
Net investment in intangible assets		**(41,340)**	(27,098)
Net cash outflow from increase in investment in associates		**–**	(386)
Net cash generated from/(used) in investing activities		**(4,385,691)**	690,733
Cash flows from financing activities			
Dividends paid to shareholders of the parent company	9	**(200,000)**	(190,000)
Net cash used in financing activities		**(200,000)**	(190,000)
Net decrease in cash and cash equivalents		**1,817,650**	(1,472,292)
Cash and cash equivalents at 1 Jan[2]		**4,328,007**	5,800,086
Exchange differences in respect of cash and cash equivalents		**(83)**	213
Cash and cash equivalents at 31 Dec	30	**6,145,574**	4,328,007

1 *Adjustment to bring changes between opening and closing balance sheet amounts to average rates. This is not done on a line-by-line basis, as details cannot be determined without unreasonable expense.*

2 *In 2019, HSBC changed its accounting practice to include settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented and also include other cash equivalents not included in 2018 cash and cash equivalents. The net effect of these changes increased cash and cash equivalents by $729m as at 31 Dec 2018. Further, Cash and cash equivalents include mandatory deposits amounting to $1,889m (2018: $1,919m) at central banks which are not available for use by the group and the presentation has been aligned to the HSBC Group.*

The accompanying notes on pages 13 to 76 form an integral part of these financial statements.

Consolidated statement of changes in equity

for the year ended 31 December

	Called up share capital and share premium	Retained earnings	Other reserves: Financial assets at FVOCI reserves	Other reserves: Cash flow hedging reserve	Other reserves: Foreign exchange reserve	Other reserves: Merger and other reserves	Total share-holders' equity	Non-controlling interests	Total equity
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**992,401**	**3,742,607**	**(32,143)**	**(19,396)**	**(123,344)**	**(15,321)**	**4,544,804**	**4,296**	**4,549,100**
Profit for the year	**—**	**554,459**	**—**	**—**	**—**	**—**	**554,459**	**98**	**554,557**
Other comprehensive income (net of tax)	**—**	**12,074**	**38,977**	**39,966**	**(1,269)**	**—**	**89,748**	**—**	**89,748**
– debt instruments at fair value through other comprehensive income	**—**	**—**	**33,001**	**—**	**—**	**—**	**33,001**	**—**	**33,001**
– equity instruments designated at fair value through other comprehensive income	**—**	**—**	**5,972**	**—**	**—**	**—**	**5,972**	**—**	**5,972**
– cash flow hedges	**—**	**—**	**—**	**39,966**	**—**	**—**	**39,966**	**—**	**39,966**
– changes in fair value of financial liabilities designated at fair value arising from changes in own credit risk	**—**	**(6,430)**	**—**	**—**	**—**	**—**	**(6,430)**	**—**	**(6,430)**
– remeasurement of defined benefit asset/liability	**—**	**19,368**	**—**	**—**	**—**	**—**	**19,368**	**—**	**19,368**
– exchange differences	**—**	**(864)**	**4**	**—**	**(1,269)**	**—**	**(2,129)**	**—**	**(2,129)**
Total comprehensive income for the year	**—**	**566,533**	**38,977**	**39,966**	**(1,269)**	**—**	**644,207**	**98**	**644,305**
Dividends to shareholders	**—**	**(200,000)**	**—**	**—**	**—**	**—**	**(200,000)**	**—**	**(200,000)**
Other movements	**—**	**(275)**	**358**	**—**	**—**	**—**	**83**	**—**	**83**
At 31 Dec 2019	**992,401**	**4,108,865**	**7,192**	**20,570**	**(124,613)**	**(15,321)**	**4,989,094**	**4,394**	**4,993,488**
At 31 Dec 2017	992,401	3,441,349	6,433	(7,354)	(115,911)	(15,321)	4,301,597	4,238	4,305,835
Impact on transition to IFRS 9	—	(92,650)	(12,725)	—	—	—	(105,375)	—	(105,375)
At 1 Jan 2018	992,401	3,348,699	(6,292)	(7,354)	(115,911)	(15,321)	4,196,222	4,238	4,200,460
Profit for the year	—	541,092	—	—	—	—	541,092	58	541,150
Other comprehensive income (net of tax)	—	42,698	(27,258)	(12,042)	(7,433)	—	(4,035)	—	(4,035)
– debt instruments at fair value through other comprehensive income	—	—	(6,434)	—	—	—	(6,434)	—	(6,434)
– equity instruments designated at fair value through other comprehensive income	—	—	(20,819)	—	—	—	(20,819)	—	(20,819)
– cash flow hedges	—	—	—	(12,043)	—	—	(12,043)	—	(12,043)
– changes in fair value of financial liabilities designated at fair value arising from changes in own credit risk	—	18,801	—	—	—	—	18,801	—	18,801
– remeasurement of defined benefit asset/liability	—	23,859	—	—	—	—	23,859	—	23,859
– exchange differences	—	38	(5)	1	(7,433)	—	(7,399)	—	(7,399)
Total comprehensive income for the year	—	583,790	(27,258)	(12,042)	(7,433)	—	537,057	58	537,115
Dividends to shareholders	—	(190,000)	—	—	—	—	(190,000)	—	(190,000)
Other movements	—	118	1,407	—	—	—	1,525	—	1,525
At 31 Dec 2018	992,401	3,742,607	(32,143)	(19,396)	(123,344)	(15,321)	4,544,804	4,296	4,549,100

The accompanying notes on pages 13 to 76 form an integral part of these financial statements.

Notes on the financial statements

1 Legal status and principal activities

The group has its place of incorporation and head office in Dubai International Financial Centre ('DIFC'), in the United Arab Emirates, under a category 1 licence issued by the Dubai Financial Services Authority ('DFSA').

The group's registered office is Level 1, Gate Village Building 8, Dubai International Financial Centre, Dubai, United Arab Emirates.

The group through its branch network and subsidiary undertakings provides a range of banking and related financial services in the Middle East and North Africa.

The immediate parent company of the group is HSBC Middle East Holdings B.V. and the ultimate parent company of the group is HSBC Holdings plc, which is incorporated in England.

2 Basis of preparation and significant accounting policies

2.1 Basis of preparation

(a) Compliance with International Financial Reporting Standards

The consolidated financial statements of the group and the separate financial statements of the group have been prepared in accordance with IFRSs as issued by the IASB, including interpretations issued by the IFRS Interpretations Committee, and as endorsed by the European Union ('EU'). At 31 December 2019, there were no unendorsed standards effective for the year ended 31 December 2019 affecting these consolidated and separate financial statements, and HSBC's application of IFRSs results in no differences between IFRSs as issued by the IASB and IFRSs as endorsed by the EU.

Standards adopted during the year ended 31 December 2019

IFRS 16 'Leases'

The group has adopted IFRS 16 'Leases' from 1 January 2019. The standard has an effective date for annual periods beginning on or after 1 January 2019. IFRS 16 results in lessees accounting for most leases within the scope of the standard in a manner similar to the way in which finance leases were accounted for under IAS 17 'Leases'. Lessees will now recognise a right of use ('ROU') asset and a corresponding financial liability on the balance sheet. The asset will be amortised over the length of the lease, and the financial liability measured at amortised cost. Lessor accounting remains substantially the same as under IAS 17. At 1 January 2019, the group has adopted the standard using a modified retrospective approach where the cumulative effect of initially applying the standard is recognised as an adjustment to the opening balance of retained earnings and comparatives are not restated.

The implementation increased assets (ROU assets) by US$42.4m and increased financial liabilities by the same amount with no effect on net assets or retained earnings.

On adoption of IFRS 16, the group recognised lease liabilities in relation to leases that had previously been classified as 'operating leases' in accordance with IAS 17 'Leases'. These liabilities were recognised in 'other liabilities' and measured at the present value of the remaining lease payments, discounted at the lessee's incremental borrowing rate at 1 January 2019. The associated right of use ('ROU') assets were recognised in 'other assets' and measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments or provisions for onerous leases recognised on balance sheet at 31 December 2018. In addition, the following practical expedients permitted by the standard were applied:

- reliance was placed on previous assessments on whether leases were onerous;
- operating leases with a remaining lease term of less than 12 months at 1 January 2019 were treated as short-term leases; and
- initial direct costs were not included in the measurement of ROU assets for leases previously accounted for as operating leases.

The differences between IAS 17 and IFRS 16 are summarised in the table below:

IAS 17	IFRS 16
Leases were classified as either finance or operating leases. Payments made under operating leases were charged to profit or loss on a straight-line basis over the period of the lease.	Leases are recognised as an ROU asset and a corresponding liability at the date at which the leased asset is made available for use. Lease payments are allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease term so as to produce a constant period rate of interest on the remaining balance of the liability. The ROU asset is depreciated over the shorter of the ROU asset's useful economic life and the lease term on a straight-line basis. In determining the lease term, the group consider all facts and circumstances that create an economic incentive to exercise an extension option or not exercise a termination option over the planning horizon of five years. In general, it is not expected that the discount rate implicit in the lease is available so the lessee's incremental borrowing rate is used. This is the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of a similar value in a similar economic environment with similar terms and conditions. The rates are determined for each economic environment in which the group operates and for each term by adjusting swap rates with funding spreads (own credit spread) and cross-currency basis where appropriate.

Amendment to IAS 12 'Income Taxes'

An amendment to IAS 12 was issued in December 2017 as part of the annual improvement cycle. The amendment clarifies that an entity should recognise the tax consequences of dividends where the transactions or events that generated the distributable profits are recognised. This amendment was applied on 1 January 2019 and had no material impact. Comparatives have not been restated.

Interest Rate Benchmark Reform: Amendments to IFRS 9 and IAS 39 'Financial Instruments'

Amendments to IFRS 9 and IAS 39 issued in September 2019 modify specific hedge accounting requirements so that entities apply those hedge accounting requirements assuming that the interest rate benchmark on which the hedged cash flows and cash flows of the hedging instrument are based is not altered as a result of interest rate benchmark reform. These amendments replace the need for specific judgements to determine whether certain hedge accounting relationships that hedge the variability of cash flows or interest rate

risk exposures for periods after the interest rate benchmarks are expected to be reformed or replaced continue to qualify for hedge accounting as at 31 December 2019. For example, in the context of cash flow hedging, the amendments require the IBOR cash flows to be assumed to be highly probable over the period of the documented hedge relationship, while uncertainty over the interest rate benchmark reform exists. The IASB is expected to provide further guidance on the implication for hedge accounting during the reform process and after the reform uncertainty is resolved.

These amendments apply from 1 January 2020 with early adoption permitted. The group has adopted the amendments that apply to IAS 39 from 1 January 2019 and has made the additional disclosures as required by the amendments.

(b) Future accounting developments

Minor amendments to IFRSs

The IASB has published a number of minor amendments to IFRSs that are effective from 1 January 2020, some of which have been endorsed for use in the EU. The group expects they will have an insignificant effect, when adopted, on the consolidated financial statements of the group.

Major new IFRSs

IFRS 17 'Insurance Contracts'

IFRS 17 'Insurance contracts' was issued in May 2017, and sets out the requirements that an entity should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. IFRS 17 is effective from 1 January 2021. The group has assessed the impact of IFRS 17 and expects that the standard will have no significant effect, when applied, on the consolidated financial statements of the group.

(c) Foreign currencies

The group's consolidated financial statements are presented in US dollars because the US dollar and currencies linked to it form the major currency bloc in which the group transacts and funds its business. The US dollar is also the group's functional currency because the US dollar and currencies linked to it are the most significant currencies relevant to the underlying transactions, events and conditions of its subsidiaries, as well as representing a significant proportion of its funds generated from financing activities.

Transactions in foreign currencies are recorded in the functional currency at the rate of exchange prevailing on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the rate of exchange at the balance sheet date. Any resulting exchange differences are included in the income statement. Non-monetary assets and liabilities that are measured at historical cost in a foreign currency are translated into the functional currency using the rate of exchange at the date of the initial transaction. Non-monetary assets and liabilities measured at fair value in a foreign currency are translated into the functional currency using the rate of exchange at the date the fair value was determined. Any exchange component of a gain or loss on a non-monetary item is recognised either in other comprehensive income or in the income statement depending where the gain or loss on the underlying non-monetary item is recognised.

In the consolidated financial statements, the assets and liabilities of branches, subsidiaries, joint ventures and associates whose functional currency is not US dollars, are translated into the group's presentation currency at the rate of exchange at the balance sheet date, while their results are translated into US dollars at the average rates of exchange for the reporting period. Exchange differences arising from the retranslation of opening foreign currency net assets, and exchange differences arising from retranslation of the result for the reporting period from the average rate to the exchange rate at the period end, are recognised in other comprehensive income. Exchange differences on a monetary item that is part of a net investment in a foreign operation are recognised in the income statement of the separate financial statements and in other comprehensive income in consolidated accounts. On disposal of a foreign operation, exchange differences previously recognised in other comprehensive income are reclassified to the income statement as a reclassification adjustment.

(d) Critical accounting estimates and judgements

The preparation of financial information requires the use of estimates and judgements about future conditions. In view of the inherent uncertainties and the high level of subjectivity involved in the recognition or measurement of items highlighted as the critical accounting estimates and judgements in section 2.2 below, it is possible that the outcomes in the next financial year could differ from those on which management's estimates are based, resulting in materially different conclusions from those reached by management for the purposes of these financial statements. Management's selection of the group's accounting policies which contain critical estimates and judgements reflects the materiality of the items to which the policies are applied and the high degree of judgement and estimation uncertainty involved.

(e) Segmental analysis

The group's chief operating decision-maker is the Board. Operating segments are reported in a manner consistent with the internal reporting provided to the Board.

Measurement of segmental assets, liabilities, income and expenses is in accordance with the group's accounting policies. Segmental income and expenses include transfers between segments, and these transfers are conducted at arm's length. Shared costs are included in segments on the basis of the actual recharges made.

Products and services

The group manages products and services to its customers in the region through global businesses.

- Retail Banking and Wealth Management serves its customers through four main businesses: Retail Banking, Wealth Management, Asset Management and Insurance. The HSBC Premier and Advance propositions are aimed at mass affluent and emerging affluent customers who value international connectivity and benefit from the global reach and scale. For customers with simpler banking needs, Retail Banking and Wealth Management offers a full range of products and services reflecting local requirements.
- Commercial Banking customers range from small enterprises focused primarily on their domestic markets through to corporates operating globally. Commercial Banking support customers with tailored financial products and services to allow them to operate efficiently and grow. Services provided include working capital, term loans, payment services and international trade facilitation, as well as expertise in mergers and acquisitions, and access to financial markets.

- Global Banking and Markets ('GB&M') supports major government, corporate and institutional clients. GB&M product specialists continue to deliver a comprehensive range of transaction banking, financing, advisory, capital markets and risk management services.
- Corporate Centre comprises Central Treasury, including Balance Sheet Management ('BSM'), interests in associates and central stewardship costs that support our businesses.

2.2 Summary of significant accounting policies

(a) Consolidation and related policies

Investments in subsidiaries

The group controls and consequently consolidates an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Control is initially assessed based on consideration of all facts and circumstances, and is subsequently reassessed when there are significant changes to the initial setup.

Where an entity is governed by voting rights, the group would consolidate when it holds, directly or indirectly, the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power over the relevant activities or holding the power as agent or principal.

Business combinations are accounted for using the acquisition method. The amount of non-controlling interest is measured at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

The group has adopted the policy of 'predecessor accounting' for the transfer of business combinations under common control within the HSBC Group. Under IFRS where both HSBC Group entities adopt the same method for accounting for common control transactions the excess of the cost of the purchased group entity over the carrying value is recorded as a merger reserve on consolidation.

Changes in a parent's ownership interest in a subsidiary that do not result in a loss of control are treated as transactions between equity holders and are reported in equity.

Entities that are controlled by the group are consolidated from the date the group gains control and cease to be consolidated on the date the group loses control of the entities.

The group performs a re-assessment of consolidation whenever there is a change in the facts and circumstances of determining the control of all entities.

All intra-group transactions are eliminated on consolidation.

Interests in associates and joint arrangements

Joint arrangements are investments in which the group, together with one or more parties, has joint control. Depending on the group's rights and obligations, the joint arrangement is classified as either a joint operation or a joint venture. The group classifies investments in entities over which it has significant influence, and that are neither subsidiaries nor joint arrangements, as associates.

The group recognises its share of the assets, liabilities and results in a joint operation. Investments in associates are recognised using the equity method. The attributable share of the results and reserves of associates are included in the consolidated financial statements of group based on either financial statements made up to 31 December or pro-rated amounts adjusted for any material transactions or events occurring between the date of financial statements available and 31 December. Investments in associates are assessed at each reporting date and tested for impairment when there is an indication that the investment may be impaired.

(b) Income and expenses

Operating income

Interest income and expense

Interest income and expense for all financial instruments except for those classified as held for trading or designated at fair value (except for debt securities issued by the group and derivatives managed in conjunction with those debt securities) are recognised in 'Interest income' and 'Interest expense' in the income statement using the effective interest method. The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability.

Non-interest income and expense

The group generates fee income from services provided at a fixed price over time, such as account service and card fees, or when the group delivers a specific transaction at the point in time such as broking services and import/export services. With the exception of certain fund management and performance fees, all other fees are generated at a fixed price. Fund management and performance fees can be variable depending on the size of the customer portfolio and the group's performance as fund manager. Variable fees are recognised when all uncertainties are resolved. Fee income is generally earned from short-term contracts with payment terms that do not include a significant financing component.

The group acts as principal in the majority of contracts with customers, with the exception of broking services. For most brokerage trades the group acts as agent in the transaction and recognises broking income net of fees payable to other parties in the arrangement.

The group recognises fees earned on transaction-based arrangements at a point in time when we have fully provided the service to the customer. Where the contract requires services to be provided over time, income is recognised on a systematic basis over the life of the agreement.

Where the group offers a package of services that contains multiple non-distinct performance obligations, such as those included in account service packages, the promised services are treated as a single performance obligation. If a package of services contains distinct performance obligations, such as those including both account and insurance services, the corresponding transaction price is allocated to each performance obligation based on the estimated stand-alone selling prices.

Dividend income is recognised when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders approve the dividend for unlisted equity securities.

Net income/(expense) from financial instruments measured at fair value through profit or loss includes the following:

- 'Net income from financial instruments held for trading or managed on a fair value basis'. This element is comprised of the net trading income, which includes all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading,

together with the related interest income, expense and dividends; and it also includes all gains and losses from changes in the fair value of derivatives that are managed in conjunction with financial assets and liabilities measured at fair value through profit or loss.

- 'Changes in fair value of long-term debt and related derivatives'. Interest on the external long-term debt and interest cash flows on related derivatives is presented in interest expense.
- 'Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss'. This includes interest on instruments which fail the SPPI test.

(c) Valuation of financial instruments

All financial instruments are recognised initially at fair value. 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. The fair value of a financial instrument on initial recognition is generally its transaction price (that is, the fair value of the consideration given or received). However, if there is a difference between the transaction price and the fair value of financial instruments whose fair value is based on a quoted price in an active market or a valuation technique that uses only data from observable markets, the group recognises the difference as a trading gain or loss at inception (a 'day 1 gain or loss'). In all other cases, the entire day 1 gain or loss is deferred and recognised in the income statement over the life of the transaction either until the transaction matures or is closed out, the valuation inputs become observable or the group enters into an offsetting transaction.

The fair value of financial instruments is generally measured on an individual basis. However, in cases where the group manages a group of financial assets and liabilities according to its net market or credit risk exposure, the group measures the fair value of the group of financial instruments on a net basis but presents the underlying financial assets and liabilities separately in the financial statements, unless they satisfy the IFRS offsetting criteria.

Critical accounting estimates and judgements

The majority of valuation techniques employ only observable market data. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them the measurement of fair value is more judgemental. An instrument in its entirety is classified as valued using significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit or greater than 5% of the instrument's valuation is driven by unobservable inputs. 'Unobservable' in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used).

(d) Financial instruments measured at amortised cost

Financial assets that are held to collect the contractual cash flows and that contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest, such as most loans and advances to banks and customers and some debt securities, are measured at amortised cost. In addition, most financial liabilities are measured at amortised cost. The group accounts for regular way amortised cost financial instruments using trade date accounting. The carrying value of these financial assets at initial recognition includes any directly attributable transactions costs. If the initial fair value is lower than the cash amount advanced, such as in the case of some leveraged finance and syndicated lending activities, the difference is deferred and recognised over the life of the loan through the recognition of interest income.

The group may commit to underwriting loans on fixed contractual terms for specified periods of time. When the loan arising from the lending commitment is expected to be held for trading, the commitment to lend is recorded as a derivative. When the group intends to hold the loan, the loan commitment is included in the impairment calculations.

Non-trading reverse repurchase, repurchase and similar agreements

When debt securities are sold subject to a commitment to repurchase them at a predetermined price ('repos'), they remain on the balance sheet and a liability is recorded in respect of the consideration received. Securities purchased under commitments to resell ('reverse repos') are not recognised on the balance sheet and an asset is recorded in respect of the initial consideration paid. Non-trading repos and reverse repos are measured at amortised cost. The difference between the sale and repurchase price or between the purchase and resale price is treated as interest and recognised in net interest income over the life of the agreement.

Contracts that are economically equivalent to reverse repurchase or repurchase agreements (such as sales or purchases of debt securities entered into together with total return swaps with the same counterparty) are accounted for similarly to, and presented together with, reverse repurchase or repurchase agreements.

(e) Financial assets measured at fair value through other comprehensive income ('FVOCI')

Financial assets that are held for a business model achieved by collecting contractual cash flows and selling and that contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at FVOCI. These comprise primarily debt securities. They are recognised on the trade date when the group enters into contractual arrangements to purchase and are normally derecognised when they are either sold or redeemed. They are subsequently remeasured at fair value and changes therein (except for those relating to impairment, interest income and foreign currency exchange gains and losses) are recognised in other comprehensive income until the assets are sold. Upon disposal, the cumulative gains or losses in other comprehensive income are recognised in the income statement as 'Gains less losses from financial instruments'. Financial assets measured at FVOCI are included in the impairment calculations and impairment is recognised in profit or loss.

(f) Equity securities measured at fair value with fair value movements presented in other comprehensive income ('OCI')

The equity securities for which fair value movements are shown in OCI are business facilitation and other similar investments where the group holds the investments other than to generate a capital return. Gains or losses on the derecognition of these equity securities are not transferred to profit or loss. Otherwise equity securities are measured at fair value through profit or loss (except for dividend income which is recognised in profit or loss).

(g) Financial instruments designated at fair value through profit or loss

Financial instruments, other than those held for trading, are classified in this category if they meet one or more of the criteria set out below and are so designated irrevocably at inception:

- the use of the designation removes or significantly reduces an accounting mismatch;
- when a group of financial assets or a group of financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy; and
- where the financial liability contains one or more non-closely related embedded derivatives.

Designated financial assets are recognised when the group enters into contracts with counterparties, which is generally on trade date, and are normally derecognised when the rights to the cash flows expire or are transferred. Designated financial liabilities are recognised when the group enters into contracts with counterparties, which is generally on settlement date, and are normally derecognised when extinguished. Subsequent changes in fair values are recognised in the income statement in 'Net income from financial instruments held for trading or managed on a fair value basis;

Under the above criterion, the main classes of financial instruments designated by the group are:

- Long-term debt issues.

The interest and/or foreign exchange exposure on certain fixed rate debt securities issued has been matched with the interest and/or foreign exchange exposure on certain swaps as part of a documented risk management strategy.

(h) Derivatives

Derivatives are financial instruments that derive their value from the price of underlying items such as equities, interest rates or other indices. Derivatives are recognised initially and are subsequently measured at fair value through profit and loss. Derivatives are classified as assets when their fair value is positive or as liabilities when their fair value is negative. This includes embedded derivatives in financial liabilities which are bifurcated from the host contract when they meet the definition of a derivative on a stand-alone basis.

Where the derivatives are managed with debt securities issued by the group that are designated at fair value, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Hedge accounting

When derivatives are not part of fair value designated relationships, if held for risk management purposes they are designated in hedge accounting relationships where the required criteria for documentation and hedge effectiveness are met. Group uses these derivatives or, where allowed, other non-derivative hedging instruments in fair value hedges, cash flow hedges or hedges of net investments in foreign operations as appropriate to the risk being hedged.

Fair value hedge

Fair value hedge accounting does not change the recording of gains and losses on derivatives and other hedging instruments, but results in recognising changes in the fair value of the hedged assets or liabilities attributable to the hedged risk that would not otherwise be recognised in the income statement. If a hedge relationship no longer meets the criteria for hedge accounting, hedge accounting is discontinued; the cumulative adjustment to the carrying amount of the hedged item is amortised to the income statement on a recalculated effective interest rate, unless the hedged item has been derecognised, in which case it is recognised in the income statement immediately.

Cash flow hedge

The effective portion of gains and losses on hedging instruments is recognised in other comprehensive income; the ineffective portion of the change in fair value of derivative hedging instruments that are part of a cash flow hedge relationship is recognised immediately in the income statement within 'Net income from financial instruments held for trading or managed on a fair value basis'. The accumulated gains and losses recognised in other comprehensive income are reclassified to the income statement in the same periods in which the hedged item affects profit or loss. In hedges of forecast transactions that result in recognition of a non-financial asset or liability, previous gains and losses recognised in other comprehensive income are included in the initial measurement of the asset or liability. When a hedge relationship is discontinued, or partially discontinued, any cumulative gain or loss recognised in other comprehensive income remains in equity until the forecast transaction is recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss previously recognised in other comprehensive income is immediately reclassified to the income statement.

Net investment hedge

Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. The effective portion of gains and losses on the hedging instrument is recognised in other comprehensive income; other gains and losses are recognised immediately in the income statement. Gains and losses previously recognised in other comprehensive income are reclassified to the income statement on the disposal, or part disposal, of the foreign operation.

Derivatives that do not qualify for hedge accounting

Non-qualifying hedges are derivatives entered into as economic hedges of assets and liabilities for which hedge accounting was not applied.

Critical accounting estimates and judgements

Various jurisdictions are in the process of replacing existing interbank benchmark unsecured interbank lending rates with alternative risk free rates, and different jurisdictions are moving at different speeds with different solutions for replacements. There is uncertainty as to the timing and the method of transition for many products, and whether some existing benchmarks will continue to be supported in some way. Judgement is needed to determine how the existing hedge accounting relationships are impacted by the transition. On balance, there is sufficient support for continuing hedge accounting for those relationships which are impacted.

(i) Impairment of amortised cost and FVOCI financial assets

Expected credit losses are recognised for loans and advances to banks and customers, non-trading reverse repurchase agreements, other financial assets held at amortised cost, debt instruments measured at fair value through other comprehensive income, and certain loan commitments and financial guarantee contracts. At initial recognition, allowance (or provision in the case of some loan commitments and financial guarantees) is required for ECL resulting from default events that are possible within the next 12 months (or less, where the remaining life is less than 12 months) ('12-month ECL'). In the event of a significant increase in credit risk, allowance (or provision) is required for ECL resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL'). Financial

assets where 12-month ECL is recognised are considered to be 'stage 1'; financial assets which are considered to have experienced a significant increase in credit risk are in 'stage 2'; and financial assets for which there is objective evidence of impairment so are considered to be in default or otherwise credit-impaired are in 'stage 3'. Purchased or originated credit-impaired financial assets (POCI) are treated differently as set out below.

Credit-impaired (stage 3)

The group determines that a financial instrument is credit-impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay such as that a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; and
- the loan is otherwise considered to be in default.

If such unlikeliness to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore the definitions of credit-impaired and default are aligned as far as possible so that stage 3 represents all loans which are considered defaulted or otherwise credit-impaired.

Interest income is recognised by applying the effective interest rate to the amortised cost amount, i.e. gross carrying amount less ECL allowance.

Write-off

Financial assets (and the related impairment allowances) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realisation of security. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

Renegotiation

Loans are identified as renegotiated and classified as credit-impaired when we modify the contractual payment terms due to significant credit distress of the borrower. Renegotiated loans remain classified as credit-impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows and retain the designation of renegotiated until maturity or derecognition.

A loan that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms or if the terms of an existing agreement are modified such that the renegotiated loan is a substantially different financial instrument. Any new loans that arise following derecognition events in these circumstances are considered to be purchased or originated credit-impaired ('POCI') and will continue to be disclosed as renegotiated loans.

Other than originated credit-impaired loans, all other modified loans could be transferred out of stage 3 if they no longer exhibit any evidence of being credit-impaired and, in the case of renegotiated loans, there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, over the minimum observation period, and there are no other indicators of impairment. These loans could be transferred to stage 1 or 2 based on the mechanism as described below by comparing the risk of a default occurring at the reporting date (based on the modified contractual terms) and the risk of a default occurring at initial recognition (based on the original, unmodified contractual terms). Any amount written off as a result of the modification of contractual terms would not be reversed.

Loan modifications that are not credit-impaired

Loan modifications that are not identified as renegotiated are considered to be commercial restructuring. Where a commercial restructuring results in a modification (whether legalised through an amendment to the existing terms or the issuance of a new loan contract) such that group's rights to the cash flows under the original contract have expired, the old loan is derecognised and the new loan is recognised at fair value. The rights to cash flows are generally considered to have expired if the commercial restructure is at market rates and no payment-related concession has been provided.

Significant increase in credit risk (stage 2)

An assessment of whether credit risk has increased significantly since initial recognition is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument. The assessment explicitly or implicitly compares the risk of default occurring at the reporting date compared to that at initial recognition, taking into account reasonable and supportable information, including information about past events, current conditions and future economic conditions. The assessment is unbiased, probability-weighted, and to the extent relevant, uses forward-looking information consistent with that used in the measurement of ECL. The analysis of credit risk is multifactor. The determination of whether a specific factor is relevant and its weight compared with other factors depends on the type of product, the characteristics of the financial instrument and the borrower, and the geographical region. Therefore, it is not possible to provide a single set of criteria that will determine what is considered to be a significant increase in credit risk and these criteria will differ for different types of lending, particularly between retail and wholesale. However, unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past due. In addition, wholesale loans that are individually assessed, typically corporate and commercial customers, and included on a watch or worry list are included in stage 2.

For wholesale portfolios, the quantitative comparison assesses default risk using a lifetime probability of default which encompasses a wide range of information including the obligor's customer risk rating, macroeconomic condition forecasts and credit transition probabilities. Significant increase in credit risk is measured by comparing the average PD for the remaining term estimated at origination with the equivalent estimation at reporting date (or that the origination PD has doubled in the case of origination CRR greater than 3.3). The significance of changes in PD was informed by expert credit risk judgement, referenced to historical credit migrations and to relative changes in external market rates. The quantitative measure of significance varies depending on the credit quality at origination as follows:

Origination CRR	Significance trigger – PD to increase by
0.1–1.2	15bps
2.1–3.3	30 bps
Greater than 3.3 and not impaired	2x

For loans originated prior to the implementation of IFRS 9, the origination PD does not include adjustments to reflect expectations of future macroeconomic conditions since these are not available without the use of hindsight. In the absence of this data, origination PD must be approximated assuming through-the-cycle PDs and through-the-cycle migration probabilities, consistent with the instrument's underlying modelling approach and the CRR at origination. For these loans, the quantitative comparison is supplemented with additional CRR deterioration based thresholds as set out in the table below:

Origination CRR	Additional significance criteria – Number of CRR grade notches deterioration required to identify as significant credit deterioration (stage 2) (> or equal to)
0.1	5 notches
1.1–4.2	4 notches
4.3–5.1	3 notches
5.2–7.1	2 notches
7.2–8.2	1 notch
8.3	0 notch

Further information about the 23-grade scale used for CRR can be found on page 54.

For certain portfolios of debt securities where external market ratings are available and credit ratings are not used in credit risk management, the debt securities will be in stage 2 if their credit risk increases to the extent they are no longer considered investment grade. Investment grade is where the financial instrument has a low risk of incurring losses, the structure has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil their contractual cash flow obligations.

For retail portfolios, default risk is assessed using a reporting date 12-month PD derived from credit scores which incorporate all available information about the customer. This PD is adjusted for the effect of macroeconomic forecasts for periods longer than 12 months and is considered to be a reasonable approximation of a lifetime PD measure. Retail exposures are first segmented into homogeneous portfolios, generally by country, product and brand. Within each portfolio, the stage 2 accounts are defined as accounts with an adjusted 12-month PD greater than the average 12-month PD of loans in that portfolio 12 months before they become 30 days past due. The expert credit risk judgement is that no prior increase in credit risk is significant. This portfolio-specific threshold identifies loans with a PD higher than would be expected from loans that are performing as originally expected and higher than that which would have been acceptable at origination. It therefore approximates a comparison of origination to reporting date PDs.

Unimpaired and without significant increase in credit risk – (stage 1)

ECL resulting from default events that are possible within the next 12 months ('12-month ECL') are recognised for financial instruments that remain in stage 1.

Purchased or originated credit-impaired

Financial assets that are purchased or originated at a deep discount that reflects the incurred credit losses are considered to be POCI. This population includes the recognition of a new financial instrument following a renegotiation where concessions have been granted for economic or contractual reasons relating to the borrower's financial difficulty that otherwise would not have been considered. The amount of change-in-lifetime ECL is recognised in profit or loss until the POCI is derecognised, even if the lifetime ECL are less than the amount of ECL included in the estimated cash flows on initial recognition.

Movement between stages

Financial assets can be transferred between the different categories (other than POCI) depending on their relative increase in credit risk since initial recognition. Financial instruments are transferred out of stage 2 if their credit risk is no longer considered to be significantly increased since initial recognition based on the assessments described above. Except for renegotiated loans, financial instruments are transferred out of stage 3 when they no longer exhibit any evidence of credit impairment as described above. Renegotiated loans that are not POCI will continue to be in stage 3 until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, observed over a minimum one-year period and there are no other indicators of impairment. For loans that are assessed for impairment on a portfolio basis, the evidence typically comprises a history of payment performance against the original or revised terms, as appropriate to the circumstances. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case-by-case basis.

Measurement of ECL

The assessment of credit risk, and the estimation of ECL, are unbiased and probability-weighted, and incorporate all available information which is relevant to the assessment including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. In addition, the estimation of ECL should take into account the time value of money.

In general, the group calculates ECL using three main components, a probability of default, a loss given default and the exposure at default ('EAD').

The 12-month ECL is calculated by multiplying the 12-month PD, LGD and EAD. Lifetime ECL is calculated using the lifetime PD instead. The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively.

The EAD represents the expected balance at default, taking into account the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdowns of committed facilities. The LGD represents expected losses on the EAD given the event of default, taking into account, among other attributes, the mitigating effect of collateral value at the time it is expected to be realised and the time value of money.

The group leverages the Basel II IRB framework where possible, with recalibration to meet the differing IFRS 9 requirements as follows:

Model	Regulatory capital	IFRS 9
PD	• Through the cycle (represents long-run average PD throughout a full economic cycle) • The definition of default includes a backstop of 90+ days past due, this has been modified to 180+ days past due for some portfolios	• Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD) • Default backstop of 90+ days past due for all portfolios
EAD	• Cannot be lower than current balance	• Amortisation captured for term products
LGD	• Downturn LGD (consistent losses expected to be suffered during a severe but plausible economic downturn) • Regulatory floors may apply to mitigate risk of underestimating downturn LGD due to lack of historical data • Discounted using cost of capital • All collection costs included	• Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral) • No floors • Discounted using the original effective interest rate of the loan • Only costs associated with obtaining/selling collateral included
Other		• Discounted back from point of default to balance sheet date

While 12-month PDs are recalibrated from Basel models where possible, the lifetime PDs are determined by projecting the 12-month PD using a term structure. For the wholesale methodology, the lifetime PD also takes into account credit migration, i.e. a customer migrating through the CRR bands over its life.

The ECL for wholesale stage 3 is determined on an individual basis using a discounted cash flow methodology. The expected future cash flows are based on the credit risk officer's estimates as at the reporting date, reflecting reasonable and supportable assumptions and projections of future recoveries and expected future receipts of interest. Collateral is taken into account if it is likely that the recovery of the outstanding amount will include realisation of collateral based on its estimated fair value of collateral at the time of expected realisation, less costs for obtaining and selling the collateral. The cash flows are discounted at a reasonable approximation of the original effective interest rate. For significant cases, cash flows under four different scenarios are probability-weighted by reference to the three economic scenarios applied more generally by the Group and the judgement of the credit risk officer in relation to the likelihood of the workout strategy succeeding or receivership being required. For less significant cases, the effect of different economic scenarios and work-out strategies is approximated and applied as an adjustment to the most likely outcome.

Period over which ECL is measured

Expected credit loss is measured from the initial recognition of the financial asset. The maximum period considered when measuring ECL (be it 12-month or lifetime ECL) is the maximum contractual period over which the group is exposed to credit risk. For wholesale overdrafts, credit risk management actions are taken no less frequently than on an annual basis and therefore this period is to the expected date of the next substantive credit review. The date of the substantive credit review also represents the initial recognition of the new facility. However, where the financial instrument includes both a drawn and undrawn commitment and the contractual ability to demand repayment and cancel the undrawn commitment does not serve to limit group's exposure to credit risk to the contractual notice period, the contractual period does not determine the maximum period considered. Instead, ECL is measured over the period the group remains exposed to credit risk that is not mitigated by credit risk management actions. This applies to retail overdrafts and credit cards, where the period is the average time taken for stage 2 exposures to default or close as performing accounts, determined on a portfolio basis and ranging from between two and six years. In addition, for these facilities it is not possible to identify the ECL on the loan commitment component separately from the financial asset component. As a result, the total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised as a provision.

Forward-looking economic inputs

The group will in general apply three forward-looking global economic scenarios determined with reference to external forecast distributions representative of our view of forecast economic conditions, the Consensus Economic Scenario approach. This approach is considered sufficient to calculate unbiased expected loss in most economic environments. They represent a 'most likely outcome' (the Central scenario) and two, less likely, 'Outer' scenarios, referred to as the Upside and Downside scenarios. The Central scenario is used by the annual operating planning process and, with regulatory modifications, will also be used in enterprise-wide stress tests. The Upside and Downside are constructed following a standard process supported by a scenario narrative reflecting the group's current top and emerging risks and by consulting external and internal subject matter experts. The relationship between the Outer scenarios and Central scenario will generally be fixed with the Central scenario being assigned a weighting of 80% and the Upside and Downside scenarios 10% each, with the difference between the Central and Outer scenarios in terms of economic severity being informed by the spread of external forecast distributions among professional industry forecasts. The Outer scenarios are economically plausible, internally consistent states of the world and will not necessarily be as severe as scenarios used in stress testing. The period of forecast is five years, after which the forecasts will revert to a view based on average past experience. The spread between the central and outer scenarios is grounded on consensus distributions of projected gross domestic product of UAE. The economic factors include, but are not limited to, gross domestic product, unemployment, interest rates, inflation and commercial property prices across all the countries in which the group operates.

In general, the consequences of the assessment of credit risk and the resulting ECL outputs will be probability-weighted using the standard probability weights. This probability weighting may be applied directly or the effect of the probability weighting determined on a periodic basis, at least annually, and then applied as an adjustment to the outcomes resulting from the central economic forecast. The central economic forecast is updated quarterly.

The group recognises that the Consensus Economic Scenario approach using three scenarios will be insufficient in certain economic environments. Additional analysis may be requested at management's discretion, including the production of extra scenarios. If conditions warrant, this could result in a management overlay for economic uncertainty which is included in the ECL.

Critical accounting estimates and judgements

The calculation of the group's ECL under IFRS 9 requires the group to make a number of judgements, assumptions and estimates. The most significant are set out below:

Judgements	Estimates
• Defining what is considered to be a significant increase in credit risk • Determining the lifetime and point of initial recognition of overdrafts and credit cards • Selecting and calibrating the PD, LGD and EAD models, which support the calculations, including making reasonable and supportable judgements about how models react to current and future economic conditions • Selecting model inputs and economic forecasts, including determining whether sufficient and appropriately weighted economic forecasts are incorporated to calculate unbiased expected loss	• The sections on pages 48 to 50, 'Measurement uncertainty and sensitivity analysis of ECL estimates' set out the assumptions used in determining ECL and provide an indication of the sensitivity of the result to the application of different weightings being applied to different economic assumptions

(j) Employee compensation and benefits

Share-based payments

Shares in HSBC Holdings plc are awarded to employees in certain cases. Equity-settled share-based payment arrangements entitle employees to receive equity instruments of HSBC.

The vesting period for these schemes may commence before the grant date if the employees have started to render services in respect of the award before the grant date. Expenses are recognised when the employee starts to render service to which the award relates.

Cancellations result from the failure to meet a non-vesting condition during the vesting period, and are treated as an acceleration of vesting recognised immediately in the income statement. Failure to meet a vesting condition by the employee is not treated as a cancellation, and the amount of expense recognised for the award is adjusted to reflect the number of awards expected to vest.

Post-employment benefit plans

The group contributes to the Government pension and social security schemes in the countries in which it operates, as per local regulations. Where the group's obligations under the plans are equivalent to a defined contribution plan the payments made are charged as an expense as they fall due. End of service benefits are calculated and paid in accordance with local law. The group's net obligation in respect of such end of service benefits is the amount of future benefits that employees have earned in return for their service in current and prior periods.

Defined benefit pension obligations are calculated using the projected unit credit method. The net charge to the income statement mainly comprises the service cost and the net interest on the net defined benefit asset or liability, and is presented in operating expenses.

Re-measurements of the net defined benefit asset or liability, which comprise actuarial gains and losses, return on plan assets excluding interest and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive income. The net defined benefit asset or liability represents the present value of defined benefit obligations reduced by the fair value of plan assets, after applying the asset ceiling test, where the net defined benefit surplus is limited to the present value of available refunds and reductions in future contributions to the plan.

The cost of obligations arising from other post-employment plans are accounted for on the same basis as defined benefit pension plans.

The group also makes contributions to the HSBC International Staff Retirement Benefit Scheme in respect of a small number of International Managers being seconded to the group by the HSBC Group. The group accounts for contributions to this scheme as if it is a defined contribution scheme on the basis that any actuarial gains and losses would not be material.

(k) Tax

Income tax comprises current tax and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case it is recognised in the same statement in which the related item appears.

Current tax is the tax expected to be payable on the taxable profit for the year and any adjustment to tax payable in respect of previous years. The group provides for potential current tax liabilities that may arise on the basis of the amounts expected to be paid to the tax authorities.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the balance sheet and the amounts attributed to such assets and liabilities for tax purposes. Deferred tax is calculated using the tax rates expected to apply in the periods in which the assets will be realised or the liabilities settled.

Current and deferred tax is calculated based on tax rates and laws enacted, or substantively enacted, by the balance sheet date.

Critical accounting estimates and judgements

The recognition of a deferred tax asset relies on an assessment of the probability and sufficiency of future taxable profits, future reversals of existing taxable temporary differences and ongoing tax planning strategies. In the absence of a history of taxable profits, the most significant judgements relate to expected future profitability and to the applicability of tax planning strategies.

(l) Debt securities in issue

Financial liabilities for debt securities issued are recognised when the group enters into contractual arrangements with counterparties and are initially measured at fair value, which is normally the consideration received, net of directly attributable transaction costs incurred. Subsequent measurement of financial liabilities, other than those measured at fair value through profit or loss and financial guarantees, is at amortised cost, using the effective interest method to amortise the difference between proceeds received, net of directly attributable transaction costs incurred, and the redemption amount over the expected life.

(m) Provisions, contingent liabilities and guarantees

Provisions

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation which has arisen as a result of past events and for which a reliable estimate can be made.

Critical accounting estimates and judgements

Judgement is involved in determining whether a present obligation exists and in estimating the probability, timing and amount of any outflows. Professional expert advice is taken on the assessment of litigation, property (including onerous contracts) and similar obligations. Provisions for legal proceedings and regulatory matters typically require a higher degree of judgement than other types of provisions. When matters are at an early stage, accounting judgements can be difficult because of the high degree of uncertainty associated with determining whether a present obligation exists, and estimating the probability and amount of any outflows that may arise. As matters progress, management and legal advisers evaluate on an ongoing basis whether provisions should be recognised, revising previous judgements and estimates as appropriate. At more advanced stages, it is typically easier to make judgements and estimates around a better defined set of possible outcomes. However, the amount provisioned can remain very sensitive to the assumptions used. There could be a wide range of possible outcomes for any pending legal proceedings, investigations or inquiries. As a result, it is often not practicable to quantify a range of possible outcomes for individual matters. It is also not practicable to meaningfully quantify ranges of potential outcomes in aggregate for these types of provisions because of the diverse nature and circumstances of such matters and the wide range of uncertainties involved. Provisions for customer remediation also require significant levels of estimation and judgement. The amounts of provisions recognised depend on a number of different assumptions, such as the volume of inbound complaints, the projected period of inbound complaint volumes, the decay rate of complaint volumes, the population identified as systemically mis-sold and the number of policies per customer complaint.

Contingent liabilities, contractual commitments and guarantees

Contingent liabilities

Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security and contingent liabilities related to legal proceedings or regulatory matters, are not recognised in the financial statements but are disclosed unless the probability of settlement is remote.

Financial guarantee contracts

Liabilities under financial guarantee contracts which are not classified as insurance contracts are recorded initially at their fair value, which is generally the fee received or present value of the fee receivable.

(n) Acceptances and endorsements

Acceptances arise when the group is under an obligation to make payments against documents drawn under letters of credit. Acceptances specify the amount of money, the date, and the person to which the payment is due. After acceptance, the instrument becomes an unconditional liability of the group and is therefore recognised as a financial liability with a corresponding contractual right of reimbursement from the customer recognised as a financial asset.

3 Net fee income

	2019	2018
	US$000	US$000
Credit Facilities	57,554	51,016
Remittances	36,690	35,508
Cards	152,941	132,773
Global Custody	37,319	34,513
Account services	41,129	29,046
Imports/exports	50,713	48,688
Others	191,755	181,858
Total Fee Income	568,101	513,402
Fee Expense	(114,586)	(106,102)
Net Fee Income	453,515	407,300

4 Changes in fair value of designated debt and related derivatives

	2019	2018
	US$000	US$000
Net income/(expense) arising on:		
– other changes in fair value	4,016	1,558
Year ended 31 Dec	4,016	1,558

5 Operating profit

Operating profit is stated after the following items:

	2019	2018
	US$000	US$000
Income		
Interest recognised on impaired financial assets	**5,117**	11,162
Interest recognised on financial assets measured at amortised cost	**1,102,972**	1,050,036
Interest recognised on financial assets measured at FVOCI	**173,083**	134,480
Fees earned on financial assets that are not at fair value through profit or loss (other than amounts included in determining the effective interest rate)	**422,445**	372,490
Fees earned on trust and other fiduciary activities	**18,973**	17,774
Expense		
Interest on financial instruments, excluding interest on financial liabilities held for trading or designated or otherwise mandatorily measured at fair value	**(194,257)**	(140,539)
Fees payable on financial liabilities that are not at fair value through profit or loss (other than amounts included in determining the effective interest rate)	**(92,054)**	(79,383)
Fees payable relating to trust and other fiduciary activities	**—**	(384)
Payments under lease sublease agreements[1]	**—**	(42,132)
Restructuring provisions	**(15,123)**	(5,068)
Gains/(losses)		
Gains recognised on assets held for sale	**—**	3,079
Gains on disposal of property, plant and equipment, intangible assets and non-financial investments	**(1,637)**	(56)
Change in expected credit loss charges and other credit impairment charges	**(99,990)**	(127,620)
– loans and advances to banks and customers	**(95,150)**	(143,268)
– loans commitments and guarantees	**(20,108)**	18,873
– other financial assets	**15,641**	(3,389)
– debt instruments measured at fair value though other comprehensive income	**(373)**	164

1 *In 2019, the charge in respect of leases is recorded in accordance with Note 2.1(a).*

6 Employee compensation and benefits

	2019	2018
	US$000	US$000
Wages and salaries	**538,181**	511,783
Social security costs	**6,526**	6,085
Post-employment benefits	**30,406**	30,922
Year ended 31 Dec	**575,113**	548,790

Share-based payments

'Wages and salaries' include the effect of share-based payments arrangements, all equity settled, as follows:

	2019	2018
	US$000	US$000
Restricted share awards	**9,755**	10,954
Year ended 31 Dec	**9,755**	10,954

Defined benefit pension plans

Net asset/(liability) under defined benefit pension plans

	Present value of defined benefit obligations	Net defined benefit liability
	US$000	US$000
At 1 Jan 2019	**(168,261)**	**(168,261)**
Service cost	**(23,521)**	**(23,521)**
– Current service cost	**(23,521)**	**(23,521)**
Net interest cost on the net defined benefit liability	**(4,997)**	**(4,997)**
Re-measurement effects recognised in other comprehensive income	**28,116**	**28,116**
– actuarial gains	**28,116**	**28,116**
Exchange differences and other movements	**(2,570)**	**(2,570)**
Benefits paid	**19,476**	**19,476**
At 31 Dec 2019	**(151,757)**	**(151,757)**
Present value of defined benefit obligation relating to:	**(151,757)**	**(151,757)**
– actives	**(148,744)**	**—**
– deferreds	**(3,013)**	**—**
At 1 Jan 2018	(175,445)	(175,445)
Service cost	(24,926)	(24,926)
– Current service cost	(24,926)	(24,926)
Net interest cost on the net defined benefit liability	(3,678)	(3,678)
Re-measurement effects recognised in other comprehensive income	23,859	23,859
– actuarial gains	23,859	23,859
Exchange differences and other movements	(1,758)	(1,758)
Benefits paid	13,687	13,687
At 31 Dec 2018	(168,261)	(168,261)
Present value of defined benefit obligation relating to:	(168,261)	(168,261)
– actives	(165,348)	—
– deferreds	(2,913)	—

Post-employment defined benefit plans' principal actuarial financial assumptions

The principal actuarial financial assumptions used to calculate the group's obligations under its defined benefit pension plans at 31 December for each year, and used as the basis for measuring periodic costs under the plans in the following years, were as follows:

Key actuarial assumptions for the principal plan

	Discount rate	Rate of pay increase	Combined rate of resignation and employment termination
	%	%	%
United Arab Emirates			
At 31 Dec 2019	**2.24**	**1.70**	**7.00**
At 31 Dec 2018	3.13	5.10	8.00

The group determines discount rates to be applied to its obligations in consultation with the plans' local actuaries, on the basis of current average yields of long term, high quality corporate bonds.

The effect of changes in key assumptions on the principal plan

	United Arab Emirates	
	2019	2018
	US$000	US$000
Discount rate		
Change in scheme obligation at year end from a 25bps increase	**(1,146)**	(2,330)
Change in scheme obligation at year end from a 25bps decrease	**3,853**	3,700
Change in following year scheme cost from a 25bps increase	**(29)**	(60)
Change in following year scheme cost from a 25bps decrease	**25**	224
Rate of pay increase		
Change in scheme obligation at year end from a 25bps increase	**4,008**	3,797
Change in scheme obligation at year end from a 25bps decrease	**(1,307)**	(2,438)
Change in following year scheme cost from a 25bps increase	**440**	685
Change in following year scheme cost from a 25bps decrease	**(430)**	(506)

7 Auditors' remuneration

	2019	2018
	US$000	US$000
Audit fees payable to PwC	**1,230**	1,179
Other audit fees payable	**30**	31
Year ended 31 Dec	**1,260**	1,210

Fees payable by the group to PwC

		2019	2018
	Footnotes	**US$000**	US$000
Fees for HSBC Bank Middle East Limited statutory audit	*1*	**1,230**	1,179
– relating to current year		**1,230**	1,168
– relating to prior year		**—**	11
Fees for other services provided to the group		**1,243**	1,211
– audit-related assurance services	*2*	**985**	648
– taxation-related services		**59**	280
– other non-audit services		**199**	283
Year ended 31 Dec		**2,473**	2,390

1 *Fees payable to PwC for the statutory audit of the consolidated financial statements of the group.*
2 *Including services for assurance and other services that relate to statutory and regulatory filings, including interim reviews.*

No fees were payable by the group to PwC as principal auditor for the following types of services: internal audit services and services related to litigation, recruitment and remuneration.

8 Tax

Tax expense

	2019	2018
	US$000	US$000
Current tax	**65,297**	90,301
– for this year	**77,723**	88,211
– adjustments in respect of prior years	**(12,426)**	2,090
Deferred tax	**25,389**	11,568
– origination and reversal of temporary differences	**25,389**	11,568
Year ended 31 Dec	**90,686**	101,869

The group provides for taxation at the appropriate rates in the countries in which it operates.

Tax reconciliation

The tax charged to the income statement differs from the tax charge that would apply if all profits had been taxed at the corporate tax rate applicable in UAE:

	2019		2018	
	US$000	**%**	US$000	%
Profit before tax	**645,243**		643,019	
Tax expense				
Taxation at UAE corporate tax rate of 20% (2018: 20%)	**129,049**	**20.0**	128,604	20.0
Effect of differently taxed overseas profits	**(4,956)**	**(0.8)**	(12,992)	(2.0)
Adjustments in respect of prior period liabilities	**(12,426)**	**(1.9)**	1,972	0.3
Non-taxable income and gains	**(31,228)**	**(4.8)**	(22,276)	(3.5)
Permanent disallowables	**6,599**	**1.0**	4,654	0.7
Local taxes and overseas withholding taxes	**3,648**	**0.6**	1,907	0.3
Overall tax expense	**90,686**	**14.1**	101,869	15.8

Accounting for taxes involves some estimation because the tax law is uncertain and the application requires a degree of judgement, which authorities may dispute. Liabilities are recognised based on best estimates of the probable outcome, taking into account external advice where appropriate. We do not expect significant liabilities to arise in excess of the amounts provided. The group only recognises current and deferred tax assets where recovery is probable.

Movement of deferred tax assets and liabilities

	Retirement benefits	Loan impairment allowances	Other	Total
	US$000	US$000	US$000	US$000
Assets	**13,149**	**185,038**	**6,795**	**204,982**
Liabilities	**—**	**—**	**—**	**—**
At 1 Jan 2019	**13,149**	**185,038**	**6,795**	**204,982**
Income statement	**—**	**(25,293)**	**(96)**	**(25,389)**
Other comprehensive income	**(8,748)**	**—**	**—**	**(8,748)**
Foreign exchange and other adjustments	**10**	**(1,703)**	**1,827**	**134**
At 31 Dec 2019	**4,411**	**158,042**	**8,526**	**170,979**
Assets	**4,411**	**158,042**	**8,526**	**170,979**
Liabilities	**—**	**—**	**—**	**—**
Assets	12,585	185,871	7,401	205,857
Liabilities	—	—	—	—
At 1 Jan 2018	12,585	185,871	7,401	205,857
IFRS 9 transitional adjustment	—	10,683	—	10,683
Income statement	(8)	(10,948)	(612)	(11,568)
Foreign exchange and other adjustments	572	(568)	6	10
At 31 Dec 2018	13,149	185,038	6,795	204,982
Assets	13,149	185,038	6,795	204,982
Liabilities	—	—	—	—

Unrecognised deferred tax

The amount of temporary differences, unused tax losses and tax credits for which no deferred tax asset is recognised in the balance sheet was nil (2018: nil).

9 Dividends

Dividends to shareholders of the parent company

	2019		2018	
	Per share	Total	Per share	Total
	US$	US$000	US$	US$000
Dividends paid on ordinary shares				
In respect of previous year:				
– fourth interim dividend	**—**	**—**	0.1504	140,000
– second interim dividend	**0.1074**	**100,000**	—	—
– third interim dividend	**0.1074**	**100,000**	—	—
In respect of current year:				
– first interim dividend	**—**	**—**	0.0537	50,000
Total	**0.2148**	**200,000**	0.2041	190,000

10 Segment analysis

Profit/(loss) for the period

	2019				
	Retail Banking and Wealth Management	**Commercial Banking**	**Global Banking and Markets**	**Corporate Centre**	**Total**
Full year	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**
Net interest income	**398,622**	**243,000**	**325,573**	**7,245**	**974,440**
Net fee income/(expense)	**115,601**	**134,072**	**208,041**	**(4,199)**	**453,515**
Net income from financial instruments held for trading or managed on a fair value basis	**36,408**	**28,937**	**117,758**	**29,651**	**212,754**
Other income	**6,613**	**12,175**	**14,460**	**25,722**	**58,970**
Net operating income before change in expected credit losses and other credit impairment charges	**557,244**	**418,184**	**665,832**	**58,419**	**1,699,679**
Change in expected credit losses and other credit impairment charges	**(47,230)**	**(47,314)**	**(4,762)**	**(684)**	**(99,990)**
Net operating income	**510,014**	**370,870**	**661,070**	**57,735**	**1,599,689**
Total operating expenses	**(364,713)**	**(237,945)**	**(270,610)**	**(81,829)**	**(955,097)**
Operating profit	**145,301**	**132,925**	**390,460**	**(24,094)**	**644,592**
Share of profit in associates	**—**	**—**	**—**	**651**	**651**
Profit before tax	**145,301**	**132,925**	**390,460**	**(23,443)**	**645,243**
By geographical region					
U.A.E.	**126,998**	**90,765**	**242,188**	**(30,094)**	**429,857**
Qatar	**7,942**	**29,538**	**73,578**	**567**	**111,625**
Rest of Middle East	**10,361**	**12,622**	**74,694**	**6,084**	**103,761**
Profit before tax	**145,301**	**132,925**	**390,460**	**(23,443)**	**645,243**

	2018				
Net interest income	396,477	232,830	319,766	36,890	985,963
Net fee income/(expense)	100,289	121,567	189,145	(3,701)	407,300
Net income from financial instruments held for trading or managed on a fair value basis	38,388	30,102	114,586	24,720	207,796
Other income	9,307	13,370	19,302	38,873	80,852
Net operating income before loan impairment charges and other credit risk	544,461	397,869	642,799	96,782	1,681,911
Change in expected credit losses and other credit impairment charges	(63,543)	(83,504)	18,967	460	(127,620)
Net operating income	480,918	314,365	661,766	97,242	1,554,291
Total operating expenses	(349,760)	(231,417)	(248,402)	(82,168)	(911,747)
Operating profit	131,158	82,948	413,364	15,074	642,544
Share of profit in associates	—	—	—	475	475
Profit before tax	131,158	82,948	413,364	15,549	643,019
By geographical region					
U.A.E.	112,476	57,712	277,165	(438)	446,915
Qatar	6,962	4,832	69,568	4,301	85,663
Rest of Middle East	11,720	20,404	66,631	11,686	110,441
Profit before tax	131,158	82,948	413,364	15,549	643,019

Balance sheet information

	2019				
	Retail Banking and Wealth Management	**Commercial Banking**	**Global Banking and Markets**	**Corporate Centre**	**Total**
	US$000	**US$000**	**US$000**	**US$000**	**US$000**
Loans and advances to customers (net)	**3,635,259**	**6,794,851**	**9,231,125**	**—**	**19,661,235**
Interest in associates	**—**	**—**	**—**	**3,074**	**3,074**
Total assets	**3,676,954**	**7,358,968**	**13,113,261**	**16,726,256**	**40,875,439**
Customer accounts	**11,484,691**	**4,694,234**	**7,547,577**	**12**	**23,726,514**
Total liabilities	**11,628,688**	**6,242,623**	**12,121,602**	**5,889,038**	**35,881,951**

	2018				
Loans and advances to customers (net)	3,674,797	6,412,781	9,985,797	—	20,073,375
Interest in associates	—	—	—	2,423	2,423
Total assets	3,695,109	6,800,324	13,624,166	11,409,452	35,529,051
Customer accounts	10,520,824	4,147,079	7,105,591	50,013	21,823,507
Total liabilities	10,683,194	5,321,362	10,775,700	4,199,695	30,979,951

Other financial information

Net operating income by global business

	Footnotes	Retail Banking and Wealth Management US$000	Commercial Banking US$000	Global Banking and Markets US$000	Corporate Centre US$000	Total US$000
		2019				
Net operating income	1	**557,244**	**418,184**	**665,832**	**58,419**	**1,699,679**
– external		**357,173**	**512,291**	**725,904**	**104,311**	**1,699,679**
– internal		**200,071**	**(94,107)**	**(60,072)**	**(45,892)**	**–**
		2018				
Net operating income	1	544,461	397,869	642,799	96,782	1,681,911
– external		382,978	465,531	698,808	134,594	1,681,911
– internal		161,483	(67,662)	(56,009)	(37,812)	–

1 *Net operating income before loan impairment charges and other credit risk provisions, also referred to as revenue.*

Information by country

	2019		2018	
	External net operating income[1]	**Non-current assets[2]**	External net operating income[1]	Non-current assets[2]
	US$000	**US$000**	US$000	US$000
U.A.E.	**1,327,580**	**339,722**	1,294,281	316,735
Qatar	**188,871**	**7,968**	191,241	5,386
Rest of Middle East	**183,228**	**11,514**	196,389	10,769
Total	**1,699,679**	**359,204**	1,681,911	332,890

1 *External net operating income is attributed to countries on the basis of the location of the branch responsible for reporting the results or advancing the funds.*
2 *Non-current assets consist of property, plant and equipment, other intangible assets and certain other assets expected to be recovered more than 12 months after the reporting period.*

Performance ratios

	Retail Banking and Wealth Management %	Commercial Banking %	Global Banking and Markets %	Corporate Centre %	Total %
	2019				
Year ended 31 December 2019					
Share of the group's profit before tax	**22.5**	**20.6**	**60.5**	**(3.6)**	**100.0**
Cost efficiency ratio	**65.4**	**56.9**	**40.6**	**140.1**	**56.2**
	2018				
Year ended 31 December 2018					
Share of the group's profit before tax	20.4	12.9	64.3	2.4	100.0
Cost efficiency ratio	64.2	58.2	38.6	84.9	54.2

11 Trading assets

	2019 US$000	2018 US$000
Trading assets:		
– not subject to repledge or resale by counterparties	**194,800**	246,156
At 31 Dec	**194,800**	246,156
Debt securities	**136,087**	194,711
Treasury and other eligible bills	**58,713**	51,445
At 31 Dec	**194,800**	246,156

12 Fair values of financial instruments carried at fair value

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk taker.

Where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is used. For inactive markets, the group sources alternative market information, with greater weight given to

information that is considered to be more relevant and reliable. Examples of the factors considered are price observability, instrument comparability, consistency of data sources, underlying data accuracy and timing of prices.

For fair values determined using valuation models, the control framework includes development or validation by independent support functions of the model logic, inputs, model outputs and adjustments. Valuation models are subject to a process of due diligence before becoming operational and are calibrated against external market data on an ongoing basis.

The majority of financial instruments measured at fair value are in GB&M. GB&M's fair value governance structure comprises its Finance function, Valuation Committee and a Valuation Committee Review Group. Finance is responsible for establishing procedures governing valuation and ensuring fair values are in compliance with accounting standards. The fair values are reviewed by the Valuation Committees, which consist of independent support functions. These Committees are overseen by the Valuation Committee Review Group, which considers all material subjective valuations.

Financial liabilities measured at fair value

In certain circumstances, the group records its own debt in issue at fair value, based on quoted prices in an active market for the specific instrument concerned, where available. An example of this is where own debt in issue is hedged with interest rate derivatives. When quoted market prices are unavailable, the own debt in issue is valued using valuation techniques, the inputs for which are either based upon quoted prices in an inactive market for the instrument, or are estimated by comparison with quoted prices in an active market for similar instruments. In both cases, the fair value includes the effect of applying the credit spread which is appropriate to the group's liabilities. The change in fair value of issued debt securities attributable to the group's own credit spread is computed as follows: for each security at each reporting date, an externally verifiable price is obtained or a price is derived using credit spreads for similar securities for the same issuer. Then, using discounted cash flow, each security is valued using a Libor-based discount curve. The difference in the valuations is attributable to the group's own credit spread. This methodology is applied consistently across all securities.

The credit spread applied to these instruments is derived from the spreads at which the group issues structured notes.

Gains and losses arising from changes in the credit spread of liabilities issued by the group is taken in reserves (OCI), the residual risks (rates, volatility, time effects) are Fair valued through Profits and Losses.

Fair value hierarchy

Fair values of financial assets and liabilities are determined according to the following hierarchy:

- Level 1 – valuation technique using quoted market price: financial instruments with quoted prices for identical instruments in active markets that the group can access at the measurement date.
- Level 2 – valuation technique using observable inputs: financial instruments 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 – valuation technique with significant unobservable inputs: financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

Financial instruments carried at fair value and bases of valuation

	2019				2018			
	Level 1	**Level 2**	**Level 3**	**Total**	Level 1	Level 2	Level 3	Total
	US$000	**US$000**	**US$000**	**US$000**	US$000	US$000	US$000	US$000
Recurring fair value measurements at 31 Dec								
Assets								
Trading assets	**3,413**	**111,427**	**79,960**	**194,800**	—	166,201	79,955	246,156
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	**—**	**—**	**40,731**	**40,731**	—	—	47,839	47,839
Derivatives	**—**	**1,170,654**	**5,642**	**1,176,296**	—	953,222	—	953,222
Financial investments	**4,513,159**	**5,925,563**	**45,169**	**10,483,891**	2,099,446	3,378,498	256,832	5,734,776
Liabilities								
Trading liabilities	**—**	**47,989**	**—**	**47,989**	—	59,023	—	59,023
Financial liabilities designated at fair value	**—**	**2,514,102**	**—**	**2,514,102**	—	2,017,966	—	2,017,966
Derivatives	**—**	**1,091,209**	**442**	**1,091,651**	—	951,976	—	951,976

The balance as at 31 December 2019 under financial assets designated at fair value through profit or loss is US$ 40.7m (2018: US $47.8m) and financial assets mandatorily measured at fair value through profit or loss is nil (2018: nil).

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each semi-annual reporting period. Transfers into and out of levels of the fair value hierarchy are primarily attributable to observability of valuation inputs and price transparency.

During 2019 there was a transfer of US$ nil (2018: US$2,099m) from Level 2 to Level 1 Financial Investments. The transfers from Level 2 to Level 3 during the year are shown in 'Movement in Level 3 financial instruments' on page 31.

Fair value adjustments

Fair value adjustments are adopted when the group considers that there are additional factors that would be considered by a market participant which are not incorporated within the valuation model.

Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement. For example, as models are enhanced, fair value adjustments may no longer be required.

Bid-offer

IFRS 13 requires use of the price within the bid-offer spread that is most representative of fair value. Valuation models will typically generate mid-market values. The bid-offer adjustment reflects the extent to which bid-offer cost would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments or by disposing of or unwinding the position.

Uncertainty

Certain model inputs may be less readily determinable from market data, and/or the choice of model itself may be more subjective. In these circumstances, there exists a range of possible values that the financial instrument or market parameter may assume and an adjustment may be necessary to reflect the likelihood that in estimating the fair value of the financial instrument, market participants would adopt more conservative values for uncertain parameters and/or model assumptions than those used in the valuation model.

Credit and debit valuation adjustment

The credit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that the counterparty may default and that the group may not receive the full market value of the transactions.

The debit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that the group may default, and that the group may not pay full market value of the transactions.

The group calculates a separate credit valuation adjustment and debit valuation adjustment for each group legal entity, and within each entity for each counterparty to which the entity has exposure.

The group calculates the credit valuation adjustment by applying the probability of default ('PD') of the counterparty conditional on the non-default of the group to the expected positive exposure to the counterparty and multiplying the result by the loss expected in the event of default. Conversely, the group calculates the debit valuation adjustment by applying the PD of the group, conditional on the non-default of the counterparty, to the expected positive exposure of the counterparty to the group and multiplying by the loss expected in the event of default. Both calculations are performed over the life of the potential exposure.

Funding fair value adjustment

The funding fair value adjustment is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. This includes the uncollateralised component of collateralised derivatives in addition to derivatives that are fully uncollateralised. The expected future funding exposure is calculated by a simulation methodology, where available. The expected future funding exposure is adjusted for events that may terminate the exposure such as the default of the group or the counterparty.

Model limitation

Models used for portfolio valuation purposes may be based upon a simplified set of assumptions that do not capture all current and future material market characteristics. In these circumstances, model limitation adjustments are adopted.

Inception profit (Day 1 P&L reserves)

Inception profit adjustments are adopted when the fair value estimated by a valuation model is based on one or more significant unobservable inputs.

Fair value valuation bases

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs – Level 3

	Assets					Liabilities	
	Financial Investments	Trading Assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Total	Derivatives	Total
	US$000	US$000	US$000	US$000	US$000	US$000	US$000
Private equity including strategic investments	**45,169**	**–**	**40,731**	**–**	**85,900**	**–**	**–**
Other derivatives	**–**	**–**	**–**	**5,642**	**5,642**	**442**	**442**
Other portfolios	**–**	**79,960**	**–**	**–**	**79,960**	**–**	**–**
At 31 Dec 2019	**45,169**	**79,960**	**40,731**	**5,642**	**171,502**	**442**	**442**
Private equity including strategic investments	39,203	–	47,839	–	87,042	–	–
Other derivatives	–	–	–	–	–	–	–
Other portfolios	217,629	79,955	–	–	297,584	–	–
At 31 Dec 2018	256,832	79,955	47,839	–	384,626	–	–

Private equity including strategic investments

The investment's fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors; by reference to market valuations for similar entities quoted in an active market; or the price at which similar companies have changed ownership.

Derivatives

OTC (i.e. non-exchange traded) derivatives are valued using valuation models. Valuation models calculate the present value of expected future cash flows, based upon 'no-arbitrage' principles. For many vanilla derivative products, such as interest rate swaps and European options, the modelling approaches used are standard across the industry. For more complex derivative products, there may be some differences in market practice. Inputs to valuation models are determined from observable market data wherever possible, including prices available from exchanges, dealers, brokers or providers of consensus pricing. Certain inputs may not be observable in the market directly, but can be determined from observable prices via model calibration procedures or estimated from historical data or other sources.

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

Movement in Level 3 financial instruments

	Assets				Liabilities
	Financial Investments	Trading Assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Derivatives
	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**256,832**	**79,955**	**47,839**	**—**	**—**
Total gain/(losses) recognised in profit or loss	**—**	**5**	**(5,853)**	**(1,856)**	**—**
– net income/expense from financial instruments held for trading or managed on a fair value basis	**—**	**5**	**—**	**(1,856)**	**—**
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**—**	**—**	**(5,853)**	**—**	**—**
Total gains recognised in other comprehensive income	**8,731**	**—**	**—**	**—**	**—**
– financial investments: fair value gains	**8,731**	**—**	**—**	**—**	**—**
Purchases	**—**	**—**	**—**	**8,651**	**442**
Sales	**—**	**—**	**—**	**—**	**—**
Settlements	**—**	**—**	**(1,255)**	**(1,153)**	**—**
Transfers out	**(220,394)**	**—**	**—**	**—**	**—**
Transfers in	**—**	**—**	**—**	**—**	**—**
At 31 Dec 2019	**45,169**	**79,960**	**40,731**	**5,642**	**442**
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2019	**—**	**5**	**(5,853)**	**(1,856)**	**—**
– net expense from financial instruments held for trading or managed on a fair value basis	**—**	**5**	**—**	**(1,856)**	**—**
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	**—**	**—**	**(5,853)**	**—**	**—**
At 1 Jan 2018	60,094	—	58,139	3,005	3,005
Total losses recognised in profit or loss	—	—	(10,300)	—	—
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	(10,300)	—	—
Total losses recognised in other comprehensive income	(20,819)	—	—	—	—
– financial investments: fair value losses	(20,819)	—	—	—	—
Sales	(66)	—	—	—	—
Settlements	—	—	—	(3,005)	(3,005)
Transfers in	217,623	79,955	—	—	—
At 31 Dec 2018	256,832	79,955	47,839	—	—
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2018	—	—	(10,300)	—	—
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	—	—	(10,300)	—	—

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

Sensitivity of Level 3 fair values to reasonably possible alternative assumptions

		31 Dec 2019				31 Dec 2018			
		Reflected in profit or loss		Reflected in OCI		Reflected in profit or loss		Reflected in OCI	
		Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes
	Footnotes	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
Derivatives, trading assets and trading liabilities	*1*	**61**	**(3,101)**	**47**	**(23)**	9	(1,809)	—	—
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		**4,073**	**(2,037)**	**—**	**—**	4,784	(2,392)	—	—
Financial investments		**—**	**—**	**4,517**	**(2,258)**	—	—	5,292	(3,141)
Total		**4,134**	**(5,138)**	**4,564**	**(2,281)**	4,793	(4,201)	5,292	(3,141)

1 Derivatives, trading assets and trading liabilities are presented as one category to reflect the manner in which these instruments are risk-managed.

Sensitivity of Level 3 fair values to reasonably possible alternative assumptions by instrument type

	2019				2018			
	Reflected in profit or loss		Reflected in OCI		Reflected in profit or loss		Reflected in OCI	
	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
Private equity including strategic investments	4,073	(2,037)	4,517	(2,258)	4,784	(2,392)	5,292	(1,961)
Other derivatives	61	(1,301)	—	—	9	(9)	—	—
Other portfolios	—	(1,800)	47	(23)	—	(1,800)	—	(1,180)
At 31 Dec	4,134	(5,138)	4,564	(2,281)	4,793	(4,201)	5,292	(3,141)

Favourable and unfavourable changes are determined on the basis of changes in the value of the instrument as a result of varying the levels of the unobservable parameters using statistical techniques. The statistical techniques aim to apply a 95% confidence interval. When parameters are not amenable to statistical analysis, the quantification of uncertainty is judgemental, but is also guided by the 95% confidence interval. When the fair value of a financial instrument is affected by more than one unobservable assumption, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

Key unobservable inputs to Level 3 financial instruments

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value		2019				2018			
	Assets	Liabilities	Full range of inputs		Core range of inputs[1]		Full range of inputs		Core range of inputs[1]	
	US$000	US$000	Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher
Private equity including strategic investments	85,900	—	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Interest rate / other derivatives	5,642	442	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EM bonds	79,960	—	100%	100%	100%	100%	100%	100%	100%	100%
At 31 Dec	171,502	442								

1 *The core range of inputs is the estimated range within which 90% of the inputs fall.*

A description of the categories of key unobservable inputs is given below.

Private equity including strategic investments

Given the bespoke nature of the analysis in respect of each holding, it is not practical to quote a range of key unobservable inputs.

Prepayment rates

Prepayment rates are a measure of the anticipated future speed at which a loan portfolio will be repaid in advance of the due date. They vary according to the nature of the loan portfolio and expectations of future market conditions, and may be estimated using a variety of evidence, such as prepayment rates implied from proxy observable security prices, current or historical prepayment rates and macroeconomic modelling.

Market proxy

Market proxy pricing may be used for an instrument for which specific market pricing is not available, but evidence is available in respect of instruments that have common characteristics. In some cases it might be possible to identify a specific proxy, but more generally evidence across a wider range of instruments will be used to understand the factors that influence current market pricing and the manner of that influence.

Volatility

Volatility is a measure of the anticipated future variability of a market price. It varies by underlying reference market price, and by strike and maturity of the option.

Certain volatilities, typically those of a longer-dated nature, are unobservable and are estimated from observable data. The range of unobservable volatilities reflects the wide variation in volatility inputs by reference market price. The core range is significantly narrower than the full range because these examples with extreme volatilities occur relatively rarely within the group portfolio.

Correlation

Correlation is a measure of the inter-relationship between two market prices and is expressed as a number between minus one and one. It is used to value more complex instruments where the payout is dependent upon more than one market price. There is a wide range of instruments for which correlation is an input, and consequently a wide range of both same-asset correlations and cross-asset correlations is used. In general, the range of same-asset correlations will be narrower than the range of cross-asset correlations. Unobservable correlations may be estimated based upon a range of evidence, including consensus pricing services, group trade prices, proxy correlations and examination of historical price relationships. The range of unobservable correlations quoted in the table reflects the wide variation in correlation inputs by market price pair.

Credit spread

Credit spread is the premium over a benchmark interest rate required by the market to accept a lower credit quality. In a discounted cash flow model, the credit spread increases the discount factors applied to future cash flows, thereby reducing the value of an asset. Credit spreads may be implied from market prices. Credit spreads may not be observable in more illiquid markets.

Inter-relationships between key unobservable inputs

Key unobservable inputs to Level 3 financial instruments may not be independent of each other. As described above, market variables may be correlated. This correlation typically reflects the manner in which different markets tend to react to macroeconomic or other events. Furthermore, the impact of changing market variables upon the group portfolio will depend upon the group's net risk position in respect of each variable.

13 Fair values of financial instruments not carried at fair value

Fair values of financial instruments not carried at fair value and bases of valuation

		Fair value			
	Carrying amount	Quoted market price Level 1	Observable inputs Level 2	Significant unobservable inputs Level 3	Total
	US$000	US$000	US$000	US$000	US$000
At 31 Dec 2019					
Assets					
Loans and advances to banks	**5,797,423**	**—**	**5,793,326**	**—**	**5,793,326**
Loans and advances to customers	**19,661,235**	**—**	**—**	**19,535,146**	**19,535,146**
Reverse repurchase agreements – non-trading	**741,633**	**—**	**741,633**	**—**	**741,633**
Liabilities					
Deposits by banks	**3,806,270**	**—**	**3,808,351**	**—**	**3,808,351**
Customer accounts	**23,726,514**	**—**	**23,846,077**	**—**	**23,846,077**
Repurchase agreements – non-trading	**—**	**—**	**—**	**—**	**—**
Debt securities in issue	**1,788,486**	**—**	**1,765,206**	**—**	**1,765,206**
At 31 Dec 2018					
Assets					
Loans and advances to banks	5,057,308	—	5,045,941	—	5,045,941
Loans and advances to customers	20,073,375	—	—	19,726,291	19,726,291
Reverse repurchase agreements – non-trading	755,076	—	755,076	—	755,076
Liabilities					
Deposits by banks	1,582,477	—	1,582,218	—	1,582,218
Customer accounts	21,823,507	—	21,912,519	—	21,912,519
Repurchase agreements – non-trading	2,999	—	2,999	—	2,999
Debt securities in issue	2,490,371	—	2,459,605	—	2,459,605

Other financial instruments not carried at fair value are typically short-term in nature and re-priced to current market rates frequently. Accordingly, their carrying amount is a reasonable approximation of fair value.

Valuation

The fair value measurement is the group's estimate of 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. It does not reflect the economic benefits and costs that the group expects to flow from the instruments' cash flows over their expected future lives. Other reporting entities may use different valuation methodologies and assumptions in determining fair values for which no observable market prices are available.

Loans and advances to banks and customers

The fair value of loans and advances is based on observable market transactions, where available. In the absence of observable market transactions, fair value is estimated using valuation models that incorporate a range of input assumptions. These assumptions may include forward looking discounted cash flow models using assumptions which the group believes are consistent with those which would be used by market participants in valuing such loans; and trading inputs from other market participants which includes observed primary and secondary trades.

Loans are grouped, as far as possible, into homogeneous groups and stratified by loans with similar characteristics to improve the accuracy of estimated valuation outputs. The stratification of a loan book considers all material factors, including vintage, origination period, estimates of future interest rates, prepayment speeds, delinquency rates, loan-to-value ratios, the quality of collateral, default probability, and internal credit risk ratings.

The fair value of a loan reflects both loan impairments at the balance sheet date and estimates of market participants' expectations of credit losses over the life of the loans, and the fair value effect of repricing between origination and the balance sheet date.

Financial investments

The fair values of listed financial investments are determined using bid market prices. The fair values of unlisted financial investments are determined using valuation techniques that take into consideration the prices and future earnings streams of equivalent quoted securities.

Deposits by banks and customer accounts

Fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities. The fair value of a deposit repayable on demand is approximated by its carrying value.

Debt securities in issue and subordinated liabilities

Fair values are determined using quoted market prices at the balance sheet date where available, or by reference to quoted market prices for similar instruments.

Repurchase and reverse repurchase agreements – non-trading

Fair values approximate carrying amounts as their balances are generally short dated.

Debt securities

Subject to available quotes, the group uses composite market data to price debt securities at FVOCI. This is applicable to High Quality Liquid Assets ('HQLA') portfolio. For local currency bonds, where such market data is not available, verified internal valuation models are used for valuations. These are normally Local Government and Central bank securities issued in their local currencies and uses market data published by the issuing entities.

14 Derivatives

Notional contract amounts and fair values of derivatives by product contract type held by the group

	Notional contract amount		Fair value – Assets			Fair value – Liabilities		
	Trading	Hedging	Trading	Hedging	Total	Trading	Hedging	Total
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
Foreign exchange	**104,667,665**	**1,099,935**	**456,915**	**23,036**	**479,951**	**430,776**	**44**	**430,820**
Interest rate	**48,603,437**	**6,072,225**	**609,962**	**70,040**	**680,002**	**608,383**	**40,896**	**649,279**
Equities	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Credit	**1,052,117**	**—**	**5,218**	**—**	**5,218**	**427**	**—**	**427**
Commodity and other	**662,673**	**—**	**11,125**	**—**	**11,125**	**11,125**	**—**	**11,125**
At 31 Dec 2019	**154,985,892**	**7,172,160**	**1,083,220**	**93,076**	**1,176,296**	**1,050,711**	**40,940**	**1,091,651**
Foreign exchange	80,982,182	1,922,755	413,613	23,240	436,853	448,502	59	448,561
Interest rate	52,054,524	5,749,262	436,043	43,973	480,016	445,607	21,899	467,506
Equities	3,740	—	442	—	442	442	—	442
Credit	96,339	—	807	—	807	326	—	326
Commodity and other	686,791	—	35,104	—	35,104	35,141	—	35,141
At 31 Dec 2018	133,823,576	7,672,017	886,009	67,213	953,222	930,018	21,958	951,976

The notional contract amounts of derivatives held for trading purposes and derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.

Use of derivatives

The group transacts derivatives for three primary purposes: to create risk management solutions for clients, to manage the portfolio risks arising from client business and to manage and hedge the group's own risks.

The group's derivative activities give rise to significant open positions in portfolios of derivatives. These positions are managed constantly to ensure that they remain within acceptable risk levels. When entering into derivative transactions, the group employs the same credit risk management framework to assess and approve potential credit exposures that it uses for traditional lending.

Trading derivatives

Most of the group's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making and risk management. Market-making entails quoting bid and offer prices to other market participants for the purpose of generating revenues based on spread and volume. Risk management activity is undertaken to manage the risk arising from client transactions, with the principal purpose of retaining client margin. Other derivatives classified as held for trading include non-qualifying hedging derivatives.

Hedge accounting derivatives

Fair value hedges

The group enters into fixed-for-floating-interest-rate swaps to manage the exposure to changes in fair value due to movements in market interest rates on certain fixed rate financial instruments which are not measured at fair value through profit or loss, including debt securities held and issued.

Hedging instrument by hedged risk

	Hedging Instrument				
		Carrying amount			
	Notional amount[1]	Assets	Liabilities	Balance sheet presentation	Change in fair value[2]
Hedged Risk	US$000	US$000	US$000		US$000
Interest rate	**2,323,210**	**5,408**	**40,674**	**Derivatives**	**(34,934)**
At 31 Dec 2019	**2,323,210**	**5,408**	**40,674**		**(34,934)**
Interest rate	1,680,150	11,688	9,029	Derivatives	(5,835)
At 31 Dec 2018	1,680,150	11,688	9,029		(5,835)

1 The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.

2 Used in effectiveness testing; comprising the full fair value change of the hedging instrument.

Hedged item by hedged risk

	Hedged Item						In-effectiveness	
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount					
	Assets	Liabilities	Assets	Liabilities	Balance sheet presentation	Change in fair value[1]	Recognised in profit and loss	Profit and loss presentation
Hedged Risk	$000	$000	$000	$000		$000	$000	
Interest rate	**1,980,465**	**—**	**28,808**	**—**	**Financial investment**	**36,096**		
Interest rate	**150,421**	**—**	**1,422**	**—**	**L&A to Bank**	**1,018**		
Interest rate	**520,607**	**—**	**4,592**	**—**	**L&A to Cust**	**2,478**	**136**	**Net income from financial instruments held for trading or managed on a fair value basis**
Interest rate	**—**	**113,033**	**—**	**2,631**	**Debt issued**	**(4,522)**		
Interest rate	**—**	**—**	**—**	**—**	**Depo by Bank**	**—**		
At 31 Dec 2019	**2,651,493**	**113,033**	**34,822**	**2,631**		**35,070**	**136**	
Interest rate	1,202,221	—	(11,716)	—	FVOCI	5,345		
Interest rate	—	—	—	—	L&A to Bank	(267)		
Interest rate	—	—	—	—	L&A to Cust	404	(33)	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	—	119,169	—	2,506	Debt issued	936		
Interest rate	—	259,910	—	—	Depo by Bank	(616)		
At 31 Dec 2018	1,202,221	379,079	(11,716)	2,506		5,802	(33)	

1 *Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component. The hedged item is either the benchmark interest rate risk portion within the fixed rate of the hedged item or the full fixed rate and it is hedged for changes in fair value due to changes in the benchmark interest rate risk.*

Sources of hedge ineffectiveness may arise from basis risk including but not limited to the discount rates used for calculating the fair value of derivatives, hedges using instruments with a non-zero fair value and notional and timing differences between the hedged items and hedging instruments.

For some debt securities held, the group manages interest rate risk in a dynamic risk management strategy. The assets in scope of this strategy are high quality fixed-rate debt securities, which may be sold to meet liquidity and funding requirements.

The interest rate risk of the group fixed rate debt securities issued is managed in a non-dynamic risk management strategy.

Cash flow hedges

The group's cash flow hedging instruments consist principally of interest rate swaps and cross-currency swaps that are used to manage the variability in future interest cash flows of non-trading financial assets and liabilities, arising due to changes in market interest rates and foreign-currency basis.

The group applies macro cash flow hedging for interest-rate risk exposures on portfolios of replenishing current and forecasted issuances of non-trading assets and liabilities that bear interest at variable rates, including rolling such instruments. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities on the basis of their contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate cash flows representing both principal balances and interest cash flows across all portfolios are used to determine the effectiveness and ineffectiveness. Macro cash flow hedges are considered to be dynamic hedges.

The group also hedges the variability in future cash-flows on foreign-denominated financial assets and liabilities arising due to changes in foreign exchange market rates with cross-currency swaps; these are considered non-dynamic hedges.

Hedging instrument by hedged risk

	Hedging Instrument					Hedged Item	Ineffectiveness	
		Carrying amount						
	Notional amount[1]	Assets	Liabilities	Balance sheet presentation	Change in fair value[2]	Change in fair value[3]	Recognised in profit and loss	Profit and loss presentation
Hedged Risk	$000	$000	$000		$000	$000	$000	
Foreign currency	**1,099,935**	**23,036**	**44**	**Derivatives**	**646**	**—**	**—**	**Net income from financial instruments held for trading or managed on a fair value basis**
Interest rate	**3,749,015**	**64,632**	**222**	**Derivatives**	**43,767**	**44,419**	**6**	
At 31 Dec 2019	**4,848,950**	**87,668**	**266**		**44,413**	**44,419**	**6**	
Foreign currency	1,922,755	23,240	59	Derivatives	(1,041)	—	(5)	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	4,069,112	32,285	12,870	Derivatives	(12,340)	(13,208)	178	
At 31 Dec 2018	5,991,867	55,525	12,929		(13,381)	(13,208)	173	

1 *The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.*
2 *Used in effectiveness testing; comprising the full fair value change of the hedging instrument not excluding any component.*
3 *Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component.*

Hedging Instruments impacted by IBOR Reform

Following the request received by the Financial Stability Board from the G20, a fundamental review and reform of the major interest rate benchmarks is under way across the world's largest financial markets. This reform was not contemplated when IAS 39 was published, and consequently the IASB has published a set of temporary exceptions from applying specific hedge accounting requirements to provide clarification on how the standard should be applied in these circumstances.

Amendments to IFRS 9 and IAS 39 were endorsed in January 2020 and modify specific hedge accounting requirements. Under these temporary exceptions, interbank offered rates ('Ibors') are assumed to continue unaltered for the purposes of hedge accounting until such time as the uncertainty is resolved.

The application of this set of temporary exceptions is mandatory for accounting periods starting on or after 1 January 2020, but early adoption is permitted. HSBC elected to apply these exceptions for the year ended 31 December 2019. Significant judgement will be required in determining when uncertainty is expected to be resolved and therefore when the temporary exceptions will cease to apply. However, at 31 December 2019, the uncertainty continued to exist and so the temporary exceptions apply to all of the group's hedge accounting relationships that reference benchmarks subject to reform or replacement.

The group has cash flow and fair value hedge accounting relationships that are exposed to different Ibors, predominantly US dollar Libor, Eibor, sterling Libor, and Euribor subject to the market-wide benchmarks reform. Many of the existing derivatives, loans, bonds, and other financial instruments designated in relationships referencing these benchmarks will transition to new risk-free rates ('RFRs') in different ways and at different times. External progress on the transition to RFRs is being monitored, with the objective of ensuring a smooth transition for the group's hedge accounting relationships. The specific issues arising will vary with the details of each hedging relationship, but may arise due to the transition of existing products included in the designation, a change in expected volumes of products to be issued, a change in contractual terms of new products issued, or a combination of these factors. Some hedges may need to be de-designated and new relationships entered into, while others may survive the market-wide benchmarks reform.

The hedge accounting relationships that are affected by the adoption of the temporary exceptions hedge items presented in the balance sheet as 'Financial assets designated and otherwise mandatorily measured at fair value through other comprehensive income', 'Loans and advances to customers', 'Debt securities in issue' and 'Deposits by banks'.

The notional amounts of Interest Rate derivatives designated in hedge accounting relationships represent the extent of the risk exposure managed by the group that is directly affected by market-wide benchmarks reform and impacted by the temporary exceptions. Although the group has designated hedge accounting relationships which involve cross currency swaps, these are not significant and have not been presented below.

Hedging Instrument impacted by IBOR Reform

	Hedging instrument						
	Impacted by IBOR Reform					NOT Impacted by IBOR Reform	Notional Contract Amount[1]
	EUR	GBP	USD	Other	Total		
	$000	$000	$000	$000	$000	$000	$000
Fair Value Hedges	11,224	111,924	2,100,148	99,914	2,323,210	–	2,323,210
Cash Flow Hedges	–	–	1,913,261	1,835,754	3,749,015	–	3,749,015
At 31 Dec 2019	**11,224**	**111,924**	**4,013,409**	**1,935,668**	**6,072,225**	**–**	**6,072,225**

1 *The notional contract amounts of interest rate derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.*

15 Financial investments

Carrying amount of financial investments

	Footnotes	2019	2018
		US$000	US$000
Financial investment measured at fair value through other comprehensive income			
Treasury and other eligible bills		2,328,599	1,495,474
Debt securities		8,110,123	4,200,099
Equity securities[1]	1	45,169	39,203
At 31 Dec		**10,483,891**	5,734,776

1 *The dividends recognised on these investments during the year were nil (2018: US$1m).*

16 Assets charged as security for liabilities, and collateral accepted as security for assets

Collateral accepted as security for assets

The fair value of financial assets accepted as collateral that the group is permitted to sell or repledge in the absence of default is US$864m (2018: US$917m). The fair value of any such collateral sold or repledged is nil (2018: nil). The group is obliged to return these assets. These transactions are conducted under terms that are usual and customary to standard securities borrowing and reverse repurchase agreements.

The fair value of assets pledged as collateral but that do not qualify for derecognition is nil (2018: US$ 3m).

17 Interests in associates and joint arrangement

Associates of the group

	At 31 Dec 2019			
	Country of incorporation	Principal activity	The group's interest in equity capital	Issued equity capital
MENA Infrastructure Fund (GP) Limited	**Dubai, UAE**	**Private Equity fund management**	**33.33%**	**US$0.99m fully paid**

The above associate is not considered significant to the group and is unlisted.

Movements in interests in associates

	2019	2018
	US$000	US$000
At 1 Jan	**2,423**	1,948
Disposals	**—**	—
Share of results	**651**	475
At 31 Dec	**3,074**	2,423

Joint arrangement of the group

	At 31 Dec 2019			
	Country of incorporation	Principal activity	The group's interest in equity capital	Issued equity capital
HSBC Middle East Leasing Partnership – (Joint operation)	**Dubai, UAE**	**Leasing**	**15.00%**	**US$621m fully paid**

The results of the joint arrangement have been included on proportionate basis.

18 Investments in subsidiaries

Subsidiary undertakings of the bank

	At 31 Dec 2019	
	Country of incorporation or registration	Bank's interest in equity capital
HSBC Financial Services (Middle East) Limited (in liquidation)	**Dubai, UAE**	**100%**
HSBC Middle East Finance Company Limited	**Dubai, UAE**	**80%**
HSBC Middle East Securities LLC	**Dubai, UAE**	**100%**
HSBC Insurance Services (Lebanon) S.A.L. (in liquidation)	**Lebanon**	**100%**
HSBC Bank Middle East Representative Office Morocco S.A.R.L. (in liquidation)	**Morocco**	**100%**

All the above prepare their financial statements up to 31 December and the countries of operation are the same as the countries of incorporation.

The subsidiary undertakings are unlisted, directly owned and are included in the consolidated financial statements of the group.

In order to comply with local legal requirements, the ownership of the investment in HSBC Middle East Securities LLC is held 49.00% in the name of the bank and 51.00% in the personal name of Mr. Abdul Wahid Al Ulama, as nominee. Under a Memorandum of Understanding, the nominee has transferred his legal and/or beneficial interest in HSBC Middle East Securities LLC to the bank. The total book value of the assets of HSBC Middle East Securities LLC amount to US$3.2m (2018: US$3.5m).

19 Prepayments, accrued income and other assets

	2019	2018
	US$000	US$000
Prepayments and accrued income	**204,566**	185,504
Endorsements and acceptances	**807,661**	505,981
Other accounts	**261,409**	179,579
Property, plant and equipment*	**293,134**	299,003
At 31 Dec	**1,566,770**	1,170,067

*As at 31 December 2019, net book value of HSBC Tower was US$ 265m (2018: US$ 253m) and depreciation charged during the year was US$ 10m (2018: US$ 3m).

20 Intangible assets

Included within intangible assets is internally generated software with a net carrying value of US$61m (2018: US$29m).

During the year, capitalisation of internally generated software was US$41m (2018: US$27m) and amortisation was US$8m (2018: US$4m).

21 Trading liabilities

	2019	2018
	US$000	US$000
Customer accounts	–	9,964
Other liabilities – net short positions in securities	47,989	49,059
At 31 Dec	47,989	59,023

22 Financial liabilities designated at fair value

	2019	2018
	US$000	US$000
Deposits by bank and customer accounts	778,684	259,853
Debt securities in issue (Note 23)	1,735,418	1,758,113
Total	2,514,102	2,017,966

At 31 December 2019, the accumulated amount of change in fair value attributable to changes in credit risk was a loss of US$10.8m (2018: US$18.8m loss). As at 31 December 2019, the difference between the carrying amount and the amount contractually required to be paid at maturity was US$95m (2018: US$51m).

23 Debt securities in issue

	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
	US$000	US$000	US$000	US$000
Medium-term notes	2,573,904	2,573,719	3,298,484	3,298,303
Non-equity preference shares	950,000	926,905	950,000	919,415
Total debt securities in issue	3,523,904	3,500,624	4,248,484	4,217,718
Included within:				
– financial liabilities designated at fair value (Note 22)	(1,735,418)	(1,735,418)	(1,758,113)	(1,758,113)
At 31 Dec	1,788,486	1,765,206	2,490,371	2,459,605

Movement in medium-term notes at amortised cost

	2019	2018
	US$000	US$000
Balance as at 1 Jan	1,540,371	1,146,395
New issues	83,000	770,020
Repayments	(786,892)	(370,000)
Other movements	2,007	(6,044)
At 31 Dec	838,486	1,540,371

Non-equity preference share capital

Authorised

The authorised non-equity preference share capital of the bank at 31 December 2019 and 31 December 2018 was 1,125,000 dated preference shares of US$1.00 each and 225,000 undated preference shares of US$1.00 each.

Issued

Undated preference shares

Issue number	Issue date	Undated preference shares	Preference dividends	Redeemable at the option of the bank on any date after
		Number	%	Date
1	29 October 1997	50,000	12 month US dollar Libor + 0.35	30 October 2002
2	1 April 1998	25,000	12 month US dollar Libor + 0.70	2 April 2003
6	14 March 2006	150,000	12 month US dollar Libor + 0.65	15 March 2011

1 *The undated preference shares have been issued at a nominal value of US$1 each with a premium of US$999 per share.*
2 *Preference dividends are payable annually on the issue price of each undated share.*
3 *The undated preference shares bear no mandatory redemption date. On redemption, the holders of the shares shall be entitled to receive an amount equal to any accrued but unpaid dividends plus the issue price of each share.*
4 *Each share carries one vote at meetings of the shareholders of the bank.*
5 *In the event of a winding up, the preference shareholders would receive, in priority to the ordinary shareholders of the bank, repayment of US $1,000 per share, plus an amount equal to any accrued but unpaid dividends. With the exception of the above, the preference shares do not carry any right to participate in the surplus of assets on a winding up.*

Dated preference shares

Issue number	Issue date	Dated preference shares	Preference dividends	Redeemable at the option of the bank on any date after
		Number	%	Date
11	16 December 2014	250,000	3 month US dollar Libor + 2.40	16 December 2019
11	16 December 2014	250,000	3 month US dollar Libor + 2.70	16 December 2024
12	30 December 2014	225,000	3 month US dollar Libor + 2.70	30 December 2024

1 *The dated preference shares have been issued at a nominal value of US$1 each with a premium of US$999 per share.*
2 *Preference dividends are payable quarterly on the issue price of each dated share.*
3 *Redemption of the dated preference shares, other than at the option of the bank, will be subject to the approval of the ordinary shareholders of the bank. The earliest redemption date is as disclosed in the table above and if not approved by the shareholders will next fall for review at 10 yearly intervals thereafter. However, the shares may be redeemed at the option of the Bank without the approval of the ordinary shareholders of the bank. On redemption, the holders of the shares shall be entitled to receive an amount equal to any accrued but unpaid dividends plus the issue price of each share.*
4 *In the event of a winding up, the preference shareholders would receive, in priority to the ordinary shareholders of the bank, repayment of US $1,000 per share, plus an amount equal to any accrued but unpaid dividends. With the exception of the above, the preference shares do not carry any right to participate in the surplus of assets on a winding up.*

24 Accruals, deferred income and other liabilities

	2019	2018
	US$000	US$000
Accruals and deferred income	**237,675**	222,860
Share-based payments liability to HSBC Holdings plc	**11,217**	14,216
Endorsements and acceptances	**808,772**	506,465
Employee benefit liabilities (Note 6)	**151,757**	168,261
Other liabilities	**1,340,957**	703,378
At 31 Dec	**2,550,378**	1,615,180

25 Provisions

	Restructuring costs	Contractual commitments	Legal proceedings and regulatory matters	Customer remediation	Other provisions	Total
	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**4,188**	**33,038**	**15,106**	**22**	**13,797**	**66,151**
Additions	**15,123**	**—**	**990**	**—**	**1,834**	**17,947**
Amounts utilised	**(10,441)**	**—**	**(1,316)**	**—**	**(2,979)**	**(14,736)**
Unused amounts reversed	**(993)**	**—**	**(16,291)**	**(22)**	**—**	**(17,306)**
Net Change in expected credit loss provision	**—**	**20,108**	**—**	**—**	**—**	**20,108**
Exchange and other movements	**—**	**(138)**	**6,149**	**—**	**(6,974)**	**(963)**
At 31 Dec 2019	**7,877**	**53,008**	**4,638**	**—**	**5,678**	**71,201**
At 1 Jan 2018	6,762	15,631	27,352	238	21,625	71,608
Impact on transition to IFRS 9	—	36,418	—	—	—	36,418
Additions	5,068	—	8,288	—	1,214	14,570
Amounts utilised	(4,468)	—	(18,296)	(187)	(5,196)	(28,147)
Unused amounts reversed	(3,174)	—	(2,332)	(29)	(898)	(6,433)
Net Change in expected credit loss provision	—	(18,873)	—	—	—	(18,873)
Exchange and other movements	—	(138)	94	—	(2,948)	(2,992)
At 31 Dec 2018	4,188	33,038	15,106	22	13,797	66,151

26 Maturity analysis of assets, liabilities and off-balance sheet commitments

The following is an analysis by remaining contractual maturities at the balance sheet date, of assets and liability line items that combine amounts expected to be recovered or settled within one year and after more than one year.

Trading assets and liabilities are excluded because they are not held for collection or settlement over the period of contractual maturity.

Maturity analysis of assets and liabilities

	At 31 Dec 2019				
	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
	US$000	US$000	US$000	US$000	US$000
Financial assets					
Loans and advances to banks	**4,987,957**	**391,826**	**417,640**	**—**	**5,797,423**
Loans and advances to customers	**7,984,365**	**2,929,053**	**5,930,993**	**2,816,824**	**19,661,235**
Reverse repurchase agreements – non-trading	**165,266**	**397,827**	**178,540**	**—**	**741,633**
Financial investments	**4,884,089**	**2,819,850**	**2,631,165**	**148,787**	**10,483,891**
Other financial assets	**762,679**	**264,362**	**192,082**	**—**	**1,219,123**
	18,784,356	**6,802,918**	**9,350,420**	**2,965,611**	**37,903,305**
Financial liabilities					
Deposits by banks	**1,565,371**	**362,435**	**1,878,464**	**—**	**3,806,270**
Customer accounts	**21,383,781**	**1,956,102**	**386,631**	**—**	**23,726,514**
Financial liabilities designated at fair value	**132,828**	**517,663**	**1,863,611**	**—**	**2,514,102**
Debt securities in issue	**200,353**	**—**	**888,133**	**700,000**	**1,788,486**
Other financial liabilities	**2,001,444**	**264,426**	**17,295**	**—**	**2,283,165**
	25,283,777	**3,100,626**	**5,034,134**	**700,000**	**34,118,537**
Loan and other credit-related commitments	**17,435,106**	**—**	**—**	**—**	**17,435,106**
Financial guarantees and similar contracts	**16,136,763**	**—**	**—**	**—**	**16,136,763**
	At 31 Dec 2018				
Financial assets					
Loans and advances to banks	3,655,838	809,009	592,461	—	5,057,308
Loans and advances to customers	7,642,785	2,725,174	6,888,976	2,816,440	20,073,375
Reverse repurchase agreements – non-trading	198,582	276,973	279,521	—	755,076
Financial investments	1,251,587	2,005,843	2,370,068	107,278	5,734,776
Other financial assets	744,120	106,323	3,759	—	854,202
	13,492,912	5,923,322	10,134,785	2,923,718	32,474,737
Financial liabilities					
Deposits by banks	682,003	200,626	699,848	—	1,582,477
Customer accounts	20,062,421	1,692,891	68,195	—	21,823,507
Financial liabilities designated at fair value	40,826	1,032,976	709,693	234,471	2,017,966
Debt securities in issue	313,510	642,213	584,648	950,000	2,490,371
Other financial liabilities	1,218,362	107,495	2,416	—	1,328,273
	22,317,122	3,676,201	2,064,800	1,184,471	29,242,594
Loan and other credit-related commitments	15,906,420	—	—	—	15,906,420
Financial guarantees and similar contracts	14,416,716	—	—	—	14,416,716

Cash flows payable by the group under financial liabilities by remaining contractual maturities

	On demand	Due within 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years
	US$000	US$000	US$000	US$000	US$000
Deposits by banks	**1,465,893**	**101,385**	**366,417**	**1,967,570**	**—**
Customer accounts	**18,814,756**	**2,587,544**	**1,973,783**	**389,440**	**—**
Trading liabilities	**47,989**	**—**	**—**	**—**	**—**
Financial liabilities designated at fair value	**—**	**143,591**	**548,041**	**1,917,198**	**—**
Derivatives	**1,050,690**	**—**	**5,819**	**31,462**	**3,659**
Debt securities in issue	**—**	**206,759**	**4,420**	**912,112**	**722,383**
Other financial liabilities	**878,718**	**1,330,290**	**269,462**	**43,521**	**—**
	22,258,046	**4,369,569**	**3,167,942**	**5,261,303**	**726,042**
Loan and other credit-related commitments	**17,435,106**	**—**	**—**	**—**	**—**
Financial guarantees and similar contracts	**16,136,763**	**—**	**—**	**—**	**—**
At 31 Dec 2019	**55,829,915**	**4,369,569**	**3,167,942**	**5,261,303**	**726,042**
Deposits by banks	236,197	1,122,269	203,919	767,452	—
Customer accounts	18,239,733	1,839,448	1,710,561	69,211	—
Trading liabilities	59,023	—	—	—	—
Financial liabilities designated at fair value	—	46,133	1,046,993	732,209	243,307
Derivatives	930,009	2,722	4,907	14,329	—
Debt securities in issue	225,000	324,054	463,917	1,073,248	475,000
Other financial liabilities	398,444	1,129,190	106,151	3,759	—
	20,088,406	4,463,816	3,536,448	2,660,208	718,307
Loan and other credit-related commitments	15,896,909	8,330	1,181	—	—
Financial guarantees and similar contracts	14,416,716	—	—	—	—
At 31 Dec 2018	50,402,031	4,472,146	3,537,629	2,660,208	718,307

Trading liabilities and trading derivatives have been included in the 'On demand' time bucket, and not by contractual maturity, because trading liabilities are typically held for short periods of time. The undiscounted cash flows on hedging derivative liabilities are classified according to their contractual maturity. The undiscounted cash flows potentially payable under financial guarantee contracts are classified on the basis of the earliest date they can be drawn down.

Further discussion of the group's liquidity and funding management can be found in Note 31 'Risk management'.

27 Offsetting of financial assets and financial liabilities

The 'Amounts not set off in the balance sheet' include transactions where:

- the counterparty has an offsetting exposure with the group and a master netting or similar arrangement is in place with a right to set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and
- in the case of derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar agreements, cash and non-cash collateral has been received/pledged.

For risk management purposes, the net amounts of loans and advances to customers are subject to limits, which are monitored and the relevant customer agreements are subject to review and updated, as necessary, to ensure that the legal right to set off remains appropriate.

	Amounts subject to enforceable netting arrangements						
				Amounts not set off in the balance sheet			
	Gross amounts	Amounts offset	Net amounts in the balance sheet	Financial instruments	Non-cash collateral	Cash collateral	Net amount
	US$000	US$000	US$000	$000	US$000	US$000	US$000
Financial assets							
Derivatives (Note 14)	**1,176,296**	**—**	**1,176,296**	**(798,325)**	**—**	**—**	**377,971**
Reverse repos, stock borrowing and similar agreements classified as:	**741,633**	**—**	**741,633**	**—**	**(741,633)**	**—**	**—**
– non-trading assets	**741,633**	**—**	**741,633**	**—**	**(741,633)**	**—**	**—**
Loans and advances to customers excluding reverse repos at amortised cost[1]	**729,638**	**—**	**729,638**	**—**	**—**	**(122,943)**	**606,695**
At 31 Dec 2019	**2,647,567**	**—**	**2,647,567**	**(798,325)**	**(741,633)**	**(122,943)**	**984,666**
Derivatives (Note 14)	953,222	—	953,222	—	—	—	953,222
Reverse repos, stock borrowing and similar agreements classified as:	755,076	—	755,076	—	(755,076)	—	—
– non-trading assets	755,076	—	755,076	—	(755,076)	—	—
Loans and advances to customers excluding reverse repos at amortised cost[1]	536,026	—	536,026	—	—	(161,515)	374,511
At 31 Dec 2018	2,244,324	—	2,244,324	—	(755,076)	(161,515)	1,327,733
Financial liabilities							
Derivatives (Note 14)	**1,091,651**	**—**	**1,091,651**	**(798,325)**	**—**	**—**	**293,326**
At 31 Dec 2019	**1,091,651**	**—**	**1,091,651**	**(798,325)**	**—**	**—**	**293,326**
Derivatives (Note 14)	951,976	—	951,976	—	—	—	951,976
At 31 Dec 2018	951,976	—	951,976	—	—	—	951,976

1 *At 31 December 2019, the total amount of 'Loans and advances to customers' was US$19,661m (2018: US$20,073m), of which US$730m (2018: US$536m) was subject to offsetting.*

28 Foreign exchange exposure

Structural foreign exchange exposures

The group's structural foreign currency exposure is represented by the net asset value of its foreign currency equity and subordinated debt investments in subsidiaries, branches and associates with non-US dollar functional currencies. Gains or losses on structural foreign exchange exposures are recognised in other comprehensive income.

The main operating currencies of the group are UAE dirham and other Gulf currencies that are linked to the US dollar.

The group's management of structural foreign currency exposures is discussed in Note 31 'Risk management'.

Net structural foreign currency exposures

Currency of structural exposure

	2019	2018
	US$000	US$000
Algerian dinar	**158,042**	147,528
Bahraini dinar	**145,964**	153,561
Kuwaiti dinar	**249,857**	209,635
Lebanese pound	**291**	318
Moroccan dirham	**167**	156
Qatari riyal	**625,242**	671,402
UAE dirham	**4,104,883**	4,114,149
Total	**5,284,446**	5,296,749

In 2019, the disclosure has been aligned to the HSBC Group approach which is to disclose exposures based on the functional currency of the component branches and subsidiaries. Prior period has been re-presented accordingly.

29 Called up share capital and share premium

Authorised

The authorised ordinary share capital of the Bank at 31 December 2019 was 1,500,000,000 (2018: 1,500,000,000) ordinary shares[1] of US$1.00 each.

Called up share capital and share premium

Issued and fully paid

	Footnotes	2019		2018	
		Number	**US$000**	Number	US$000
At 1 Jan		**931,055,001**	**931,055**	931,055,001	931,055
At 31 Dec	1	**931,055,001**	**931,055**	931,055,001	931,055

Share premium

	US$000	US$000
At 31 Dec	**61,346**	61,346

Total called up share capital and share premium

	US$000	US$000
At 31 Dec	**992,401**	992,401

1 *All ordinary shares in issue confer identical rights, including in respect of capital, dividends and voting.*

30 Notes on the statement of cash flows

Non-cash items included in profit before tax

	2019	2018
	US$000	US$000
Depreciation, amortisation and impairment	**43,948**	20,153
Share-based payment expense	**10,442**	11,031
Change in expected credit losses and other credit impairment charges	**142,792**	145,398
Provisions including pensions	**29,159**	36,732
Other non-cash items included in profit before tax	**(52,702)**	28,108
	173,639	241,422

Change in operating assets

	2019	2018
	US$000	US$000
Change in other assets	**17,904**	404,841
Change in net trading securities and net derivatives	**(25,169)**	(2,770,995)
Change in loans and advances to banks and customers	**553,322**	(1,683,279)
Change in reverse repurchase agreements – non-trading	**37,432**	666,044
Change in financial assets designated at fair value	**7,108**	(47,839)
	590,597	(3,431,228)

Change in operating liabilities

	2019	2018
	US$000	US$000
Change in other liabilities	**1,403,555**	(16,311)
Change in deposits by banks and customer accounts	**4,126,800**	(976,138)
Change in debt securities in issue	**(701,885)**	397,981
Change in financial liabilities designated at fair value	**246,650**	1,278,541
Change in repurchase agreements – non-trading	**(2,999)**	2,999
	5,072,121	687,072

Cash and cash equivalents

	2019	2018
	US$000	US$000
Cash and balances at central banks	**896,608**	1,170,359
Items in the course of collection from other banks	**78,992**	81,984
Loans and advances to banks of one month or less	**4,691,798**	3,173,609
Reverse repurchase agreement with banks of one month or less	**57,855**	33,866
Net settlement accounts and cash collateral	**606,555**	35,309
Treasury bills, other bills and certificates of deposit less than three months	**–**	96,787
Less: items in the course of transmission to other banks	**(186,234)**	(263,907)
Total cash and cash equivalents	**6,145,574**	4,328,007

Total interest paid by the group during the year was US$268m (2018: US$110m). Total interest received by the group during the year was US$1,205m (2018: US$938m). Total dividends received by the group during the year were US$5.1m (2018: US$6.6m).

31 Risk management

All the group's activities involve, to varying degrees, the analysis, evaluation, acceptance and active management of risks or combinations of risks. The key financial risks that the group is exposed to are credit risk (including cross-border country risk), market risk (predominantly foreign exchange and interest rate risks) and liquidity risk. The group is also exposed to operational risk in various forms (including technology, projects, process, people, security and fraud risks). The group continues to enhance its capabilities and coverage of financial crime control. Other risks that the group is actively managing include legal risk, reputational risk, pensions risk, strategic risk (direction and execution) and ensuring the group complies with various regulatory requirements or takes necessary actions where it is not yet doing so.

Risk governance and ownership

An established risk governance and ownership structure ensures oversight of, and accountability for, the effective management of risk at the group and global business level. The risk management framework fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. Integral to the group's risk management framework are the enterprise tools of Risk Appetite, Top and Emerging Risks, Risk Map and Stress Testing.

The Board approves the group's risk appetite framework, plans and performance targets for the group and its principal operating subsidiaries, the appointment of senior officers, the delegation of authorities for credit and other risks and the establishment of effective control procedures. The Audit and Risk Committees are responsible for advising the Board on material risk matters and providing non-executive oversight of risks. Under authority delegated by the Board, the separately convened Risk Management Meeting ('RMM') formulates high-level group risk management policy and oversees the implementation of risk appetite and controls. The RMM together with the Asset and Liability Committee ('ALCO') and Financial Crime Risk Management Committee ('FCRMC') monitors all categories of risk, receives reports on actual performance and emerging issues, determines action to be taken and reviews the efficacy of the group's risk management framework.

In their oversight and stewardship of risk management at group level, RMM are supported by a dedicated Risk function headed by the Chief Risk Officer ('CRO'), who is a Chair of the RMM and reports to the Chief Executive Officer ('CEO') and functionally to the Group CRO in the HSBC Group.

Risk management tools

The group uses a range of tools to identify, monitor and manage risk. The key tools are summarised below.

Risk appetite

Risk appetite, a key component of the group's risk management framework, is approved by the Board and describes the types and levels of risk that the group is prepared to accept in executing the group's strategy. The group's risk appetite is set out in the group's Risk Appetite Statement and is central to the annual planning process. Global businesses as well as countries are required to articulate their Risk Appetite Statements which are aligned with the group strategy.

Quantitative and qualitative metrics are organised under 15 categories, namely; returns, costs, capital, risk-weighted assets, liquidity and funding, loan impairments, exposure to the HSBC Group, credit and portfolio concentrations, market risk, operational risk, internal audit, financial crime compliance, reputational risk, sustainability risk and technology infrastructure. Measurements against the metrics serve to:

- guide underlying business activity, ensuring it is aligned to risk appetite statements;
- determine risk-adjusted remuneration;
- enable the key underlying assumptions to be monitored and, where necessary, adjusted through subsequent business planning cycles; and
- promptly identify business decisions needed to mitigate risk.

Risk map

The group uses a risk map to provide a point-in-time view of its risk profile across a suite of risk categories. This highlights the potential for these risks to materially affect our financial results, reputation or business sustainability.

The risks presented on the risk map are regularly assessed against risk appetite, are stress tested and, where longer-term thematic issues arise, are considered for inclusion as top or emerging risks.

Top and emerging risks

The group uses a top and emerging risks process to provide a forward-looking view of issues that have the potential to threaten the execution of the group's strategy or operations over the medium to long term.

The group defines a 'top risk' as a thematic issue that may form and crystallise in between six months and one year, and that has the potential to materially affect the group's financial results, reputation or business model. It may arise across any combination of risk types, regions or global businesses. The impact may be well understood by senior management and some mitigating actions may already be in place. Stress tests of varying granularity may also have been carried out to assess the impact.

An 'emerging risk' is a thematic issue with large unknown components that may form and crystallise beyond a one-year time horizon. If it were to materialise, it could have a material effect on the group's long-term strategy, profitability and reputation. Existing mitigation plans are likely to be minimal, reflecting the uncertain nature of these risks at this stage. Some high-level analysis and/or stress testing may have been carried out to assess the potential impact.

Stress testing

Stress testing is a critical component of the HSBC Group's strategic, risk and capital management governance as the regulatory expectations and demands in this area continue to expand significantly. It is an important tool used to evaluate the potential financial impact of plausible scenarios in the event of an economic downturn or a geopolitical duress. Apart from market-wide events, entities also take into account risks that are idiosyncratic to the bank. The stress testing and scenario analysis programme examines the sensitivities of our capital plans and unplanned demand for regulatory capital under a number of scenarios and ensures that top and emerging risks are appropriately considered. These scenarios include, but are not limited to, adverse macroeconomic events, failures at country, sector

and counterparty levels, geopolitical occurrences and a variety of projected major operational risk events. The group entities are included in the annual Group stress test submitted to the Bank of England.

In addition to the HSBC Group-wide risk scenarios, the group conducts regular macroeconomic and event-driven scenario analyses specific to the region. The group is subject to regulatory stress testing in many jurisdictions within the region. These have increased both in frequency and in the granularity of information required by supervisors. Assessment by regulators is on both quantitative and qualitative bases, the latter focusing on portfolio quality, data provision, stress testing capability, forward-looking capital management processes and internal management processes.

Apart from the aforementioned Enterprise Wide Stress Tests the group also undertakes Reverse Stress Testing, which is conducted to examine a set of potential scenarios that may render the group's business model non-viable. Non-viability might occur before the group's capital is depleted, and could result from a variety of events, including idiosyncratic or systemic events or combinations thereof. Reverse stress testing is used to strengthen our resilience by helping to inform early-warning triggers, management actions and contingency plans designed to mitigate the potential stresses and vulnerabilities which we might face.

The results of aforementioned stress tests feed into the regional recovery plan and forms a part of the group's Internal Capital Adequacy Assessment Process submission to the regulator.

Risk culture

The group's strong risk governance reflects the importance placed by the Board on managing risks effectively. It is supported by a clear policy framework of risk ownership and by the accountability of all staff for identifying, assessing and managing risks within the scope of their assigned responsibilities. This personal accountability, reinforced by the governance structure, experience and mandatory learning, helps to foster a disciplined and constructive culture of risk management and control throughout the group. Personal accountability is also reinforced by the group's values, with staff expected to be:

- dependable, doing the right thing;
- open to different ideas and cultures; and
- connected to our customers, regulators and each other.

Business culture

We recognise our wider role in society and believe we can make a positive impact with how we do business. The group aims to maintain a responsible business culture to protect our customers, our communities and the integrity of the financial system. We act on our responsibility to run our business in a way that upholds high standards of corporate governance and are committed to working with our regulators and stakeholders to manage the safety and ethics of the financial system. We meet our responsibility to society by paying taxes and also seek to ensure we respect global standards on human rights in our workplace, supply chain and continually work to improve our compliance management capabilities. We continue to support our clients in the transition to a low carbon economy through our sustainable finance offerings. HBME was awarded the Middle East's Best Bank in Sustainable Finance for 2019 in the Euromoney Awards for Excellence. We believe it is important to support the global transition to a low-carbon economy by leading by example in our own operations including the focus on strategic goals to reduce our carbon emissions and usage of energy, waste, water and paper and to commission buildings to the highest sustainability standards.

Credit risk

Credit risk management

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. It arises principally from direct lending, trade finance and leasing business, but also from other products such as guarantees and credit derivatives, and from the group's holdings of debt and other securities. Credit risk generates the largest regulatory capital requirement of the risks the group incurs.

HSBC Holdings plc is responsible for the formulation of high-level credit risk policies and provides high-level centralised oversight and management of credit risk for the HSBC Group worldwide. In addition its responsibilities include:

- Controlling exposures to sovereign entities, banks and other financial institutions, as well as debt securities that are not held solely for the purpose of trading.
- Monitoring intra-HSBC Group exposures to ensure they are maintained within regulatory limits.
- Controlling cross-border exposures, through the imposition of country limits with sub-limits by maturity and type of business. Country limits are determined by taking into account economic and political factors, and applying local business knowledge. Transactions with countries deemed to be higher risk are considered case by case.

Within the group, the Credit Risk function is headed by the CRO. Its responsibilities include:

- Formulating and recording detailed credit policies and procedures, consistent with HSBC Group policy.
- Issuing policy guidelines to subsidiaries and offices on appetite for credit risk exposure to specified market sectors, activities and banking products, and controlling exposures to certain high-risk sectors.
- Undertaking independent review and objective assessment of risk. Credit Risk assesses all commercial non-bank credit facilities and exposures over designated limits, prior to the facilities being committed to customers or transactions being undertaken.
- Monitoring the performance and management of portfolios.
- Maintaining policy on large credit exposures, ensuring that concentrations of exposure by counterparty, sector or geography do not become excessive in relation to the group's capital base and remain within internal and regulatory limits.
- Maintaining and developing the governance and operation of HSBC Group's risk rating framework and systems, to classify exposures.
- Reporting on retail portfolio performance, high risk portfolios, risk concentrations, country limits and cross-border exposures, large impaired accounts, impairment allowances and stress testing results and recommendations to the RMM, the Audit and Risk Committee and the Board of Directors.
- Acting on behalf of the group as the primary interface, for credit-related issues, with external parties, including the rating agencies, corporate analysts, trade associations etc.

The group is required to implement credit policies, procedures and lending guidelines that meet local requirements while conforming to the HSBC Group standards.

Credit quality of financial instruments

The group's credit risk rating systems and processes differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. In the case of individually significant accounts, risk ratings are reviewed regularly and any amendments are implemented promptly. Within the group's retail business, risk is assessed and managed using a wide range of risk and pricing models to generate portfolio data.

The group's risk rating system facilitates the Internal Ratings Based ('IRB') approach for portfolio management purposes to support calculation under Basel II of the minimum credit regulatory capital requirement for banks, sovereigns and certain larger corporates.

Special attention is paid to problem exposures in order to accelerate remedial action. Where appropriate, the group uses specialist units to provide customers with support in order to help them avoid default wherever possible.

Periodic risk-based audits of the group's credit processes and portfolios are also undertaken by an independent function.

Impairment Assessment

It is the group's policy that each operating company creates allowances for impaired loans promptly and consistently.

For details of impairment policies on loans and advances and financial investments, see Note 2.2(i) on the Financial Statements.

Write-off of loans and advances

Loans are normally written off, either partially or in full, when there is no realistic prospect of further recovery. For secured loans, write-off generally occurs after receipt of any proceeds from the realisation of security.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due, the standard period being the end of the month in which the account becomes 180 days contractually delinquent. Write-off periods may be extended, generally to no more than 360 days past due but in very exceptional circumstances exceeding that period, in a few countries where local regulation or legislation constrain earlier write-off, or where the realisation of collateral for secured real estate lending extends to this time.

In the event of bankruptcy or analogous proceedings, write-off may occur earlier than at the periods stated above. Collections procedures may continue after write-off.

Refinance risk

Many types of lending require the repayment of a significant proportion of the principal at maturity. Typically, the mechanism of repayment for the customer is through the acquisition of a new loan to settle the existing debt. Refinance risk arises where a customer is unable to repay such term debt on maturity, or to refinance debt at commercial rates. When there is evidence that this risk may apply to a specific contract, the group may need to refinance the loan on concessionary terms that it would not otherwise have considered, in order to recoup the maximum possible cash flows from the contract and potentially avoid the customer defaulting on the repayment of principal. When there is sufficient evidence that borrowers, based on their current financial capabilities, may fail at maturity to repay or refinance their loans, these loans are disclosed as impaired with recognition of a corresponding impairment allowance where appropriate.

Summary of credit risk

The disclosure below presents the gross carrying/nominal amount of financial instruments to which the impairment requirements in IFRS 9 are applied and the associated allowance for ECL.

The IFRS 9 allowance for ECL has decreased from US$1,074m at 31 December 2018 to US$986m at 31 December 2019.

The IFRS 9 allowance for ECL at 31 December 2019 comprises US$ 964m (2018: US$1,061m) in respect of assets held at amortised cost and US$22m (2018: US$13m) in respect of loan commitments and financial guarantees.

Summary of financial instruments to which the impairment requirements in IFRS 9 are applied

	31 Dec 2019		31 Dec 2018	
	Gross carrying/nominal amount	**Allowance for ECL**	Gross carrying/nominal amount	Allowance for ECL
	US$000	**US$000**	US$000	US$000
Loans and advances to customers at amortised cost	**20,616,496**	**(955,261)**	21,132,610	(1,059,235)
Loans and advances to banks at amortised cost	**5,798,901**	**(1,478)**	5,058,866	(1,558)
Other financial assets measured at amortised costs	**2,892,317**	**(7,342)**	2,784,969	(632)
– cash and balances at central banks	**896,922**	**(314)**	1,170,499	(140)
– items in the course of collection from other banks	**78,992**	**—**	81,984	—
– reverse repurchase agreements – non-trading	**741,661**	**(28)**	755,084	(8)
– prepayments, accrued income and other assets	**1,174,742**	**(7,000)**	777,402	(484)
Total gross carrying amount on-balance sheet	**29,307,714**	**(964,081)**	28,976,445	(1,061,425)
Loans and other credit related commitments	**6,319,523**	**(15,939)**	5,648,633	(2,736)
Financial guarantees[1]	**1,553,668**	**(6,037)**	1,828,518	(10,327)
Total nominal amount off-balance sheet	**7,873,191**	**(21,976)**	7,477,151	(13,063)

	Fair value	**Memorandum allowance for ECL**	Fair value	Memorandum allowance for ECL
	US$000	**US$000**	US$000	US$000
Debt instruments measured at fair value through other comprehensive income (FVOCI)	**10,438,722**	**(1,485)**	5,695,573	(1,112)

1 *In 2019, the group has aligned the disclosure to the HSBC Group approach which is to include Financial guarantees within the scope of IFRS 9. Prior period has been re-presented accordingly and this has been reflected through all relevant disclosures in Note 31.*

The following table provides an overview of the group's credit risk by stage, and the associated ECL coverage. The financial assets recorded in each stage have the following characteristics:

Stage 1: Unimpaired and without significant increase in credit risk on which a 12-month allowance for ECL is recognised.

Stage 2: A significant increase in credit risk has been experienced since initial recognition on which a lifetime ECL is recognised.

Stage 3: Objective evidence of impairment, and are therefore considered to be in default or otherwise credit-impaired on which a lifetime ECL is recognised.

POCI: Purchased or originated at a deep discount that reflects the incurred credit losses on which a lifetime ECL is recognised.

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage at 31 December 2019

	Gross carrying/nominal amount					Allowance for ECL				
	Stage 1	**Stage 2**	**Stage 3**	**POCI**	**Total**	**Stage 1**	**Stage 2**	**Stage 3**	**POCI**	**Total**
	US$000	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**
Loans and advances to customers at amortised cost	**17,507,463**	**1,907,875**	**1,198,711**	**2,447**	**20,616,496**	**(68,462)**	**(87,128)**	**(798,178)**	**(1,493)**	**(955,261)**
Loans and advances to banks at amortised cost	**5,788,598**	**10,303**	**—**	**—**	**5,798,901**	**(1,420)**	**(58)**	**—**	**—**	**(1,478)**
Other financial assets measured at amortised cost	**2,801,122**	**85,307**	**5,888**	**—**	**2,892,317**	**(1,159)**	**(295)**	**(5,888)**	**—**	**(7,342)**
Loan and other credit-related commitments	**5,921,696**	**391,018**	**6,809**	**—**	**6,319,523**	**(8,839)**	**(7,100)**	**—**	**—**	**(15,939)**
Financial guarantees	**1,432,963**	**111,318**	**9,387**	**—**	**1,553,668**	**(2,023)**	**(3,994)**	**(20)**	**—**	**(6,037)**
At 31 Dec 2019	**33,451,842**	**2,505,821**	**1,220,795**	**2,447**	**37,180,905**	**(81,903)**	**(98,575)**	**(804,086)**	**(1,493)**	**(986,057)**

	ECL coverage %				
	Stage 1	**Stage 2**	**Stage 3**	**POCI**	**Total**
	%	**%**	**%**	**%**	**%**
Loans and advances to customers at amortised cost	**0.4**	**4.6**	**66.6**	**61.0**	**4.6**
Loans and advances to banks at amortised cost	**—**	**0.6**	**—**	**—**	**—**
Other financial assets measured at amortised cost	**—**	**0.3**	**100.0**	**—**	**0.3**
Loan and other credit-related commitments	**0.1**	**1.8**	**—**	**—**	**0.3**
Financial guarantees	**0.1**	**3.6**	**0.2**	**—**	**0.4**
At 31 Dec 2019	**0.2**	**3.9**	**65.9**	**61.0**	**2.7**

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage at 31 December 2018

	Gross carrying/nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
Loans and advances to customers at amortised cost	17,617,241	2,177,358	1,301,233	36,778	21,132,610	(65,826)	(91,814)	(864,817)	(36,778)	(1,059,235)
Loans and advances to banks at amortised cost	5,048,916	9,950	—	—	5,058,866	(1,412)	(146)	—	—	(1,558)
Other financial assets measured at amortised cost	2,687,842	97,127	—	—	2,784,969	(339)	(293)	—	—	(632)
Loan and other credit related commitments	5,351,317	296,712	604	—	5,648,633	(1,912)	(824)	—	—	(2,736)
Financial guarantees	1,488,325	329,587	10,606	—	1,828,518	(2,435)	(7,892)	—	—	(10,327)
At 31 Dec 2018	32,193,641	2,910,734	1,312,443	36,778	36,453,596	(71,924)	(100,969)	(864,817)	(36,778)	(1,074,488)

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage at 31 December 2018 (continued)

	ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI	Total
	%	%	%	%	%
Loans and advances to customers at amortised cost	0.4	4.2	66.5	100.0	5.0
Loans and advances to banks at amortised cost	—	1.5	—	—	—
Other financial assets measured at amortised cost	—	0.3	—	—	—
Loan and other credit related commitments	—	0.3	—	—	0.1
Financial guarantees	0.2	2.4	—	—	0.6
At 31 Dec 2018	0.2	3.5	65.9	100.0	2.9

Measurement uncertainty and sensitivity analysis of ECL estimates

Expected credit loss impairment allowances recognised in the financial statements reflect the effect of a range of possible economic outcomes, calculated on a probability-weighted basis, based on the economic scenarios described below. The recognition and measurement of ECL involves the use of significant judgement and estimation. It is necessary to formulate multiple forward-looking economic forecasts and incorporate them into the ECL estimates. The group uses a standard framework to form economic scenarios to

reflect assumptions about future economic conditions, supplemented with the use of management judgement, which may result in using alternative or additional economic scenarios and/or management adjustments.

Methodology for Developing Forward Looking Economic Scenarios

The group has adopted the use of three scenarios, representative of our view of forecast economic conditions, sufficient to calculate unbiased expected loss in most economic environments. They represent a 'most likely outcome' (the Central scenario), and two, less likely 'outer' scenarios, referred to as the Upside and Downside scenarios. Each outer scenario is consistent with a probability of 10%, while the Central scenario is assigned the remaining 80%, according to the decision of the group's senior management. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in most circumstances. Key scenario assumptions are set using the average of forecasts of external economists, helping to ensure that the IFRS 9 scenarios are unbiased and maximise the use of independent information. The Central, Upside and Downside scenarios selected with reference to external forecast distributions using the above approach are termed the 'consensus economic scenarios'.

For the Central scenario, the group sets key assumptions such as GDP growth, inflation, unemployment and policy interest rates, using either the average of external forecasts (commonly referred to as consensus forecasts) for most economies, or market prices. An external provider's global macro model, conditioned to follow the consensus forecasts, projects the other paths required as inputs to credit models. This external provider is subject to the group's risk governance framework, with oversight by a specialist internal unit.

The Upside and Downside scenarios are designed to be cyclical, in that GDP growth, inflation and unemployment usually revert back to the Central scenario after the first three years for major economies. We determine the maximum divergence of GDP growth from the Central scenario using the 10th and the 90th percentile of the entire distribution of forecast outcomes for major economies. We use externally available forecast distributions to help ensure independence in scenario construction. While key economic variables are set with reference to external distributional forecasts, we also align the overall narrative of the scenarios to the macroeconomic risks captured in the group's Top and Emerging Risks. This ensures that scenarios remain consistent with the more qualitative assessment of these risks. We project additional variable paths using the external provider's global macro model.

We apply the following steps to generate the three economic scenarios:

- Economic risk assessment: We develop a shortlist of the upside and downside economic and political risks most relevant to the group and the IFRS 9 measurement objective. These include local and global economic and political risks which together affect economies that have a material effect on credit risk for the group.
- Scenario generation: For the Central scenario, we obtain a pre-defined set of economic paths from the average taken from the consensus survey of professional forecasters. Paths for the two outer scenarios are benchmarked to the Central scenario and reflect the economic risk assessment. We select scenarios that in management's judgement are representative of the probability weighting scheme, informed by the current economic outlook, data analysis of past recessions, and transitions in and out of recession.
- Variable enrichment: We expand each scenario through enrichment of variables. The external provider expands these scenarios by using as inputs the agreed scenario narratives and the variables aligned to these narratives. Scenarios, once expanded, continue to be benchmarked to latest events and information.

Description of Consensus Economic Scenarios

The following table describes key macroeconomic variables and the probabilities assigned in the each scenario.

	UAE		
	Scenario Average (2020 – 2024)		
Factors	**Upside**	**Central**	**Downside**
GDP growth rate (%)	**3.5**	**2.8**	**2.1**
Inflation (%)	**2.3**	**2.0**	**1.7**
Unemployment (%)	**2.5**	**2.7**	**2.9**
Short term interest rates (%)	**1.9**	**1.8**	**0.4**
House price growth (%)	**0.6**	**(2.4)**	**(5.2)**
Probability	**10.0**	**80.0**	**10.0**

The Consensus Central Scenario

The group's central scenario is one of moderate growth over the forecast period 2020-2024. The group notes that:

- Expected average rates of GDP growth over the 2020-2024 period are lower than average growth rates achieved over the 2014-2018 period for the UAE.

- The average unemployment rate over the projection horizon is expected to increase.
- Inflation is expected to be stable despite steady GDP growth.
- Major central banks lowered their main policy interest rates in 2019 and are expected to continue to maintain a low interest rate environment over the projection horizon.
- The West Texas Intermediate oil price is forecast to average US$59p/b over the projection period.

The Consensus Upside scenario

The economic forecast distribution of risks (as captured by consensus probability distributions of GDP growth) have shown a decrease over the course of 2019. Globally, real GDP growth rises in the first two years of the Upside scenario before converging to the Central scenario. Increased confidence, stronger oil prices as well as calming of geopolitical tensions are the risk themes that support the 2019 year-end upside scenario.

The Consensus Downside scenario

The distribution of risks (as captured by consensus probability distributions of GDP growth) have shown a marginal increase in downside risks over the course of 2019. Globally, real GDP growth declines for two years in the Downside scenario before recovering to the Central scenario. The global slowdown in demand drives commodity prices lower and results in an accompanying fall in inflation. Central Banks remain accommodative.

How economic scenarios are reflected in the wholesale calculation of ECL

HSBC has developed a globally consistent methodology for the application of economic scenarios into the calculation of ECL by incorporating those scenarios into the estimation of the term structure of probability of default ('PD') and loss given default ('LGD'). For PDs, we consider the correlation of economic guidance to default rates for a particular industry in a country. For LGD calculations we consider the correlation of economic guidance to collateral values and realisation rates for a particular country and industry. PDs and LGDs are estimated for the entire term structure of each instrument.

For impaired loans, LGD estimates take into account independent recovery valuations provided by external consultants where available, or internal forecasts corresponding to anticipated economic conditions and individual company conditions. In estimating the ECL on impaired loans that are individually considered not to be significant, HSBC incorporates economic scenarios proportionate to the probability-weighted outcome and the central scenario outcome for non-stage 3 populations.

ECL based exposures at 31 December 2019[1]

	UAE	
	2019	2018
Reported ECL (US$m)[2]	**97**	74
Gross carrying/nominal amount (US$m)[3]	**42,304**	37,546
Consensus Central scenario	**97**	74
Consensus Upside scenario	**89**	69
Consensus Downside scenario	**108**	80

1 *Excludes ECL and financial instruments relating to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios.*
2 *Includes off-balance sheet financial instruments that are subject to significant measurement uncertainty.*
3 *Includes low credit-risk financial instruments such as debt instruments at FVOCI, which have high carrying amounts but low ECL under all the above scenarios.*

How economic scenarios are reflected in the retail calculation of ECL

HSBC has developed and implemented a globally consistent methodology for incorporating forecasts of economic conditions into ECL estimates. The impact of economic scenarios on PD is modelled at a portfolio level. Historic relationships between observed default rates and macro-economic variables are integrated into ('IFRS 9 ECL') estimates by leveraging economic response models. The impact of these scenarios on PD is modelled over a period equal to the remaining maturity of underlying asset or assets. The impact on (LGD) is modelled for mortgage portfolios by forecasting future loan-to-value ('LTV') profiles for the remaining maturity of the asset by leveraging national level forecasts of the house price index and applying the corresponding LGD expectation.

ECL based exposures at 31 December 2019[1]

	UAE	
	2019	2018
Reported ECL (US$m)[2]	**174**	204
Gross carrying amount (US$m)	**3,391**	3,453
Consensus Central scenario	**173**	204
Consensus Upside scenario	**158**	195
Consensus Downside scenario	**193**	209

1 *ECL sensitivities exclude portfolios utilising less complex modelling approaches.*
2 *ECL sensitivity includes only on-balance sheet financial instruments to which IFRS 9 impairment requirements are applied.*

Economic scenarios sensitivity analysis of ECL estimates

The ECL outcome is sensitive to judgement and estimations made with regards to the formulation and incorporation of multiple forward looking economic conditions described above. As a result, management assessed and considered the sensitivity of the ECL outcome against the forward looking economic conditions as part of the ECL governance process by recalculating the ECL under each scenario described above for selected portfolios, applying a 100% weighting to each scenario in turn. The weighting is reflected in both the determination of significant increase in credit risk as well as the measurement of the resulting ECL.

The economic scenarios are generated to capture the group's view of a range of possible forecast economic conditions that is sufficient for the calculation of unbiased and probability-weighted ECL. As a result, the ECL calculated for the Upside and Downside scenarios

should not be taken to represent the upper and lower limits of possible actual ECL outcomes. There are a very wide range of possible combinations of inter-related economic factors that could influence actual credit loss outcomes, accordingly the range of estimates provided by attributing 100% weightings to scenarios are indicative of possible outcomes given the assumptions used. A wider range of possible ECL outcomes reflects uncertainty about the distribution of economic conditions and does not necessarily mean that credit risk on the associated loans is higher than for loans where the distribution of possible future economic conditions is narrower. The recalculated ECLs for each of the scenarios should be read in the context of the sensitivity analysis as a whole and in conjunction with the narrative disclosures.

Credit exposure

Maximum exposure to credit risk

The group's exposure to credit risk is spread across a broad range of asset classes, including derivatives, trading assets, loans and advances to customers, loans and advances to banks, and financial investments.

The following table presents the group's maximum exposure to credit risk from on balance sheet and off-balance sheet financial instruments before taking account of any collateral held or other credit enhancements (unless such enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments, it is generally the full amount of the committed facilities.

The offset in the table relate to amounts where there is a legally enforceable right of offset in the event of counterparty default and where, as a result, there is a net exposure for credit risk purposes. However, as there is no intention to settle these balances on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes.

In the case of derivatives and reverse repos the offset column also includes collateral received in cash and other financial assets.

Maximum exposure to credit risk

	2019			2018		
	Maximum exposure	Offset	Net	Maximum exposure	Offset	Net
	US$000	US$000	US$000	US$000	US$000	US$000
Loans and advances to customers held at amortised cost	19,661,235	(122,943)	19,538,292	20,073,375	(161,515)	19,911,860
Loans and advances to banks held at amortised cost	5,797,423	–	5,797,423	5,057,308	–	5,057,308
Other financial assets measured at amortised costs	13,322,212	(741,633)	12,580,579	8,478,798	(755,076)	7,723,722
– cash and balances at central banks	896,608	–	896,608	1,170,359	–	1,170,359
– items in the course of collection from other banks	78,992	–	78,992	81,984	–	81,984
– reverse repurchase agreements – non-trading	741,633	(741,633)	–	755,076	(755,076)	–
– financial investments	10,437,237	–	10,437,237	5,694,461	–	5,694,461
– prepayments, accrued income and other assets	1,167,742	–	1,167,742	776,918	–	776,918
Derivatives	1,176,296	(798,325)	377,971	953,222	–	953,222
Total off-balance sheet	24,161,448	–	24,161,448	22,275,974	–	22,275,974
– financial guarantees and similar contracts	6,726,342	–	6,726,342	6,369,554	–	6,369,554
– loan and other credit-related commitments	17,435,106	–	17,435,106	15,906,420	–	15,906,420

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

The following disclosure provides a reconciliation by stage of the group's gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees. Movements are calculated on a quarterly basis and therefore fully capture stage movements between quarters. If movements were calculated on a year-to-date basis they would only reflect the opening and closing position of the financial instrument. The transfers of financial instruments represents the impact of stage transfers upon the gross carrying/nominal amount and associated allowance for ECL.
The net remeasurement of ECL arising from stage transfers represents the increase or decrease due to these transfers, for example, moving from a 12-month (stage 1) to a lifetime (stage 2) ECL measurement basis. Net remeasurement excludes the underlying customer risk rating ('CRR')/probability of default ('PD') movements of the financial instruments from stage transfers. This is captured, along with other credit quality movements in the 'changes in risk parameters - credit quality' line item.
Changes in 'New financial assets originated or purchased', 'assets derecognised (including final repayments)' and 'changes to risk parameters - further lending/repayments' represent the impact from volume movements within the group's lending portfolio.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees at 31 December 2019

	Non-credit impaired				Credit impaired					
	Stage 1		Stage 2		Stage 3		POCI		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**29,505,799**	**(71,585)**	**2,813,607**	**(100,676)**	**1,312,443**	**(864,817)**	**36,778**	**(36,778)**	**33,668,627**	**(1,073,856)**
Transfers of financial instruments:	**(198,307)**	**(22,794)**	**(174,672)**	**74,049**	**372,979**	**(51,255)**	**–**	**–**	**–**	**–**
– Transfers from Stage 1 to Stage 2	**(2,998,583)**	**10,128**	**2,998,583**	**(10,128)**	**–**	**–**	**–**	**–**	**–**	**–**
– Transfers from Stage 2 to Stage 1	**2,940,276**	**(32,939)**	**(2,940,276)**	**32,939**	**–**	**–**	**–**	**–**	**–**	**–**
– Transfers to Stage 3	**(140,000)**	**17**	**(254,287)**	**58,473**	**394,287**	**(58,490)**	**–**	**–**	**–**	**–**
– Transfers from Stage 3	**–**	**–**	**21,308**	**(7,235)**	**(21,308)**	**7,235**	**–**	**–**	**–**	**–**
Net remeasurement of ECL arising from transfer of stage	**–**	**21,443**	**–**	**(21,191)**	**–**	**(15,276)**	**–**	**–**	**–**	**(15,024)**
Net new and further lending / (repayments)	**1,346,240**	**(10,221)**	**(216,980)**	**(50,567)**	**(218,061)**	**(66,632)**	**–**	**–**	**911,199**	**(127,420)**
Assets written off	**–**	**–**	**–**	**–**	**(252,997)**	**252,997**	**(35,281)**	**35,281**	**(288,278)**	**288,278**
Foreign exchange and others	**(2,987)**	**5**	**(1,441)**	**13**	**543**	**(244)**	**2**	**(2)**	**(3,883)**	**(228)**
Others	**(25)**	**2,408**	**–**	**92**		**(52,971)**	**948**	**6**	**923**	**(50,465)**
At 31 Dec 2019	**30,650,720**	**(80,744)**	**2,420,514**	**(98,280)**	**1,214,907**	**(798,198)**	**2,447**	**(1,493)**	**34,288,588**	**(978,715)**
ECL release/(charge) for the period	**–**	**11,222**	**–**	**(71,758)**	**–**	**(81,908)**	**–**	**–**	**–**	**(142,444)**
Recoveries	**–**	**–**	**–**	**–**	**–**	**33,749**	**–**	**–**	**–**	**33,749**
Others	**–**	**–**	**–**	**–**	**–**	**4,501**	**–**	**–**	**–**	**4,501**
Total ECL Charge for the period	**–**	**11,222**	**–**	**(71,758)**	**–**	**(43,658)**	**–**	**–**	**–**	**(104,194)**

	At 31 Dec 2019		Twelve months ended 31 Dec 2019
	Gross carrying/nominal amount	Allowance for ECL	ECL and other credit charges
	US$000	US$000	US$000
As above	**34,288,588**	**(978,715)**	**(104,194)**
Other financial assets measured at amortised cost	**2,892,317**	**(7,342)**	**15,641**
Other instruments not within the scope of IFRS 9			**(11,064)**
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/ Summary consolidated income statement	**37,180,905**	**(986,057)**	**(99,617)**
Debt instruments measured at FVOCI	**10,438,722**	**(1,485)**	**(373)**
Total allowance for ECL/total income statement ECL charge for the year	**N/A**	**(987,542)**	**(99,990)**

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees at 31 December 2018 (continued)

	Non-credit impaired				Credit impaired					
	Stage 1		Stage 2		Stage 3		POCI		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2018	29,080,220	(78,792)	3,782,161	(127,488)	1,435,815	(945,480)	36,778	(36,778)	34,334,974	(1,188,538)
Transfers of financial instruments:	2,015,010	(29,840)	(2,214,115)	101,236	199,105	(71,396)	–	–	–	–
– Transfers from Stage 1 to Stage 2	(3,932,481)	13,646	3,932,481	(13,646)	–	–		–	–	–
– Transfers from Stage 2 to Stage 1	5,949,600	(43,491)	(5,949,600)	43,491	–	–		–	–	–
– Transfers to Stage 3	(2,117)	5	(242,375)	78,685	244,492	(78,690)		–	–	–
– Transfers from Stage 3	8	–	45,379	(7,294)	(45,387)	7,294		–	–	–
Net remeasurement of ECL arising from transfer of stage	–	24,778	–	(17,081)	–	(23,980)	–	–	–	(16,283)
Net new and further lending / (repayments)	(1,568,368)	12,187	1,236,710	(59,069)	(59,446)	(76,445)	–	–	(391,104)	(123,327)
Assets written off	–	–	–	–	(254,309)	254,309	–	–	(254,309)	254,309
Foreign exchange and others	(14,316)	24	10,468	27	(370)	10	–	–	(4,218)	61
Others	(6,747)	58	(1,617)	1,699	(8,352)	(1,835)	–	–	(16,716)	(78)
At 31 Dec 2018	29,505,799	(71,585)	2,813,607	(100,676)	1,312,443	(864,817)	36,778	(36,778)	33,668,627	(1,073,856)
ECL release/(charge) for the period		36,965		(76,150)		(100,425)	–	–	–	(139,610)
Recoveries	–	–	–	–	–	22,246	–	–	–	22,246
Others	–	–	–	–	–	(1,255)	–	–	–	(1,255)
Total ECL Charge for the period	–	36,965	–	(76,150)	–	(79,434)	–	–	–	(118,619)

	At 31 Dec 2018		Twelve months ended 31 Dec 2018
	Gross carrying/nominal amount	Allowance for ECL	ECL and other credit charges
	US$000	US$000	US$000
As above	33,668,627	(1,073,856)	(118,619)
Other financial assets measured at amortised cost	2,784,969	(632)	40
Other instruments not within the scope of IFRS 9			(9,205)
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/ Summary consolidated income statement	36,453,596	(1,074,488)	(127,784)
Debt instruments measured at FVOCI	5,695,573	(1,112)	164
Total allowance for ECL/total income statement ECL charge for the year	N/A	(1,075,600)	(127,620)

Wholesale lending – Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees at 31 December 2019

	Non-credit impaired				Credit impaired					
	Stage 1		Stage 2		Stage 3		POCI		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**24,006,494**	**(40,461)**	**2,604,902**	**(57,272)**	**1,060,630**	**(712,193)**	**36,778**	**(36,778)**	**27,708,804**	**(846,704)**
Transfers of financial instruments	**(116,213)**	**(17,010)**	**(164,925)**	**26,462**	**281,138**	**(9,452)**	**—**	**—**	**—**	**—**
Net remeasurement of ECL arising from transfer of stage	**—**	**16,210**	**—**	**(16,977)**	**—**	**(12,283)**	**—**	**—**	**—**	**(13,050)**
Net new and further lending / (repayments)	**1,238,291**	**(13,243)**	**(186,876)**	**(3,295)**	**(166,965)**	**(41,367)**	**—**	**—**	**884,450**	**(57,905)**
Assets written off	**—**	**—**	**—**	**—**	**(154,534)**	**154,534**	**(35,281)**	**35,281**	**(189,815)**	**189,815**
Foreign exchange and others	**(2,633)**	**5**	**(1,441)**	**13**	**543**	**(248)**	**2**	**(2)**	**(3,529)**	**(232)**
Others	**(25)**	**2,289**	**—**	**92**	**—**	**(52,921)**	**948**	**6**	**923**	**(50,534)**
At 31 Dec 2019	**25,125,914**	**(52,210)**	**2,251,660**	**(50,977)**	**1,020,812**	**(673,930)**	**2,447**	**(1,493)**	**28,400,833**	**(778,610)**
ECL release/(charge) for the period	**—**	**2,967**	**—**	**(20,272)**	**—**	**(53,650)**	**—**	**—**	**—**	**(70,955)**
Recoveries	**—**	**—**	**—**	**—**	**—**	**9,767**	**—**	**—**	**—**	**9,767**
Others	**—**	**—**	**—**	**—**	**—**	**4,370**	**—**	**—**	**—**	**4,370**
Total ECL Charge for the period	**—**	**2,967**	**—**	**(20,272)**	**—**	**(39,513)**	**—**	**—**	**—**	**(56,818)**
At 1 Jan 2018	23,148,867	(49,618)	3,572,950	(74,131)	1,170,430	(783,115)	36,778	(36,778)	27,929,025	(943,642)
Transfers of financial instruments:	2,137,831	(25,514)	(2,230,814)	47,388	92,983	(21,874)	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	20,837	—	(11,419)	—	(23,815)	—	—	—	(14,397)
Net new and further lending / (repayments)	(1,257,676)	13,746	1,253,947	(20,845)	(41,772)	(35,678)	—	—	(45,501)	(42,777)
Assets written off	—	—	—	—	(152,390)	152,391	—	—	(152,390)	152,391
Foreign exchange and others	(15,782)	28	10,436	35	(110)	43	—	—	(5,456)	106
Others	(6,746)	60	(1,617)	1,700	(8,511)	(145)	—	—	(16,874)	1,615
At 31 Dec 2018	24,006,494	(40,461)	2,604,902	(57,272)	1,060,630	(712,193)	36,778	(36,778)	27,708,804	(846,704)
ECL release/(charge) for the period	—	34,583	—	(32,264)	—	(59,494)	—	—	—	(57,175)
Recoveries	—	—	—	—	—	158	—	—	—	158
Others	—	—	—	—	—	1,397	—	—	—	1,397
Total ECL Charge for the period	—	34,583	—	(32,264)	—	(57,939)	—	—	—	(55,620)

Personal lending – Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees at 31 December 2019

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL	Gross carrying/ nominal amount	Allowance for ECL
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
At 1 Jan 2019	**5,499,305**	**(31,124)**	**208,705**	**(43,404)**	**251,813**	**(152,624)**	**5,959,823**	**(227,152)**
Transfers of financial instruments:	**(82,094)**	**(5,784)**	**(9,747)**	**47,587**	**91,841**	**(41,803)**	**—**	**—**
Net remeasurement of ECL arising from transfer of stage	**—**	**5,233**	**—**	**(4,214)**	**—**	**(2,993)**	**—**	**(1,974)**
Net new and further lending / (repayments)	**107,949**	**3,022**	**(30,104)**	**(47,272)**	**(51,096)**	**(25,265)**	**26,749**	**(69,515)**
Assets written off	**—**	**—**	**—**	**—**	**(98,463)**	**98,463**	**(98,463)**	**98,463**
Foreign exchange and others	**(354)**	**—**	**—**	**—**	**—**	**4**	**(354)**	**4**
Others	**—**	**119**	**—**	**—**	**—**	**(50)**	**—**	**69**
At 31 Dec 2019	**5,524,806**	**(28,534)**	**168,854**	**(47,303)**	**194,095**	**(124,268)**	**5,887,755**	**(200,105)**
ECL release/(charge) for the period	**—**	**8,255**	**—**	**(51,486)**	**—**	**(28,258)**	**—**	**(71,489)**
Recoveries						**23,982**	**—**	**23,982**
Others						**131**	**—**	**131**
Total ECL Charge for the period	**—**	**8,255**	**—**	**(51,486)**	**—**	**(4,145)**	**—**	**(47,376)**
At 1 Jan 2018	5,931,353	(29,174)	209,212	(53,357)	265,385	(162,365)	6,405,950	(244,896)
Transfers of financial instruments:	(122,821)	(4,326)	16,699	53,848	106,122	(49,522)	—	—
Net remeasurement of ECL arising from transfer of stage	—	3,941	—	(5,661)	—	(165)	—	(1,885)
Net new and further lending / (repayments)	(310,693)	(1,559)	(17,237)	(38,224)	(17,674)	(40,767)	(345,604)	(80,550)
Assets written off	—	—	—	—	(101,918)	101,918	(101,918)	101,918
Foreign exchange and others	1,466	(4)	31	(8)	(260)	(33)	1,237	(45)
Others	—	(2)	—	(2)	158	(1,690)	158	(1,694)
At 31 Dec 2018	5,499,305	(31,124)	208,705	(43,404)	251,813	(152,624)	5,959,823	(227,152)
ECL release/(charge) for the period	—	2,382	—	(43,885)	—	(40,932)	—	(82,435)
Recoveries	—	—	—	—	—	22,088	—	22,088
Others	—	—	—	—	—	(2,652)	—	(2,652)
Total ECL Charge for the period	—	2,382	—	(43,885)	—	(21,496)	—	(62,999)

Credit quality of financial instruments

Credit Review and Risk Identification teams regularly review exposures and processes in order to provide an independent, rigorous assessment of the credit risk management framework across the HSBC Group, reinforce secondary risk management controls and share best practice. Internal audit, as a tertiary control function, focuses on risks with a global perspective and on the design and effectiveness of primary and secondary controls, carrying out oversight audits via the sampling of global/regional control frameworks, themed audits of key or emerging risks and project audits to assess major change initiatives.

The five credit quality classifications defined below each encompass a range of more granular, internal credit rating grades assigned to wholesale and retail lending businesses, as well as the external ratings attributed by external agencies to debt securities.

There is no direct correlation between the internal and external ratings at granular level, except to the extent each falls within a single quality classification.

Credit quality classification

	Debt securities and other bills	Wholesale lending	Retail lending
	External credit rating	Internal credit rating	Internal credit rating[2]
Quality classification			
Strong	**A– and above**	**CRR[1]1 to CRR2**	**Band 1 and 2**
Good	**BBB+ to BBB–**	**CRR3**	**Band 3**
Satisfactory	**BB+ to B and unrated**	**CRR4 to CRR5**	**Band 4 and 5**
Sub-standard	**B– to C**	**CRR6 to CRR8**	**Band 6**
Impaired	**Default**	**CRR9 to CRR10**	**Band 7**

1 *Customer risk rating.*
2 *12-month point-in-time probability weighted probability of default ('PD').*

Quality classification definitions

- 'Strong' exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss.
- 'Good' exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk.
- 'Satisfactory' exposures require closer monitoring and demonstrate an average to fair capacity to meet financial commitments, with moderate default risk.
- 'Sub-standard' exposures require varying degrees of special attention and default risk is of greater concern.
- 'Impaired' exposures have been assessed as impaired. These also include retail accounts classified as Band 1 to Band 6 that are delinquent by more than 90 days, unless individually they have been assessed as not impaired; and renegotiated loans that have met the requirements to be disclosed as impaired and have not yet met the criteria to be returned to the unimpaired portfolio.

Risk rating scales

The customer risk rating ('CRR') 10-grade scale summarises a more granular underlying 23-grade scale of obligor probability of default ('PD'). All HSBC customers are rated using the 10- or 23-grade scale, depending on the degree of sophistication of the Basel II approach adopted for the exposure.

Retail lending credit quality is disclosed based on a 12-month point-in-time probability weighted probability of default.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications. The ratings of Standard and Poor's are cited, with those of other agencies being treated equivalently. Debt securities with short-term issue ratings are reported against the long-term rating of the issuer of those securities. If major rating agencies have different ratings for the same debt securities, a prudent rating selection is made in line with regulatory requirements.

Distribution of financial instruments by credit quality at 31 December 2019

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	8,320,848	3,913,442	6,292,933	888,115	1,201,158	20,616,496	(955,261)	19,661,235
Loans and advances to banks held at amortised cost	4,966,769	365,094	451,727	15,311	–	5,798,901	(1,478)	5,797,423
Cash and balances at central banks	896,922	–	–	–	–	896,922	(314)	896,608
Items in the course of collection from other banks	78,992	–	–	–	–	78,992	–	78,992
Reverse repurchase agreements – non-trading	464,772	–	276,889	–	–	741,661	(28)	741,633
Prepayments, accrued income and other assets	118,248	125,837	903,725	21,045	5,888	1,174,743	(7,000)	1,167,743
– endorsements and acceptances	57,416	119,004	611,307	21,045	–	808,772	(1,111)	807,661
– accrued income and other	60,832	6,833	292,418	–	5,888	365,971	(5,889)	360,082
Debt instruments measured at fair value through other comprehensive income	9,009,603	–	1,429,119	–	–	10,438,722	(1,485)	10,437,237
Out-of-scope for IFRS 9						–		
Trading assets	22,069	15,490	157,241	–	–	194,800	–	194,800
Derivatives	1,015,523	131,931	26,221	955	1,665	1,176,295	–	1,176,295
Total gross carrying amount on balance sheet	24,893,746	4,551,794	9,537,855	925,426	1,208,711	41,117,532	(965,566)	40,151,966
Percentage of total credit quality	61%	11%	23%	2%	3%	100%		100%
Loan and other credit related commitments	3,413,834	1,555,964	1,263,902	79,014	6,809	6,319,523	(15,939)	6,303,584
Financial guarantees	986,983	281,983	261,271	14,044	9,387	1,553,668	(6,037)	1,547,631
Total nominal amount off balance sheet	4,400,817	1,837,947	1,525,173	93,058	16,196	7,873,191	(21,976)	7,851,215
At 31 Dec 2019	29,294,563	6,389,741	11,063,028	1,018,484	1,224,907	48,990,723	(987,542)	48,003,181

Distribution of financial instruments by credit quality at 31 December 2018 (continued)

	Gross carrying/notional amount							
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total	Allowance for ECL	Net
	US$000	US$000	US$000	US$000	US$000	US$000	US$000	US$000
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	5,805,304	6,522,422	6,817,823	649,050	1,338,011	21,132,610	(1,059,235)	20,073,375
Loans and advances to banks held at amortised cost	4,089,114	677,967	291,785	—	—	5,058,866	(1,558)	5,057,308
Cash and balances at central	1,170,499	—	—	—	—	1,170,499	(140)	1,170,359
Items in the course of collection from other banks	81,984	—	—	—	—	81,984	—	81,984
Reverse repurchase agreements – non-trading	225,912	271,718	257,454	—	—	755,084	(8)	755,076
Prepayments, accrued income and other assets	76,000	145,636	539,457	16,309	—	777,402	(484)	776,918
– endorsements and acceptances	37,679	145,162	307,316	16,309	—	506,466	(484)	505,982
– accrued income and other	38,321	474	232,141	—	—	270,936	—	270,936
Debt instruments measured at fair value through other comprehensive income	3,970,505	—	1,725,068	—	—	5,695,573	(1,112)	5,694,461
Out-of-scope for IFRS 9								
Trading assets	41,851	11,390	181,644	11,271	—	246,156	—	246,156
Derivatives	795,974	88,074	64,486	4,688	—	953,222	—	953,222
Total gross carrying amount on balance sheet	16,257,143	7,717,207	9,877,717	681,318	1,338,011	35,871,396	(1,062,537)	34,808,859
Loan and other credit related commitments	3,141,027	1,536,192	936,769	34,042	604	5,648,634	(2,736)	5,645,898
Financial guarantees	864,703	574,695	337,917	40,596	10,606	1,828,517	(10,327)	1,818,190
Total nominal amount off balance sheet	4,005,730	2,110,887	1,274,686	74,638	11,210	7,477,151	(13,063)	7,464,088
At 31 Dec 2018	20,262,873	9,828,094	11,152,403	755,956	1,349,221	43,348,547	(1,075,600)	42,272,947

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage allocation at 31 December 2019

	Gross carrying/notional amount							
	Strong	**Good**	**Satisfactory**	**Sub-standard**	**Credit impaired**	**Total**	**Allowance for ECL**	**Net**
	US$000	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**	**US$000**
Gross carrying amount on balance sheet	**23,856,154**	**4,404,373**	**9,354,393**	**924,471**	**1,207,046**	**39,746,437**	**(965,566)**	**38,780,871**
– stage 1	**23,772,777**	**3,840,090**	**8,309,779**	**613,260**	**—**	**36,535,906**	**(72,526)**	**36,463,380**
– stage 2	**83,377**	**564,283**	**1,044,614**	**311,211**	**—**	**2,003,485**	**(87,481)**	**1,916,004**
– stage 3	**—**	**—**	**—**	**—**	**1,204,599**	**1,204,599**	**(804,066)**	**400,533**
– POCI	**—**	**—**	**—**	**—**	**2,447**	**2,447**	**(1,493)**	**954**
Nominal amount off balance sheet	**4,400,817**	**1,837,947**	**1,525,173**	**93,058**	**16,196**	**7,873,191**	**(21,976)**	**7,851,215**
– stage 1	**4,305,271**	**1,768,562**	**1,206,005**	**74,821**	**—**	**7,354,659**	**(10,862)**	**7,343,797**
– stage 2	**95,546**	**69,385**	**319,168**	**18,237**	**—**	**502,336**	**(11,094)**	**491,242**
– stage 3	**—**	**—**	**—**	**—**	**16,196**	**16,196**	**(20)**	**16,176**
– POCI	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
At 31 Dec 2019	**28,256,971**	**6,242,320**	**10,879,566**	**1,017,529**	**1,223,242**	**47,619,628**	**(987,542)**	**46,632,086**
Gross carrying amount on balance sheet	15,419,318	7,617,743	9,631,587	665,359	1,338,011	34,672,018	(1,062,537)	33,609,481
– stage 1	14,985,805	7,403,873	8,285,788	374,109	—	31,049,575	(68,688)	30,980,887
– stage 2	433,513	213,870	1,345,799	291,250	—	2,284,432	(92,254)	2,192,178
– stage 3	—	—	—	—	1,301,233	1,301,233	(864,817)	436,416
– POCI	—	—	—	—	36,778	36,778	(36,778)	—
Nominal amount off balance sheet	4,005,730	2,110,887	1,274,686	74,638	11,210	7,477,151	(13,063)	7,464,088
– stage 1	4,002,547	1,808,744	1,009,962	18,389	—	6,839,642	(4,347)	6,835,295
– stage 2	3,183	302,143	264,724	56,249	—	626,299	(8,716)	617,583
– stage 3	—	—	—	—	11,210	11,210	—	11,210
– POCI	—	—	—	—	—	—	—	—
At 31 Dec 2018	19,425,048	9,728,630	10,906,273	739,997	1,349,221	42,149,169	(1,075,600)	41,073,569

Past due but not impaired gross financial instruments

Past due but not impaired gross financial instruments are those loans where, although customers have failed to make payments in accordance with the contractual terms of their facilities, they have not met the impaired loan criteria. This is typically when a loan is less than 90 days past due and there are no other indicators of impairment.

Further examples of exposures past due but not impaired include individually assessed mortgages that are in arrears more than 90 days, but there are no other indicators of impairment and the value of collateral is sufficient to repay both the principal debt and all potential interest for at least one year or short-term trade facilities past due more than 90 days for technical reasons such as delays in documentation but there is no concern over the creditworthiness of the counterparty.

The following table provides an analysis of gross loans and advances to customers held at amortised cost which are past due but not considered impaired. There are no other significant balance sheet items where past due balances are not considered impaired.

Stage 2 days past due analysis

	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2	1 to 29 DPD	30 and > DPD	Stage 2	1 to 29 DPD	30 and > DPD	Stage 2	1 to 29 DPD	30 and > DPD
	US$000	US$000	US$000	US$000	US$000	US$000	%	%	%
Loans and advances to customers held at amortised cost	**1,907,875**	**84,344**	**34,190**	**(87,128)**	**(7,802)**	**(11,337)**	**(4.6)**	**(9.3)**	**(33.2)**
– personal	**148,660**	**17,282**	**21,203**	**(47,299)**	**(6,993)**	**(11,056)**	**(31.8)**	**(40.5)**	**(52.1)**
– corporate and commercial	**1,759,215**	**67,062**	**12,987**	**(39,829)**	**(809)**	**(281)**	**(2.3)**	**(1.2)**	**(2.2)**
– non-bank financial institutions	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Loans and advances to banks at amortised cost	**10,303**	**—**	**—**	**(58)**	**—**	**—**	**(0.6)%**	**—**	**—**
Other financial assets measured at amortised cost	**85,307**	**2,636**	**78**	**(295)**	**(4)**	**(9)**	**(0.3)**	**(0.2)**	**(11.5)**
At 31 Dec 2019	**2,003,485**	**86,980**	**34,268**	**(87,481)**	**(7,806)**	**(11,346)**	**(4.4)**	**(9.0)**	**(33.1)**
Loans and advances to customers held at amortised cost	2,177,357	103,529	89,644	(91,814)	(9,119)	(17,795)	(4.2)	(8.8)	(19.9)
– personal	183,149	22,674	32,002	(43,407)	(6,443)	(13,448)	(23.7)	(28.4)	(42.0)
– corporate and commercial	1,994,208	80,855	57,642	(48,407)	(2,676)	(4,347)	(2.4)	(3.3)	(7.5)
– non-bank financial institutions	—	—	—	—	—	—	—	—	—
Loans and advances to banks at amortised cost	9,950	—	—	(146)	—	—	(1.5)%	—	—
Other financial assets measured at amortised cost	97,127	7,001	10,467	(293)	(7)	(17)	(0.3)	(0.1)	(0.2)
At 31 Dec 2018	2,284,434	110,530	100,111	(92,253)	(9,126)	(17,812)	(4.0)	(8.3)	(17.8)

Impaired loans

Impaired and stage 3 loans and advances are those that meet any of the following criteria:

- Wholesale loans and advances classified as Customer Risk Rating ('CRR') 9 or CRR 10. These grades are assigned when the group considers that either the customer is unlikely to pay their credit obligations in full without recourse to security, or when the customer is more than 90 days past due on any material credit obligation to the group.
- Retail loans and advances classified as Band 10. These grades are typically assigned to retail loans and advances more than 90 days past due unless individually they have been assessed as not impaired.
- Renegotiated loans and advances that have been subject to a change in contractual cash flows as a result of a concession which the lender would not otherwise consider, and where it is probable that without the concession the borrower would be unable to meet its contractual payment obligations in full, unless the concession is insignificant and there are no other indicators of impairment. Renegotiated loans remain classified as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, and there are no other indicators of impairment.

Renegotiated loans and forbearance

Where a loan is modified due to significant concerns about the borrower's ability to meet contractual payments when due, a range of forbearance strategies is employed in order to improve the management of customer relationships, maximise collection opportunities and, if possible, avoid default, foreclosure or repossession.

Identifying renegotiated loans

Loans are identified as renegotiated loans when the group modifies the contractual payment terms due to significant credit distress of the borrower. 'Forbearance' describes concessions made on the contractual terms of a loan in response to an obligor's financial difficulties. The group classifies and reports loans on which concessions have been granted under conditions of credit distress as 'renegotiated loans' when their contractual payment terms have been modified because the group has significant concerns about the borrowers' ability to meet contractual payments when due.

When considering modification terms, the borrower's continued ability to repay is assessed and where they are unrelated to payment arrangements, whilst potential indicators of impairment, these loans are not considered as renegotiated loans. Loans that have been identified as renegotiated retain this designation until maturity or derecognition. A loan that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms or if the terms of an existing agreement are modified such that the renegotiated loan is substantially a different financial instrument. Any new loans that arise following derecognition events will continue to be disclosed as renegotiated loans.

Credit Quality of Renegotiated Loans

Under IFRSs, an entity is required to assess whether there is objective evidence that financial assets are impaired at the end of each reporting period. A loan is impaired and an impairment allowance is recognised when there is objective evidence of a loss event that has an effect on the cash flows of the loan which can be reliably estimated.

When the group grants a concession to a customer that the group would not otherwise consider, as a result of their financial difficulty, this is objective evidence of impairment and impairment losses are measured accordingly.

A renegotiated loan is presented as impaired when:

- there has been a change in contractual cash flows as a result of a concession which the lender would otherwise not consider, and;
- it is probable that without the concession, the borrower would be unable to meet contractual payment obligations in full.

This presentation applies unless the concession is insignificant and there are no other indicators of impairment.

The renegotiated loan will continue to be disclosed as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, and there are no other indicators of impairment.

Renegotiated loans are classified as unimpaired where the renegotiation has resulted from significant concern about a borrower's ability to meet their contractual payment terms but the renegotiated terms are based on current market rates and contractual cash flows are expected to be collected in full following the renegotiation. Unimpaired renegotiated loans also include previously impaired renegotiated loans that have demonstrated satisfactory performance over a period of time or have been assessed based on all available evidence as having no remaining indicators of impairment.

Loans that have been identified as renegotiated retain this designation until maturity or derecognition. When a loan is restructured as part of a forbearance strategy and the restructuring results in derecognition of the existing loan, such as in some debt consolidations, the new loan is disclosed as renegotiated.

When determining whether a loan that is restructured should be derecognised and a new loan recognised, the group considers the extent to which the changes to the original contractual terms result in the renegotiated loan, considered as a whole, being a substantially different financial instrument.

Renegotiated loans and advances to customers by industry sector at 31 December 2019

	First lien residential mortgages	Other personal lending	Corporate and commercial	Non-bank financial institutions	Renegotiated loans
	US$000	US$000	US$000	US$000	US$000
Stage 1	**—**	**—**	**334,492**	**—**	**334,492**
Stage 2	**—**	**—**	**48,968**	**—**	**48,968**
Stage 3	**95,069**	**12,595**	**658,698**	**17,900**	**784,262**
Renegotiated loans At 31 Dec 2019	**95,069**	**12,595**	**1,042,158**	**17,900**	**1,167,722**
Allowance for expected credit losses on renegotiated loans					**520,360**
Stage 1	—	—	348,750	14,785	363,535
Stage 2	—	—	117,285	—	117,285
Stage 3	125,129	15,875	697,066	—	838,070
Renegotiated loans At 31 Dec 2018	125,129	15,875	1,163,101	14,785	1,318,890
Allowance for expected credit losses on renegotiated loans					547,893

For retail lending, unsecured renegotiated loans are generally segmented from other parts of the loan portfolio. Renegotiated expected credit loss assessments reflect the higher rates of losses typically encountered with renegotiated loans. For wholesale lending, renegotiated loans are typically assessed individually. Credit risk ratings are intrinsic to the impairment assessments. The individual impairment assessment takes into account the higher risk of the future non-payment inherent in renegotiated loans.

For details of our impairment policies on loans and advances and financial investments, see Note 2.2(i) on the Financial Statements.

Collateral and other credit enhancements held

Loans and advances held at amortised cost

Although collateral can be an important mitigant of credit risk, it is the group's practice to lend on the basis of the customer's ability to meet their obligations out of cash flow resources rather than rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided without security. However, for other lending a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the group may utilise the collateral as a source of repayment. Depending on its form, collateral can have a significant financial effect in mitigating the group's exposure to credit risk.

The tables below provide a quantification of the value of fixed charges the group holds over specific asset (or assets) where the group has a history of enforcing, and are able to enforce, the collateral in satisfying a debt in the event of the borrower failing to meet its contractual obligations, and where the collateral is cash or can be realised by sale in an established market. The collateral valuation in the tables below excludes any adjustments for obtaining and selling the collateral.

The group may also manage its risk by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees, but the valuation of such mitigants is less certain and their financial effect has not been quantified. In particular, loans shown in the tables below as not collateralised or partially collateralised may benefit from such credit mitigants.

Personal lending: residential mortgage loans including loan commitments by level of collateral at 31 December

	Gross carrying/nominal amount	
	2019	2018
	US$000	US$000
Stage 1		
Fully collateralised	**1,715,360**	1,702,109
LTV ratio:		
– less than 50%	**257,775**	286,974
– 51% to 60%	**201,333**	191,743
– 61% to 70%	**288,063**	308,881
– 71% to 80%	**486,549**	532,624
– 81% to 90%	**391,497**	296,163
– 91% to 100%	**90,143**	85,724
Partially collateralised (A):	**102,972**	104,048
LTV ratio:		
– 101% to 110%	**48,207**	59,451
– 111% to 120%	**18,673**	12,514
– greater than 120%	**36,092**	32,083
– *collateral value on A*	***95,163***	*101,464*
Total	**1,818,332**	1,806,157
Stage 2		
Fully collateralised	**10,694**	32,652
LTV ratio:		
– less than 50%	**3,273**	4,995
– 51% to 60%	**520**	1,746
– 61% to 70%	**2,776**	3,966
– 71% to 80%	**2,038**	11,464
– 81% to 90%	**657**	7,892
– 91% to 100%	**1,430**	2,589
Partially collateralised (B):	**2,618**	3,696
LTV ratio:		
– 101% to 110%	**–**	1,985
– 111% to 120%	**917**	355
– greater than 120%	**1,701**	1,356
– *collateral value on B*	***2,122***	*2,331*
Total	**13,312**	36,348
Stage 3		
Fully collateralised	**44,652**	58,117
LTV ratio:		
– less than 50%	**7,774**	12,064
– 51% to 60%	**4,025**	5,850
– 61% to 70%	**5,023**	9,893
– 71% to 80%	**4,951**	13,027
– 81% to 90%	**7,012**	13,928
– 91% to 100%	**15,867**	3,355
Partially collateralised (C):	**72,725**	108,055
LTV ratio:		
– 101% to 110%	**8,482**	7,503
– 111% to 120%	**4,134**	11,274
– greater than 120%	**60,109**	89,278
– *collateral value on C*	***71,840***	*108,055*
Total	**117,377**	166,172
At 31 Dec	**1,949,021**	2,008,677

The above table shows residential mortgage lending including off-balance sheet loan commitments by level of collateral. The collateral included in the table above consists of first charges on real estate.

The LTV ratio is calculated as the gross on balance sheet carrying amount of the loan and any off-balance sheet loan commitment at the balance sheet date divided by the value of collateral. The methodologies for obtaining residential property collateral values vary throughout the group, but are typically determined through a combination of professional appraisals, house price indices or statistical analysis. Valuations must be updated on a regular basis and, as a minimum, at intervals of every three years.

Other personal lending

The other personal lending consists primarily of motor vehicle, credit cards and second lien portfolios. Motor vehicle lending is generally collateralised by the motor vehicle financed. Credit cards and overdrafts are generally unsecured. Second lien lending is supported by collateral but the claim on the collateral is subordinate to the first lien charge.

Collateral on loans and advances

Commercial real estate loans and advances

Collateral held is analysed separately below for commercial real estate and for other corporate, commercial and financial (non-bank) lending. The analysis includes off-balance sheet loan commitments, primarily undrawn credit lines.

Wholesale lending: commercial real estate loans and advances including loan commitments by level of collateral at 31 December

	Gross carrying/nominal amount	
	2019	2018
	US$000	US$000
Stage 1		
Not collateralised	**1,609,747**	2,096,358
Fully collateralised	**264,162**	62,612
LTV ratio:		
– less than 50%	**28,771**	19,887
– 51% to 75%	**44,660**	13,771
– 76% to 90%	**—**	—
– 91% to 100%	**190,731**	28,954
Partially collateralised (A):	**101,208**	291,120
– *collateral value on A*	***78,142***	*250,289*
Total	**1,975,117**	2,450,090
Stage 2		
Not collateralised	**3,416**	202,884
Fully collateralised	**12,926**	22,143
LTV ratio:		
– less than 50%	**12,926**	—
– 51% to 75%	**—**	19,251
– 76% to 90%	**—**	—
– 91% to 100%	**—**	2,892
Partially collateralised (B):	**—**	—
– *collateral value on B*	**—**	—
Total	**16,342**	225,027
Stage 3		
Not collateralised	**30,716**	30,699
Fully collateralised	**6,478**	6,900
LTV ratio:		
– less than 50%	**6,478**	6,900
– 51% to 75%	**—**	—
– 76% to 90%	**—**	—
– 91% to 100%	**—**	—
Partially collateralised (C):	**171,257**	171,080
– *collateral value on C*	***151,594***	*163,180*
Total	**208,451**	208,679
At 31 Dec	**2,199,910**	2,883,796

The collateral included in the table above consists of fixed first charges on real estate and charges over cash for commercial real estate. These facilities are disclosed as not collateralised if they are unsecured or benefit from credit risk mitigation from guarantees, which are not quantified for the purposes of this disclosure.

The value of commercial real estate collateral is determined through a combination of professional and internal valuations and physical inspection. Due to the complexity of valuing collateral for commercial real estate, local valuation policies determine the frequency of review based on local market conditions. Revaluations are sought with greater frequency when, as part of the regular credit assessment of the obligor, material concerns arise in relation to the transaction which may reflect on the underlying performance of the collateral, or in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation (i.e. the obligor's credit quality classification indicates it is at the lower end, that is sub-standard, or approaching impaired). Where such concerns exist the revaluation method selected will depend upon the loan-to-value relationship, the direction in which the local commercial real estate market has moved since the last valuation and, most importantly, the specific characteristics of the underlying commercial real estate which is of concern.

Other corporate, commercial and financial (non-bank) is analysed separately below reflecting the difference in collateral held on the portfolios. For financing activities in corporate and commercial lending that are not predominantly commercial real estate-oriented, collateral value is not strongly correlated to principal repayment performance. Collateral values are generally refreshed when an obligor's general credit performance deteriorates and we have to assess the likely performance of secondary sources of repayment should it prove necessary to rely on them.

Wholesale lending: other corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral by stage at 31 December

	Gross carrying/nominal amount	
	2019	2018[1]
	US$000	US$000
Stage 1		
Not collateralised	**22,936,289**	22,746,445
Fully collateralised	**676,110**	350,081
LTV ratio:		
– less than 50%	**379,671**	80,332
– 51% to 75%	**113,473**	95,328
– 76% to 90%	**83,476**	68,861
– 91% to 100%	**99,490**	105,560
Partially collateralised (A):	**1,811,389**	1,374,919
– *collateral value on A*	***600,074***	*292,404*
Total	**25,423,788**	24,471,445
Stage 2		
Not collateralised	**1,936,677**	1,796,671
Fully collateralised	**57,440**	327,327
LTV ratio:		
– less than 50%	**26,463**	21,117
– 51% to 75%	**25,014**	3,354
– 76% to 90%	**2,990**	5,185
– 91% to 100%	**2,973**	297,671
Partially collateralised (B):	**285,424**	281,123
– *collateral value on B*	***108,130***	*110,874*
Total	**2,279,541**	2,405,121
Stage 3		
Not collateralised	**594,138**	707,696
Fully collateralised	**122,712**	91,161
LTV ratio:		
– less than 50%	**21,432**	2,830
– 51% to 75%	**1,023**	21,506
– 76% to 90%	**78,820**	66,825
– 91% to 100%	**21,437**	–
Partially collateralised (C):	**162,843**	137,392
– *collateral value on C*	***62,139***	*51,433*
Total	**879,693**	936,249
POCI		
Not collateralised	**2,447**	36,778
Fully collateralised	**–**	–
LTV ratio:		
– less than 50%	**–**	–
– 51% to 75%	**–**	–
– 76% to 90%	**–**	–
– 91% to 100%	**–**	–
Partially collateralised (C):	**–**	–
– *collateral value on C*	**–**	–
Total	**2,447**	36,778
At 31 Dec	**28,585,469**	27,849,593

1 *Certain line items have been updated with total impact of US$902m to align to current year HSBC Group approach.*

Other credit risk exposures

In addition to collateralised lending described above, other credit enhancements are employed and methods used to mitigate credit risk arising from financial assets. These are described in more detail below.

Securities issued by governments, banks and other financial institutions may benefit from additional credit enhancement, notably through government guarantees that reference these assets.

The group's maximum exposure to credit risk includes financial guarantees and similar arrangements that the group issues or enters into, and loan commitments that the group are irrevocably committed to. Depending on the terms of the arrangement, the group may have recourse to additional credit mitigation in the event that a guarantee is called upon or a loan commitment is drawn and subsequently defaults.

Derivatives

The International Swaps and Derivatives Association ('ISDA') Master Agreement is our preferred agreement for documenting derivatives activity. It provides the contractual framework within which dealing activity across a full range of over-the-counter ('OTC') products is conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or another pre-agreed termination event occurs. It is common, and our preferred practice, for the parties to execute a Credit Support Annex ('CSA') in conjunction with the ISDA Master Agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions.

Concentration of exposure

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics or such counterparties are engaged in similar activities or industry sectors so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. The group uses a number of controls and measures to minimise undue concentration of exposure in our portfolios across industry and global businesses. These include portfolio and counterparty limits, approval and review controls, and stress testing.

The group provides a diverse range of financial services both in the Middle East and internationally. As a result, its portfolio of financial instruments with credit risk is diversified, with no exposures to individual industries or economic groupings totalling more than 10% of consolidated total assets, except as follows:

- the majority of the group's exposure to credit risk is concentrated in the Middle East. Within the Middle East, the group's credit risk is diversified over a wide range of industrial and economic groupings; and
- the group's position as part of a major international banking group means that it has a significant concentration of exposure to banking counterparties. The majority of credit risk to the banking industry at 31 December 2019 and 31 December 2018 was concentrated in the Middle East.

Wrong-way risk is an aggravated form of concentration risk and arises when there is a strong correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. The group uses a range of procedures to monitor and control wrong-way risk, including requiring entities to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines.

Gross loans and advances to customers by industry sector

	Gross loans and advances to customers	
	Total	As a % of total gross loans
At 31 Dec 2019	**US$000**	**%**
Personal		
– residential mortgages	**1,949,021**	**9.5**
– other personal	**1,885,944**	**9.1**
	3,834,965	**18.6**
Corporate and commercial		
– commercial, industrial and international trade	**9,522,586**	**46.2**
– commercial real estate and other property-related	**2,805,084**	**13.6**
– government	**1,468,378**	**7.1**
– other commercial	**2,859,850**	**13.9**
	16,655,898	**80.8**
Financial		
– non-bank financial institutions	**125,633**	**0.6**
Total gross loans and advances to customers	**20,616,496**	**100.0**
Impaired loans		
– as a percentage of gross loans and advances to customers	**5.83%**	
Total impairment allowances		
– as a percentage of gross loans and advances to customers	**4.63%**	
At 31 Dec 2018		
Personal		
– residential mortgages	2,008,677	9.5
– other personal	1,908,830	9.0
	3,917,507	18.5
Corporate and commercial		
– commercial, industrial and international trade	9,347,222	44.2
– commercial real estate and other property-related	2,864,960	13.6
– government	1,640,769	7.8
– other commercial	3,114,514	14.7
	16,967,465	80.3
Financial		
– non-bank financial institutions	247,638	1.2
Total gross loans and advances to customers	21,132,610	100.0
Impaired loans		
– as a percentage of gross loans and advances to customers	6.33%	
Total impairment allowances		
– as a percentage of gross loans and advances to customers	5.01%	

Areas of special interest

Geopolitical risk in the Middle East remained prevalent during 2019 with continued economic and diplomatic sanctions on Qatar and the Kingdom of Saudi Arabia facing challenges on the international stage including interruptions to oil production in the second half of 2019. However, the majority of the group's exposures in the region continued to be concentrated in the UAE, where the political and economic landscape remained stable.

Elsewhere across the region where the group has presence, economic and political change including social unrest continue to be carefully monitored with risk appetite adjusted accordingly.

2019 saw oil prices (Brent Crude) remain above US$60bbl throughout the year providing stability for fiscal budgets regionally but there were some offsetting production cuts so underlying economic activity remained subdued.

Wholesale lending

Wholesale lending covers the range of credit facilities granted to sovereign borrowers, banks, non-bank financial institutions and corporate entities.

The group’s wholesale portfolios are well diversified across industry sectors throughout the region, with exposure subject to portfolio controls.

Subdued economic activity continues to create challenging market conditions across all sectors such as Retail, Automotive Dealerships, Commercial Real Estate, Hotels and Tourism etc. The Contracting sector continues to experience challenges as paymasters delay payments placing increased pressure on main and sub-contractors. In addition, the volume of new projects has slowed resulting in severe competition and squeezed margins being seen for new projects.

The outlook for hydrocarbon production and prices remains a key determinant of confidence in the region and continues to bring uncertainty into the region’s economies.

During 2019, the group continued to manage its counterparty exposures in Middle East countries most at risk from the uncertain political environment.

A number of measures are taken by conducting portfolio stress testing, using lending guidelines dynamically, monitoring of sector concentrations in addition to regular reviews of industries including Oil and Gas, Contracting, Retail and Auto Dealer sectors.

Second order risk continues to be a concern and reviews have been completed on Large Concentration risks and Cross Border exposure. The Regional Portfolio Oversight Council continues to review portfolio trends.

Commercial real estate

Commercial real estate continues to face a challenging outlook with a slowdown in transactions volumes, continuing declines in rentals and asset prices and a fundamental supply/demand imbalance. Whilst portfolio credit quality across this sector remained broadly stable, there continues to be evidence of softening valuations which is in line with overall market sentiment and there remains risk of stress given the cyclical nature of the sector. Accordingly, across the group’s portfolios, credit risk is mitigated by long-standing and conservative policies on asset origination which focus on relationships with long-term customers and limited initial leverage. HSBC Group Risk, in conjunction with major subsidiaries, designates real estate as a Specialised Lending/Controlled Sector and, accordingly, implements enhanced exposure approval, monitoring and reporting procedures. For example, the Group monitors risk appetite limits for the sector at regional level to detect and prevent higher risk concentrations. Given the developing legal environment and the region being more prone to volatility, further conservatism is adopted in the Middle East.

Sovereign counterparties

The overall quality of the group’s sovereign portfolio remained strong during the period with the large majority of both in-country and cross-border limits extended to countries with strong internal credit risk ratings. Higher oil prices has brought some relief in budget deficits and more expansive fiscal measures in 2019 and forecast for 2020. The group regularly updates its assessment of higher risk countries and adjusts its risk appetite to reflect prevalent market conditions as appropriate.

Ibor transition

Regulators and central banks in various jurisdictions have convened national working groups (‘NWGs’) to identify replacement rates for the interbank offer rates (‘Ibors’) that will not be used beyond 2021, and where appropriate, to facilitate an orderly transition to these rates.

Given the current lack of alternatives, the group has contracts referencing Ibors with maturities beyond 2021. The group is part of HSBC Group's Ibor transition programme with the objective of facilitating an orderly transition from Ibors for the group and its clients. This global programme oversees the transition by each of the global businesses and is led by the Group Chief Risk Officer. The programme is currently focussed on developing alternative rate products, and the supporting processes and systems, that reference the NWG-selected replacement rates and making them available to customers. The programme is concurrently developing the capability to transition, through repapering, outstanding Ibor contracts.

Although the group has plans to transition contractually Ibor-referenced loans onto replacement rates, the group's ability to transition this portfolio by the end of 2021 is materially dependent on the availability of products that reference the replacement rates and on the group's customers being ready and able to adapt their own processes and systems to accommodate the replacement products. The process of adopting new reference rates may expose the group to an increased level of operational, financial and conduct related risks. We continue to engage with industry participants, the official sector and our clients to support an orderly transition and the mitigation of the risks resulting from the transition.

Liquidity and Funding

Overview

Liquidity risk is the risk that the group does not have sufficient financial resources to meet the obligations as they fall due or that the group can only do so at an excessive cost. Liquidity risk arises from mismatches in the timing of cash flows.

Funding risk is the risk that funding considered to be sustainable, and therefore used to fund assets, is not sustainable over time. Funding risk arises when illiquid asset positions cannot be funded at the expected terms and when required.

Liquidity and funding risk management framework

The group has an internal liquidity and funding risk management framework (‘LFRF’) which aims to allow the group to withstand very severe liquidity stresses. It is based on global policies that are designed to be adaptable to different business models, markets and regulations. The LFRF comprises policies, metrics and controls designed to ensure that the group has oversight of our liquidity and funding risks in order to manage them appropriately.

The group manages liquidity and funding risk at an operating entity level to ensure that obligations can be met in the jurisdiction where they fall due, generally without reliance on other entities of HSBC. Operating entities are required to meet internal minimum requirements and any applicable regulatory requirements at all times. Management of liquidity and funding is primarily undertaken by country in the

operating entities in compliance with the Group’s LFRF and with practices and limits set by the GMB through the RMM and approved by the Board. The group's general policy is that each defined operating entity should be self-sufficient in funding its own activities.

Governance

It is the responsibility of Asset, Liability and Capital Management (‘ALCM’) teams to apply the LFRF at the individual entity level. Regional and local ALCM teams are responsible for the implementation of Group-wide and local regulatory policy at a legal entity level. Balance Sheet Management (‘BSM’) has responsibility for cash and liquidity management. The UAE branch of the bank, being an RMM operating entity, is overseen by the HSBC Holdings ALCO and the HSBC Group Risk Management Meeting. The remaining smaller operating entities are overseen by the Group ALCO, with appropriate escalation of significant issues to HSBC Holdings ALCO and the HSBC Group Risk Management Meeting.

Liquidity Risk Management carry out independent review, challenge and assurance of the appropriateness of the risk management activities undertaken by ALCM and BSM. Their work includes setting control standards, advice on policy implementation, and review and challenge of reporting.

Internal Audit provide independent assurance that risk is managed effectively.

Overall liquidity risk profile

The LFRF is delivered using the following key aspects:

- A liquidity adequacy measure: LCR
- A funding profile measure: NSFR
- Single currency liquidity and funding management
- A deposit concentration measure
- A wholesale market term funding maturity concentration measure
- Analysis of off-balance sheet commitments
- Individual Liquidity Adequacy Assessment and liquidity stress testing
- Liquidity funds transfer pricing
- Contingency funding plans
- Forward looking funding status assessments
- Asset encumbrance.

Management of Liquidity and Funding Risk

Liquidity coverage ratio (‘LCR’)

The LCR aims to ensure that a bank has sufficient unencumbered high-quality liquid assets (‘HQLA’) to meet its liquidity needs in a 30 calendar day liquidity stress scenario. For the calculation of the LCR, the group follows the guidelines set by the European Commission.

Net stable funding ratio (‘NSFR’)

The group’s internal liquidity and funding risk management framework requires all entities to use the net stable funding ratio (‘NSFR’) as a basis for ensuring operating entities raise sufficient stable funding to support their business activities. The NSFR requires institutions to maintain minimum amount of stable funding based on assumptions of asset liquidity.

Depositor concentration and wholesale market term funding maturity concentration

The LCR and NSFR metrics assume a stressed outflow based on a portfolio of depositors within each deposit segment. The validity of these assumptions is challenged if the portfolio of depositors is not large enough to avoid depositor concentration. Operating entities are exposed to term re-financing concentration risk if the current maturity profile results in future maturities being overly concentrated in any defined period.

The group monitors depositor concentration and term funding maturity concentration. Both metrics are subject to limits which are approved by the group Board.

Currency mismatch in the LCR and NSFR

The group’s internal liquidity and funding risk management framework requires all operating entities to monitor the LCR and NSFR for material currencies. Limits are set locally for single currency LCR and NSFR to ensure stable funding by currency and to ensure that outflows can be met, given assumptions on stressed capacity in the FX swap markets.

Liquid assets

Liquid assets are held and managed on a stand-alone operating entity basis. Most are held directly by the Balance Sheet Management (‘BSM’) department, primarily for the purpose of managing liquidity risk in line with the LFRF.

Liquid assets also include any unencumbered liquid assets held outside BSM departments for any other purpose. The LFRF gives ultimate control of all unencumbered assets and sources of liquidity to BSM.

Contingency Funding Plan

The Contingency Funding Plan ensures that the group can cope in the event of a liquidity stress, by having an actionable plan in place.

Management of liquidity risk

Liquidity coverage ratio ('LCR')

The LCR metric is designed to promote the short-term resilience of a bank's liquidity profile, and became a minimum regulatory standard from 1 October 2015, under European Commission ('EC') Delegated Regulation 2015/61.

Delegated Act ('DA') LCR

Unaudited

	2019	2018
	%	%
HSBC Bank Middle East Limited	242	214

The group additionally computes and reports a DFSA-basis LCR, which differs from the Delegated Act ('DA') LCR primarily with respect to the haircuts applied to liquid securities under DA issued by Gulf Cooperation Council ('GCC') sovereign issuers and outflow percentages applied for off-balance sheet items and retail deposits.

DFSA LCR

Unaudited

	2019	2018
	%	%
HSBC Bank Middle East Limited	245	205

Net stable funding ratio ('NSFR')

The European calibration of NSFR is pending following the Basel Committee's final recommendation in October 2014. The group calculates NSFR in line with Basel Committee on Banking Supervision's publication number 295 (BCBS295).

NSFR-295

Unaudited

	2019	2018
	%	%
HSBC Bank Middle East Limited	160	138

The DFSA implementation of NSFR was effective from June 2018. It differs from the Group NSFR with respect to weightings applied for off-balance sheet items, retail deposits and in the calculation for derivatives.

DFSA NSFR

Unaudited

	2019	2018
	%	%
HSBC Bank Middle East Limited	161	138

Components of Net Stable Funding Ratio (Unaudited) at 31 December 2019

In currency amount (US$000)		Unweighted value by residual maturity				Weighted values
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
ASF (available stable funds) Item						
1	**Capital**	–	–	–	5,941,551	5,941,551
2	Regulatory Capital	–	–	–	5,941,551	5,941,551
3	Other capital	–	–	–	–	–
4	**Retail deposits/PSIAs and deposits/PSIAs from small business customers:**	–	11,669,480	–	–	10,502,532
5	Stable Deposits/PSIAs	–	–	–	–	–
6	Less stable deposits/PSIAs	–	11,669,480	–	–	10,502,532
7	**Wholesale funding:**	–	13,611,245	1,149,332	4,864,695	10,824,078
8	Operational deposits / operational accounts		5,086,312	–	–	2,543,156
9	Other wholesale funding		8,524,933	1,149,332	4,864,695	8,280,922
10	**Liabilities with matching interdependent assets**	–	–	–	–	–
11	**Other liabilities:**	–	1,859,143	–	–	–
12	NSFR derivative liabilities and net liabilities for Shari'a compliant hedging contracts	–	–	–	–	–
13	All other liabilities and equity not included in the above categories	–	1,859,143	–	–	–
14	**Total ASF**	–	27,139,868	1,149,332	10,806,246	27,268,161
RSF (Required stable funds) Item						
15	**Total NSFR high-quality liquid assets ('HQLA')**	–	10,066,690	946,333	2,743,518	365,693
16	**Deposits/PSIAs held at other financial institutions for operational purposes**	–	–	–	–	–
17	**Performing loans and securities (including Shari'a compliant securities):**	–	10,584,801	3,956,512	9,675,780	13,622,535
18	Performing loans to financial institutions secured by Level 1 HQLA	–	294,807	202,603	–	130,782
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	–	2,878,564	393,688	607,367	1,235,996
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, Central Banks and PSEs, of which:	–	7,249,485	3,266,243	7,307,001	10,942,518
21	*With a risk weight of less than or equal to 50%*	–	2,190,429	234,150	2,631,488	2,922,756
22	Performing residential mortgages, of which:	–	95,664	89,147	1,559,614	1,106,155
23	*With a risk weight of less than or equal to 50%*	–	95,664	89,147	1,559,614	1,106,155
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	–	66,281	4,831	201,798	207,084
25	**Assets with matching interdependent liabilities**	–	–	–	–	–
26	**Other Assets**	–	798,620	–	542,347	1,340,967
27	Physical traded commodities, including gold	–	–	–	–	–
28	Assets posted as initial margin for derivative contracts/Shari'a compliant hedging contracts and contributions to default funds of CCPs	–	–	–	–	–
29	NSFR derivative assets	–	–	–	85,266	85,266
30	NSFR derivative liabilities before deduction of variation margin posted	–	–	–	219,169	219,169
31	All other assets not included in the above categories	–	798,620	–	237,912	1,036,532
32	**Off-balance sheet items**	–	34,573,682	–	–	1,626,979
33	**Total RSF**	–	56,023,793	4,902,845	12,961,645	16,956,174
34	**Net Stable Funding Ratio (%)**					161

Components of Net Stable Funding Ratio (Unaudited) at 31 December 2018 (continued)

In currency amount (US$000)		Unweighted value by residual maturity				Weighted values
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
ASF (available stable funds) Item						
1	Capital	—	—	—	5,551,322	5,551,322
2	Regulatory Capital	—	—	—	5,551,322	5,551,322
3	Other capital	—	—	—	—	—
4	Retail deposits/PSIAs and deposits/PSIAs from small business customers:	—	10,717,833	—	—	9,646,050
5	Stable Deposits/PSIAs	—	—	—	—	—
6	Less stable deposits/PSIAs	—	10,717,833	—	—	9,646,050
7	Wholesale funding:	—	11,572,711	1,461,992	295,776	6,158,857
8	Operational deposits / operational accounts		5,170,533	—	—	2,585,266
9	Other wholesale funding		6,402,178	1,461,992	295,776	3,573,591
10	Liabilities with matching interdependent assets	—	—	—	—	—
11	Other liabilities:	—	1,786,775	1,501,128	1,298,617	2,049,181
12	NSFR derivative liabilities and net liabilities for Shari'a compliant hedging contracts	—	—	—	—	—
13	All other liabilities and equity not included in the above categories	—	1,786,775	1,501,128	1,298,617	2,049,181
14	Total ASF	—	24,077,319	2,963,120	7,145,715	23,405,410
RSF (Required stable funds) Item						
15	Total NSFR high-quality liquid assets (HQLA)	—	6,837,125	320,492	2,284,456	248,951
16	Deposits/PSIAs held at other financial institutions for operational purposes	—	—	—	—	—
17	Performing loans and securities (including Shari'a compliant securities):	—	9,541,319	3,590,890	10,478,895	13,867,794
18	Performing loans to financial institutions secured by Level 1 HQLA	—	425,981	21,569	—	53,383
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	—	2,068,040	105,334	1,049,361	1,412,234
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, Central Banks and PSEs, of which:	—	6,887,128	3,362,201	7,610,052	11,045,062
21	*With a risk weight of less than or equal to 50%*	—	*1,649,759*	*292,425*	*2,740,735*	*2,752,570*
22	Performing residential mortgages, of which:	—	96,969	90,496	1,602,119	1,135,110
23	*With a risk weight of less than or equal to 50%*	—	*96,969*	*90,496*	*1,602,119*	*1,135,110*
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	—	63,201	11,290	217,363	222,005
25	Assets with matching interdependent liabilities	—	—	—	—	—
26	Other Assets	—	93,657	66,526	1,155,358	1,315,541
27	Physical traded commodities, including gold	—	—	—	—	—
28	Assets posted as initial margin for derivative contracts/Shari'a compliant hedging contracts and contributions to default funds of CCPs	—	—	—	—	—
29	NSFR derivative assets	—	—	—	1,285	1,285
30	NSFR derivative liabilities before deduction of variation margin posted	—	—	—	182,560	182,560
31	All other assets not included in the above categories	—	93,657	66,526	971,513	1,131,696
32	Off-balance sheet items	—	30,967,975	—	—	1,510,523
33	Total RSF	—	47,440,076	3,977,908	13,918,709	16,942,809
34	Net Stable Funding Ratio (%)					138

Primary sources of funding

Customer deposits in the form of current accounts and savings deposits payable on demand or at short notice form a significant part of our funding, and the group places considerable importance on maintaining their stability. For deposits, stability depends upon maintaining depositor confidence in our capital strength and liquidity, and on competitive and transparent pricing.

Of total liabilities of US$35,882m at 31 December 2019, funding from customers amounted to US$23,727m, of which US$23,340m was contractually repayable within one year.

An analysis of cash flows payable by the group under financial liabilities by remaining contractual maturities at the balance sheet date is included in Note 26.

Assets available to meet these liabilities, and to cover outstanding commitments to lend (US$17,435m), included cash, central bank balances, items in the course of collection and treasury and other bills (US$3,702m); loans to banks (US$5,797m, including US$5,380m repayable within one year); and loans to customers (US$19,661m, including US$10,913m repayable within one year). In the normal course of business, a proportion of customer loans contractually repayable within one year will be extended.

The group also access wholesale funding markets by issuing senior secured and unsecured debt securities (publicly and privately) and borrowing from the secured repo markets against high-quality collateral to align asset and liability maturities and currencies and to maintain a presence in local wholesale markets.

Ordinary share capital and retained reserves, non-core capital instruments and intergroup borrowings are also a source of stable funding.

Market risk

Market risk management

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

The group's exposure to market risk is separated into trading or non-trading portfolios. Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions. Non-trading portfolios include positions that primarily arise from the

interest rate management of the group's retail and commercial banking assets and liabilities and financial investments designated as fair value through other comprehensive income.

Market risk measures

Monitoring and limiting market risk exposures

The group's objective is to manage and control market risk exposures while maintaining a market profile consistent with the group's risk appetite. The group uses a range of tools to monitor and limit market risk exposures, including:

- sensitivity measures include sensitivity of net interest income and sensitivity for structural foreign exchange, which are used to monitor the market risk positions within each risk type;
- value at risk ('VaR') is a technique that estimates the potential losses that could occur on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence; and
- in recognition of VaR's limitations the group augments VaR with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables.

Market risk is managed and controlled through limits approved by the Risk Management Meeting of the GMB for HSBC Holdings and our various global businesses. These limits are allocated across business lines and to the HSBC Group's legal entities.

The management of market risk is principally undertaken in Global Markets. VaR limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set.

VaR limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set. HSBC Group Risk, an independent unit within HSBC Group, is responsible for our market risk management policies and measurement techniques. The group has an independent market risk management and control function that is responsible for measuring market risk exposures in accordance with the policies defined by HSBC Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

The group assesses the market risks arising on each product in its business and to transfer them to either its Global Markets unit for management, or to separate books managed under the supervision of the local ALCO. Our aim is to ensure that all market risks are consolidated within operations that have the necessary skills, tools, management and governance to manage them professionally. In certain cases where the market risks cannot be fully transferred, the group identifies the impact of varying scenarios on valuations or on net interest income resulting from any residual risk positions.

Sensitivity analysis

Sensitivity analysis measures the impact of individual market factor movements on specific instruments or portfolios, including interest rates, foreign exchange rates and equity prices, such as the effect of a one basis point change in yield. We use sensitivity measures to monitor the market risk positions within each risk type. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

Value at risk

Value at risk ('VaR') is a technique that estimates the potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence.

The VaR models used by the group are predominantly based on historical simulation. These models derive plausible future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and rates, such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures. The historical simulation models assess potential market movements with reference to data from the past two years and calculate VaR to a 99% confidence level and for a one-day holding period.

The group routinely validates the accuracy of its VaR models by back-testing the actual daily profit and loss results, adjusted to remove non-modelled items such as fees and commissions, against the corresponding VAR numbers. Statistically, the group would expect to see losses in excess of VaR only 1% of the time over a one-year period. The actual number of excesses over this period can therefore be used to gauge how well the models are performing.

Although a valuable guide to risk, VaR should always be viewed in the context of its limitations:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a one-day holding period assumes that all positions can be liquidated or the risks offset in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one-day holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence;
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- VaR is unlikely to reflect loss potential on exposures that only arise under conditions of significant market movement.

Trading and non-trading portfolio

The following table provides an overview of the reporting of the risks within this section:

		Portfolio	
	Footnotes	Trading	Non-trading
Risk type			
Foreign exchange and commodity	*1*	VaR	VaR
Interest rate		VaR	VaR
Credit spread		VaR	VaR

1 *The reporting of commodity risk is consolidated with foreign exchange risk and is not applicable to non-trading portfolios.*

Value at risk of the trading and non-trading portfolio

The group VaR, both trading and non-trading, is below:

Value at risk

	2019	2018
	US$000	US$000
At 31 Dec	**2,533**	2,437
Average	**2,140**	7,415
Maximum	**4,244**	12,124
Minimum	**1,300**	2,437

Trading portfolios

The group's control of market risk in the trading portfolios is based on a policy of restricting individual operations to trading within a list of permissible instruments authorised for each site by HSBC Group Risk, of enforcing new product approval procedures, and of restricting trading in the more complex derivative products only to offices with appropriate levels of product expertise and robust control systems.

Market-making and position-taking is undertaken within Global Markets. The VaR for such trading intent activity at 31 December 2019 was US$2.25m (2018: US$2m).

VaR by risk type for the trading intent activities

	Footnotes	Foreign exchange (FX)	Interest rate	Credit spread	Total
		US$000	US$000	US$000	US$000
At 31 Dec 2019	1	**407**	**2,228**	**245**	**2,256**
Average		**974**	**1,177**	**627**	**1,728**
Maximum		**2,614**	**2,752**	**3,129**	**3,156**
Minimum		**180**	**527**	**106**	**794**
At 31 Dec 2018		1,583	1,132	612	1,931
Average		5,182	2,794	487	5,557
Maximum		12,647	4,191	1,252	11,977
Minimum		1,332	599	208	1,608

1 *The total VaR is non-additive across risk types due to diversification effects.*

Non-trading portfolios

Non-trading VaR of the Group includes contributions from all global businesses. There is no commodity risk in the non-trading portfolios. Non-trading VaR includes the interest rate risk in the banking book transferred to and managed by Balance Sheet Management ('BSM') and the non-trading financial instruments held by BSM.

VaR by risk type for the non-trading activities

	Interest rate	Credit spread	Total
	US$000	US$000	US$000
At 31 Dec 2019	**1,898**	**346**	**2,000**
Average	**1,377**	**384**	**1,416**
Maximum	**2,081**	**1,660**	**3,295**
Minimum	**819**	**143**	**846**
At 31 Dec 2018	2,033	489	2,043
Average	4,211	921	4,568
Maximum	5,850	2,181	6,949
Minimum	2,033	350	2,043

Gap risk

A gap event is a significant and sudden change in market price with no accompanying trading opportunity. Such movements may occur, for example, when, in reaction to an adverse event or unexpected news announcement, some parts of the market move far beyond their normal volatility range and become temporarily illiquid.

Given the characteristics, these transactions will not have significant impact on VaR or to market risk sensitivity measures. The group captures the risks for such transactions within the stress testing scenarios and monitors gap risk on an ongoing basis.

The group incurred no material losses (2018: nil) arising from gap risk movements in the underlying market price on such transactions in the 12 months ended 31 December 2019.

De-peg risk

For certain currencies (pegged or managed) the spot exchange rate is pegged at a fixed rate (typically to USD), or managed within a predefined band around a pegged rate. De-peg risk is the risk of the peg or managed band changing or being abolished, and moving to a floating regime.

Using stressed scenarios on spot rates, the group is able to analyse how de-peg events would impact the positions held by the group. This complements traditional market risk metrics, such as historical VaR, which may not fully capture the risk involved in holding

positions in pegged currencies. Historical VaR relies on past events to determine the likelihood of potential profits or losses. However, pegged or managed currencies may not have experienced a de-peg event during the historical timeframe being considered.

Non-trading portfolios

The principal objective of market risk management of non-trading portfolios is to optimise net interest income.

Interest rate risk in non-trading portfolios arises principally from mismatches between the future yield on assets and their funding cost as a result of interest rate changes. Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas, such as the incidence of mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand such as current accounts, and the re-pricing behaviour of managed rate products.

The control of market risk in the non-trading portfolios is based on transferring the risks to the books managed by Global Markets and Balance Sheet Management ('BSM') or the local ALCO. The net exposure is typically managed through the use of interest rate swaps within agreed limits. The VaR for these portfolios is included within the group VaR.

Structural foreign exchange exposures

Structural foreign exchange exposures represent net investments in subsidiaries, branches or associates, the functional currencies of which are currencies other than the US dollar. An entity's functional currency is the currency of the primary economic environment in which the entity operates.

Exchange differences on structural exposures are recorded in 'Other comprehensive income'. The main operating currencies of the group are UAE dirham and other Gulf currencies that are linked to the US dollar.

The group's policy is to hedge structural foreign currency exposures only in limited circumstances. The group's structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that the group's capital ratio is protected from the effect of changes in exchange rates. This is usually achieved by ensuring that the rates of structural exposures in a given currency to risk-weighted assets denominated in that currency is broadly equal to the capital ratio. The group considers hedging structural foreign currency exposures only in limited circumstances to protect the capital ratio or the US dollar value of capital invested. Such hedging would be undertaken using forward foreign exchange controls or by financing the borrowings in the same currencies as the functional currencies involved.

Net interest income sensitivity

A principal part of the group's management of market risk in non-trading portfolios is monitoring the sensitivity of projected net interest income under varying interest rate scenarios (simulation modelling). The group aims, through our management of market risk in non-trading portfolios, to mitigate the impact of prospective interest rate movements which could reduce future net interest income, while balancing the cost of hedging such activities on the current net revenue stream.

For simulation modelling, businesses use a combination of scenarios relevant to their local businesses and markets and standard scenarios which are required throughout the HSBC Group. The latter are consolidated to illustrate the combined pro forma effect on the group's consolidated portfolio valuations and net interest income.

Projected net interest income sensitivity figures represent the effect of the pro forma movements in net interest income based on the projected yield curve scenarios and the group's current interest rate risk profile. This effect, however, does not incorporate actions which would probably be taken by Global Markets or in the business units to mitigate the effect of interest rate risk. In reality, Global Markets seeks proactively to change the interest rate risk profile to minimise losses and optimise net revenues. The projections also assume that interest rates of all maturities move by the same amount (although rates are not assumed to become negative in the falling rates scenario) and, therefore, do not reflect the potential impact on net interest income of some rates changing while others remain unchanged. In addition, the projections take account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates linked to other bases (such as Central Bank rates or product rates over which the entity has discretion in terms of the timing and extent of rate changes). The projections make other simplifying assumptions, including that all positions run to maturity.

Defined benefit pension scheme

Market risk also arises within the group's defined benefit pension schemes to the extent that the obligations of the schemes are not fully matched by assets with determinable cash flows.

Operational risk

Operational risk is the risk to achieving the strategy or objectives as a result of inadequate or failed internal processes, people and systems, or from external events.

Responsibility for minimising operational risk lies with our employees. They are required to manage the operational risks of the business and operational activities for which they are responsible.

We maintain adequate oversight of our non-financial risks through our various specialist Risk Stewards, along with our aggregate overview of Non-Financial Risk, through Chief Risk Officers. The operational risk function provides support to the Chief Risk Officers.

Key developments in 2019

During 2019, we continued to strengthen our approach to managing Non-Financial risk, as set out in the operational risk management framework ('ORMF'). The framework sets out our approach to governance and risk appetite. It enables a single view of non-financial risks that matter the most and associated controls.

Legal risk

The group implements processes and procedures in place to manage legal risk that conform to HSBC Group standards.

Legal risk falls within the definition of operational risk and includes the risk of a member of the group suffering financial loss, legal or regulatory action or reputational damage due to:

- contractual risk, which is the risk that any group member enters into inadequate or unenforceable customer contracts or ancillary documentation, inadequate or unenforceable non-customer contracts or ancillary documentation and/or contractual fiduciary;

- dispute adjudication risk, which is the risk arising due to an adverse dispute environment or a failure to take appropriate steps to defend, prosecute and/or resolve actual or threatened legal claims brought against or by a group member, including for the avoidance of doubt, regulatory matters;
- legislative risk, which is the risk that a group member fails to or is unable to identify, analyse, track, assess or correctly interpret applicable legislation, case law or regulation, or new regulatory, legislative or doctrinal interpretations of existing laws or regulations, or decisions in the Courts or regulatory bodies;
- non-contractual rights risk, which is the risk that a group member's assets are not properly owned or protected or are infringed by others, or a group member infringes another party's rights; and
- non-contractual obligations risk, which is the risk arising due to infringement of third-party rights and/or breach of common law duties.

The group has a legal function to assist management in controlling legal risk. The function provides legal advice to manage and control legislative, contractual and non-contractual risks and support in managing litigation claims and significant regulatory enforcement against group companies, as well as in respect of non-routine debt recoveries or other litigation against third parties.

The group members must notify the legal department immediately if any litigation, dispute or material regulatory action is either threatened or commenced against the group or an employee (acting in his capacity as an officer or employee of the group). The legal department must be immediately advised of any significant action by a regulatory authority, where the proceedings are criminal, or where the claim might materially affect HSBC Group's reputation.

The legal department will assess each claim that is threatened or commenced against the group or any employee (acting in his capacity as an officer or employee of the group) in order to determine the appropriate action, including appointment of external counsel, consideration of the merits of the claim, consideration of any provision, consideration of any document holds or interviews that may be required and consideration of any immediate reporting to senior management or the bank's regulators as may be necessary.

The legal department must immediately advise the bank's senior management and the HSBC Group of any threatened or actual litigation claims if such claim exceeds US$5m or of any significant action by a regulatory authority, where the proceedings are criminal or where a claim might materially affect HSBC Group's reputation. In addition, the legal department submits periodic returns to the bank's risk management meeting and Board Risk Committee meeting, including updates on ongoing litigation and details of any judgements issued against the group. These returns are shared with the bank's regulators on a periodic basis.

Finally, the group is required to submit a quarterly return to HSBC Group detailing outstanding claims where the claim (or group of similar claims) exceeds US$10m, where the action is by a regulatory authority, where the proceedings are criminal, where the claim might materially affect the group's reputation, or, where the HSBC Group has requested returns be completed for a particular claim. These returns are used for reporting to the HSBC Group Audit Committee and the Board of HSBC Holdings plc.

Capital management

The Dubai Financial Services Authority ('DFSA') is the lead regulator of the bank.

The bank's objective is to ensure that capital resources are at all times adequate and efficiently used. This implies assessing the bank's capital demand and maintaining the capital supply at the required level. The bank's approach to capital management is driven by strategic and organisational requirements, taking into account the regulatory, economic and commercial environment in which it operates in. The bank's policy on capital management is underpinned by a capital management process and the internal capital adequacy assessment process, which enables it to manage its capital in a consistent manner.

The DFSA supervises the bank and, receives information on the capital adequacy of, and sets capital requirements for, the bank. Individual branches and subsidiaries are directly regulated by their local banking supervisors, where applicable, who set and monitor their capital adequacy requirements.

The DFSA's capital requirements are prescribed in the DFSA Prudential - Investment, Insurance Intermediation and Banking Module ('PIB'). In accordance with the PIB:

1. the capital requirement for an authorised firm is calculated, subject to (2), as the higher of:
   a. the applicable Base Capital Requirement as set out in the PIB; or
   b. its Risk Capital Requirement plus applicable Capital Buffer Requirements.
2. where the authorised firm has an Individual Capital Requirement ('ICR') imposed on it then the Capital Requirement is its ICR plus Risk Capital Requirement plus applicable Capital Buffer Requirements.

An authorised firm must calculate its Risk Capital Requirement as the sum of the following:

- the Credit Risk Capital Requirement;
- the Market Risk Capital Requirement;
- the Operational Risk Capital Requirement; and
- the Displaced Commercial Risk Capital Requirement, where applicable.

Further, the bank is subject to a Capital Conservation Buffer of 2.5% of Risk Weighted Assets which must constitute only CET1 Capital.

The PIB requires an authorised firm to:

- appropriately apply a risk-weight to all on-balance sheet assets and off-balance sheet exposures for capital adequacy purposes. A risk-weight is based on a Credit Quality Grade aligned with the likelihood of counterparty default;
- calculate the Credit Risk Capital Requirement for its on-balance sheet assets and off-balance sheet exposures; and
- reduce the Credit Risk Capital Requirement for its on-balance sheet assets and off-balance sheet exposures where the exposure is covered fully or partly by some form of eligible Credit Risk mitigant.

The DFSA has granted approval to the bank to use HSBC Group internal models for the purposes of calculating Market Risk Requirements.

The bank uses the Standardised Approach for the calculation of Operational Risk Capital Requirement.

The bank's regulatory capital is divided into two tiers:

- Tier 1 capital comprises equity share capital, share premium, retained earnings, other comprehensive income and other reserves. This is adjusted for the amount of cash flow hedge reserve related to gains or losses on cash flow hedges of financial instruments, all unrealised gains or losses on liabilities that are valued at fair value and which result from changes in the bank's own credit quality and deduction for intangible assets.
- Tier 2 capital comprises qualifying non-equity preference share capital, share premium and general provisions limited to 1.25% of Credit Risk Weighted Assets.

The bank maintains its capital requirements at all times in accordance with the DFSA requirements.

Capital structure at 31 December (solo basis)

Unaudited	2019 US$000	2018 US$000
Composition of regulatory capital		
Common Equity Tier 1 capital	**4,901,691**	4,523,090
Total Tier 1 capital	**4,901,691**	4,523,090
Tier 2 capital	**1,039,860**	1,028,232
Total regulatory capital	**5,941,551**	5,551,322
Risk-weighted assets		
Credit and counterparty risk	**26,370,630**	25,514,540
Market risk	**1,780,820**	1,850,063
Operational risk	**3,090,351**	3,105,202
	31,241,801	30,469,805
Capital ratio		
Capital adequacy ratio	**19.02%**	18.22%

32 Contingent liabilities, contractual commitments and guarantees

	2019 US$000	2018 US$000
Guarantees and other contingent liabilities		
Guarantees	**16,136,763**	14,416,716
Commitments		
Documentary credits and short-term trade-related transactions	**716,233**	509,106
Undrawn formal standby facilities, credit lines and other commitments to lend	**16,718,873**	15,397,314
At 31 Dec	**17,435,106**	15,906,420

The above table discloses the nominal principal amounts which represents the maximum amounts at risk should contracts be fully drawn upon and clients default. As a significant portion of guarantees and commitments is expected to expire without being drawn upon, the total of these nominal principal amounts is not representative of future liquidity requirements.

Included in the above are the following contingent liabilities on account of other members of the HSBC Group:

	2019 US$000	2018 US$000
Guarantees and assets pledged by the bank as collateral security	**3,140,418**	2,836,474
Documentary credits and short-term trade-related transactions	**267,164**	130,983
At 31 Dec	**3,407,582**	2,967,457

Guarantees

The group provides guarantees and similar undertakings on behalf of both third-party customers and other entities within the group. These guarantees are generally provided in the normal course of the group's banking business. The principal types of guarantees provided, and the maximum potential amount of future payments which the group could be required to make at 31 December were as follows:

		2019		2018	
		Guarantees in favour of third parties	**Guarantees by the group in favour of other HSBC Group entities**	Guarantees in favour of third parties	Guarantees by the group in favour of other HSBC Group entities
	Footnotes	**US$000**	**US$000**	US$000	US$000
Financial guarantees	*1*	**1,110,198**	**443,470**	1,322,212	506,298
Credit-related guarantees	*2*	**4,180,066**	**992,614**	3,707,579	833,465
Other guarantees		**7,706,081**	**1,704,334**	6,550,451	1,496,711
At 31 Dec		**12,996,345**	**3,140,418**	11,580,242	2,836,474

1 *Financial guarantees are contracts that require the issuer to make specified payments to reimburse the holder for a loss incurred because a specified debtor fails to make payment when due.*
2 *Credit-related guarantees are contracts that have similar features to financial guarantee contracts.*

The amounts disclosed in the above table are nominal principal amounts and reflect the group's maximum exposure under a large number of individual guarantee undertakings. The risks and exposures arising from guarantees are captured and managed in accordance with the group's overall credit risk management policies and procedures. Guarantees with terms of more than one year are subject to the group's annual credit review process.

Other commitments

In addition to the commitments disclosed above, at 31 December 2019 the group had capital commitments to purchase, within one year, land and building and other fixed assets for a value of nil (2018: nil).

Associates

The group and its operations are contingently liable with respect to lawsuits and other matters that arise in the normal course of business. Management is of the opinion that the eventual outcome of the legal and financial liability is not expected to materially affect the group's financial position and operations.

33 Lease commitments

Finance lease receivables

The group leases a variety of assets to third parties under finance leases. At the end of lease terms, assets may be sold to third parties or leased for further terms. Rentals are calculated to recover the cost of assets less their residual value, and earn finance income.

	2019			2018		
	Total future minimum payments	**Unearned finance income**	**Present value**	Total future minimum payments	Unearned finance income	Present value
	US$000	**US$000**	**US$000**	US$000	US$000	US$000
Lease receivables:						
– no later than one year	**79,810**	**(1,858)**	**77,952**	129,773	(2,463)	127,310
– later than one year and no later than five years	**32,274**	**(6,869)**	**25,405**	56,035	(4,397)	51,638
– later than five years	**33,962**	**(1,246)**	**32,716**	25,386	(5,594)	19,792
At 31 Dec	**146,046**	**(9,973)**	**136,073**	211,194	(12,454)	198,740

34 Legal proceedings and regulatory matters

The group is party to legal proceedings and regulatory matters in a number of jurisdictions arising out of its normal business operations. Apart from the matters described below, the group considers that none of these matters are material. The recognition of provisions is determined in accordance with the accounting policies set out in Note 2 of the group's *Annual Report and Accounts 2019.* While the outcome of legal proceedings and regulatory matters is inherently uncertain, management believes that, based on the information available to it, appropriate provisions have been made in respect of these matters as at 31 December 2019. Where an individual provision is material, the fact that a provision has been made is stated and quantified, except to the extent doing so would be seriously prejudicial. Any provision recognised does not constitute an admission of wrongdoing or legal liability. It is not practicable to provide an aggregate estimate of potential liability for our legal proceedings and regulatory matters as a class of contingent liabilities.

Anti-money laundering and sanctions-related matters

(Matters relevant to the group as a subsidiary of HSBC operating in the Middle East)

In December 2012, HSBC Holdings entered into an agreement with the U.S. Office of Foreign Assets Control ("OFAC") regarding historical transactions involving parties subject to OFAC sanctions. Also in December 2012, HSBC Holdings agreed to an undertaking with the UK Financial Services Authority , which was replaced by a Direction issued by the UK Financial Conduct Authority ("FCA") in 2013, and consented to a cease-and-desist order with the US Federal Reserve Board ("FRB"), both of which contained certain forward-looking anti-money laundering ("AML") and sanctions-related obligations. HSBC Holdings agreed to retain an independent compliance monitor to produce annual assessments of the Group's AML and sanctions compliance programme (the "Independent Consultant"). Reflective of the Group's significant progress in strengthening its financial crime risk management capabilities, the Group's engagement with the current Independent Consultant will be terminated and a new Independent Consultant will be appointed with a narrower mandate to assess the remaining areas that require further work in order for the Group to transition fully to business-as-usual financial crime risk management. The Independent Consultant will continue to carry out an annual OFAC compliance review at the FRB's discretion.

Through the Independent Consultant's prior reviews, as well as internal reviews conducted by HSBC, certain potential AML and sanctions compliance issues have been identified that the Group is reviewing further with the FRB, FCA and/or OFAC.

Additionally, HSBC is cooperating with other ongoing investigations and reviews by Financial Crimes Enforcement Network of the US Treasury Department, as well as the Civil Division of the US Attorney's Office for the Southern District of New York and an investigation by the FCA in which HSBC Bank plc is the subject into its compliance with UK AML regulations and financial crime systems and controls requirements.

US Anti-Terrorism Act Related Litigation

Since November 2014, a number of lawsuits have been filed in federal courts in the US against various companies of HSBC Group including HSBC Bank Middle East Limited and others on behalf of plaintiffs who are, or are related to, victims of terrorist attacks in the Middle East.

In November 2014, a complaint was filed in the US District Court for the Eastern District of New York on behalf of representatives of US persons alleged to have been killed or injured in Iraq between April 2004 and November 2011 ("ATA Case 1"). The complaint was filed against HSBC Holdings, HSBC Bank plc, HSBC Bank USA and HSBC Bank Middle East Limited, as well as other non-HSBC banks and the Islamic Republic of Iran. The plaintiffs allege that the defendants violated the US Anti-Terrorism Act ("US ATA") by altering or falsifying

payment messages involving Iran, Iranian parties and Iranian banks for transactions processed through the US. The defendants filed a Motion to Dismiss in May 2015 and an amended Motion to Dismiss in September 2017, following the filing by the Plaintiffs of a Second Amended Complaint in July 2017. In July 2017, the various motions before the Court were referred for review and for the issuance of a judicial report and recommendations, which was issued in July 2018, and which concluded that the New York District Court should deny the defendants' motion to dismiss. The defendants challenged this conclusion and in December 2019, the judge granted the defendants' motion to dismiss in ATA Case 1 which the plaintiffs appealed. The Court allowed minor amendments to the complaint in ATA case 1, following which it indicated that a decision on the Motion to Dismiss would be granted.

In November 2017, a complaint was filed in the Southern District of New York on behalf of representatives of US soldiers killed or injured whilst serving in Iraq ("ATA Case 2"). The complaint was filed against HSBC Holdings plc, HSBC Bank plc, HSBC Bank Middle East Limited, HSBC Bank USA, N.A, HSBC North America Holdings Inc. and other non-HSBC Banks. The plaintiffs allege that the HSBC defendants violated the US ATA by altering or falsifying payment messages involving Iran, Iranian parties and Iranian banks for transactions processed through the US and also allege breaches of US Justice Against Sponsors of Terrorism Act ("JASTA"). ATA Case 2 is now fully briefed, and the HSBC defendants, including HSBC Bank Middle East Limited have filed a Motion to Dismiss, which is currently pending before the Court.

In December 2018, three new cases and two cases relating to existing actions were filed in the New York District Court against the group and various HSBC companies, prompted by an expiry of the statute of limitations which applies to such ATA related claims. An additional ATA case was filed in April 2019 (the "New ATA Cases"). The Court indicated that it would consolidate ATA Case 1 and two of the new ATA Cases to proceed to the second circuit. The Bank defendants will be filing a Motion to Dismiss 2 of these cases in January 2020. The remainder of the e New ATA Cases are at a very early stage. Based on the facts currently known, it is not practicable at this time for HSBC to predict the timing of the resolution of ATA Case 2 or the New ATA Cases.

Foreign exchange rate investigations and litigation

Various regulators and competition authorities around the world, including in the EU, Switzerland, Brazil and South Africa, are conducting investigations and reviews into trading by HSBC and others on the foreign exchange markets. HSBC is cooperating with these investigations and reviews and settlements relevant to the group are detailed below.

In January 2018, HSBC Holdings entered into a three-year deferred prosecution agreement with the Criminal Division of the DoJ, regarding fraudulent conduct in connection with two particular transactions in 2010 and 2011. This concluded the DoJ's investigation into HSBC's historical foreign exchange activities. Under the terms of the FX DPA, HSBC has a number of ongoing obligations, including continuing to cooperate with authorities and implementing enhancements to its internal controls and procedures in its Global Markets business, which will be the subject of annual reports to the DoJ. In addition, HSBC agreed to pay a financial penalty and restitution.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters, which could be significant.

35 Related party transactions

The ultimate parent company of the group is HSBC Holdings plc, which is incorporated in England.

Copies of the HSBC Holdings plc financial statements may be obtained from the following address:

HSBC Holdings plc

8 Canada Square

London

E14 5HQ

Related parties of the group include the parent, fellow subsidiaries, associates, joint ventures, post-employment benefit plans for HSBC employees, Key Management Personnel as defined by IAS 24 'Related Party Disclosures', close family members of Key Management Personnel and entities which are controlled, jointly controlled or significantly influenced by Key Management Personnel or their close family members. Key Management Personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of HSBC Bank Middle East Limited and the group and includes members of the Boards of Directors of HSBC Bank Middle East Limited.

Particulars of transactions with related parties are tabulated below. The disclosure of the year-end balance and the highest amounts outstanding during the year is considered to be the most meaningful information to represent the amount of the transactions and outstanding balances during the year.

Key Management Personnel

The emoluments of a number of the Key Management Personnel are paid by other HSBC Group companies who make no recharge to the group. The Directors are also Directors of a number of other HSBC Group companies and it is not possible to make a reasonable apportionment of their emoluments in respect of each of the companies. Accordingly, no emoluments in respect of the Directors paid by other HSBC Group companies and applicable to the group has been included in the following disclosure.

Transactions, arrangements and agreements including Key Management Personnel

Compensation of Key Management Personnel

	2019	2018
	US$000	US$000
Remuneration (wages and bonus)	**3,155**	6,307
Post-employment benefits	**128**	290
Share-based payments	**834**	2,049
Year ended 31 Dec	**4,117**	8,646

The table below sets out transactions which fall to be disclosed under IAS 24 between the group and the Key Management Personnel of both the bank and its parent company, HSBC Holdings plc, and their connected persons or controlled companies.

Transactions and balances during the year with Key Management Personnel

	Footnotes	2019		2018	
		Highest amounts outstanding during year	**Balance at 31 Dec**	Highest amounts outstanding during year	Balance at 31 Dec
		US$000	**US$000**	US$000	US$000
Key Management Personnel	1				
Loans		**918**	**—**	855	835
Credit cards		**191**	**191**	35	8

1 *Includes Key Management Personnel, close family members of Key Management Personnel and entities that are controlled or jointly controlled by Key Management Personnel or their close family members.*

The above transactions were made in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with persons of a similar standing or, where applicable, with other employees. The transactions did not involve more than the normal risk of repayment or present other unfavourable features.

Transactions with other related parties

Associates

Transactions and balances during the year with associates

	2019		2018	
	Highest balance during the year	**Balance at 31 Dec**	Highest balance during the year	Balance at 31 Dec
	US$000	**US$000**	US$000	US$000
Amounts due to associates	**1,657**	**1,657**	1,279	1,279

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

Transactions of the group with HSBC Holdings plc and fellow subsidiaries of HSBC Holdings plc

Transactions detailed below include amounts due to/from HSBC Holdings plc

	2019		2018	
	Highest balance during the year	**Balance at 31 Dec**	Highest balance during the year	Balance at 31 Dec
	US$000	**US$000**	US$000	US$000
Assets				
Loans and advances to banks	**2,797**	**2,797**	2,463	1,413
Liabilities				
Deposits by banks	**7,351**	**6,875**	9,692	3,433

	For the year ended 31 Dec 2019	For the year ended 31 Dec 2018
	US$000	US$000
Income statement		
Other operating income	**1,550**	1,618
General and administrative expenses	**31,253**	21,082

Transactions detailed below include amounts due to/from fellow subsidiaries of HSBC Holdings plc

	2019		2018	
	Highest balance during the year	**Balance at 31 Dec**	Highest balance during the year	Balance at 31 Dec
	US$000	**US$000**	US$000	US$000
Assets				
Derivatives	**926,754**	**825,453**	904,772	648,869
Loans and advances to banks (including reverse repos)	**1,971,202**	**1,131,657**	2,237,126	949,901
Other assets	**304,678**	**47,439**	870,540	37,596
Liabilities				
Deposits by banks	**1,911,105**	**1,911,105**	1,661,620	482,541
Derivatives	**1,255,240**	**953,261**	930,712	863,808
Subordinated amounts due	**950,000**	**950,000**	950,000	950,000
Other liabilities	**165,561**	**14,553**	199,984	2,242
Off-balance sheet				
Guarantees	**3,160,336**	**3,140,418**	3,231,514	2,836,474
Documentary credit and short-term trade-related transactions	**267,164**	**267,164**	179,904	130,983

	For the year ended 31 Dec 2019	For the year ended 31 Dec 2018
	US$000	US$000
Income Statement		
Interest income	**5,115**	2,238
Interest expense	**81,332**	68,572
Fee income	**65,237**	63,706
Fee expense	**15,314**	18,508
Other operating income	**49,191**	77,070
General and administrative expenses	**181,488**	143,395

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

Transactions between HSBC Bank Middle East Limited and its subsidiaries

Transactions detailed below include amounts due to/from HSBC Bank Middle East Limited and its subsidiaries

	2019		2018	
	Highest balance during the year	**Balance at 31 Dec**	Highest balance during the year	Balance at 31 Dec
	US$000	**US$000**	US$000	US$000
Assets				
Loans and advances to customers	**2,351**	**1,787**	6,369	1,888
Liabilities				
Customer accounts	**27,082**	**26,107**	49,015	26,168

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

36 Events after the balance sheet date

These accounts were approved by the Board of Directors on 18 February 2020 and authorised for issue.

HSBC Bank Middle East Limited

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Middle East Management Office

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Downtown
P O Box 66
Dubai
United Arab Emirates

ALGERIA

El Mohammadia branch
Hydra branch
Oran branch

BAHRAIN

Seef – Main Branch Adliya
Manama – Batelco Building Sanad

KUWAIT

Kuwait City – Sharq Area

QATAR

Doha – Airport Road (Main Branch)
Doha – City Centre
Doha – Salwa Road

UNITED ARAB EMIRATES

Abu Dhabi – Old Airport Road
Dubai – Deira Al Muraqqabat
Dubai – Bur Dubai
Dubai – Jumeirah
Jebel Ali – Free Trade Zone
Fujairah – Hamad Bin Abdulla St
Ras Al Khaimah – Al Dhait
Sharjah – King Faisal Road
5 Customer Service Units and 2 Management Offices

Principal Subsidiary Companies

HSBC Financial Services (Middle East) Limited
HSBC Middle East Securities LLC
HSBC Middle East Finance Company Limited
HSBC Insurance Services (Lebanon) S.A.L.
HSBC Bank Middle East Representative Office Morocco S.A.R.L.

Associated Companies

MENA Infrastructure Fund (GP) Limited

Special Connections With These Members Of The HSBC Group

HSBC Bank Oman S.A.O.G.
HSBC Bank Egypt S.A.E.
HSBC Bank International Limited
HSBC Securities (Egypt) S.A.E.
HSBC Electronic Data Service Delivery (Egypt) S.A.E.
HSBC Saudi Arabia
The Saudi British Bank
HSBC Private Bank (Suisse) SA (DIFC Branch)
HSBC Middle East Leasing Partnership
HSBC Bank A.S.

HSBC BANK MIDDLE EAST LIMITED
Incorporated in the Dubai International Financial Centre number – 2199
Regulated by the Dubai Financial Services Authority.

REGISTERED OFFICE
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