

HSBC Bank plc

Annual Report and Accounts 2019

Contents

	Page
Strategic Report	
Highlights	2
Key financial metrics	3
Purpose and strategy	4
About HSBC Bank plc	4
Products and services	6
How we do business	7
Key Performance Indicators	11
Economic background and outlook	12
Financial summary	13
Risk overview	19
Report of the Directors	
Risk	20
– Our approach to risk	20
– Top and emerging risks	21
– Areas of special interest	25
– Our material banking and insurance risks	26
Capital	75
Corporate Governance Report	77
– Directors	77
– Company Secretary	78
– Board of Directors	78
– Directors' emoluments	78
– Board committees	78
– Dividends	80
– Internal control	80
– Employees	81
– Auditor	83
– Articles of association, conflicts of interest and indemnification of directors	84
– Statement on going concern	85
– Statement of directors' responsibilities	86
Financial Statements	
Independent Auditors' Report	87
Financial statements	94
Notes on the financial statements	105

Presentation of Information

This document comprises the *Annual Report and Accounts 2019* for HSBC Bank plc ('the bank') and its subsidiaries (together 'the group'). 'We', 'us' and 'our' refer to HSBC Bank plc together with its subsidiaries. It contains the Strategic Report, the Report of the Directors, the Statement of Directors' Responsibilities and Financial Statements, together with the Independent Auditors' Report, as required by the UK Companies Act 2006. References to 'HSBC', 'HSBC Group' or 'Group' within this document mean HSBC Holdings plc together with its subsidiaries.

HSBC Bank plc is exempt from publishing information required by The Capital Requirements Country-by-Country Reporting Regulations 2013, as this information is published by its parent, HSBC Holdings plc. This information is available on HSBC's website: www.hsbc.com.

Pillar 3 disclosures for the group are also available on www.hsbc.com, under Investors.

All narrative disclosures, tables and graphs within the Strategic Report and Report of the Directors are unaudited unless otherwise stated.

Our reporting currency is £ sterling.

Unless otherwise specified, all \$ symbols represent US dollars.

Cautionary Statement Regarding Forward-Looking Statements

This *Annual Report and Accounts 2019* contains certain forward-looking statements with respect to the financial condition, results of operations and business of the group.

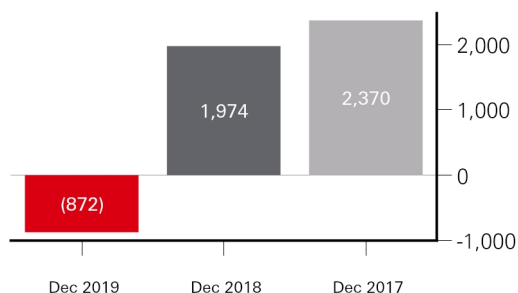
Statements that are not historical facts, including statements about the group's beliefs and expectations, are forward-looking statements. Words such as 'expects', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. HSBC Bank plc makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statement.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement.

Highlights

For the year ended 31 December 2019

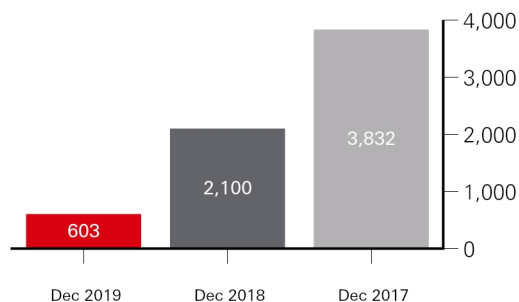
Reported profit/(loss) before tax (£m)



£(872)m

(2018: £1,974m)

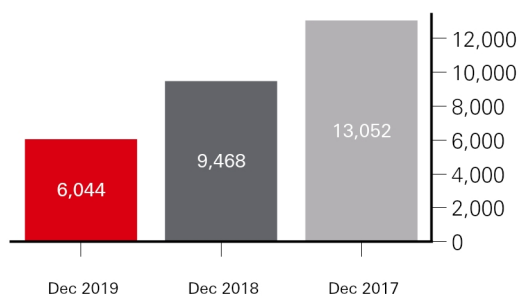
Adjusted profit before tax (£m)



£603m

(2018: £2,100m)

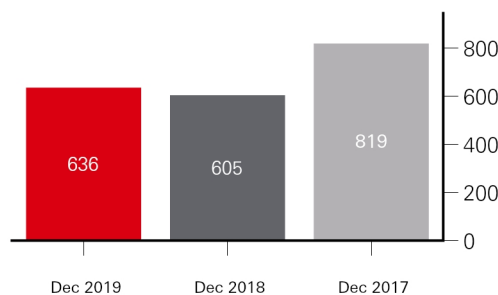
Reported revenue (£m)



£6,044m

(2018: £9,468m)

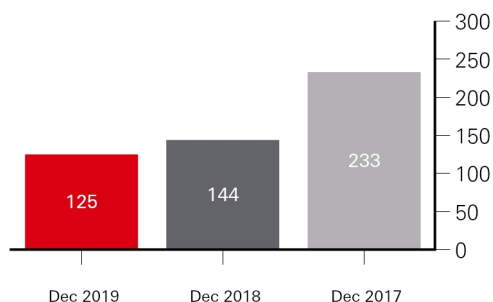
Total assets at period end (£bn)



£636bn

(2018: £605bn)

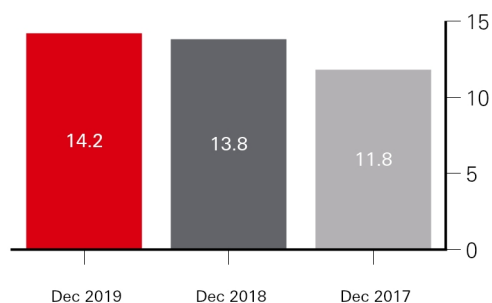
Reported risk-weighted assets at period end (£bn)



£125bn

(2018: £144bn)

Common equity tier 1 ratio at period end (%)



14.2%

(2018: 13.8%)

2020 Business Update

- In June 2018, the HSBC 'Group' set strategic priorities and financial targets amid an environment of rising interest rates, resilient global economic growth and reduced geopolitical risk.
- In reviewing the Group's businesses and geographies today, it is clear that many parts are performing strongly, particularly in Asia and the Middle East, as well as our market-leading transaction banking services globally. The Group's deep heritage has provided advantages, including a wholesale and personal client base located in the faster-growing, higher-return markets of the world. However, other parts of the business have underperformed.
- With the changed macroeconomic environment and interest-rate outlook, the Group has tempered revenue growth expectations and adjusted the Group's business plan accordingly. The Group plans to upgrade the return profile of assets and improve efficiency, with the aim of generating higher returns and more capacity for growth.
- HSBC Bank plc's business update is consistent with the Group's strategy, enabling Europe to be simpler and more competitive; better positioning the Group to achieve its aim of being the world's leading international bank. The Group strategy is supported by changes to our European business model: we will seek to simplify our business, reduce our cost base and continue to contribute to our global network.

Key financial metrics

	Footnotes	2019	2018 ¹
For the year (£m)			
(Loss) / profit before tax (reported basis)		(872)	1,974
Profit before tax (adjusted basis)	2	603	2,100
Net operating income before change in expected credit losses and other credit impairment charges (reported basis)	3	6,044	9,468
(Loss) / profit attributable to shareholders of the parent company		(1,013)	1,506
At year-end (£m)			
Total equity attributable to shareholders of the parent company		23,503	26,878
Total assets		636,491	604,958
Risk-weighted assets		125,413	143,875
Loans and advances to customers (net of impairment allowances)		108,391	111,964
Customer accounts		177,236	180,836
Capital ratios (%)			
Common equity tier 1	4	14.2	13.8
Tier 1		17.6	16.0
Total capital		27.9	26.2
Performance, efficiency and other ratios (annualised %)			
Return on average ordinary shareholders' equity	5	(9.2)	4.2
Return on tangible equity	6	0.6	5.1
Cost efficiency ratio (reported basis)	7	112.2	77.6
Cost efficiency ratio (adjusted basis)	7	87.9	76.1
Ratio of customer advances to customer accounts		61.2	61.9

1 Comparatives for the year 2018 include the discontinued operations (HSBC UK Bank plc) until 30 June 2018.

2 Adjusted performance is computed by adjusting reported results for the effect of significant items as detailed on pages 14 to 15.

3 Net operating income before change in expected credit losses and other credit impairment charges is also referred to as revenue.

4 Capital ratios are detailed in the Capital section on pages 75 to 76.

5 The return on average ordinary shareholders' equity is defined as profit attributable to shareholders of the parent company divided by the average total shareholders' equity. Dividends paid on AT1 should be net of tax in the calculation.

6 The RoTE is calculated as reported profit attributable to ordinary shareholders less changes in goodwill and present value of in-force long-term insurance business divided by average tangible shareholders' equity.

7 Reported cost efficiency ratio is defined as total operating expenses (reported) divided by net operating income before change in expected credit losses and other credit impairment charges (reported), while adjusted cost efficiency ratio is defined as total operating expenses (adjusted) divided by net operating income before change in expected credit losses and other credit impairment charges (adjusted).

HSBC at a glance

HSBC is one of the largest banking and financial services organisations in the world, with operations in 64 countries and territories.

Purpose and strategy

Our purpose

Our purpose is to be where the growth is, connecting customers to opportunities. We help enable businesses to thrive and economies to prosper, helping people to fulfil their hopes, dreams and realise their ambitions.

HSBC values

HSBC values define who we are as an organisation and what makes us distinctive.

Open

We are open to different ideas and cultures and value diverse perspectives.

Connected

We are connected to our customers, communities, regulators and each other, caring about individuals and their progress.

Dependable

We are dependable, standing firm for what is right and delivering on commitments.

Our role in society

How we do business is as important as what we do. Our responsibilities to our customers, employees and shareholders as well as to wider society go far beyond simply being profitable. We seek to build trusting and lasting relationships with our many stakeholders to generate value in society.

HSBC worldwide

We are a part of HSBC Group, which has approximately 235,000 employees working globally to provide more than 40 million customers with a broad range of banking products and services to meet their financial needs.

HSBC Group strategy

The Group's aim is to be the world's leading international bank, helping personal, wealth and corporate clients thrive through the Group's deep heritage in faster growing, higher-returning markets, particularly in Asia and the Middle East.

The Group's strategy is supported by long-term global trends and the Group's strategic advantages.

Leading international bank with access to high growth markets

- The Group has a strong wealth business with client assets reaching \$1.4tn, supported by a premier international wealth proposition and scale retail banking operations in Hong Kong, the UK and Mexico.
- The Group is a leading trade and payments and cash management bank with \$17bn of transaction banking adjusted revenue. This is supported by the Group's international network of 64 markets, which covers approximately 90% of global GDP, trade and capital flows.

Balance sheet strength

- Continue to maintain a strong capital, funding and liquidity position with a diversified business model.
- Low earnings volatility.
- Foundation for sustained dividend; strong capacity for distribution to shareholders.

About HSBC Bank plc

With assets of £636bn at 31 December 2019, HSBC Bank plc is one of Europe's largest banking and financial services organisations.

More than

1.3 million

customers bank with us

We employ around

18,000

people across our locations

Partner of choice for

c.8,000

multinationals in the European Union ('EU')

HSBC Bank plc

HSBC Bank plc, a licensed subsidiary of HSBC Holdings plc, operates in 20 markets, following the opening of our Swedish branch in October 2019. Our operating entities represent the Group to customers, regulators, employees and other stakeholders. The Bank and its subsidiaries have a physical presence in three main areas:

- The United Kingdom: the non ring-fenced bank in the UK provides a leading wholesale banking platform and is a global centre of excellence for HSBC. We continue to work closely with HSBC UK Bank plc (the ring-fenced bank) to help ensure a seamless service is provided to clients.
- The European Union: we have a broad presence in the European Union with a physical presence in Belgium, Czech Republic, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Poland, Spain and Sweden. Two of these subsidiaries are located in Continental Europe's largest economies, France and Germany.
- Network Markets: in addition to the above, our physical presence in Switzerland, Armenia, Israel, Russia, South Africa, the Channel Islands and Isle of Man further enhances our client offering and global connectivity. The Channel Islands and Isle of Man are included within the UK in the financial statement disclosure.

Our strategy

HSBC Bank plc's strategic vision is to be a leading international bank in Europe with strong connectivity to Asia and the Middle East. We want to help businesses and customers across the region to continue to thrive and prosper. HSBC Group's international network and expertise along with our extensive coverage and capabilities across Europe provide us with a strategic advantage to help clients achieve their goals; whether it is growing their businesses in the single market or breaking into international markets.

Business update for HSBC Bank plc

HSBC Bank plc makes a significant, high value and growing contribution to HSBC's international network, by connecting European clients to international markets. However, despite growing international revenues, Europe returns are well below cost of capital.

As a part of HSBC's business update, we will remodel our European business to focus on its strengths, and plan to reduce European RWAs and costs. To achieve this, our future business model will focus our client coverage on key international European clients and connect them to Asia and the Middle East.

The UK investment banking activities will focus on supporting UK mid-market clients and international corporate clients who require support in the UK. Within Global Markets, we plan to invest in and develop our FX capabilities while reducing the capital allocated to Rates and Credit. London will remain a global hub for our Global Banking and Markets business, leveraging the depth of the London capital markets and our existing capabilities. In Continental Europe, we plan to simplify our model and our Continental hub will remain in France.

In addition to our wholesale franchise, we will operate a targeted wealth franchise focusing on Ultra High Net Worth Private Banking and leveraging our international Expat offering. Retail banking operations in France are subject to an ongoing strategic review. HSBC France remains focused on its clients and will continue to work with them during this period. Our strategic vision is based on the following key principles:

Supporting our clients

Europe is home to some of the best performing, forward thinking companies, ranging from entrepreneurial start-ups to large multinationals. The European Union is the world's largest trading bloc. HSBC supports businesses of all sizes across the EU, including c.8,000 multinationals. We offer a wide range of banking services including retail and private banking, corporate and investment banking, transaction banking, foreign exchange and fixed income. We have c.18,000 employees in Europe supporting our clients' needs.

Connecting to the world

The Group's global network enables us to connect clients in Europe with opportunities across the world's trade corridors. Europe's largest trade corridor is with Asia, which accounts for more than a third (35%) of its total trade (source: International Trade Centre as at 2018). The Group's history and heritage allows the Group to maintain a privileged position in high growth markets in Asia and the Middle East. We have a strong ability to provide a bridge to Asia and the Middle East for European businesses and we're also here to help Asian and Middle Eastern businesses navigate growth opportunities in Europe.

Strengthening intra-regional ties

Strong trading relationships exist within Europe, supported by the region's interlinked infrastructure and transport connections and the EU's single market framework. With intra-regional trade in the EU expected to grow by 4.6% per year on average (source: International Trade Centre and Oxford Economics as at 2018), we are committed to helping customers in the region flourish. With dedicated teams in 20 European markets, we have extensive

European capability across traditional trade and structured trade finance, cash management, payments and financing to serve the needs of our clients.

Driving sustainable growth

Europe is at the forefront of international efforts to fight climate change. We share these values and want to help governments and businesses achieve their aims of developing a sustainable future for all.

Process of UK withdrawal from the European Union

The UK left the EU on 31 January 2020, and entered a transition period until 31 December 2020. During the transition period the UK will continue to be bound by EU laws and regulations. Beyond that date, there is no certainty on what the future relationship between the UK and the EU will be. This creates market volatility and economic risk, particularly in the UK. We will continue to work with regulators, governments and our customers and employees to manage the risks resulting from the UK's exit from the EU as they arise, particularly across those industry sectors most impacted. For more information, please refer to page 25.

Products and services

The Group manages its products and services through its four businesses: RBWM; CMB; GB&M; GPB; and Corporate Centre (Corporate Centre comprises Central Treasury, including Balance Sheet Management, certain legacy assets, interests in our associates and joint ventures, and central stewardship costs).

Our global businesses

Our operating model consists of four global businesses and a Corporate Centre, supported by HSBC Operations, Services and Technology, and 11 global functions, including risk, finance, compliance, legal, marketing and human resources.

Global Banking and Markets ('GB&M')	Commercial Banking ('CMB')	Retail Banking and Wealth Management ('RBWM')	Global Private Banking ('GPB')
<p>HSBC Global Banking and Markets operates in 20 markets across the UK, European Union and our Network Markets (see HSBC Bank plc on page 4) offering clients geographical reach and deep local knowledge. We deliver tailored financial solutions to major government, corporate and institutional clients worldwide. Operating as a global business, we also contribute significant revenues to other regions through our European client base.</p> <p>We provide a comprehensive suite of services across capital financing, transaction and advisory banking services, trade services, research, securities services and global liquidity and cash management. Our European teams bring together relationship managers and product specialists to deliver financial solutions customised to suit our clients' business specific growth ambitions and financial objectives. We continue to work closely with colleagues in CMB, to provide a range of tailored products and seamless services that meet the needs of clients across the bank.</p> <p>Our business is underpinned by a focus on highest standards of conduct and financial crime risk management. We remain committed to deepening client relationships, improving synergies across HSBC global businesses. We continue to invest in digital programmes focused on clients such as HSBCnet, streamlining the platform and improving customer experience. Cost discipline remains a priority, as we strive to simplify the business through streamlining business lines, operations and technology.</p>	<p>We serve customers in 19 markets and territories, ranging from small enterprises focused on their local market to corporates operating across borders. We support multinationals across the region and provide the tools and expertise that European businesses need to thrive.</p> <p>Our network of relationship managers and product specialists work closely to meet customer needs, from term loans to region-wide treasury and trade solutions. We are fully committed to helping European businesses navigate change and seize export opportunities as the EU strikes new trade agreements.</p> <p>CMB is at the centre of creating revenue synergies within the group. We work closely with our GB&M colleagues to provide expertise in capital finance and advisory solutions to support our CMB clients. Our trade teams within CMB also provide import and export finance solutions to GB&M clients.</p> <p>With major operations in France and Germany, and full-service centres in hubs such as Ireland, the Netherlands and Switzerland, we provide corporates with the means to consolidate and simplify their European operations, enabling our customers to have greater visibility over their liquidity position and unlock efficiencies in their treasury structures. Our customers expect us to be innovative, whether it's a receivables finance solution to optimise working capital or support in pursuing the sustainability agenda. One way we're helping customers in their sustainability efforts is through their supply chains, by developing green financing solutions that are beneficial for buyer and seller alike.</p>	<p>In Continental Europe, the Channel Islands and Isle of Man, RBWM helps around 1.2 million customers with their financial needs through Retail Banking, Wealth Management, Insurance and Asset Management. For customers with simpler banking needs, we offer a full suite of products reflecting local requirements; including personal banking, mortgages, loans, credit cards, savings, investments and insurance. Alongside this, RBWM provides various propositions in certain markets, including Jade, Premier, and Advance; as well as wealth solutions, financial planning and international services.</p> <p>In RBWM, we serve our customers through four main channels: branches, self-service terminals, telephone service centres and digital services (internet and mobile banking). We are moving from having isolated interactions with our customers, to a world in which we are always listening, learning and innovating to offer simple and helpful solutions. We continue to focus on meeting the needs of our customers, the communities we serve, and our own people, whilst working to build the bank of the future. We aim to deliver growth and are targeting to grow revenue faster than costs, increasing return on equity over time.</p>	<p>We serve high net worth and ultra high net worth individuals and families in the Channel Islands and Isle of Man, France and Germany, including those with international banking needs.</p> <p>Services provided include Investment Management, which comprises discretionary, advisory and brokerage services, and Private Wealth Solutions, which includes trusts and estate planning and bespoke lending such as lending against financial assets and residential mortgage financing for high-end properties.</p> <p>We collaborate with the other global businesses within the group and aspire to be the private bank of choice to our best corporate clients.</p>
<p>Adjusted profit before tax</p> <p>£135m (2018: £706m)</p>	<p>£431m (2018: £1,285m)¹</p>	<p>£213m (2018: £443m)¹</p>	<p>£48m (2018: £62m)¹</p>
<p>Risk-Weighted Assets</p> <p>£79,401m (31 Dec 2018: £91,259m)</p>	<p>£28,260m (31 Dec 2018: £31,910m)</p>	<p>£6,879m (31 Dec 2018: £7,032m)</p>	<p>£1,898m (31 Dec 2018: £2,012m)</p>

¹ Includes profit from the discontinued operations due to the separation of HSBC UK Bank plc from the group.

Our global businesses are presented on an adjusted basis, which is consistent with the way in which we assess the performance of our global businesses.

How we do business

HSBC conducts business with the commitment to supporting the sustained success of our customers, people and communities.

Non-Financial Information Statement

Disclosures required pursuant to the Companies, Partnerships and Groups (Accounts and Non-Financial Reporting) Regulations 2016 can be found on the following pages:

Environmental matters (including the impact of the company's business on the environment)	Page 8
The company's employees	Pages 7 to 10 and 81 to 83
Social matters	Pages 7 to 10
Respect for human rights	Page 8
Anti-corruption and anti-bribery matters	Pages 22 to 23
Business model	Page 6
Principal risks	Page 19

Customers

HSBC creates value by providing products and services our customers need, we aim to do so in a way that fits seamlessly into their lives. This helps us to build long-lasting relationships with our customers. HSBC maintains trust by striving to protect our customers' data and information, and delivering fair outcomes for them and if things go wrong, we need to address complaints in a timely manner. Operating with high standards of conduct is central to our long-term success and underpins our ability to serve our customers. Our Conduct Framework guides activities to strengthen our business and increases our understanding of how the decisions we make affect customers and other stakeholders. Details on our Conduct Framework are available at www.hsbc.com.

Investment in technology

In this section, we focus on investment in Global Liquidity and Cash Management ('GLCM') and Global Trade and Receivables Finance ('GTRF'), key transaction banking products offered to clients in Europe.

In 2019, GTRF increased digitisation of trade finance to improve customer experience. Investment in existing digital programmes, such as HSBCnet, led to an improved user interface for 10 markets across the region. The interface is now more intuitive, reducing errors on transactional applications and increasing customer self-service. Customers can now also customise various views of their products. Administrative processes have been streamlined where possible - for example automation of the invoice discounting process.

GLCM deployed a number of new products and enhancements in Europe to better serve our customer base and enhance client experience. Efforts to empower clients to view and operate virtual account structures with single sign-on via Digital channels, led to the implementation of next generation virtual accounts (NgVAM) in the UK, Netherlands and Ireland. GLCM expanded its European footprint with the launch of Pan-European Cards platform in France along with introduction of 6 additional currencies.

Employees

Our people at HSBC span many cultures, communities and continents. HSBC wants to build trusted relationships and create an environment where our people feel empowered and can fulfil their potential. HSBC understands the importance of building a diverse and inclusive workforce as well as a healthy and happy workforce. This allows us to better represent our customers and the communities we serve.

We are focusing on employee well-being, diversity, inclusion and engagement, as well as building our people's skills and capabilities for now and for the future. We want to have an open culture where our people feel connected, supported to speak up and where our leaders encourage feedback.

We held our first Europe-wide Diversity & Inclusion event in Athens in December 2019. The event focused on the theme of the unconscious biases that we all carry around with us and can adversely impact hiring, promotion and talent management decisions. We heard from colleagues who shared their real life stories and tips which will help our minds become more suspicious of our own biases.

Further information on our commitment to Diversity & Inclusion, and Learning & Talent Development, can be found on pages 82 to 83.

How we listen

It is vital we understand how our people feel as it helps us give them the right support to thrive and serve our customers well. We capture their views on a range of topics, such as our strategy, culture, behaviour, well-being and working environment, through our employee survey, Snapshot. Results are presented to and discussed with the Board and management, allowing us to take action based on the feedback.

When things go wrong

We want a culture where our people feel able to speak up. Individuals are encouraged to raise concerns about wrongdoing or unethical conduct through the usual reporting and escalation channels. However, we understand that there are circumstances where people need to raise concerns more discreetly. HSBC Confidential is a global whistleblowing channel that enables our people, past and present, to raise concerns in confidence and without fear of retaliation.

Whistleblowing concerns are investigated thoroughly and independently. Some of the common themes that have been referred to HSBC Confidential include behaviour and conduct, allegations of fraud, and weaknesses with information security. Following investigation, we take appropriate action, including disciplinary action and dismissal, as well as adjustments to variable pay and performance and behavioural ratings. We regularly monitor case volumes and trends, and we report on our progress and performance to senior management. The Group's Audit Committee has overall responsibility for the oversight of HSBC's whistleblowing arrangements and receives regular updates on the status of whistleblowing arrangements and outcomes.

HSBC does not condone or tolerate any acts of retaliation against those who raise concerns, and has a strict policy prohibiting any such acts. The outcomes of allegations of retaliation are reported to senior management. Making malicious or false claims is incompatible with our values and such instances are taken seriously.

We continued to promote the Group's whistleblowing arrangement through training in 2019 and this has contributed to the increase in the number of cases raised compared with 2018. Whistleblowing cases raised in Europe (subject to investigation):

2019 - 325

2018 - 363

Substantiated closed whistleblowing cases in Europe (cases where the investigation found the allegations to be substantiated or partially substantiated):

2019 - 31%

2018 - 24%

Acting on Employee Feedback

In our 2019 Snapshot survey, 71% of respondents (vs 73% in 2018) said they felt able to speak up when they see behaviour that they consider to be wrong.

We want more of our people to have confidence in speaking up. A Group programme has commenced to raise awareness about how to speak up about different types of concerns, how concerns are investigated and, crucially, what actions we take as a result of concerns being raised.

A number of initiatives were progressed in response to other areas of feedback from Snapshot and employee engagement mechanisms such as Townhalls and Exchange meetings:

- our senior leaders have been encouraged to actively recognise colleagues through the use of informal methods, such as email and 'in-the-moment' feedback on collaboration, helpful challenge, and empathetic responses;
- the roll-out of consistent flexible working policies which will be completed in July 2020. These encourage companies to adopt best practice such as HSBC France's work-life charter which provides ten principles for successfully balancing private and professional life;
- the launch of a mental health-education sessions during 3Q19;
- promoting the use of HSBC University resources with the aim of creating purposeful and healthy teams to support our leaders navigate the challenges they face; and
- extend the availability of local language information resources across the region, reflecting the diversity of the Bank's clients, colleagues and the countries in which we operate.

Supporting sustainable growth

Europe is at the forefront of international efforts to fight climate change and is a world leader in sustainable finance. We share these values and want to help governments and businesses achieve their aims of developing a sustainable future for all.

We at the bank are also engaging with our customers on transition risk, and embedding climate risk within our own risk management practices. HSBC Holdings understands that it is important to provide disclosures on both climate-related opportunities and risks to our stakeholders, and will include our third disclosure under the Task Force on Climate-related Financial Disclosure ('TCFD') in our Group Annual Report and Accounts 2019.

HSBC Group has shown progress against our targets in sustainable finance, and have set out how we are partnering with our customers to assist with the transition to a low-carbon economy.

Europe has provided \$24.7bn of financing, investing and facilitation since 1st January 2017. This represents over 50% of total progress towards HSBC Group's commitment to deliver \$100bn of sustainable financing and investment by 2025;

- The cornerstone of every Green Bond is the verifiable use of its proceeds to support sustainable investment. In addition to launching our own Green Bond from HSBC France as far back as 2015, HSBC has been a bookrunner on a number of innovative green and sustainability issuances by clients in both public and private sectors—more than 50 in 2019, in Europe.
- In 2019 we have witnessed the exponential rise of green and sustainable loans, the latest being largely led by Europe who contributed 76% of the all the Group's cumulative volume as at year end 2019. In April 2019 a sustainable supply chain partnership with Germany-based Puma the sporting goods manufacturer, was announced, which links the cost of HSBC's financing for Puma suppliers to their sustainability performance.
- In June, the European Investment Bank Group ('EIB') and HSBC France signed two major financial agreements designed to significantly increase lending to French businesses, with €100m dedicated to green projects.

Recognising increasing demand by individuals, we provide investments into defined socially responsible investment ('SRI') and low-carbon funds. HSBC Global Asset Management now integrates environmental, social and governance ('ESG') criteria into all its investment decisions. AMG SRI funds Net new money (SRI, green transition, lower carbon), continues to grow with the majority being on the European market. In July 2019, the HSBC SICAV Responsible Investment Funds was launched with €1m Asset under management (SICAV under French law dedicated to sustainable finance funds with the SRI state label).

We believe also that it is important to lead by example and have improved our own operational sustainability in several areas with a commitment to source all our energy from renewables by 2030. In Europe, we have reduced our carbon emissions from energy by 6% year-on-year, our water consumption by 6% and waste by 3% (as of Q4 2019).

A responsible business culture

HSBC aims to maintain high standards of governance across the group. HSBC acts on our responsibility to run our business in a way that upholds high standards of corporate governance. We are committed to working with our regulators to manage the safety of the financial system, adhering to the spirit and the letter of the rules and regulations governing our industry. In our endeavour to restore trust in our industry, we aim to act with courageous integrity and learn from past events to prevent their recurrences. We meet our responsibility to society through paying taxes and being transparent in our approach to this. We also seek to ensure we respect global standards on human rights in our workplace and our supply chains, and continually work to improve our compliance management capabilities. We acknowledge that increasing financial inclusion is a continuing effort, and we are carrying out a number of initiatives to increase access to financial services. The Group's Environmental, Social and Governance ('ESG') Update will be published on 18 February 2020 and is available on our website: www.hsbc.com/our-approach/esg-information

Empowering people

Enabling a diverse and inclusive environment for all

Our commitment

We are committed to developing a company-wide approach to diversity and inclusion. We want to embrace our people's diverse ideas, styles and perspectives to reflect and understand our customers, communities, suppliers and investors. Our actions are focused on ensuring our people are valued, respected and supported to fulfil their potential and thrive. We want them to bring the best of themselves to work to help deliver more sustainable outcomes for all of our stakeholders.

Gender balance at senior levels

We continue to focus on improving gender balance in senior leadership roles. At the end of 2019, we achieved an increase in the female share of senior leadership roles to 23.7%. We recognize we need to increase our effort in order to move this figure higher to be aligned with the HSBC Group target of 30% - in line with our 30% Club CEO campaign commitment in the UK. In 2020, our target for the female share of senior leadership roles will be 25.9%.

Employee networks

We have strengthened the governance of our global employee networks, with the appointment of executive sponsors for our global employee networks which cover: age; disability; ethnicity; faith; gender; LGBT+; and parents and carers. We have seven global employee networks as well as our HSBC Communities, which include common interest groups. They provide spaces for colleagues to speak up about internal and commercial issues and opportunities, make connections, and learn from each other. The networks focus on gender, age, ethnicity, LGBT+, faith, working parents and carers, and ability. More information about our diversity and inclusion activity is available at www.hsbc.com/our-approach/measuring-our-impact.

Engaging with our stakeholders

Building strong relationships with our stakeholders will help enable us to deliver our strategy in line with long-term values, and operate the business in a sustainable way. The table below provides details of our key stakeholders, how we engage with them and the key discussion points during the year.

Our stakeholders	How we engage	Discussion points ¹
Communities	We welcome dialogue with external stakeholders, including non-governmental organisations ('NGOs') and charities. We engage directly on specific issues and by taking part in external forums and round-tables.	We discuss how we support our customers with the transition to a low-carbon economy and climate-related risk management, covering sensitive sectors, such as energy, palm oil and forestry.
Customers	Our customers' voices are heard through our interactions with them, surveys, listening to and engaging with social media and from their feedback.	Our customers have told us they are interested in how we are making banking accessible, how we are making our processes easier and how we plan to communicate more simply and effectively.
Employees	We capture the views of our people through our employee survey Snapshot, Exchange meetings and our 'speak up' channels including our whistleblowing line, HSBC Confidential.	In 2019, we focused discussions on a range of subjects including our speak-up culture, well-being and the importance of helping our employees stay engaged.
HSBC Holdings plc	We engage through the mechanisms established in the Subsidiary Accountability Framework.	We have a high degree of connectivity between our Board & Board Committees and those of HSBC Holdings plc with ongoing reporting as well as direct engagement between Chairs.
Regulators	We engage with regulators to facilitate strong relationships and understand the expectations that are critical to our business.	Regulators focus on our strategic response to geopolitical and macroeconomic challenges. There is also focus on non-financial risks, including on cyber and operational resilience risks, as well as attention to conduct and financial crime risks.
Suppliers	The ethical and environmental code of conduct for suppliers of goods and services, which can be found on the Group's website (hsbc.com), sets out how we work with our suppliers on ethical and environmental performance.	The code of conduct for suppliers of goods and services raises conduct requirements related to the economic, environmental and social impacts associated with the supply of goods or services.

¹ These are summaries of the discussion points for each of our stakeholder groups. The list of discussion points is not exhaustive or exclusive to one stakeholder group.

Section 172 statement

Section 172 of the Companies Act 2006 requires a director of a company to act in the way he or she considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole. In doing this, section 172 requires a director to have regard, amongst other matters, to: the likely consequences of any decision in the long term; the interests of the company's employees; the need to foster the company's business relationships with suppliers, customers and others; the impact of the company's operations on the community and the environment; the desirability of the company maintaining a reputation for high standards of business conduct; and the need to act fairly as between members of the company.

These factors underpin the way in which the directors discharge their duties. The stakeholders considered include the people who work for us, bank with us, own us, regulate us, and live in the societies we serve and the planet we all inhabit. The Board recognises that building strong relationships with our stakeholders will help us to deliver our strategy in line with our long-term values, and operate the business in a sustainable way.

The Directors are supported in the discharge of their duties by:

- An induction programme and ongoing training to provide an understanding of our business and financial performance and prospects;
- Management processes which ensure that proposals presented to Board and Committee meetings for decision include information relevant to determine the action that would most likely promote the success of the bank and engagement with stakeholders where relevant to support appropriate decision making; and
- Agenda planning for Board and Committee meetings to provide sufficient time for the consideration and discussion of key matters.

Stakeholder engagement

The Board understands the importance of effective engagement with all of its stakeholders. Depending on the nature of the issue in question, the relevance of each stakeholder group may differ

and not every decision the Board makes will necessarily result in a positive outcome for all stakeholders.

For further details regarding the role of the Board and the way in which it makes decisions, including key activities during 2019, please see page 78.

The Board regularly receives reports from management on issues concerning customers, the environment, communities, suppliers, employees, regulators, governments and investors, which it takes into account in its discussions and in its decision-making process. In addition to this, the Board seeks to understand the interests and views of the Group's stakeholders by engaging with them directly as appropriate. Some of the ways in which the Board has engaged with stakeholders over the year is shown below:

Customers – in addition to the Board receiving updates from senior management on the Group's interaction with customers, individual members of the Board have met with customers, which included by way of an example, direct engagement with a key customer to understand its approach to sustainability financing.

Employees – in addition to the Board receiving updates from senior management on various metrics and feedback tools in relation to employees, members of the Board engage with the Group's employees in a variety of ways including attending exchange sessions with employees, visiting branches and meeting with employees in those countries that directors visit individually or as a collective Board.

HSBC Holdings plc – during the course of the year, the Group Chairman held a number of principal subsidiary chair conferences which were attended by the Chairman of the Board. In addition, Chairs of the Audit and Risk committees participated in regional Audit and Risk committee forum hosted by their Group counterparts. These were attended both by the bank's Board as well as Audit and Risk Committee Chairs of material subsidiaries.

Regulators/Governments – members of the Board regularly meet with regulators both in the UK and Europe.

Suppliers - during the year, the Board received an update on the bank's performance against its statutory reporting obligations in respect of the payment of third party suppliers. This also provided

an insight into the impact of its procurement processes and procedures on suppliers.

Employee Engagement

The Chief Executive Officer and the Executive Team are actively involved in the engagement of employees through leadership calls and quarterly all employee webcasts to keep the workforce up-to-date on business developments and answer questions. The Board receives regular updates from the Chief Executive Officer and the Head of HR on employee matters, including feedback received through Town Halls and Exchanges, which this year included a dedicated "Europe Week" to help employees understand the bank's role in the wider HSBC Group and to build pride and engagement around our EU proposition, as well as through our regular employee surveys including the Banking Standards Board and Snapshot. One of the non-executive Directors has a focus on "Employees" to enhance the Board's view of people matters and to get a better understanding of the employee perspective and issues. This focus also included travelling to different countries and meeting with employee groups to get direct feedback. This ensured a direct linkage between engagement and the Board.

Further details of the bank's engagement with employees can be found below and on pages 7 to 9 and 81 to 83.

Decision making

Although principal decisions regarding the UK's exit from the European Union ('EU') were taken in prior years, this remained an important matter for the Board to monitor during 2019. The Board received regular updates on activities and engagement with key stakeholders, notably customers and regulators. This ongoing monitoring provided in-depth oversight of how key stakeholders were being considered in each stage of execution following on from decisions previously taken.

We set out below some examples of how the directors have had regard to the matters set out in section 172 when discharging their duties:

- The Board approved the capitalisation of its subsidiaries in Europe, as part of the Group's preparations for the UK's exit from the EU, to ensure that the EU network was sufficiently capitalised to support the continuation of business activities for clients in the EU and to meet regulatory expectations.
- The Board approved the payment of a dividend to its parent company, the timing of which required engagement with and consideration of both the parent company's interests and the longer term interests of the bank. The matter was initially considered by the Risk Committee and the discussions at that committee were relayed to the board where it similarly debated and discussed the proposal. This decision was taken after careful consideration of the financial position of the company, its obligations under Companies Act and the need to consider its longer term relationship with its ultimate parent company, HSBC Holdings plc.

Tax

Our approach to tax

We apply the spirit as well as the letter of the law in all territories where we operate, and have adopted the UK Code of Practice for the Taxation of Banks. As a consequence, we pay our fair share of tax in the countries in which we operate. We continue to strengthen our processes to help ensure our banking services are not associated with any arrangements known or suspected to facilitate tax evasion.

HSBC continues to apply global initiatives to improve tax transparency such as:

- the US Foreign Account Tax Compliance Act ('FATCA');
- the OECD Standard for Automatic Exchange of Financial Account Information (also known as the Common Reporting Standard);
- the Capital Requirements Directive IV ('CRD IV') Country by Country Reporting;
- the OECD Base Erosion and Profit Shifting ('BEPS') initiative; and
- the UK legislation on the corporate criminal offence ('CCO') of failing to prevent the facilitation of tax evasion.

We do not expect the BEPS or similar initiatives adopted by national governments to adversely impact our results.

Key Performance Indicators

The Board of Directors tracks the group's progress in implementing its strategy with a range of financial and non-financial measures or key performance indicators ('KPIs'). Progress is assessed by comparison with the group strategic priorities, operating plan targets and historical performance.

The group reviews its KPIs regularly in light of its strategic objectives and may adopt new or refined measures to better align the KPIs to HSBC's strategy and strategic priorities.

Financial KPIs

	2019	2018
(Loss)/profit before tax (reported) (£m)	(872)	1,974
Profit before tax (adjusted) (£m)	603	2,100
Jaws (adjusted) (%)	(10.0)	(9.1)
Cost efficiency ratio (reported) (%)	112.2	77.6
Cost efficiency ratio (adjusted) (%)	87.9	76.1
Common equity tier 1 capital ratio (%)	14.2	13.8

Profit before tax (reported/adjusted): Reported profit/(loss) before tax is the profit as reported under IFRS. Adjusted profit/(loss) before tax adjusts the reported profit/(loss) for the effect of significant items as detailed on pages 14 to 15.

Reported loss before tax in 2019 was £(872)m compared to a profit before tax of £1,974m in 2018. Excluding 2018 discontinued operations (HBSC UK Bank plc), the reported profit before tax for 2018 was £831m. The loss in 2019 compared with the profit in 2018 was primarily due to higher operating expenses driven by a number of significant items booked during the year, notably a £1.2bn goodwill impairment reflecting refinements of the methodology, updates to inputs and assumptions in the model used to estimate value-in-use and reductions in forecast future cash flows, as a result of challenging market conditions and negative interest rates in the Eurozone. Revenue also decreased in GB&M, partly offset by higher revenue in RBWM.

Adjusted profit before tax decreased due to the impact of the discontinued operations in 2018. Excluding this, the decrease was mainly due to lower revenue in GB&M, partly offset by RBWM in the insurance business in France and due to favourable fair value movements in Visa preference shares in the UK.

Adjusted jaws measures the difference between adjusted revenue and adjusted cost growth rates (excluding the effects of significant items as detailed on pages 14 to 15). Our target is to grow revenue faster than operating expenses on an adjusted basis. This is referred to as positive jaws.

In 2019, adjusted revenue reduced by 35% and our operating expenses reduced by 25%. Jaws was therefore negative 10.0%, compared with negative 9.1% in 2018.

Adjusted costs decreased due to the impact of discontinued operations. Costs were also lower due to the transfer of costs from the bank to a separate service company in 2018. Since these costs had been recharged to other entities in the group in early 2018, there was an offsetting reduction in intercompany revenue. Adjusted revenue decreased due to the impact of discontinued operations and lower revenue in GB&M.

Excluding the impact of discontinued operations in 2018, adjusted jaws is negative 3%.

Cost efficiency ratio (reported/adjusted) is measured as total operating expenses divided by net operating income before expected credit losses and other credit impairment charges.

In 2019, reported revenue decreased by 36% while reported operating expenses decreased by 8%. The cost efficiency ratio therefore worsened by 34.6 percentage points. Reported revenue and operating expenses decreased due to the impact of the discontinued operations in 2018. Excluding this, the cost efficiency ratio worsened by 26.1 percentage points. This was mainly due to

lower revenue in GB&M and the impact of the goodwill impairment on reported operating expenses.

The cost efficiency ratio (adjusted) worsened by 11.8 percentage points from 2018 as costs increased by more than revenue. Excluding discontinued operations, the cost efficiency ratio (adjusted) worsened by 2.3 percentage points from 2018, mainly reflecting lower revenue in GB&M.

Common equity tier 1 ('CET1') capital ratio represents the ratio of common equity tier 1 capital to total risk-weighted assets. CET1 capital is the highest quality form of capital comprising shareholders' equity and related non-controlling interests less regulatory deductions and adjustments.

The group seeks to maintain a strong capital base to support the development of its business and meet regulatory capital requirements at all times.

The CET1 capital ratio increased during the year mainly due to a reduction in risk-weighted assets ('RWAs').

Non-financial KPIs

We also monitor a range of non-financial KPIs focusing on customers, people, culture and values including customer service satisfaction, employee involvement and engagement, and diversity and sustainability.

For details on customer service and satisfaction please refer below; for the remaining non-financial KPIs refer to the Corporate Governance section on pages 77 to 84.

Customer service and satisfaction

RBWM

In RBWM Continental Europe, we put the customer at the centre of everything we do. Enhancing customer experience and improving satisfaction remains integral to our strategy. This is monitored through a number of customer satisfaction metrics covering branch, contact centre and digital channels. We recognise the importance of customer feedback and continue to enhance our insights to gain a better understanding of our clients to provide a more personalised and relevant service.

Digital is a principal area of investment to enhance customer experience. We are building digital capabilities and tools to enhance efficiency and value to the customer; especially with regards to mobile and online interactions. In 2019, we launched an FX App for our Expat clients, enabling customers to create FX orders, alerts, payments, also providing relevant news and research. We also launched a new public website, online banking and mobile App in a number of our markets to improve usability for our customers.

HSBC France was recognised externally for our retail banking quality of service by the leading public retail banking industry benchmark portal Meilleurebanque.com. This was defined by more than 5000 respondents in an analysis of 19 banks. We placed 1st on physical branch service, 1st on remote services, 2nd on Relationship Manager advisory and 3rd on website services.

We recognise that enhancing customer satisfaction is an evolving process and are committed to ensure our investments and focus are prioritised to achieve this.

CMB

Customer experience, satisfaction and conduct are key priorities for CMB in Continental Europe. We continue to remain focused on enhancing our insights through relevant and measurable metrics that enables us to improve understanding of our customers. In 2019, our customers have indicated that the key strengths of our existing franchise are the skills and knowledge of our people and our global international network. This is further complemented by our product and service capabilities which support our customers' business aspirations. We have received a number of external recognitions including the world's leading bank for trade finance for the third year in a row in the Euromoney Trade Finance Survey. Conversely, we acknowledge that we do not always

consistently meet our customers' expectations. To address this, we are streamlining the onboarding process and conducting deep dives in these areas to identify opportunities for improvement. Building on 2019 focus on improving customer experience, further work is planned to continue throughout 2020 across all of these areas, focusing on utilising customer insights to drive appropriate changes required to improve overall customer experience and satisfaction.

GB&M

The core internal metric used to assess the strength of our client relationships in GB&M is the Client Engagement Score (a composite measure made up of seven questions, covering satisfaction, advocacy, loyalty, trust, emotion, value and rapport) which is tracked over time. The measure provides a score out of 100 and is benchmarked against the competition (competitors are self-defined by respondents). In 2019 the Client Engagement Score for HSBC in Continental Europe was 82, 1 point ahead of our competitors; and 80 in the UK, 3 points ahead of our competitors.

The 2019 Greenwich Fixed Income Survey results shows our market position is stable year on year. In our Emerging Markets ('EM') franchise, we are 1st in EM Credit whilst EM Rates remained unchanged at 3rd. Our Corporates business was voted #1 Cash Manager in the UK and Armenia in the Euromoney Survey and #2 in Western Europe and France, moving ahead of key competitors. For client service we were ranked #1 in the UK and France and our Financial Institutions business retained our ranking of #1 for Sterling transactions across Western Europe.

In 2019 we received further industry recognition winning the awards 'Best Global Transaction Bank' by The Banker and 'European Transfer Agent of the Year' by Funds Europe Awards. We remain committed to providing excellent customer value and continue to strive towards improving our proposition to meet client needs.

Economic background and outlook

UK

A new phase brings uncertainty

Following the general election on 12 December 2019, the UK's political landscape has changed substantially. With a large majority in Parliament, the government presided over Brexit - the UK's withdrawal from the European Union ('EU') on 31 January 2020. After a transition period lasting until the end of 2020, the UK is set to move to a new trading relationship with the EU.

The UK economy continues to face uncertainties. First, it remains to be seen what form the UK's future relationship with the EU, and other trading partners, will take. Second, the government has yet to outline its fiscal plans in detail - they will be set out at the Budget on 11 March 2020. Third, the economic data are sending mixed - and not always encouraging - signals.

On the data, the economy saw zero growth in the final quarter of 2019, following a 0.5% increase in the third quarter. Annual retail sales growth in November dropped below 1% for the first time in more than a year and a half, and annual consumer price inflation sunk to 1.3% in December, well below the Bank of England's 2% target.

Importantly though, these data refer to activity taking place around the time of the election, when political uncertainty was elevated. Business surveys point to a post-election boost to economic growth, but it is unclear how large and sustained that will be.

Rate cuts on the table

Given these continued uncertainties, HSBC Research maintains a cautious outlook. Its forecast is for below-average GDP growth of 1.1% in 2020, then an acceleration to 1.4% in 2021, driven, in part,

by looser fiscal policy. But this subdued outlook is unlikely to deliver much inflationary pressure. Given that, HSBC Research forecasts Bank Rate to be reduced from 0.75% to 0.50% in May this year, then to remain on hold until at least the end of 2021.

Eurozone

Diverging fortunes

Eurozone real economic growth saw a slight slowdown through the course of 2019. Having started the year at 1.4%, the annual pace of economic growth slowed to 1.0% in the fourth quarter. While the slowdown has been modest, it masks big divergences across sectors and countries. Household spending growth has picked up slightly and investment has been surprisingly resilient. But there has been significant weakness in trade and industry. This weakness has been felt most acutely in Germany, where the manufacturing sector has been in recession for more than a year. That said, there are early signs that the eurozone has left the worst of the manufacturing weakness behind it - having slumped earlier in the year, manufacturing indicators have broadly stabilised.

Alongside the slowdown in economic growth, the annual 'core' rate of eurozone consumer price inflation, which strips out volatile energy and food prices, remains low, at 1.1% in the January 'flash' estimate. But of course, this is still materially below the European Central Bank's ('ECB') target of 'below, but close to, 2%'.

Subdued growth and lower policy rates in prospect

Given the stabilisation in leading indicators, HSBC Research forecasts quarterly economic growth to pick up very gradually over the next two years. However, full-year eurozone economic growth in 2020 is expected to be soft, at 0.7%, while growth in 2021 is expected to be only a little firmer, at 1.0%. Fiscal policy is likely to be somewhat supportive, but a large scale stimulus package seems unlikely.

Against this subdued growth backdrop, HSBC Research expects eurozone inflation to remain below the ECB's target through this year and next. Monetary policy is likely to remain highly accommodative - the ECB is expected to keep rates on hold through 2020 and 2021, with the deposit rate at -0.50%. An open-ended Asset Purchase Programme (quantitative easing) is also set to continue.

Financial summary

Use of non-GAAP financial measures

Our reported results are prepared in accordance with IFRSs, as detailed in the Financial Statements starting on page 94. In measuring our performance, the financial measures that we use include those derived from our reported results in order to eliminate factors that distort year-on-year comparisons. These are considered non-GAAP financial measures.

Non-GAAP financial measures are described and reconciled to the closest reported financial measure when used.

The global business segmental results are presented on an adjusted basis in accordance with IFRS 8 'Operating Segments', as detailed in 'Basis of preparation' in Note 9: Segmental Analysis on page 125. Reconciliations of reported and adjusted performance are presented on pages 14 to 15.

Adjusted performance

Adjusted performance is computed by adjusting reported results for the year-on-year effects of significant items that distort year-on-year comparisons.

We use 'significant items' to describe collectively the group of individual adjustments excluded from reported results when arriving at adjusted performance. These items are ones that management and investors would ordinarily identify and consider separately when assessing performance to understand better the underlying trends in the business.

We consider adjusted performance provides useful information for investors by aligning internal and external reporting, identifying and quantifying items management believes to be significant and providing insight into how management assesses year-on-year performance.

Changes to accounting from 1 January 2019

IFRS 16 'Leases'

On 1 January 2019, HSBC adopted the requirements of IFRS 16 'Leases' retrospectively, with the cumulative effect of initially applying the standard recognised as an adjustment to the opening balance of retained earnings at that date. Comparatives were not restated. The adoption of the standard increased assets by £0.9bn in the group (£0.6bn in the separate financial statements of HSBC Bank plc), and increased financial liabilities by the same amount with no effect on net assets or retained earnings.

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 apply from 1 January 2020 with early adoption permitted. HSBC has adopted the amendments that apply to IAS 39 from 1 January 2019 and has made the additional disclosures, refer to Note 14, as required by the amendments.

Summary consolidated income statement for the year ended

	Footnotes	2019 £m	2018 £m
Net interest income		1,483	3,660
Net fee income		1,344	2,044
Net income from financial instruments measured at fair value		3,882	2,645
Gains less losses from financial investments		38	12
Net insurance premium income		2,147	2,005
Other operating income		516	580
Total operating income	1	9,410	10,946
– of which: Discontinued operations	2	–	3,132
Net insurance claims, benefits paid and movement in liabilities to policyholders		(3,366)	(1,478)
Net operating income before expected credit losses and other credit impairment charges		6,044	9,468
Change in expected credit losses and other credit impairment charges		(124)	(159)
Net operating income		5,920	9,309
– of which: Discontinued operations	2	–	3,037
Total operating expenses excluding goodwill impairment	1	(5,630)	(7,351)
– of which: Discontinued operations		–	(1,894)
Goodwill impairment		(1,152)	–
Operating (loss)/profit		(862)	1,958
Share of (loss) / profit in associates and joint ventures		(10)	16
(Loss)/profit before tax		(872)	1,974
– of which: Discontinued operations	2	–	1,143
Tax expense	3	(119)	(442)
(Loss)/profit for the year		(991)	1,532
(Loss)/profit attributable to shareholders of the parent company		(1,013)	1,506
Profit attributable to non-controlling interests		22	26

- 1 Total operating income and expense include significant items as detailed on pages 14 to 15. In 2019, operating expenses include depreciation of the right-of-use assets of £133m (2018: nil). Right-of-use assets have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.
- 2 Profit from discontinued operations relates to profit attributable to shareholders of the group from the separation of HSBC UK Bank plc from the group. HSBC completed the ring-fencing of its UK retail banking activities on 1 July 2018, transferring qualifying RBWM, CMB and GPB customers of the group to HSBC UK Bank plc, HSBC ring-fenced bank.
- 3 From 2019, due to an amendment to IAS12 'Income Taxes', the tax relief on payments in relation to Additional Tier 1 instruments has been recognised in the tax charge shown in the income statement, whereas previously it was recorded direct in equity. The 2019 tax credit was £40m (2018: £48m) with no effect on equity. Comparatives have not been restated.

Reported performance

Reported loss before tax was £(872)m, compared with a profit before tax in 2018 of £1,974m, a reduction in profit before tax of £2,846m. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), the profit before tax decreased by £1,702m.

Net interest income ('NII') decreased by £2,177m or 59% compared to the prior year. Excluding 2018 discontinued operations, NII increased by £121m or 9%. This was driven by a reduction in cost of funds on interest bearing liabilities from the second quarter of 2019 through the implementation of a funding strategy to reduce wholesale funding costs and a reduction in the volume of higher cost customer deposits. There was also an increase in income in GLCM (in GB&M and CMB) following UK and US rate rises in 2018 and 2019, as well as growth in deposit balances in CMB.

Net fee income decreased by £700m or 34% compared to the prior year. Excluding 2018 discontinued operations, fee income decreased by £113m or 8%, primarily in GB&M in Global Banking. This reflected lower transaction volumes in the Advisory and Equity Capital Markets businesses, as well as lower volumes and subdued market conditions resulting in lower net fee income within the Credit and Lending business. In RBWM, net fee income was lower primarily in insurance due to higher costs driven by business growth in France and increased costs in the UK.

Net income from financial instruments measured at fair value increased by £1,237m or 47% compared with the prior year. Excluding 2018 discontinued operations, the increase was £1,472m. This was mainly in the RBWM insurance business primarily reflecting an improvement in equity market conditions in France, which impacted the value of equity and unit trust assets supporting insurance contracts. Corresponding movements were recorded in liabilities to customers, reflecting the extent to which they participate in the investment performance of the associated assets. The offsetting movements are recorded in net insurance claims and benefits paid and movement in liabilities to policyholders. This was partly offset in GB&M in Markets due to lower income in Credit reflecting reduced market activity.

Gains less losses from financial investments increased by £26m. There was no impact from 2018 discontinued operations. The increase was mainly in Corporate Centre, notably in the UK due to gains in Legacy Credit following portfolio disposals, partly offset by lower gains on the disposal of bonds that are held at fair value through other comprehensive income ('FVOCI').

Net insurance premium income increased by £142m or 7%. There was no impact from 2018 discontinued operations. The increase in net insurance premium income was mainly in RBWM. In the UK this was due an increase in the volume of new

underwriting as a result of additional product offerings within the Life Insurance business. Income was also higher in France due to business growth.

Net insurance claims, benefits paid and movement in liabilities to policyholders increased by £1,888m or 128%. There was no impact from 2018 discontinued operations. The increase was primarily in the Insurance business largely due to a recovery in returns on contracts where the policyholder is subject to part or all of the investment risk. The gains or losses recognised on the financial assets measured at fair value through profit and loss that are held to support these insurance contract liabilities are reported in 'Net income from financial instruments designated at fair value'.

Other operating income decreased by £64m or 11%. Excluding 2018 discontinued operations, other operating income decreased by £53m or 10%, mainly in Corporate Centre. This was partially offset in GB&M where other operating income increased due to higher intercompany recoveries from HSBC UK plc relating to the Global Foreign Exchange business (offset by higher operating expenses).

Changes in expected credit losses and other impairment charges ('ECL') decreased by £35m or 22%. Excluding 2018 discontinued operations, ECL increased by £59m, or 90% due to increases in stage 3 charges in CMB within France, Germany and South Africa. There was also a reduction in ECL provision releases from portfolio disposals in Legacy Credit, reflecting disposals in 2019 which were at a lower level compared with 2018.

Total operating expenses decreased by £569m or 8%. Excluding the impact of discontinued operations, operating expenses increased by £1,325m or 24%. The increase in operating expenses was largely driven by a number of significant items during the period:

- A goodwill impairment of £1,152m was recorded during the year as a result of reductions in forecast future cash flows, reflecting challenging market conditions and negative interest rates in the Eurozone as well as refinements and revisions of the methodologies employed to allocate carrying value in use; and
- An increase of £174m in expenses related to severance costs arising from cost efficiency measures across our global businesses and functions.

Tax expense of £119m was £323m lower than in 2018. The effective tax rate for 2019 of (13.6)% is distorted by the non-deductible impairment of goodwill. Excluding the impact of the impairment of goodwill the effective tax rate would be 42.5%, which is higher than the 22.4% in 2018 mainly due to charges in respect of prior periods.

Adjusted performance

Significant revenue items by business segment – (gains)/losses

	RBWM £m	CMB £m	GB&M £m	GPB £m	Corporate Centre £m	Total £m
31 Dec 2019						
Reported revenue	1,139	1,170	3,627	189	(81)	6,044
Significant revenue items	1	–	27	–	(3)	25
– UK customer redress programmes	1	–	–	–	–	1
– debit valuation adjustment on derivative contracts	–	–	27	–	–	27
– fair value movement on non-qualifying hedges	–	–	–	–	(3)	(3)
Adjusted revenue	1,140	1,170	3,654	189	(84)	6,069
31 Dec 2018						
Reported revenue	2,580	2,479	4,249	249	(89)	9,468
Significant revenue items	–	(34)	(42)	–	2	(74)
– UK customer redress programmes	–	(34)	–	–	–	(34)
– debit valuation adjustment on derivative contracts	–	–	(42)	–	–	(42)
– fair value movement on non-qualifying hedges	–	–	–	–	2	2
Adjusted revenue	2,580	2,445	4,207	249	(87)	9,394

Significant cost items by business segment – (recoveries)/charges

	RBWM	CMB	GB&M	GPB	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m
31 Dec 2019						
Reported operating expenses	(1,278)	(1,159)	(3,625)	(440)	(280)	(6,782)
Significant cost items	354	529	147	298	122	1,450
– costs of structural reform ¹	–	3	29	–	55	87
– restructuring and other related costs	15	6	117	5	61	204
– settlements and provisions in connection with legal and regulatory matters	–	–	1	–	6	7
– impairment of goodwill	339	520	–	293	–	1,152
Adjusted operating expenses	(924)	(630)	(3,478)	(142)	(158)	(5,332)
31 Dec 2018						
Reported operating expenses	(2,102)	(1,143)	(3,335)	(188)	(583)	(7,351)
Significant cost items	68	9	(56)	–	179	200
– costs of structural reform ¹	–	4	26	–	154	184
– UK customer redress programmes	68	5	(17)	–	–	56
– restructuring and other related costs	–	–	–	–	30	30
– settlements and provisions in connection with legal and regulatory matters	–	–	(65)	–	(5)	(70)
Adjusted operating expenses	(2,034)	(1,134)	(3,391)	(188)	(404)	(7,151)

1 Costs of structural reform includes £87m (2018: £97m) associated with the UK's exit from the EU. In 2018, it also included £87m to establish the UK ring-fenced bank.

Net impact on profit before tax by business segment

	RBWM	CMB	GB&M	GPB	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m
31 Dec 2019						
Reported loss before tax	(142)	(98)	(39)	(250)	(343)	(872)
Net impact on reported profit and loss	355	529	174	298	119	1,475
– Significant revenue items	1	–	27	–	(3)	25
– Significant cost items	354	529	147	298	122	1,450
Adjusted profit/(loss) before tax	213	431	135	48	(224)	603
31 Dec 2018						
Reported profit/(loss) before tax	375	1,310	804	62	(577)	1,974
Net impact on reported profit and loss	68	(25)	(98)	–	181	126
– Significant revenue items	–	(34)	(42)	–	2	(74)
– Significant cost items	68	9	(56)	–	179	200
Adjusted profit/(loss) before tax	443	1,285	706	62	(396)	2,100

Adjusted performance

Adjusted profit before tax was £603m, down by £1,497m when compared with 2018. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), adjusted profit before tax is down £256m or 30%. This reflected lower revenue and higher ECL charges in 2019. The following commentary excludes discontinued operations from the 2018 comparative figures.

Adjusted revenue decreased by £227m or 4%, primarily due to lower revenue in GB&M. Global Markets revenue was lower due to a decrease in primary and secondary flow activity within Credit in the UK. There was also lower revenue in Global Banking due to gains during 2018 on corporate lending restructuring, adverse mark-to-market valuations from a debt converted equity deal and lower event-driven activity (Equity Capital Markets and Mergers and Acquisitions). This was partly offset by higher revenue in GLCM. Revenue was also higher in RBWM, most notably in the UK and France in Insurance. Revenue was also higher in Corporate Centre due to gains from disposals within the Legacy Credit portfolio.

Adjusted ECL were £59m higher compared with 2018, mainly due to increases in stage 3 provisions across France and Germany within CMB as well as lower releases of provisions on portfolio disposals in Corporate Centre in Legacy Credit when compared with 2018.

Adjusted operating expenses decreased by £56m or 1%, mainly reflecting the transfer of IT contractor costs to the UK ServCo during the first quarter of 2018. There was an offsetting reduction in intercompany recharges in revenue. In addition, operations costs decreased as a result of cost efficiency initiatives

and costs in Legacy Credit decreased reflecting the run off of the portfolio during the year.

Retail Banking and Wealth Management

Adjusted profit before tax was £213m, a decrease of £230m compared with 2018. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), adjusted profit before tax increased £157m. This was primarily due to higher revenue. The following commentary excludes discontinued operations from the 2018 comparative figures.

Revenue increased by £152m or 15%, mainly in the UK and France insurance businesses. In France, revenue was higher in the insurance business due to strong sales particularly driven by Wealth Insurance products and an increase in revenue from the present value of in-force ('PVIF') insurance contracts partly offset by the lower interest rate environment impacting revenue in both Insurance and Retail. In the UK, revenue was higher due to favourable fair value movements in preference share holdings in Visa and due to improved equity market performance through the year resulting in higher revenue in Wealth. In the Channel Islands and Isle of Man, there was an increase in revenue from deposits due to higher balances and enhanced margins. In addition, lending revenue was higher due to an increase in balances, particularly from higher yielding mortgages.

ECL reduced by £2m compared with 2018. Overall, the credit environment remained benign with a low level of ECL in both 2019 and 2018.

Operating expenses reduced by £6m or 1%. This was primarily driven by lower staff costs within France as well as lower associated variable pay and social security expenses during the second half of 2019.

Commercial Banking

Adjusted profit before tax was £431m, down by £854m compared with 2018. Excluding 2018 discontinued operations (HSBC UK Bank plc), adjusted profit before tax decreased by £39m or 8%. This was driven by an increase in ECL which was partially offset by an increase in revenue. The following commentary excludes discontinued operations from the 2018 comparative figures.

Revenue increased by £36m or 3% compared with 2018. This was primarily driven by favourable fair value movements in preference share holdings in Visa in the UK. Revenue was also higher reflecting higher guarantee volumes in the International Markets.

ECL increased by £74m compared with 2018 driven by an increase in stage 3 charges within the retail sector in France as well as the automobile, metals and mining sectors within Germany.

Operating expenses increased by £1m, mainly reflecting an increase in UK employee insurance costs.

Global Banking and Markets

Adjusted profit before tax was £135m, down by £571m compared with 2018. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), adjusted profit before tax was down £559m or 80%. This was largely driven by a decrease in revenue reflecting ongoing economic uncertainty and spread compression through 2019. The following commentary excludes discontinued operations from the 2018 comparative figures.

Revenue decreased by £485m or 12%. Global Markets revenue was lower driven by low market volatility and reduced client activity due to ongoing economic uncertainty. This was despite the benefit of a legal provision release in the first quarter of 2019. In Global Banking, revenue was lower due to the non-repeat of gains on corporate lending restructuring in the first half of 2018 and lower event-driven activity (Advisory and Equity Capital Markets). This was partly offset by a strong performance in GLCM, including the impact of the interest rate rise in the UK in August 2018.

ECL decreased by £68m or 63%. ECL charges in 2019 of £41m were mainly in the construction and retail sectors in the UK and France. ECL in 2018 included higher charges in the same sectors.

Operating expenses increased by £142m or 4% compared with 2018 although this was offset by an increase in intercompany recoveries in revenue as costs were recharged to other entities in the Group.

Global Private Banking

Adjusted profit before tax was £48m, a decrease of £14m compared with 2018. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), adjusted profit before tax was £4m or 9% higher primarily due to an increase in revenue partially offset by an increase in operating expenses. The following commentary excludes discontinued operations from the 2018 comparative figures.

Revenue increased by £16m or 9%, primarily due to higher net interest income and increases in net fee income due to increases in customer loan and advances which outpaced customer deposit growth.

ECL remained flat with no material change compared with 2018.

Operating expenses increased by £11m or 9% compared with 2018 due to increases in IT and compliance related costs across all sites.

Corporate Centre

Adjusted loss before tax was £224m compared with a loss before tax of £396m in 2018, a decrease of £172m. Excluding 2018 discontinued operations (HSBC UK Ring-fencing), the adjusted loss before tax was £180m or 45% lower. This was driven by higher revenue and a reduction in operating expenses in 2019. The following commentary excludes discontinued operations from the 2018 comparative figures.

Revenue increased by £50m, primarily in Balance Sheet Management through money market loans and deposits and derivative contracts used as a part of internal funding resulting in an increase in net interest income. Revenue was also higher in Legacy Credit reflecting lower losses from portfolio disposals undertaken during 2019.

ECL net releases of £27m in 2019 compared with net releases of £79m in 2018. This reflected provision releases following Legacy Credit portfolio disposals in both years, with a higher level of portfolio disposals in 2018.

Operating expenses decreased by £207m or 45%, mainly reflecting the transfer of IT contractor costs to the UK ServCo during the first quarter of 2018. There was an offsetting reduction in intercompany recharges in revenue. In addition, costs in Legacy Credit decreased reflecting the run off of the portfolio during the year.

Dividends

The consolidated reported loss for the year attributable to the shareholders of the bank was £(1,013)m.

A special dividend of £1,707m in respect of 2019 was paid on the ordinary share capital during the year. Also, an interim dividend of £406m, in lieu of a final dividend, and a special dividend of £674m in respect of the previous financial year were paid in 2019.

Further information about the results is given in the consolidated income statement on page 95.

Review of business position

Summary consolidated balance sheet at 31 Dec

	2019 £m	2018 £m
Total assets	636,491	604,958
Cash and balances at central banks	51,816	52,013
Trading assets	98,249	95,420
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	17,012	17,799
Derivatives	164,538	144,522
Loans and advances to banks	11,467	13,628
Loans and advances to customers	108,391	111,964
Reverse repurchase agreements – non-trading	85,756	80,102
Financial investments	46,464	47,272
Other assets	52,798	42,238
Total liabilities	612,479	577,549
Deposits by banks	23,991	24,532
Customer accounts	177,236	180,836
Repurchase agreements – non-trading	49,385	46,583
Trading liabilities	48,026	49,514
Financial liabilities designated at fair value	41,642	36,922
Derivatives	161,083	139,932
Debt securities in issue	25,039	22,721
Liabilities under insurance contracts	21,509	20,657
Other liabilities	64,568	55,852
Total equity	24,012	27,409
Total shareholders' equity	23,503	26,878
Non-controlling interests	509	531

There are no reconciling items between the adjusted and reported view of the balance sheet for 2019 and 2018.

The group maintained a strong and liquid balance sheet with the ratio of customer advances to customer accounts of 61.2% compared with 61.9% at 31 December 2018.

Derivative assets increased by 14%, primarily from mark-to-market gains. The increase in derivative assets was broadly consistent

with the increase in derivative liabilities as the underlying risk is broadly matched.

The equity balance decreased by 12% as a result of impairment losses and dividends paid. Debt securities in issue increased by 10% due to funding initiatives driven by both internal and regulatory requirements. Additionally repurchase and reverse repurchase agreements (non-trading) increased by 6% and 7%, respectively, as a result of increased market activity.

Reported performance by country

Profit/(loss) before tax – by country

	Retail Banking and Wealth Management £m	Commercial Banking £m	Global Banking and Markets £m	Global Private Banking £m	Corporate Centre £m	Total £m
31 Dec 2019						
United Kingdom	158	212	(179)	30	(327)	(106)
France	32	93	(50)	7	(58)	24
Germany	5	29	58	6	29	127
Other ¹	(337)	(432)	132	(293)	13	(917)
Loss before tax	(142)	(98)	(39)	(250)	(343)	(872)
31 Dec 2018						
United Kingdom	402	1,018	582	44	(535)	1,511
France	(42)	128	20	12	(75)	43
Germany	10	64	74	6	(3)	151
Other	5	100	128	–	36	269
Profit/(loss) before tax	375	1,310	804	62	(577)	1,974

¹ Includes impairment of goodwill (refer to Note 20).

Net interest margin

Net interest margin is calculated by dividing net interest income as reported in the income statement by the average balance of interest-earning assets. Average balances are based on daily averages of the group's activities.

Net interest margin of 0.43% was 45 basis points ('bps') lower than in 2018, including the effects of significant items, foreign

currency translation and impacted by the transfer of the UK businesses to HSBC UK in 2018.

Net interest income

	2019 £m	2018 £m
Interest income	5,504	7,422
Interest expense	(4,021)	(3,762)
Net interest income	1,483	3,660
Average interest-earning assets	343,944	417,569
	%	%
Gross interest yield ¹	1.25	1.58
Less: cost of funds	(0.93)	(0.77)
Net interest spread ²	0.32	0.81
Net interest margin ³	0.43	0.88

1 Gross interest yield is the average annualised interest rate earned on average interest-earning assets ('AIEA').

2 Net interest spread is the difference between the average annualised interest rate earned on AIEA, net of amortised premiums and loan fees, and the average annualised interest rate payable on average interest-bearing liabilities.

3 Net interest margin is net interest income expressed as an annualised percentage of average interest-earning assets.

Summary of interest income by asset type

	2019			2018		
	Average balance	Interest income	Yield ¹	Average balance	Interest income	Yield ¹
	£m	£m	%	£m	£m	%
Short term funds and loans and advances to banks	66,056	108	0.16	85,186	146	0.17
Loans and advances to customers	117,665	2,492	2.12	188,956	4,865	2.57
Reverse repurchase agreements – non – trading	77,140	478	0.62	64,462	404	0.63
Financial investments	50,194	935	1.86	52,153	902	1.73
Other interest-earning assets	32,889	287	0.87	26,812	268	1.00
Total interest-earning assets	343,944	4,300	1.25	417,569	6,585	1.58
Trading assets and financial assets designated or mandatorily measured at fair value ²	73,862	1,974	2.67	70,958	1,906	2.69
Expected credit losses provision	(1,192)	–	–	(2,051)	–	–
Non-interest-earning assets	266,527	–	–	263,691	–	–
Total assets	683,141	6,274	0.92	750,167	8,491	1.13

1 Yield calculations include negative interest on assets recognised as interest expense in the income statement.

2 Interest income arising from trading assets is included within 'Net trading income' in the income statement.

Summary of interest expense by type of liability and equity

	2019			2018		
	Average balance	Interest expense ¹	Cost	Average balance	Interest expense ¹	Cost
	£m	£m	%	£m	£m	%
Deposits by banks	23,298	146	0.63	21,716	109	0.50
Financial liabilities designated at fair value – own debt issued	16,409	201	1.22	16,178	187	1.16
Customer accounts	136,544	1,028	0.75	222,970	1,343	0.60
Repurchase agreements – non – trading	49,801	337	0.68	49,523	389	0.79
Debt securities in issue and subordinated debts	37,944	683	1.80	34,969	600	1.72
Other interest-bearing liabilities	38,559	422	1.09	32,729	297	0.91
Total interest-bearing liabilities	302,555	2,817	0.93	378,085	2,925	0.77
Trading liabilities and financial liabilities designated at fair value (excluding own debt issued) ²	71,549	1,705	2.38	65,768	1,617	2.46
Non-interest-bearing current accounts	50,208	–	–	53,741	–	–
Total equity and other non-interest bearing liabilities	258,829	–	–	252,573	–	–
Total equity and liabilities	683,141	4,522	0.66	750,167	4,542	0.61

1 Cost of funding calculations include negative interest on liabilities recognised as interest income in the income statement.

2 Interest expense arising from trading liabilities is included within 'Net trading income' in the income statement.

Risk overview

The group continuously identifies and monitors risks. This process, which is informed by its risk factors and the results of its stress testing programme, gives rise to the classification of certain principal risks. Changes in the assessment of principal risks may result in adjustments to the group's business strategy and, potentially, its risk appetite.

Our banking risks include credit risk, capital and liquidity risk, market risk, resilience risk, regulatory compliance risk, financial crime and fraud risk and model risk. We also incur insurance risk. In addition to these banking risks, we have identified top and

emerging risks with the potential to have a material impact on our financial results, or reputation and the sustainability of our long-term business model.

The exposure to our risks and risk management of these are explained in more detail in the Risk section of the Report of the Directors on pages 20 to 74.

During 2019, a number of changes to our top and emerging risks have been made, to reflect the revised assessment of their effect on the group.

Two risks have been added in 2019. These are 'Climate Related Risks' and 'Third Party Risk Management'.

Risk	Mitigants
Externally driven	
UK exit from EU	▶ The UK left the EU on 31 January 2020. We will continue to work with regulators, governments and our customers to manage the risks created by the UK's exit from the EU as they arise, particularly across those industry sectors most impacted.
Geopolitical risk	▲ We continually assess the impact of geopolitical events on our businesses and exposures across Europe and take steps to mitigate them, where required, to help ensure that we remain within risk appetite. We have also strengthened physical security at our premises where the risk of terrorism is heightened.
Cyber threat and unauthorised access to systems	▶ We continue to strengthen our cyber control framework, and improve our resilience and cybersecurity capabilities, including threat detection and analysis, access control, payment system controls, data protection, network controls and backup and recovery.
Regulatory focus on conduct of business	▶ We continue to enhance our management of conduct in a number of areas, including the treatment of potentially vulnerable customers, market surveillance, employee training and performance.
Financial Crime and Fraud risk	▶ Throughout 2019, we continued to implement the final elements of the Global Standards programme to integrate anti-money laundering and sanctions capabilities into our day-to-day operations. We continue to enhance our financial crime risk management capabilities and the effectiveness of our financial crime controls, with investment being maintained in the next generation of tools to fight financial crime through the application of advanced analytics and artificial intelligence.
Market illiquidity and volatility	▶ We monitor risks closely and report regularly on illiquidity and concentration risks to the PRA.
Ibor transition	▲ We are part of the Group's Interbank Offered Rates ('Ibor') transition programme. This programme is focused on replacing Ibors by developing processes and systems to support alternative rate products and making these available to our clients. The programme is developing the proposed transition operating model to re-paper outstanding Libor and Eonia contracts. We continue to engage with industry bodies, regulators and our clients to support an orderly transition.
Climate Related Risks	● The HSBC Group are committed to facilitating the re-allocation of capital to help finance the global transition to a low carbon economy. The Group continues to make progress in this area. We regularly review our sustainability risk policies to ensure they remain fit-for-purpose, while still supporting customers. We have initiated the analysis of the impact of transition risk on our credit portfolio.
Internally driven	
People risk	▶ We continue to monitor workforce capacity and capability requirements in line with our strategy and any emerging issues in the markets in which we operate. These issues can include changes to immigration and tax rules as well as industry-wide regulatory changes.
IT systems infrastructure and resilience	▶ We actively monitor and improve service resilience across our technology infrastructure. We are enhancing the end-to-end mapping of key processes, and strengthening our problem diagnosis/resolution and change execution capabilities, reducing service disruption to our customers.
Execution risk	▶ We continue to strengthen our prioritisation and governance processes for significant strategic, regulatory and compliance projects.
Model risk	▲ We have evolved our model risk management capability and practice by enhancing the second line of defence Model Risk Management function, strengthening model oversight through the creation of a Model Risk Committee, and by evolving our model risk governance framework.
Data management	▶ We continue to enhance and advance our data insights, data aggregation, reporting and decisions through ongoing improvement and investments in data governance, data quality, data privacy, data architecture, machine learning and artificial intelligence capabilities.
Third Party Risk Management	● We continue to strengthen and embed Third Party Risk Management governance and oversight processes on how we actively identify, assess, mitigate and manage risks across the range of third parties with which we do business. This includes control monitoring and assurance throughout the third party life cycle.

- ▲ Risk has heightened during 2019
- ▶ Risk remains at the same level as 2018
- New risk introduced in 2019

On behalf of the Board
 J Fleurant, Director
 18 February 2020
 Registered number 14259

Risk

	Page
Our approach to risk	20
Our risk appetite	20
Risk management	21
Key developments and risk profile	21
Top and emerging risks	21
Externally driven	21
Internally driven	24
Areas of special interest	25
Process of UK withdrawal from the European Union	25
IBOR transition	25
Our material banking and insurance risks	26
Credit risk	28
Capital and Liquidity risk	62
Market risk	64
Resilience risk	68
Regulatory compliance risk	69
Financial crime risk	69
Model risk	70
Insurance manufacturing operations risk	71

Our approach to risk

Our risk appetite

Throughout its history HSBC has maintained a risk profile that has developed in line with its strategy and business objectives.

We recognise that the primary role of risk management is to protect our business, customers, colleagues, shareholders and the communities that we serve whilst supporting our group strategy and enabling sustainable growth.

We have long recognised the importance of a strong risk culture, which refers to our shared attitudes, values and norms that shape behaviours related to risk awareness, risk taking and risk management. All employees are responsible for the management of risk, with the ultimate responsibility residing with the Board.

The following principles guide the group's overarching risk appetite and determine how its businesses and risks are managed:

Financial position

- Strong capital position, defined by regulatory and internal ratios.
- Liquidity and funding management for each entity on a stand-alone basis.

Operating model

- Ambition to generate returns in line with our risk appetite and strong risk management capability.
- Ambition to deliver sustainable earnings and appropriate returns for shareholders.

Business practice

- Zero tolerance for knowingly engaging in any business, activity or association where foreseeable reputational risk or damage has not been considered and/or mitigated.
- No appetite for deliberately or knowingly causing detriment to consumers arising from our products and services or incurring a breach of the letter or spirit of regulatory requirements.
- No appetite for inappropriate market conduct by a member of staff or by any group business.

Enterprise-wide application

Our risk appetite encapsulates consideration of financial and non-financial risks and is expressed in both quantitative and qualitative terms. It is applied at the global business level, at the country level and to material European entities.

Our risk management framework

An established risk governance framework and ownership structure ensures oversight of, and accountability for, the effective management of risk within the group. HSBC's Enterprise Risk Management Framework ('ERMF') fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. Integral to the ERMF are risk appetite, stress testing and the identification of emerging risks.

The bank's Risk Committee focuses on risk governance and provides a forward-looking view of risks and their mitigation. The Risk Committee is a committee of the Board and has responsibility for oversight and advice to the Board on, amongst other things, the bank's risk appetite, tolerance and strategy, systems of risk management, internal control and compliance. Additionally, members of the Risk Committee attend meetings of the Chairman's Nominations and Remuneration Committee at which the alignment of the reward structures to risk appetite is considered.

In carrying out its responsibilities, the Risk Committee is closely supported by the Chief Risk Officer, the Chief Financial Officer, the Head of Internal Audit and the Heads of Compliance, together with other business functions on risks within their respective areas of responsibility.

Responsibility for managing both financial and non-financial risk lies with our people. They are required to manage the risks of the business and operational activities for which they are responsible. We maintain oversight of our risks through our various specialist Risk Stewards, as well as the accountability held by the Chief Risk Officer.

Non-financial risk includes some of the most material risks HSBC faces, such as cyber attacks, the loss of data and poor conduct outcomes. Actively managing non-financial risk is crucial to serving our customers effectively and having a positive impact on society. During 2019 we continued to strengthen the control environment and our approach to the management of non-financial risk, as set out in HSBC's Operational Risk Management Framework ('ORMF'). The approach outlines non-financial risk governance and risk appetite, and provides a single view of the key non-financial risks, and associated controls. It incorporates a risk management system designed to enable the active management of non-financial risk. Our ongoing focus is on simplifying our approach to non-financial risk management, while driving more effective oversight and better end-to-end identification and management of non-financial risks. This is overseen by the Operational Risk Management function, headed by the group Head of Operational Risk.

Three lines of defence

To create a robust control environment to manage risks, we use an activity-based three lines of defence model, whereby the activity a member of staff undertakes drives which line they reside within. This model delineates management accountabilities and responsibilities for risk management and the control environment.

The model underpins our approach to risk management by clarifying responsibility, encouraging collaboration and enabling efficient coordination of risk and control activities. The three lines are summarised below:

- The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing them, and ensuring that the right controls and assessments are in place to mitigate them.
- The second line of defence challenges the first line of defence on effective risk management, and provides advice and guidance in relation to the risk.
- The third line of defence is our Internal Audit function, which provides independent assurance that the group's risk management approach and processes are designed and operating effectively.

Our risk culture

Our risk culture is reinforced by our values. It is instrumental in aligning the behaviours of individuals with our attitude to assuming and managing risk, which helps to ensure that our risk profile remains in line with our risk appetite.

We use clear and consistent employee communication on risk to convey strategic messages and set the tone from senior management and the Board. We also deploy mandatory training on risk and compliance topics to embed skills and understanding in order to strengthen our risk culture and reinforce the attitude to risk in the behaviour expected of employees, as described in our risk policies.

The risk culture is reinforced by our approach to remuneration. Individual awards, including those for senior executives, are based on compliance with our values and the achievement of both financial and non-financial objectives, that are aligned to our risk appetite and global strategy.

Whistleblowing

We operate a global whistleblowing standard, HSBC Confidential, allowing staff to report matters of concern confidentially. We also maintain an external email address for concerns about accounting and internal financial controls or auditing matters (accountingdisclosures@hsbc.com).

For further details, see page 7 of the How we do Business section.

Risk appetite

We formally articulate our risk appetite through our risk appetite statement ('RAS'), which is approved by the Board on the recommendation of the Risk Committee. Setting out our risk appetite ensures that planned business activities provide an appropriate balance of return for the risk we are taking, and that we agree a suitable level of risk for our strategy. In this way, risk appetite informs our financial planning process and helps senior management to allocate capital to business activities, services and products.

The RAS consists of qualitative statements and quantitative metrics, covering financial and non-financial risks. It is fundamental to the development of business line strategies, strategic and business planning and senior management balanced scorecards. Performance against the RAS is reported to the Risk Management Meeting ('RMM') on a monthly basis so that any actual performance that falls outside the approved risk appetite is discussed and appropriate mitigating actions are determined. This reporting allows risks to be promptly identified and mitigated, and informs risk-adjusted remuneration to drive a strong risk culture.

Risk management

As a provider of banking and financial services, the group actively manages risk as a core part of its day-to-day activities. It continues to maintain a strong liquidity position and is well positioned for the evolving regulatory landscape.

Stress testing

Stress testing is an important tool for banks and regulators to assess vulnerabilities in individual banks and/or the financial banking sector under hypothetical adverse scenarios. The results of stress testing are used to assess banks' resilience to a range of adverse shocks and to assess their capital adequacy.

HSBC Bank plc is subject to regulatory stress testing in several jurisdictions. These requirements are increasing in frequency and granularity. They include the programmes of the Bank of England ('BoE'), Prudential Regulation Authority ('PRA') and the European Banking Authority ('EBA'). Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on our portfolio quality, data provision, stress testing capability and capital planning processes.

A number of internal macroeconomic and event-driven scenarios specific to the European region were considered and reported to senior management during the course of the year, focusing in particular on the ramifications of various potential scenarios

relating to the UK exit from the EU. The group also conducts Reverse Stress Testing. This exercise requires a firm to assess scenarios and circumstances that would render its business model unviable, thereby identifying potential business vulnerabilities.

In 2019, the Group participated in the successful completion of the annual BoE concurrent stress testing exercise. The Annual Cyclical Scenario was materially unchanged from 2018, incorporating a synchronised global downturn affecting Asia and the UK in particular. Financial markets come under severe stress with a reduction in global risk appetite and reductions in market liquidity. The UK experiences a slowdown driven by the downturn in its trading partners, fall in confidence, and a sharp sterling depreciation leading to inflationary pressure on imports. In response monetary policy tightening leads to a steep rise in market and lending interest rates in the UK while global yield curves remain flat.

The BoE published the results of the 2019 Concurrent Stress Test in December 2019, confirming that these tests did not reveal any capital inadequacies for the HSBC Group.

Key developments and risk profile

Key developments in 2019

In 2019, we undertook a number of initiatives to enhance our approach to the management of risk. These included:

- We continued to strengthen our approach to managing non-financial risk, as set out in the ORMF. The framework sets out HSBC's approach to governance and risk appetite. It enables a single view of key non-financial risks and associated controls. This is overseen by the operational risk function, headed by the group's Head of Operational Risk.
- The HSBC Group simplified its risk taxonomy through consolidating certain existing risks into broader categories, for example Resilience Risk. We adopted this approach. These changes streamline risk reporting and promote common language in our risk management approach. Further simplification will continue during 2020, including the combining of the HSBC Group's two key risk management frameworks, the ERMF and the ORMF, into one.
- The Group have formed a Resilience Risk function to reflect the growing regulatory importance of being able to ensure our operations continue to function when an operational disturbance occurs. We leverage the global function's capabilities to steward our operational resilience.

Top and emerging risks

Top and emerging risks are those that may impact on the financial results, reputation or business model of the bank. If these risks were to occur, they could have a material effect on the group. The exposure to these risks and our risk management approach are explained in more detail below.

Externally driven

Process of UK withdrawal from the European Union

The UK left the EU on 31 January 2020, and entered a period of transition until 31 December 2020. We will continue to work with regulators, governments and our customers and employees to manage the risks resulting from the UK's exit from the EU as they arise, particularly across those industry sectors most impacted.

Uncertainty regarding the terms of the UK's future relationship (including trading) with both the EU and the rest of the world is expected to continue for some time to come. Market volatility may therefore persist as the UK continues its negotiations with the EU and its potential future trading partners around the world.

Throughout this period, we will continually update our assessment of potential consequences for our customers, products and banking model and re-evaluate our mitigating actions accordingly. The scale and nature of the impact on us will depend on the precise terms on which we and our customers will be able to conduct cross-border business following the end of the transition period:

- **Clients:** the UK's departure from the EU is likely to impact our clients operating models, including their supply chains, working capital requirements, investment decisions and financial markets infrastructure access. Some EEA incorporated clients will be required to be migrated from the UK to HSBC France (or another EEA entity) and most customers who we expect can no longer be serviced out of the UK have now been migrated.
- **People:** the potential loss of freedom of movement could impact our EEA staff resident in the UK and UK staff resident in an EEA country.

Our priority is to ensure we continue to support our clients and people through the period of transition and beyond, and help minimise any disruption.

Changes to the UK's current trade relationships could require changes to our banking model to ensure we continue to comply with law and regulation in meeting the needs of our customers and conducting our business. In addition, any negative impact on the economy, demand for borrowing and capital flows as a result of the aforementioned uncertainty, volatility or result of UK negotiations could have a consequential negative impact on HSBC.

Mitigating actions

We have undertaken a comprehensive impact assessment to understand the range of potential implications for our customers, our products and our business. Where necessary, we have identified actions, including evolving our business models, to ensure we can continue to serve our customers.

- We actively monitor our portfolio to identify areas of stress, supported by stress testing analyses. Vulnerable sectors or asset classes are subject to additional management review to determine if any adjustments to risk policy or appetite are required.
- We continue to stay very close to our clients, via proactive communications and dedicated channels to respond to customer queries.
- We will be supporting our UK employees resident in EEA countries and EEA employees resident in the UK, with their settlement applications.
- We will continue to work with regulators, governments and our clients in an effort to manage risks as they arise, particularly across the most impacted sectors.

Geopolitical risk

Geopolitical risk remained heightened throughout 2019. Our operations and portfolios are exposed to risks associated with political instability, and civil unrest, which could lead to disruption to our operations, physical risk to our staff and/or physical damage to our assets.

Populist parties in Europe continue to grow in presence meaning that political systems in Europe are increasingly fragmented. The persistent threat of terrorist activity remains. The future relationship between the UK and the EU remains uncertain and it is expected that ongoing negotiations between the two will be a dominant political theme in 2020.

The coronavirus outbreak in mainland China and Hong Kong is being actively monitored to assess any potential economic impact on our clients, or adverse impact on our staff.

Mitigating actions

- We continually monitor the geopolitical outlook, in particular in countries where we have material exposures and/or a physical presence.

- We use internal stress tests and scenario analysis as well as regulatory stress test programmes, to adjust limits and exposures to reflect our risk appetite and mitigate risks as appropriate.
- We have taken steps to enhance physical security in those geographical areas deemed to be at high risk from terrorism.
- We have reviewed our business continuity plans following the coronavirus outbreak, to ensure the safety and well-being of our staff and customers and to ensure our ability to maintain our business operations is upheld.

Cyber threat and unauthorised access to systems

HSBC and other organisations continue to operate in a challenging cyber threat environment, which requires ongoing investment in business and technical controls to defend against these threats.

Key threats include unauthorised access to online customer accounts, advanced malware attacks and distributed denial of service attacks.

Mitigating actions

- We continually evaluate threat levels for the most prevalent attack types and their potential outcomes. To further protect HSBC and our customers we strengthened our controls to reduce the likelihood and impact of advanced malware, data leakage, infiltration of payment systems and denial of service attacks. We continued to enhance our cybersecurity capabilities, including threat detection, access control as well as back-up and recovery. An important part of our defence strategy is ensuring our people remain aware of cybersecurity issues and know how to report incidents.
- Cyber risk is a priority area for the Board. We report and review cyber risk and control effectiveness quarterly at executive and non-executive Board level. We also report it across our businesses and functions, to help ensure appropriate visibility and governance of the risk and mitigating actions.
- We participate globally in several industry bodies and working groups to share information about tactics employed by cyber-crime groups and to collaborate in fighting, detecting and preventing cyber attacks on financial organisations.

Regulatory focus on conduct of business

Financial service providers continue to operate to stringent regulatory and supervisory requirements, particularly in the areas of capital and liquidity management, conduct of business, financial crime, internal control frameworks, the use of models and the integrity of financial services delivery. Regulatory changes, including any resulting from the UK's exit from the EU, may affect the activities of HSBC.

Mitigating actions

- We are fully engaged, wherever possible, with the government and regulators in the UK and Europe to help ensure that new requirements are properly considered by regulators and the financial sector and can be implemented in an effective manner.
- We hold regular meetings with UK and European authorities to discuss strategic contingency plans covering a wide range of scenarios relating to the UK's exit from the EU. These include our plans to navigate the restrictions that are likely to arise regarding our ability to access EU markets, if passporting rights are withdrawn following the end of the transition period.

Financial crime and fraud risk

Throughout 2019, we continued to implement the final elements of the Global Standards programme to integrate our anti-money laundering and sanctions capabilities into our day-to-day operations. We continue to enhance our financial crime risk management capabilities and the effectiveness of our financial crime controls, and the HSBC Group is maintaining its investment

in the next generation of tools to fight financial crime through the application of advanced analytics and artificial intelligence.

Financial institutions remain under considerable regulatory scrutiny regarding their ability to prevent and detect financial crime. There is an increased regulatory focus on fraud and anti-bribery and corruption controls, with expectations that banks should do more to protect customers from fraud and identify and manage bribery and corruption risks within their businesses. Financial crime threats continue to evolve, often in tandem with geopolitical developments. The highly speculative, volatile and opaque nature of virtual currencies as well as the pace of new currencies and associated technological developments creates challenges in effectively managing financial crime risks. We continue to see increasing challenges presented by national data privacy requirements in a global organisation, which may affect our ability to effectively manage financial crime risks.

In December 2012, among other agreements, HSBC Holdings plc ('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 also agreed to retain an independent compliance monitor (who is, for FCA purposes, a 'Skilled Person' under section 166 of the Financial Services and Markets Act and, for FRB purposes, an 'Independent Consultant') to produce periodic assessments of the Group's AML and sanctions compliance programme (the 'Skilled Person/Independent Consultant'). In December 2012, HSBC Holdings also entered into an agreement with the Office of Foreign Assets Control ('OFAC') regarding historical transactions involving parties subject to OFAC sanctions. Reflective of the HSBC Group's significant progress in strengthening its financial crime risk management capabilities, the HSBC Group's engagement with the current Skilled Person will be terminated and a new Skilled Person with a narrower mandate will be appointed to assess the remaining areas that require further work in order for the HSBC 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. The role of the Skilled Person/Independent Consultant is discussed on page 70.

Mitigating actions

- We continue to enhance our financial crime risk management capabilities. We are investing in next generation capabilities to fight financial crime through the application of advanced analytics and artificial intelligence.
- We are strengthening and investing in our fraud controls, to introduce next generation anti-fraud capabilities to protect both customers and the bank.
- We continue to embed our improved Anti-Bribery and Corruption ('AB&C') policies and controls, focusing on conduct.
- We continue to educate our staff on emerging digital landscapes and associated risks.
- We have developed procedures and controls to manage the risks associated with direct and indirect exposure to virtual currencies, and we continue to monitor external developments.
- We continue to collaborate with government and law enforcement agencies to address data privacy challenges through international standards, guidance, and legislation to enable effective management of financial crime risk.
- We continue to take steps designed to ensure that the reforms we have put in place are both effective and sustainable over the long-term.

Market illiquidity and volatility

Market liquidity, as defined by the ability to trade the desired volume of a financial security in a timely manner, continues to vary. Liquidity remains challenging due to multiple factors: regulatory demands such as increased capital requirements

constraining the overall balance sheet size of financial institutions, the implementation of the Volcker rule, which prohibits certain trading activities, and the impact of revised collateral and internal liquidity requirements.

This is a market-wide issue, where HSBC may incur losses or result in lower revenue.

Mitigating actions

- We continually monitor our positions more vulnerable to illiquidity and concentration risks, adjusting our market risk limits and risk appetite where appropriate.

Ibor transition

Ibors, including Libor, are used to set interest rates on hundreds of trillions of US dollars' worth of different types of financial transactions and are used extensively for valuation purposes, risk measurement and performance benchmarking.

Following the announcement by the FCA in July 2017 that it will no longer persuade or require banks to submit rates for Libor after 2021, the national working groups ('NWG') for the affected currencies were tasked with facilitating an orderly transition of the relevant Ibors to their chosen replacement rates. The euro NWG is also responsible for facilitating an orderly transition of the Euro Overnight Index Average ('Eonia') to the euro short-term Rate ('€STER') as a result of the determination that Eonia cannot be made to comply with the European Benchmark Regulations ('BMR') and can therefore no longer be used beyond 2021.

The process of developing products that reference the replacement rates and transitioning legacy Ibor contracts exposes HSBC to material execution, conduct and financial risks.

Mitigating Actions

- The HSBC Group has a global programme to facilitate an orderly transition from Libor and Eonia for our business and our clients. This execution of this programme is overseen by the Group Chief Risk Officer, with the group's transition overseen by our CRO as monitored through our Risk Management Meeting.
- The HSBC Group programme is focused on developing alternative rate products that reference the proposed replacement rates and making them available to customers. It is also focused on the supporting processes and systems to developing these products. At the same time, the HSBC Group are developing the capability to transition, through re-papering, outstanding Libor and Eonia contracts.
- We have identified a number of execution, conduct, litigation and financial risks and we are in the process of addressing these. We continue to analyse these risks and their evolution over the course of the transition.
- We will continue to engage with industry bodies, regulators and our clients to support an orderly transition.

Climate-related risks

Climate change can impact a number of our risk types:

- Transition risk, arising from the move to a low-carbon economy, such as through policy, regulatory and technological changes.
- Physical risk, through increasing severity and/or frequency of severe weather events or other climatic events (e.g. sea level rise, flooding).

These have potential to cause both idiosyncratic and systemic risks, resulting, over time, in potential financial impacts for HSBC. Impacts could materialise through higher risk-weighted assets ('RWAs'), greater transactional losses and/or increased capital requirements.

Mitigating actions

- HSBC continues to expand its thinking with regards to stress testing of climate risks. It has commenced sector specific scenario analysis and continues current work to source data and develop scenarios.

- HSBC has public and internal policies for certain sectors which pose sustainability risk to HSBC. These include policies on energy, agricultural commodities, chemicals, forestry, mining and metals, UNESCO World Heritage sites and Ramsar-designated wetlands.
- The Group is working with the PRA, FCA and the wider industry through their Climate Financial Risk Forum to ensure it remains aware of and drives emerging best practice.
- Our enterprise risk management framework continues to be enhanced to develop and embed the measurement, monitoring and management of climate-related risks.
- In line with the PRA requirements we have assigned responsibility to relevant Senior Management Function (SMF) holders. Additionally, risk stewards will consider physical and transition risks from climate change relevant to their specific risk function.

Internally driven

People risk

Our employees are critical to our success and it is important that we continue to focus on employee engagement and monitor our workforce capacity and capability requirements in line with our strategy. We aim to foster a culture that proactively promotes the right colleague behaviours and conduct and help employees feel empowered to thrive in their careers, as well as being able to support our customers and the communities they serve.

We continually assess the impact of geopolitical events on our businesses and engage with regulators and policy makers to help ensure that regulatory changes are implemented effectively. Some events, such as the UK's exit from the EU and changes announced by the UK Government relating to the contingent workforce (IR35), which could increase people risks, continue to be managed closely.

Mitigating actions

- We have plans in place to manage the potential impacts resulting from the UK exit from the EU.
- People plans are in place across key European markets which focus on promoting a diverse and inclusive workforce and health and wellbeing activities.
- HSBC University is focused on developing opportunities and tools for current and future skills, personal skills and leaders to create an environment for success.
- We have processes in place to recognise exceptional conduct and manage poor conduct and behaviour.

IT systems infrastructure and resilience

HSBC is committed to investing in the reliability and resilience of its IT systems and critical services. HSBC does so in order to protect its customers and ensure they do not receive disruption to services, which could result in reputational and regulatory damage.

Mitigating actions

- We are continuing to invest in transforming how software solutions are developed, delivered and maintained, with a particular focus on providing high-quality, stable and secure services. As part of this, we are concentrating on materially improving system resilience and service continuity testing. We have enhanced the security features of our software development life cycle and improved our testing processes and tools.
- During 2019, we upgraded many of our IT systems, simplifying our service provision and replacing older IT infrastructure and applications.

Execution risk

In order to deliver our strategic objectives and meet mandatory regulatory requirements, it is important for HSBC to maintain a strong focus on execution risk. This requires robust management of significant resource-intensive and time-sensitive programmes.

Risks arising from the magnitude and complexity of change may include regulatory censure, reputational damage or financial losses. Current major initiatives include managing the operational implications of updating our business model following the UK's decision to leave the EU.

Mitigating actions

- Our prioritisation and governance processes for significant projects are monitored by the group's Executive Committee.
- In 2019, we continued to manage execution risks through closely monitoring the punctual delivery of critical initiatives, internal and external dependencies, and key risks, to allow better portfolio management across the group.

Model risk

Models are used across many areas of the bank in both financial and non-financial contexts. Model risk arises whenever business decision making includes reliance on models. HSBC uses models in a range of business applications, in activities such as customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting.

Mitigating actions

In 2019 we elevated model risk to the highest level within our risk management framework, in reflection of its increasing importance. We have undertaken a number of initiatives to strengthen the new Model Risk Management sub-function, including:

- We appointed a Head of Model Risk Management for the group.
- We refined the model risk policy to enable a more risk-based approach to model risk management.
- We conducted a full review and enhancement of model governance arrangements overseeing model risk across the group, resulting in a range of enhancements to the underlying structure to improve effectiveness and increase business engagement.
- We designed a new target operating model for Model Risk Management, informed by internal and industry best practice, to drive the evolution of the overall governance framework and ensure best practice.
- We are refreshing the existing model risk controls to enable better understanding of control objectives and to provide the modelling areas with implementation guidance to enhance effectiveness.

Data management

The group currently uses a large number of systems and applications to support key business processes and operations. As a result, we often need to reconcile multiple data sources, including customer data sources, to reduce the risk of error. HSBC, along with other organisations, also needs to meet external regulatory obligations such as the General Data Protection Regulation ('GDPR'), Basel Committee for Banking Supervision ('BCBS') 239, and Basel III.

Mitigating actions

- We are improving data quality across a large number of systems globally. Our data management, aggregation and oversight continues to strengthen and enhance the effectiveness of internal systems and processes. We are implementing data controls for critical processes in the 'front-office' systems to improve our data capture at the point of entry. HSBC has achieved its objective of meeting a 'largely compliant' rating in support of the BCBS 239 principles and have now embedded them across the key markets and regions.
- We are expanding and enhancing our data governance processes to monitor proactively the quality of critical customer, product and transaction data and resolving associated data issues in a timely manner. We have also implemented data controls in order to improve the reliability of data used by our customers and staff.

- We are modernising our data and analytics infrastructure through investments in advanced capabilities in cloud visualisation, machine learning and artificial intelligence platforms.
- HSBC has implemented a global data privacy framework that establishes data privacy practices, design principles and guidelines that demonstrate compliance with data privacy laws and regulations in the jurisdictions in which the group operates, such as GDPR.
- We continue to take part in annual data symposiums and data privacy awareness training to help our employees keep abreast of data management and data privacy laws and regulations. These highlight our commitment to protect personal data for our customers, employees and stakeholders.

Third Party Risk Management

We utilise third parties for the provision of a range of services, in common with other financial service providers. Risks arising from the use of third party service providers may be less transparent and therefore more challenging to manage or influence. It is critical that we ensure we have appropriate risk management policies, processes and practices. These should include adequate control over the selection, governance and oversight of third parties, particularly for key processes and controls that could affect operational resilience. Any deficiency in our management of risks arising from the use of third parties could affect our ability to meet strategic, regulatory or client expectations and damage our reputation.

Mitigating actions

- We continued to embed our third party management framework in the first line of defence through a dedicated team. Processes, controls and technology to assess third party service providers against key criteria and associated control monitoring testing and assurance have been deployed.

Areas of special interest

Process of UK withdrawal from the European Union

The UK left the EU on 31 January 2020 and entered a transition period until 31 December 2020, during which negotiations will take place on the future relationship between the UK and the EU. At this stage it remains unclear what that relationship will look like, potentially leaving firms with little time to adapt to changes which may enter into force on 1 January 2021.

Our programme to manage the impact of the UK leaving the EU has now been largely completed. It is based on the assumption of a scenario whereby the UK will no longer have access to the existing passporting or regulatory equivalence framework that supports cross-border business. Our focus has been on four main components: legal entity restructuring; product offering; customer migrations; and employees.

Legal entity restructuring

Our branches in seven European Economic Area ('EEA') countries (Belgium, the Netherlands, Luxembourg, Spain, Italy, Ireland and Czech Republic) relied on passporting out of the UK. We have worked on the assumption that passporting will no longer be possible following the UK's departure from the EU and therefore transferred our branch business to newly established branches of HSBC France, our primary banking entity authorised in the EU. This was completed in the first quarter of 2019.

Product offering

To accommodate for customer migrations and new business after the UK's departure from the EU, we expanded and enhanced our existing product offering in France, the Netherlands and Ireland. We also opened a new branch in Stockholm to service our customers in the Nordics.

Customer migrations

The UK's departure from the EU is likely to have an impact on our clients' operating models, including their working capital requirements, investment decisions and financial markets infrastructure access. Our priority is to provide continuity of service, and while our intention is to minimise the level of change for our customers, we are required to migrate some EEA-incorporated clients from the UK to HSBC France, or another EEA entity. We have now migrated most clients who we expect can no longer be serviced out of the UK. We are working in close collaboration with any remaining clients to make the transition as smooth as possible.

Employees

The migration of EEA-incorporated clients will require us to strengthen our local teams in the EU, and France in particular.

Given the scale and capabilities of our existing business in France, we are well prepared to take on additional roles and activities.

Looking beyond the transfer of roles to the EU, we are also providing support to our UK employees resident in EEA countries and EEA employees resident in the UK, for example with settlement applications.

Nevertheless, London will continue to be an important global financial centre and the best location for our global headquarters. As of December 2019, HSBC employed approximately 40,000 people in the UK.

Across the programme, we have made good progress in terms of ensuring we are prepared for the UK leaving the EU under the terms described above. However, there remain execution risks, many of them linked to the uncertain outcome of negotiations.

We have carried out detailed reviews of our credit portfolios to determine those sectors and customers most vulnerable to the UK's exit from the EU. For further details, please see 'Impact of UK economic uncertainty on ECL' on page 38.

Ibor transition

The Financial Stability Board issued a report in 2014 entitled 'Reforming Major Interest Rate Benchmarks'. This report was produced as a result of attempts to manipulate key Ibors and in recognition of a liquidity decline in interbank unsecured markets. In response, regulators and central banks in various jurisdictions have convened national working groups to identify replacement rates (risk-free rates or RFRs) for these Ibors and, where appropriate, to facilitate an orderly transition to these rates.

Following the announcement by the UK's FCA in July 2017 that it will no longer persuade or require banks to submit rates for Libor after 2021, the national working groups for the affected currencies were tasked with facilitating an orderly transition of the relevant Libors to their chosen replacement rates. The euro working group is also responsible for facilitating an orderly transition of the Euro Overnight Index Average ('Eonia') to the Euro short-term rate ('€STER') as a result of Eonia not being made compliant with the EU Benchmark Regulation.

Although national working groups in other jurisdictions have identified replacements for their respective Ibors, there is no intention for these benchmark rates to be discontinued.

Given the current lack of alternatives, HSBC has an increasing portfolio of contracts referencing Libor and Eonia with maturities beyond 2021. HSBC established the Ibor transition programme with the objective of facilitating an orderly transition from Libor and Eonia for HSBC and its clients. This global programme oversees the transition effected by each of the global businesses and is led by the Group Chief Risk Officer with the group's transition overseen by our CRO as monitored through the Risk Management Meeting. The programme's strategic objectives can be broadly grouped into two streams of work: develop RFR product capabilities; and transition legacy contracts.

Develop RFR product capabilities

Our global businesses are currently developing their capabilities to offer RFR-based products and the supporting processes and

systems. We already have several capabilities live: including Secured Overnight Financing Rate ('SOFR') bonds and Sonia bonds, SOFR futures and Sonia swaps - and we are planning further launches in 2020, with the initial focus for the group being on the UK and France.

The sale of Libor and Eonia contracts with maturities beyond 2021 is likely to continue until RFR-based products become widely available and accepted by customers.

Transition legacy contracts

In addition to enabling the offering of new RFR-based products, the new RFR product capabilities will also help enable the transition of outstanding Libor and Eonia products onto the RFR equivalents. To help enable the repapering of a significant number of Libor and Eonia contracts, the programme is also developing the capability to transition outstanding Libor and Eonia contracts at scale. Critical to the successful transition of Libor-linked contracts is the active engagement of other market participants and HSBC's clients.

Although we have notional amounts of around \$3tn of Libor and Eonia derivative contracts outstanding that mature beyond 2021, we expect that the International Swaps and Derivatives Association ('ISDA') efforts in guiding the transition of derivative contracts, to reduce the risk of a non-orderly transition of the derivative market with an estimated notional size in excess of \$200tn. The process of implementing ISDA's proposed protocol and transitioning outstanding contracts is nonetheless a material undertaking for the industry as a whole and may expose HSBC to the risk of financial losses.

The Group intends to engage actively in the process to achieve an orderly transition of HSBC's Libor and Eonia bond issuance, HSBC's holdings of Libor and Eonia bonds, and of those bonds where HSBC is the payment agent. We continue to formulate detailed plans to enable us to transition these exposures, although the execution of these transition plans will, to a certain extent, also

depend on the participation and engagement of third-party market participants in the transition process.

Although the Group have plans to transition \$100bn drawn amounts of post-2021 contractually Libor-referenced commercial loans onto replacement rates, our 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 our customers being ready and able to adapt their own processes and systems to accommodate the replacement products. This gives rise to an elevated level of conduct related risk. HSBC is engaging with impacted clients to help ensure that customers are aware of the risks associated with the ongoing purchase of Libor and Eonia referencing contracts as well as the need to transition legacy contracts prior to the end of 2021.

In addition to the conduct and execution risk previously highlighted, the process of adopting new reference rates may expose the Group to an increased level of operational and financial risks, such as potential earnings volatility resulting from contract modifications and a large volume of product and associated process changes. Furthermore, the transition to alternative reference rates could have a range of adverse impacts on our business, including legal proceedings or other actions regarding the interpretation and enforceability of provisions in Libor-based contracts and regulatory investigations or reviews in respect of our preparation and readiness for the replacement of Libor with alternative reference rates.

We continue to engage with industry bodies, regulators and our clients to support an orderly transition and the mitigation of the risks resulting from the transition. The FCA's and PRA's recent letter to senior managers of institutions, including HSBC, that fall within their remit, should increase the level and depth of engagement as well as accelerating transition in the sterling Libor markets.

Our material banking and insurance risks

The material risk types associated with our banking and insurance manufacturing operations are described in the following tables.

Description of risks – banking operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Credit risk (see page 28)</p> <p>The risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.</p>	<p>Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.</p>	<p>Credit risk is:</p> <ul style="list-style-type: none"> measured as the amount that could be lost if a customer or counterparty fails to make repayments; monitored using various internal risk management measures and within limits approved by individuals within a framework of delegated authorities; and managed through a robust risk control framework that outlines clear and consistent policies, principles and guidance for risk managers.
<p>Capital and liquidity risk (see page 62)</p> <p>The risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including pension risk.</p>	<p>Capital and liquidity risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions or the external environment.</p>	<p>Capital and liquidity risk is:</p> <ul style="list-style-type: none"> measured through appetites set as target and minimum ratios; monitored and projected against appetites and using stress and scenario testing; and managed through capital and liquidity resources in conjunction with risk profiles and cashflows.
<p>Market risk (see page 64)</p> <p>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.</p>	<p>Exposure to market risk is separated into two portfolios:</p> <ul style="list-style-type: none"> trading portfolios; and non-trading portfolios. <p>Market risk exposures arising from our insurance operations are discussed on page 71.</p>	<p>Market risk is:</p> <ul style="list-style-type: none"> measured using sensitivities, value at risk ('VaR') and stress testing, giving a detailed picture of potential gains and losses for a range of market movements and scenarios, as well as tail risks over specified time horizons; monitored using VaR, stress testing and other measures, including the sensitivity of net interest income and the sensitivity of structural foreign exchange; and managed using risk limits approved by the risk management meeting ('RMM') and the RMM in various global businesses.

Description of risks – banking operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Resilience risk (see page 68)</p> <p>Resilience risk is the risk that we are unable to provide critical services to our customers, affiliates, and counterparties as a result of sustained and significant operational disruption.</p>	<p>Resilience risk arises from failures or inadequacies in processes, people, systems or external events. These may be driven by rapid technological innovation, changing behaviours of our consumers, cyber-threats and attacks, crossborder dependencies, and third party relationships.</p>	<p>Resilience risk is:</p> <ul style="list-style-type: none"> measured through a range of metrics with defined maximum acceptable impact tolerances, and against our agreed risk appetite. monitored through oversight of enterprise processes, risks, controls and strategic change programmes; and managed by continuous monitoring and thematic reviews.
<p>Regulatory compliance risk (see page 69)</p> <p>The risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business.</p>	<p>Regulatory compliance risk arises from the risks associated with breaching our duty to our customers and other counterparties, inappropriate market conduct and breaching other regulatory requirements.</p>	<p>Regulatory compliance risk is:</p> <ul style="list-style-type: none"> measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our regulatory compliance teams; monitored against the first line of defence risk and control assessments, the results of the monitoring and control activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to assure their observance. Proactive risk control and/or remediation work is undertaken where required.
<p>Financial crime risk (see page 69)</p> <p>The risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity, including both internal and external fraud.</p>	<p>Financial crime and fraud risk arises from day-to-day banking operations.</p>	<p>Financial crime and fraud risk is:</p> <ul style="list-style-type: none"> measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our financial crime risk teams; monitored against our financial crime risk appetite statement and metrics, the results of the monitoring and control activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to ensure their observance. Proactive risk control and/or remediation work is undertaken where required.

Description of risks – banking operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Model risk (see page 70)</p> <p>Model risk is the potential for adverse consequences from business decisions informed by models, which can be exacerbated by errors in methodology, design or the way they are used.</p>	<p>Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.</p>	<p>Model risk is:</p> <ul style="list-style-type: none"> measured by reference to model performance tracking and the output of detailed technical reviews, with key metrics including model review statuses and findings; monitored against model risk appetite statements, insight from the independent review function, feedback from internal and external audits, and regulatory reviews; and managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to ensure operational effectiveness.

Our insurance manufacturing subsidiaries are regulated separately from our banking operations. Risks in our insurance entities are managed using methodologies and processes that are subject to Group oversight. Our insurance operations are also subject to some of the same risks as our banking operations, which are covered by the group's risk management processes.

Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Financial risk (see page 71)</p> <p>Our ability to effectively match liabilities arising under insurance contracts with the asset portfolios that back them is contingent on the management of financial risks and the extent to which these are borne by policyholders.</p>	<p>Exposure to financial risks arises from:</p> <ul style="list-style-type: none"> market risk affecting the fair values of financial assets or their future cash flows; credit risk; and liquidity risk of entities not being able to make payments to policyholders as they fall due. 	<p>Financial risk is:</p> <ul style="list-style-type: none"> measured (i) for credit risk, in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; (ii) for market risk, in terms of economic capital, internal metrics and fluctuations in key financial variables; and (iii) for liquidity risk, in terms of internal metrics, including stressed operational cash flow projections; monitored through a framework of approved limits and delegated authorities; and managed through a robust risk control framework that outlines clear and consistent policies, principles and guidance. This includes using product design and asset liability matching and bonus rates.

Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Insurance risk (see page 71)</p> <p>The risk that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.</p>	<p>The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.</p>	<p>Insurance risk is:</p> <ul style="list-style-type: none"> measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; monitored through a framework of approved limits and delegated authorities; and managed through a robust risk control framework that outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.

Credit risk

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products, such as guarantees and derivatives.

Credit risk management

Key developments in 2019

There were no material changes to the policies and practices for the management of credit risk in 2019. We continue to apply the requirements of IFRS 9 'Financial Instruments' within Credit Risk.

Governance and structure

We have established group-wide credit risk management and related IFRS 9 processes. We continue to actively assess the impact of economic developments in key markets on specific customers, customer segments or portfolios. As credit conditions change, we take mitigating action, including the revision of risk appetites or limits and tenors, as appropriate. In addition, we continue to evaluate the terms under which we provide credit facilities within the context of individual customer requirements, the quality of the relationship, local regulatory requirements, market practices and our local market position.

Credit risk sub-function

(Audited)

Credit approval authorities are delegated by the Board to the Chief Executive together with the authority to sub-delegate them. The Credit Risk sub-function in Risk is responsible for the key policies and processes for managing credit risk, which include formulating credit policies and risk rating frameworks, guiding the appetite for credit risk exposures, undertaking independent reviews and objective assessment of credit risk, and monitoring performance and management of portfolios.

The principal objectives of our credit risk management are:

- to maintain across the group a strong culture of responsible lending and a robust risk policy and control framework;
- to both partner and challenge global businesses in defining, implementing and continually re-evaluating our risk appetite under actual and scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and mitigation.

Key risk management process

IFRS 9 'Financial Instruments' process

The IFRS 9 process comprises three main areas: modelling and data; implementation; and governance.

Modelling and data

The Group have established IFRS 9 modelling and data processes in various geographies, which are subject to internal model risk governance including independent review of significant model developments.

Implementation

A centralised impairment engine performs the expected credit loss ('ECL') calculation using data, which is subject to a number of

validation checks and enhancements, from a variety of client, finance and risk systems. Where possible, these checks and processes are performed in a globally consistent and centralised manner.

Governance

Management review forums are established in order to review and approve the impairment results. Management review forums have representatives from Credit Risk and Finance. Required members of the committee are the heads of Wholesale Credit, Market Risk, and Retail Banking and Wealth Management ('RBWM') Risk, as well as the global business Chief Financial Officers and the Chief Accounting Officer.

Concentration of exposure

(Audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or are engaged in similar activities, or operate in the same geographical areas/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 the group's portfolios across industry, country and customer groups. These include portfolio and counterparty limits, approval and review controls, and stress testing.

Credit quality of financial instruments

(Audited)

Our risk rating system facilitates the internal ratings-based approach under the Basel framework adopted by the Group to support the calculation of our minimum credit regulatory capital requirement. The five credit quality classifications each encompass a range of granular internal credit rating grades assigned to wholesale and retail lending businesses, and the external ratings attributed by external agencies to debt securities.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications based upon the mapping of related Customer Risk Rating ('CRR') to external credit rating.

Wholesale lending

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

Each CRR band is associated with an external rating grade by reference to long-run default rates for that grade, represented by the average of issuer-weighted historical default rates. This mapping between internal and external ratings is indicative and may vary over time.

Retail lending

Retail lending credit quality is based on a 12-month point-in-time probability-weighted probability of default ('PD').

Credit quality classification

Footnotes	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending and derivatives		Retail lending	
	External credit rating	External credit rating	Internal credit rating	12-month probability of default %	Internal credit rating	12 month probability-weighted PD %
Quality classification	<i>1,2</i>					
Strong	BBB and above	A- and above	CRR1 to CRR2¹	0 – 0.169	Band 1 and 2	0.000 – 0.500
Good	BBB- to BB	BBB+ to BBB-	CRR3	0.170 – 0.740	Band 3	0.501 – 1.500
Satisfactory	BB- to B and unrated	BB+ to B and unrated	CRR4 to CRR5	0.741 – 4.914	Band 4 and 5	1.501 – 20.000
Sub-standard	B- to C	B- to C	CRR6 to CRR8	4.915 – 99.999	Band 6	20.001 – 99.999
Credit impaired	Default	Default	CRR9 to CRR10	100	Band 7	100

1 Customer risk rating ('CRR').

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.
- 'Credit-impaired' exposures have been assessed as described in Note 1.2(i) in the Financial Statements.

Renegotiated loans and forbearance

(Audited)

'Forbearance' describes concessions made on the contractual terms of a loan in response to an obligor's financial difficulties.

A loan is classed as 'renegotiated' when we modify the contractual payment terms on concessionary terms because we have significant concerns about the borrowers' ability to meet contractual payments when due. Non-payment-related concessions (e.g. covenant waivers), while potential indicators of impairment, do not trigger identification as renegotiated loans.

Loans that have been identified as renegotiated retain this designation until maturity or derecognition.

For details of our policy on derecognised renegotiated loans, see Note 1.2(i) on the financial statements.

Credit quality of renegotiated loans

On execution of a renegotiation, the loan will also be classified as credit impaired if it is not already so classified. In wholesale lending, all facilities with a customer, including loans that have not been modified, are considered credit impaired following the identification of a renegotiated loan.

Wholesale renegotiated loans are classified as credit impaired 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. Personal renegotiated loans generally remain credit impaired until repayment, write-off or derecognition.

Renegotiated loans and recognition of expected credit losses

(Audited)

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.

Impairment assessment

(Audited)

For details of our impairment policies on loans and advances and financial investments see Note 1.2(i) on the Financial Statements.

Write-off of loans and advances

(Audited)

For details of our accounting policy on the write-off of loans and advances, see Note 1.2(i) on the Financial Statements.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due. The standard period runs until 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. However, in exceptional circumstances, they may be extended further.

For secured facilities, write-off should occur upon repossession of collateral, receipt of proceeds via settlement, or determination that recovery of the collateral will not be pursued.

Any secured assets maintained on the balance sheet beyond 60 months of consecutive delinquency-driven default require additional monitoring and review to assess the prospect of recovery.

There are exceptions in a few countries where local regulation or legislation constrain earlier write-off, or where the realisation of collateral for secured real estate lending takes more time. In the event of bankruptcy or analogous proceedings, write-off may occur earlier than the maximum periods stated above. Collection procedures may continue after write-off.

Credit risk in 2019

Dovish global monetary policies remained accommodative through much of 2019, and share indices hit record highs. The European Central Bank and the Bank of England are expected to maintain adequate market liquidity during 2020. Corporate credit quality in Europe and the UK has been helped by a record low rate environment despite a lower than expected trend of economic growth. Certain industry segments of the economy are however experiencing market or demand cycle changes that are providing a more challenged market place and this trend is likely to continue going forward. In some areas borrowers have taken on material amounts of new financial leverage leading to more stretched financial profiles. The second order impacts on European and UK corporates of coronavirus are being carefully followed by the bank as this issue develops. We are expecting modest positive growth for most economies in the region however UK borrowers may benefit given UK policymakers somewhat greater room for policy stimulus.

Gross loans and advances to customers of £109bn decreased from £113bn at 31 December 2018. Loans and advances to banks of £11bn decreased from £14bn at 31 December 2018. Wholesale and personal lending movements are disclosed on pages 53 to 59. The charge in expected credit losses, as it appears in the income statement, for the period was £124m (2018: £159m). Income statement movements are analysed further on page 13.

Our maximum exposure to credit risk is presented on page 36 and credit quality on page 43. While credit risk arises across most of our balance sheet, losses have typically been incurred on loans and advances and securitisation exposures and other structured products. As a result, our disclosures focus primarily on these two areas.

Re-presentation of UK gross carrying/nominal amounts staging

The wholesale lending gross carrying/nominal amounts in stages 1 and 2, which were disclosed at 31 December 2018, have been re-presented to reflect the UK economic uncertainty adjustment, which was not previously reflected in the stage allocation. The 31 December 2018 amounts reflected the probability-weighted view of stage allocation for the consensus scenarios only. In comparisons, the allowance for ECL did reflect the UK economic uncertainty adjustment. As a result of the re-presentation, there has been an increase in stage 2 amounts, with a corresponding decrease in stage 1. The financial instruments and disclosures impacted are as follows:

- Loans and advances to customers: A change of £1,736m comprised of £1,677m for corporate and commercial and £59m

non-bank financial institutions in pages 33, 35, 49, 54. Loans and other credit-related commitments: A change of £979m is attributable to £916m for corporate and commercial and £63m for non-bank financial institutions on pages 33, 35, 49, 54.

- Financial guarantees: A change of £21m comprised of £21m to corporate and commercial on pages 33, 35, 49, 54.
- Wholesale lending: other corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral: A change of £2,241m on page 57.

The 'Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees' disclosure for 31 December 2018 reflects this re-presentation in other £2,736m movements. There is no impact upon total gross carrying values/nominal amounts, personal lending amounts or allowance for ECL.

Summary of credit risk

The following disclosure presents the gross carrying/nominal amount of financial instruments to which the impairment requirements in IFRS9 are applied and the associated allowance for ECL. The allowance for ECL decreased from £1,430m at 31 December 2018 to £1,113m at 31 December 2019.

The allowance for ECL at 31 December 2019 comprised of £1,050m (2018: £1,347m) in respect of assets held at amortised cost, £63m (2018: £83m) in respect of loan commitments and financial guarantees, and £16m (2018: £45m) in respect of debt instruments measured at 'FVOCI'.

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

(Audited)

The group	31 Dec 2019		31 Dec 2018	
	Gross carrying/nominal amount £m	Allowance for ECL ¹ £m	Gross carrying/nominal amount £m	Allowance for ECL ¹ £m
Loans and advances to customers at amortised cost	109,428	(1,037)	113,306	(1,342)
– personal	24,833	(173)	23,903	(206)
– corporate and commercial	66,990	(809)	74,058	(1,106)
– non-bank financial institutions	17,605	(55)	15,345	(30)
Loans and advances to banks at amortised cost	11,471	(4)	13,631	(3)
Other financial assets measured at amortised cost	181,755	(9)	165,525	(2)
– cash and balances at central banks	51,816	–	52,014	(1)
– items in the course of collection from other banks	707	–	839	–
– reverse repurchase agreements – non trading	85,756	–	80,102	–
– financial investments	13	–	13	–
– prepayments, accrued income and other assets ²	43,463	(9)	32,557	(1)
Total gross carrying amount on balance sheet	302,654	(1,050)	292,462	(1,347)
Loans and other credit related commitments	121,447	(54)	141,620	(66)
– personal	1,950	(2)	2,062	–
– corporate and commercial	68,893	(50)	69,119	(65)
– financial	50,604	(2)	70,439	(1)
Financial guarantees ³	4,318	(9)	6,054	(17)
– personal	34	–	43	–
– corporate and commercial	2,849	(8)	4,429	(16)
– financial	1,435	(1)	1,582	(1)
Total nominal amount off balance sheet⁴	125,765	(63)	147,674	(83)
	428,419	(1,113)	440,136	(1,430)

Debt instruments measured at fair value through other comprehensive income ('FVOCI')	Memorandum allowance for ECL ⁵		Memorandum allowance for ECL ⁵	
	Fair value £m	£m	Fair value £m	£m
	46,360	(16)	47,172	(45)

- 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.
- Includes only those financial instruments which are subject to the impairment requirements of IFRS 9. 'Prepayments, accrued income and other assets' as presented within the consolidated balance sheet on page 97 includes both financial and non-financial assets.
- Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- Debt instruments measured at FVOCI continue to be measured at fair value with the allowance for ECL as a memorandum item. Change in ECL is recognised in 'Change in expected credit losses and other credit impairment charges' in the income statement.

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

(Audited)

	31 Dec 2019		31 Dec 2018	
	Gross carrying/ nominal amount £m	Allowance for ECL ¹ £m	Gross carrying/ nominal amount £m	Allowance for ECL ¹ £m
The bank				
Loans and advances to customers at amortised cost	50,314	(388)	59,527	(744)
– personal	3,637	(8)	3,249	(9)
– corporate and commercial	29,839	(345)	39,256	(685)
– non-bank financial institutions	16,838	(35)	17,022	(50)
Loans and advances to banks at amortised cost	9,525	(3)	12,689	(3)
Other financial assets measured at amortised cost	114,330	–	124,544	(1)
– cash and balances at central banks	30,149	–	40,657	–
– items in the course of collection from other banks	44	–	442	–
– reverse repurchase agreements-non trading	50,736	–	56,495	–
– financial investments	–	–	–	–
– prepayments, accrued income and other assets ²	33,401	–	26,950	(1)
Total gross carrying amount on balance sheet	174,169	(391)	196,760	(748)
Loans and other credit related commitments	39,682	(25)	61,196	(50)
– personal	308	(1)	305	–
– corporate and commercial	25,495	(23)	33,291	(49)
– financial	13,879	(1)	27,600	(1)
Financial guarantees ³	3,695	(4)	5,578	(14)
– personal	3	–	3	–
– corporate and commercial	674	(3)	1,846	(13)
– financial	3,018	(1)	3,729	(1)
Total nominal amount off balance sheet⁴	43,377	(29)	66,774	(64)
	217,546	(420)	263,534	(812)
	Fair value	Memorandum allowance for ECL⁵	Fair value	Memorandum allowance for ECL⁵
	£m	£m	£m	£m
Debt instruments measured at FVOCI⁵	26,506	(4)	26,646	(6)

1 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.

2 Includes only those financial instruments which are subject to the impairment requirements of IFRS 9. 'Prepayments, accrued income and other assets' as presented within the consolidated balance sheet on page 97 includes both financial and non-financial assets.

3 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

4 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

5 Debt instruments measured at FVOCI continue to be measured at fair value with the allowance for ECL as a memorandum item. Change in ECL is recognised in 'Change in expected credit losses and other credit impairment charges' in the income statement.

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

- Stage 1: These financial assets are 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: There is objective evidence of impairment, and are therefore considered to be in default or otherwise credit-impaired on which a lifetime ECL is recognised.
- Purchased or originated credit-impaired ('POCI'): Financial assets that are 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 by industry sector at 31 December 2019

(Audited)

The group	Gross carrying/nominal amount ²					Allowance for ECL					ECL coverage %				
	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI ³ £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI ³ £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	POCI ³ %	Total %
Loans and advances to customers at amortised cost	100,077	7,238	2,043	70	109,428	(104)	(126)	(774)	(33)	(1,037)	0.1	1.7	37.9	47.1	0.9
– personal	23,273	1,073	487	–	24,833	(6)	(23)	(144)	–	(173)	–	2.1	29.6	–	0.7
– corporate and commercial	59,654	5,806	1,460	70	66,990	(85)	(100)	(591)	(33)	(809)	0.1	1.7	40.5	47.1	1.2
– non-bank financial institutions	17,150	359	96	–	17,605	(13)	(3)	(39)	–	(55)	0.1	0.8	40.6	–	0.3
Loans and advances to banks at amortised cost	11,408	63	–	–	11,471	(4)	–	–	–	(4)	–	–	–	–	–
Other financial assets measured at amortised cost	181,697	26	32	–	181,755	–	–	(9)	–	(9)	–	–	28.1	–	–
Loan and other credit-related commitments	118,078	3,235	129	5	121,447	(22)	(11)	(21)	–	(54)	–	0.3	16.3	–	–
– personal	1,859	88	3	–	1,950	–	(2)	–	–	(2)	–	2.3	–	–	0.1
– corporate and commercial	65,796	2,967	125	5	68,893	(20)	(9)	(21)	–	(50)	–	0.3	16.8	–	0.1
– financial	50,423	180	1	–	50,604	(2)	–	–	–	(2)	–	–	–	–	–
Financial guarantees ¹	3,685	567	63	3	4,318	(2)	(6)	(1)	–	(9)	0.1	1.1	1.6	–	0.2
– personal	33	–	1	–	34	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	2,352	433	61	3	2,849	(2)	(6)	–	–	(8)	0.1	1.4	–	–	0.3
– financial	1,300	134	1	–	1,435	–	–	(1)	–	(1)	–	–	100.0	–	0.1
At 31 Dec 2019	414,945	11,129	2,267	78	428,419	(132)	(143)	(805)	(33)	(1,113)	–	1.3	35.5	42.3	0.3

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

3 Purchased or originated credit-impaired ('POCI').

Unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when they are 30 days past due ('DPD') and are transferred from stage 1 to stage 2. The following disclosure presents the ageing of stage 2

financial assets by those less than 30 days and greater than 30 DPD and therefore presents those financial assets classified as stage 2 due to ageing (30 DPD) and those identified at an earlier stage (less than 30 DPD).

Stage 2 days past due analysis at 31 December 2019

(Audited)

The group	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2 £m	Of which:	Of which:	Stage 2 £m	Of which:	Of which:	Stage 2 %	Of which:	Of which:
		1 to 29 DPD ¹ £m	30 and > DPD ¹ £m		1 to 29 DPD ¹ £m	30 and > DPD ¹ £m		1 to 29 DPD ¹ %	30 and > DPD ¹ %
Loans and advances to customers at amortised cost:	7,238	73	100	(126)	(1)	(3)	1.7	1.4	3.0
– personal	1,073	58	44	(23)	(1)	(1)	2.1	1.7	2.3
– corporate and commercial	5,806	15	56	(100)	–	(2)	1.7	–	3.6
– non-bank financial institutions	359	–	–	(3)	–	–	0.8	–	–
Loans and advances to banks at amortised cost	63	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	26	5	–	–	–	–	–	–	–

1 Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

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

(Audited)

The group	Gross carrying/nominal amount ²					Allowance for ECL					ECL coverage %				
	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI ³ £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI ³ £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	POCI ³ %	Total %
Loans and advances to customers at amortised cost	100,393	10,552	2,244	117	113,306	(121)	(171)	(972)	(78)	(1,342)	0.1	1.6	43.3	66.7	1.2
– personal	22,170	1,206	527	–	23,903	(9)	(27)	(170)	–	(206)	–	2.2	32.3	–	0.9
– corporate and commercial	63,145	9,153	1,643	117	74,058	(99)	(132)	(797)	(78)	(1,106)	0.2	1.4	48.5	66.7	1.5
– non-bank financial institutions	15,078	193	74	–	15,345	(13)	(12)	(5)	–	(30)	0.1	6.2	6.8	–	0.2
Loans and advances to banks at amortised cost	13,565	66	–	–	13,631	(2)	(1)	–	–	(3)	–	1.5	–	–	–
Other financial assets measured at amortised cost	165,496	24	5	–	165,525	(1)	–	(1)	–	(2)	–	–	20.0	–	–
Loan and other credit-related commitments	135,560	5,806	249	5	141,620	(27)	(26)	(13)	–	(66)	–	0.4	5.2	–	–
– personal	2,005	54	3	–	2,062	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	63,512	5,357	245	5	69,119	(26)	(26)	(13)	–	(65)	–	0.5	5.3	–	0.1
– financial	70,043	395	1	–	70,439	(1)	–	–	–	(1)	–	–	–	–	–
Financial guarantees ¹	5,402	586	64	2	6,054	(4)	(9)	(4)	–	(17)	0.1	1.5	6.3	–	0.3
– personal	42	–	1	–	43	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	3,845	520	62	2	4,429	(4)	(8)	(4)	–	(16)	0.1	1.5	6.5	–	0.4
– financial	1,515	66	1	–	1,582	–	(1)	–	–	(1)	–	1.5	–	–	0.1
At 31 Dec 2018 ⁴	420,416	17,034	2,562	124	440,136	(155)	(207)	(990)	(78)	(1,430)	–	1.2	38.6	62.9	0.3

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

² Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

³ Purchased or originated credit-impaired ('POCI').

⁴ During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount. For further details, see page 30.

Stage 2 days past due analysis at 31 December 2018 (continued)

(Audited)

The group	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Of which: Stage 2 £m	Of which: 1 to 29 DPD ¹ £m	Of which: 30 and > DPD ¹ £m	Of which: Stage 2 £m	Of which: 1 to 29 DPD ¹ £m	Of which: 30 and > DPD ¹ £m	Of which: Stage 2 %	Of which: 1 to 29 DPD ¹ %	Of which: 30 and > DPD ¹ %
Loans and advances to customers at amortised cost	10,552	117	178	(171)	(3)	(6)	1.6	2.6	3.4
– personal	1,206	80	83	(27)	(2)	(4)	2.2	2.5	4.8
– corporate and commercial	9,153	37	95	(132)	(1)	(2)	1.4	2.7	2.1
– non-bank financial institutions	193	–	–	(12)	–	–	6.2	–	–
Loans and advances to banks at amortised cost	66	5	–	(1)	–	–	1.5	–	–
Other financial assets measured at amortised cost	24	–	–	–	–	–	–	–	–

¹ Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

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

(Audited)

The bank	Gross carrying/nominal amount ²					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%
Loans and advances to customers at amortised cost	46,173	3,430	678	33	50,314	(58)	(67)	(239)	(24)	(388)	0.1	2.0	35.3	72.7	0.8
– personal	3,562	57	18	–	3,637	(1)	(3)	(4)	–	(8)	–	5.3	22.2	–	0.2
– corporate and commercial	26,082	3,109	615	33	29,839	(48)	(62)	(211)	(24)	(345)	0.2	2.0	34.3	72.7	1.2
– non-bank financial institutions	16,529	264	45	–	16,838	(9)	(2)	(24)	–	(35)	0.1	0.8	53.3	–	0.2
Loans and advances to banks at amortised cost	9,487	38	–	–	9,525	(3)	–	–	–	(3)	–	–	–	–	–
Other financial assets measured at amortised cost	114,306	16	8	–	114,330	–	–	–	–	–	–	–	–	–	–
Loan and other credit-related commitments	38,820	839	18	5	39,682	(15)	(8)	(2)	–	(25)	–	1.0	11.1	–	0.1
– personal	305	3	–	–	308	–	(1)	–	–	(1)	–	33.3	–	–	0.3
– corporate and commercial	24,657	815	18	5	25,495	(14)	(7)	(2)	–	(23)	0.1	0.9	11.1	–	0.1
– financial	13,858	21	–	–	13,879	(1)	–	–	–	(1)	–	–	–	–	–
Financial guarantees ¹	3,363	275	57	–	3,695	(1)	(2)	(1)	–	(4)	–	0.7	1.8	–	0.1
– personal	3	–	–	–	3	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	468	150	56	–	674	(1)	(2)	–	–	(3)	0.2	1.3	–	–	0.4
– financial	2,892	125	1	–	3,018	–	–	(1)	–	(1)	–	–	100.0	–	–
At 31 Dec 2019	212,149	4,598	761	38	217,546	(77)	(77)	(242)	(24)	(420)	–	1.7	31.8	63.2	0.2

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

3 Purchased or originated credit-impaired ('POCI').

Stage 2 days past due analysis at 31 December 2019

(Audited)

The bank	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2	Of which:		Stage 2	Of which:		Stage 2	Of which:	
		1 to 29 DPD ¹	30 and > DPD ¹		1 to 29 DPD ¹	30 and > DPD ¹		1 to 29 DPD ¹	30 and > DPD ¹
£m	£m	£m	£m	£m	£m	%	%	%	
Loans and advances to customers at amortised cost:	3,430	13	6	(67)	–	–	2.0	–	–
– personal	57	13	6	(3)	–	–	5.3	–	–
– corporate and commercial	3,109	–	–	(62)	–	–	2.0	–	–
– non-bank financial institutions	264	–	–	(2)	–	–	0.8	–	–
Loans and advances to banks at amortised cost	38	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	16	–	–	–	–	–	–	–	–

1 Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

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

(Audited)

	Gross carrying/nominal amount ²					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total
The bank	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%
Loans and advances to customers at amortised cost	51,226	7,213	985	103	59,527	(86)	(122)	(461)	(75)	(744)	0.2	1.7	46.8	72.8	1.2
– personal	3,134	91	24	–	3,249	(1)	(3)	(5)	–	(9)	–	3.3	20.8	–	0.3
– corporate and commercial	31,289	6,969	895	103	39,256	(72)	(108)	(430)	(75)	(685)	0.2	1.5	48.0	72.8	1.7
– non-bank financial institutions	16,803	153	66	–	17,022	(13)	(11)	(26)	–	(50)	0.1	7.2	39.4	–	0.3
Loans and advances to banks at	12,629	60	–	–	12,689	(2)	(1)	–	–	(3)	–	1.7	–	–	–
Other financial assets measured at amortised cost	124,521	19	4	–	124,544	–	–	(1)	–	(1)	–	–	25.0	–	–
Loan and other credit-related commitments	57,183	3,868	141	5	61,197	(24)	(24)	(2)	–	(50)	–	0.6	1.4	–	0.1
– personal	302	3	–	–	305	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	29,633	3,513	141	5	33,292	(23)	(24)	(2)	–	(49)	0.1	0.7	1.4	–	0.1
– financial	27,248	352	–	–	27,600	(1)	–	–	–	(1)	–	–	–	–	–
Financial guarantees ¹	5,227	298	53	–	5,578	(3)	(7)	(4)	–	(14)	0.1	2.3	7.5	–	0.3
– personal	3	–	–	–	3	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	1,546	248	52	–	1,846	(3)	(6)	(4)	–	(13)	0.2	2.4	7.7	–	0.7
– financial	3,678	50	1	–	3,729	–	(1)	–	–	(1)	–	2.0	–	–	–
At 31 Dec 2018 ⁴	250,786	11,458	1,183	108	263,535	(115)	(154)	(468)	(75)	(812)	–	1.3	39.6	69.4	0.3

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

3 Purchased or originated credit-impaired ('POCI').

4 During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount. For further details, see page 30.

Stage 2 days past due analysis at 31 December 2018 (continued)

(Audited)

	Gross carrying amount			Allowance for ECL			ECL coverage %		
	Stage 2	Of which:	Of which:	Stage 2	Of which:	Of which:	Stage 2	Of which:	Of which:
		1 to 29 DPD ¹	30 and > DPD ¹		1 to 29 DPD ¹	30 and > DPD ¹		1 to 29 DPD ¹	30 and > DPD ¹
The bank	£m	£m	£m	£m	£m	£m	%	%	%
Loans and advances to customers at amortised cost:	7,213	20	5	(122)	–	–	1.7	–	–
– Personal	91	20	5	(3)	–	–	3.3	–	–
– Corporate and commercial	6,969	–	–	(108)	–	–	1.5	–	–
– Non-bank financial institutions	153	–	–	(11)	–	–	7.2	–	–
Loans and advances to banks at amortised cost	60	–	–	(1)	–	–	1.7	–	–
Other financial assets measured at amortised cost	19	–	–	–	–	–	–	–	–

1 Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

Credit exposure

Maximum exposure to credit risk

(Audited)

This section provides information on balance sheet items and their offsets as well as loan and other credit-related commitments.

The offset on derivatives remains in line with the movements in maximum exposure amounts.

'Maximum exposure to credit risk' table

The following table presents our maximum exposure before taking account of any collateral held or other credit enhancements (unless such enhancements meet accounting offsetting requirements). The table excludes financial instruments whose carrying amount best represents the net exposure to credit risk and it excludes equity securities as they are not subject to credit risk. For the financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and other guarantees 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 relates 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. No offset has been applied to off-balance sheet collateral. In the case of derivatives the offset column also includes collateral received in cash and other financial assets.

Other credit risk mitigants

While not disclosed as an offset in the following 'Maximum exposure to credit risk' table, other arrangements are in place which reduce our maximum exposure to credit risk. These include a charge over collateral on borrowers' specific assets such as residential properties, collateral held in the form of financial instruments that are not held on balance sheet and short positions in securities. In addition, for financial assets held as part of linked insurance/investment contracts the risk is predominantly borne by the policyholder. See Note 28 on the Financial Statements for further details of collateral in respect of certain loans and advances and derivatives.

Collateral available to mitigate credit risk is disclosed in the Collateral section on page 55.

Maximum exposure to credit risk

(Audited)

	2019			2018		
	Maximum exposure £m	Offset £m	Net £m	Maximum exposure £m	Offset £m	Net £m
The group						
Loans and advances to customers held at amortised cost	108,391	(10,419)	97,972	111,964	(12,579)	99,385
– personal	24,660	–	24,660	23,697	–	23,697
– corporate and commercial	66,181	(8,833)	57,348	72,952	(10,610)	62,342
– non-bank financial institutions	17,550	(1,586)	15,964	15,315	(1,969)	13,346
Loans and advances to banks at amortised cost	11,467	(75)	11,392	13,628	(12)	13,616
Other financial assets held at amortised cost	181,983	(21,848)	160,135	165,793	(17,065)	148,728
– cash and balances at central banks	51,816	–	51,816	52,013	–	52,013
– items in the course of collection from other banks	707	–	707	839	–	839
– reverse repurchase agreements – non trading	85,756	(21,848)	63,908	80,102	(17,065)	63,037
– financial investments	13	–	13	13	–	13
– prepayments, accrued income and other assets	43,691	–	43,691	32,826	–	32,826
Derivatives	164,538	(163,779)	759	144,522	(140,644)	3,878
Total on balance sheet exposure to credit risk	466,379	(196,121)	270,258	435,907	(170,300)	265,607
Total off-balance sheet	148,306	–	148,306	172,073	–	172,073
– financial and other guarantees ¹	19,456	–	19,456	23,244	–	23,244
– loan and other credit-related commitments	128,850	–	128,850	148,829	–	148,829
At 31 Dec	614,685	(196,121)	418,564	607,980	(170,300)	437,680

	2019			2018		
	£m	£m	£m	£m	£m	£m
The bank						
Loans and advances to customers held at amortised cost	49,926	(17,409)	32,517	58,783	(20,045)	38,738
– personal	3,629	–	3,629	3,240	–	3,240
– corporate and commercial	29,494	(8,833)	20,661	38,571	(10,610)	27,961
– non-bank financial institutions	16,803	(8,576)	8,227	16,972	(9,435)	7,537
Loans and advances to banks at amortised cost	9,522	–	9,522	12,686	(22)	12,664
Other financial assets held at amortised cost	114,440	(14,936)	99,504	124,815	(13,401)	111,414
– cash and balances at central banks	30,149	–	30,149	40,657	–	40,657
– items in the course of collection from other banks	44	–	44	442	–	442
– reverse repurchase agreements – non trading	50,736	(14,936)	35,800	56,495	(13,401)	43,094
– financial investments	–	–	–	–	–	–
– prepayments, accrued income and other assets	33,511	–	33,511	27,221	–	27,221
Derivatives	152,496	(152,450)	46	139,229	(137,504)	1,725
Total on balance sheet exposure to credit risk	326,384	(184,795)	141,589	335,513	(170,972)	164,541
Total off-balance sheet	55,298	–	55,298	81,748	–	81,748
– financial and other guarantees ¹	11,236	–	11,236	15,860	–	15,860
– loan and other credit-related commitments	44,062	–	44,062	65,888	–	65,888
At 31 Dec	381,682	(184,795)	196,887	417,261	(170,972)	246,289

¹ 'Financial and other guarantees' represents 'Financial guarantees' and 'Performance and other guarantees' as disclosed in Note 30, net of ECL.

Concentration of exposure

We have a number of businesses with a broad range of products. We operate in a number of markets with the majority of our exposures in UK and France.

For an analysis of:

- financial investments, see Note 15 on the Financial Statements;

- trading assets, see Note 10 on the Financial Statements;
- derivatives, see page 58 and Note 14 on the Financial Statements; and
- loans and advances by industry sector and by the location of the principal operations of the lending subsidiary or by the location of the lending branch, see page 53 for wholesale lending and page 58 for personal lending.

Credit deterioration of financial instruments

(Audited)

A summary of our current policies and practices regarding the identification, treatment and measurement of stage 1, stage 2 and stage 3 (credit impaired) and POCL financial instruments can be found in Note 1.2 of the financial statements.

Measurement uncertainty and sensitivity analysis of ECL estimates

The recognition and measurement of expected credit loss ('ECL') involves the use of significant judgement and estimation. We form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate.

Methodology

We use multiple economic scenarios to reflect assumptions about future economic conditions, starting with three economic scenarios based on consensus forecast distributions, supplemented by alternative or additional economic scenarios and/or management adjustments where, in management's judgement, the consensus forecast distribution does not adequately capture the relevant risks.

The three economic scenarios represent the 'most likely' outcome and two less likely outcomes 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 HSBC's senior management. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in most circumstances.

Economic assumptions in the Central consensus economic scenario are set using the average of forecasts of external economists. Reliance on external forecasts helps ensure that the Central scenario is unbiased and maximises the use of independent information. The Upside and Downside scenarios are selected with reference to externally available forecast distributions and 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. 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 described in HSBC's 'Top and emerging risks' on page 21. This ensures that scenarios remain consistent with the more qualitative assessment of these risks. We project additional variable paths using an external provider's global macro model.

The Upside and Downside scenarios are generated once a year, reviewed at each reporting date to ensure that they are an appropriate reflection of management's view and updated if economic conditions change significantly. The Central scenario is generated every quarter. For quarters without updates to outer scenarios, wholesale and retail credit risk use the updated Central scenario to approximate the impact of the most recent outer scenarios.

Additional scenarios are created, as required, to address those forward-looking risks that management considers are not adequately captured by the consensus. At the reporting date, we deployed additional scenarios to address economic uncertainty in the UK.

Description of consensus economic scenarios

The economic assumptions presented in this section have been formed by HSBC with reference to external forecasts specifically for the purpose of calculating ECL.

The consensus Central scenario

HSBC's Central scenario is one of moderate growth over the forecast period 2020–2024. Global GDP growth is expected to be

2.8% on average over the period, which is marginally higher than the average growth rate over the period 2014–2018. Across the key markets, we note:

- 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 UK and France which reflects expectations that the long-term impact of current economic uncertainty will be moderately adverse.
- The unemployment rate is expected to rise over the forecast horizon in most of our major markets.
- Inflation is expected to be stable and will remain close to central bank targets in our core markets over the forecast period.
- 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 European Central Bank is expected to restart its asset purchase programmes.
- The West Texas Intermediate oil price is forecast to average \$59 per barrel over the projection period.

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

Consensus Central scenario (average 2020–2024)

	UK	France
GDP growth rate (%)	1.6	1.3
Inflation (%)	2.0	1.6
Unemployment (%)	4.4	7.8
Short term interest rate (%)	0.6	(0.6)
10-year treasury bond yields (%)	1.7	1.0
House price growth (%)	3.0	2.9
Equity price growth (%)	2.8	3.4
Probability (%)	55.0	80.0

The consensus Upside scenario

The economic forecast distribution of risks (as captured by consensus probability distributions of GDP growth) has shown a decrease in upside risks across our main markets over the course of 2019. In the first two years of the Upside scenario, global real GDP growth rises before converging to the Central scenario.

Increased confidence, positive resolution of economic uncertainty in the UK, de-escalation of trade tensions and removal of trade barriers globally, expansionary fiscal policy, stronger oil prices and a calming of geopolitical tensions are the risk themes that support the Upside scenario.

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

Consensus Upside scenario (average 2020–2024)

	UK	France
GDP growth rate (%)	2.1	1.7
Inflation (%)	2.4	2.0
Unemployment (%)	4.0	7.4
Short term interest rate (%)	0.6	(0.5)
10-year treasury bond yields (%)	1.7	1.0
House price growth (%)	4.4	3.7
Equity price growth (%)	4.4	7.3
Probability (%)	10.0	10.0

The consensus Downside scenario

The distribution of risks (as captured by consensus probability distributions of GDP growth) has shown a marginal increase in downside risks over the course of 2019 for the eurozone and the UK (see discussion on UK economic uncertainty below). In the Downside scenario, global real GDP growth declines for two years before recovering towards its long-run trend. House price growth either stalls or contracts and equity markets correct abruptly in our major markets in this scenario. The global slowdown in demand

would drive commodity prices lower and result in an accompanying fall in inflation. Central banks would be expected to enact loose monetary policy, which in some markets, would result in a reduction in the key policy interest rate. This is consistent with the key downside risk themes, which include an intensification of global protectionism and trade barriers, a worsening of economic uncertainty in the UK, and weaker commodity prices.

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

Consensus Downside scenario (average 2020–2024)

	UK	France
GDP growth rate (%)	1.0	1.0
Inflation (%)	1.7	1.3
Unemployment (%)	4.8	8.2
Short term interest rate (%)	0.1	(0.9)
10-year Treasury bond yields (%)	0.8	0.2
House price growth (%)	1.6	1.9
Equity price growth (%)	(1.1)	(2.3)
Probability (%)	–	10.0

Alternative Downside scenarios

Alternative Downside scenarios have been created to reflect management's view of risk in some of our key markets.

UK alternative Downside scenarios

Three alternative Downside scenarios were maintained in 2019 for the UK, reflecting management's view of the distribution of economic risks. These scenarios reflect management's judgement that the consensus distribution does not adequately reflect the risks that stem from the UK's departure from the European Union ('EU') on the 31st of January 2020. Management evaluated events over the course of 2019 and assigned probabilities to these scenarios that take into consideration all relevant economic and political events. The three scenarios and associated probabilities are described below.

- UK alternative Downside scenario 1 ('AD1'): Economic uncertainty could have a large impact on the UK economy resulting in a long-lasting recession with a weak recovery. This scenario reflects the consequences of such a recession with an initial risk-premium shock and weaker long-run productivity growth. This scenario has been used with a 25% weighting.
- UK alternative Downside scenario 2 ('AD2'): This scenario reflects the possibility that economic uncertainty could result in a deep cyclical shock triggering a steep depreciation in sterling, a sharp increase in inflation and an associated monetary policy response. This represents a tail risk and has been assigned a 5% weighting.
- UK alternative Downside scenario 3 ('AD3'): This scenario reflects the possibility that the adverse impact associated with economic uncertainty currently in the UK could manifest over a far longer period of time with the worst effects occurring later than in the above two scenarios. This scenario is also considered a tail risk and has been assigned a 5% weighting.

The table below describes key macroeconomic variables and the probabilities for each of the alternative Downside scenarios:

Average 2020–2024

	AD1	AD2	AD3
GDP growth rate (%)	0.3	(0.3)	(0.8)
Inflation (%)	2.3	2.5	2.7
Unemployment (%)	6.5	8.0	7.7
Short term interest rate (%)	0.4	2.5	2.5
10-year treasury bond yields (%)	1.8	4.0	4.0
House price growth (%)	(1.7)	(3.7)	(4.8)
Equity price growth (%)	(3.3)	(4.6)	(9.6)
Probability (%)	25.0	5.0	5.0

The conditions which resulted in departure from the consensus economic forecasts will be reviewed regularly as economic

conditions change in the future to determine whether this adjustment continues to be necessary.

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.

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. Historical relationships between observed default rates and macroeconomic 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 ('HPI') and applying the corresponding LGD expectation.

Impact of UK economic uncertainty on ECL

At 31 December 2019, management made an adjustment that increased ECL allowances in UK wholesale by £25.7m (2018: £64m). The adjustment represents incremental ECL based on a probability-weighted distribution of the upside (10%), consensus (55%) and alternative downside scenarios (35% combined).

We also considered developments after the balance sheet date and concluded that they did not necessitate any adjustment to the approach or judgements taken on 31 December 2019.

Economic scenarios sensitivity analysis of ECL estimates

Management considered the sensitivity of the ECL outcome against the economic forecasts 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 ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible actual ECL outcomes. The impact of defaults that might occur in the future under different economic scenarios is captured by recalculating ECL for loans in stages 1 and 2 at the balance sheet date. The population of stage 3 loans (in default) at the balance sheet date is unchanged in these sensitivity calculations. Stage 3 ECL would only be sensitive to changes in forecasts of future economic conditions if the LGD of a particular portfolio was sensitive to these changes.

There is a particularly high degree of estimation uncertainty in numbers representing tail risk scenarios when assigned a 100% weighting, and an indicative range is provided for the UK tail risk sensitivity analysis.

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted obligors because the measurement of ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios, and it is impracticable to separate the effect of macroeconomic factors in individual assessments.

For retail credit risk exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors. This is because the retail ECL for secured mortgage portfolios including loans in all stages is sensitive to macroeconomic variables.

Wholesale analysis

IFRS 9 ECL sensitivity to future economic conditions¹

	UK £m	France £m
ECL coverage of financial instruments subject to significant measurement uncertainty at 31 December 2019²		
Reported ECL	119	42
Consensus scenarios		
Central scenario	92	40
Upside scenario	83	38
Downside scenario	108	60
Alternative scenarios		
UK AD1	160	
Tail risk scenarios (UK AD2 and AD3)	342-314	
Gross carrying amount/nominal amount ³	125,085	119,967

- 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.

At 31 December 2019, the sensitivity of the UK book to changes in macro-economic forecasts is primarily due to downward revisions in consensus forecasts and their resultant impact on the additional downside scenarios.

The underlying movement in the reported ECL in the UK is driven by changes in the probability weights of the underlying scenarios together with a shift in the portfolio mix of underlying assets. Furthermore, the impact of the additional downside scenarios particularly AD2 and AD3 are relatively more severe than 2018 given marginally weaker than forecast economic performance in 2019.

Retail analysis

IFRS 9 ECL sensitivity to future economic conditions¹

	UK £m	France £m
ECL coverage of financial instruments subject to significant measurement uncertainty at 31 December 2019²		
Reported ECL	10	133
Consensus scenarios		
Central scenario	10	133
Upside scenario	9	132
Downside scenario	11	134
Alternative scenarios		
Gross carrying amount	2,599	23,017

- 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.

In France, following management review of the calculated ECL, results have been adjusted to more accurately reflect management's views of ECL sensitivity under an upside and

downside scenario by adjusting for factors including the economic forecast skew and forecast reversion approach, consistent with 2018.

The changes in sensitivity from 31 December 2018 is reflective of changes in lending volumes, credit quality and movements in foreign exchange.

For all the above sensitivity analyses, changes to ECL sensitivity would occur should there be changes to the corresponding level of uncertainty, economic forecasts, historical economic variable correlations or credit quality.

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 transferring stage. 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 guarantees¹

(Audited)

	Non-credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	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
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
The group										
At 1 Jan 2019	205,009	(154)	17,010	(207)	2,557	(989)	124	(78)	224,700	(1,428)
Transfers of financial instruments	1,566	(61)	(2,198)	83	632	(22)	–	–	–	–
– Transfers from Stage 1 to Stage 2	(8,660)	19	8,660	(19)	–	–	–	–	–	–
– Transfers from Stage 2 to Stage 1	10,426	(80)	(10,426)	80	–	–	–	–	–	–
– Transfers to Stage 3	(205)	1	(487)	24	692	(25)	–	–	–	–
– Transfers from Stage 3	5	(1)	55	(2)	(60)	3	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	52	–	(28)	–	(1)	–	–	–	23
New financial assets originated or purchased	113,078	(79)	–	–	–	–	21	(16)	113,099	(95)
Asset derecognised (including final repayments)	(88,021)	5	(1,479)	17	(411)	96	(7)	3	(89,918)	121
Changes to risk parameters – further lending/repayments	(26,328)	60	(2,380)	21	(99)	62	23	8	(28,784)	151
Changes to risk parameters – credit quality	–	46	–	(38)	–	(333)	–	(28)	–	(353)
Changes to model used for ECL calculation	–	–	–	–	–	–	–	–	–	–
Assets written off	–	–	–	–	(304)	304	(78)	78	(382)	382
Credit related modifications that resulted in derecognition	–	–	–	–	(65)	46	–	–	(65)	46
Foreign exchange	(6,029)	4	(341)	4	(84)	32	(6)	3	(6,460)	43
Others ²	(4,026)	(5)	491	5	9	9	1	(3)	(3,525)	6
At 31 Dec 2019	195,249	(132)	11,103	(143)	2,235	(796)	78	(33)	208,665	(1,104)
ECL income statement charge for the period		84		(28)		(176)		(33)		(153)
Recoveries										6
Others										(3)
Total ECL income charge for the period										(150)

	At 31 Dec 2019		12 months ended 31 Dec 2019
	Gross carrying/nominal amount	Allowance for ECL	ECL charge
	£m	£m	£m
As above	208,665	(1,104)	(150)
Other financial assets measured at amortised cost	181,755	(9)	3
Non-trading reverse purchase agreement commitments	37,999	–	–
Performance and other guarantees not considered for IFRS 9			(4)
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	428,419	(1,113)	(151)
Debt instruments measured at FVOCI	46,360	(16)	27
Total allowance for ECL/total income statement ECL charge for the period	n/a	(1,129)	(124)

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

² Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2019, these amounted to £(5)bn and were classified as Stage 1 with no ECL.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹ (continued)

(Audited)

	Non-credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	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
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
The group										
At 1 Jan 2018	408,167	(452)	18,702	(618)	5,342	(1,897)	463	(74)	432,674	(3,041)
Transfers to HSBC UK and its subsidiaries	(216,026)	288	(9,502)	453	(2,711)	663	–	–	(228,239)	1,404
Transfers of financial instruments:	(5,852)	(120)	4,637	176	1,215	(56)	–	–	–	–
– Transfers from Stage 1 to Stage 2	(15,141)	38	15,141	(38)	–	–	–	–	–	–
– Transfers from Stage 2 to Stage 1	9,955	(154)	(9,955)	154	–	–	–	–	–	–
– Transfers to Stage 3	(754)	11	(941)	79	1,695	(90)	–	–	–	–
– Transfers from Stage 3	88	(15)	392	(19)	(480)	34	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	99	–	(114)	–	(7)	–	–	–	(22)
Net new and further lending/ (repayments) ²	19,080	(143)	(421)	239	(769)	76	(330)	11	17,560	183
Changes to risk parameters – credit quality	–	138	–	(324)	–	(240)	–	(22)	–	(448)
Assets written off	–	–	–	–	(456)	456	–	–	(456)	456
Foreign exchange	779	(2)	86	–	14	(8)	(1)	–	878	(10)
Others ³	(1,139)	38	3,508	(19)	(78)	24	(8)	7	2,283	50
At 31 Dec 2018	205,009	(154)	17,010	(207)	2,557	(989)	124	(78)	224,700	(1,428)
ECL Income statement charge for the period		94		(199)		(171)		(11)		(287)
Recoveries										71
Others										(10)
Total ECL income statement charge/ for the period										(226)

	At 31 Dec 2018		12 months ended 31 Dec 2018
	Gross carrying/nominal amount	Allowance for ECL	ECL charge
	£m	£m	£m
As above	224,700	(1,428)	(226)
Other financial assets measured at amortised cost	165,525	(2)	–
Non-trading reverse purchase agreement commitments	49,911	–	–
Performance and other guarantees not considered for IFRS 9			(12)
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	440,136	(1,430)	(238)
Debt instruments measured at FVOCI	47,172	(45)	79
Total allowance for ECL/total income statement ECL charge for the period	n/a	(1,475)	(159)

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

² The 31 December 2018 comparative 'Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers' disclosure presents 'New financial assets originated or purchased', 'Assets derecognised (including final repayments)' and 'Changes to risk parameters – further lending/repayments' under 'Net new lending and further lending/repayments'. To provide greater granularity, these amounts have been separately presented in the 31 December 2019 disclosure.

³ Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2018, these amounted to £2bn and were classified as Stage 1 with no ECL. During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount for the 31 December 2018 only. For further details, see page 30.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹

(Audited)

	Non credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	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
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
The bank										
At 1 Jan 2019	124,740	(115)	11,439	(154)	1,179	(467)	108	(75)	137,466	(811)
Transfers of financial instruments	2,678	(32)	(2,983)	50	305	(18)	–	–	–	–
– Transfers from Stage 1 to Stage 2	(3,736)	15	3,736	(15)	–	–	–	–	–	–
– Transfers from Stage 2 to Stage 1	6,602	(47)	(6,602)	47	–	–	–	–	–	–
– Transfers to Stage 3	(192)	1	(145)	18	337	(19)	–	–	–	–
– Transfers from Stage 3	4	(1)	28	–	(32)	1	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	31	–	(15)	–	–	–	–	–	16
New financial assets originated or purchased	18,132	(57)	–	–	–	–	18	(15)	18,150	(72)
Asset derecognised (including final repayments)	(12,180)	1	(602)	16	(99)	14	–	–	(12,881)	31
Changes to risk parameters – further lending/repayments	(19,884)	45	(2,538)	24	(249)	35	14	(2)	(22,657)	102
Changes to risk parameters – credit quality	–	34	–	(10)	–	(89)	–	(7)	–	(72)
Changes to model used for ECL calculation	–	–	–	–	–	–	–	–	–	–
Assets written off	–	–	–	–	(194)	194	–	–	(194)	194
Credit related modifications that resulted in derecognition	–	–	–	–	(62)	45	–	–	(62)	45
Foreign exchange	(218)	2	(21)	–	(7)	3	(3)	2	(249)	7
Others ²	(18,331)	14	(713)	12	(120)	41	(99)	73	(19,263)	140
At 31 Dec 2019	94,937	(77)	4,582	(77)	753	(242)	38	(24)	100,310	(420)
ECL income statement charge for the period		54		15		(40)		(24)		5
Recoveries										2
Others										(10)
Total ECL income charge for the period										(3)

	At 31 Dec 2019		12 months ended 31 Dec 2019	
	Gross carrying/nominal amount	Allowance for ECL		ECL charge
	£m	£m		£m
As above	100,310	(420)		(3)
Other financial assets measured at amortised cost	114,330	–		–
Non-trading reverse purchase agreement commitments	2,906	–		–
Performance and other guarantees not considered for IFRS 9				2
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	217,546	(420)		(1)
Debt instruments measured at FVOCI	26,506	(4)		2
Total allowance for ECL/total income statement ECL charge for the period	n/a	(424)		1

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

² Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2019, these amounted to £(12)bn and were classified as Stage 1 with no ECL.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹ (continued)

(Audited)

	Non-credit – impaired				Credit – impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	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
The bank	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 Jan 2018	276,954	(364)	11,665	(524)	3,488	(1,285)	425	(59)	292,532	(2,232)
Transfers to HSBC UK and its subsidiaries	(216,026)	288	(9,502)	453	(2,711)	663	–	–	(228,239)	1,404
Transfers of financial instruments:	(3,640)	(83)	2,848	138	792	(55)	–	–	–	–
– Transfers from Stage 1 to Stage 2	(8,746)	29	8,746	(29)	–	–	–	–	–	–
– Transfers from Stage 2 to Stage 1	5,549	(116)	(5,549)	116	–	–	–	–	–	–
– Transfers to Stage 3	(522)	11	(598)	66	1,120	(77)	–	–	–	–
– Transfers from Stage 3	79	(7)	249	(15)	(328)	22	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	65	–	(96)	–	(6)	–	–	–	(37)
Net new and further lending/ (repayments) ²	12,636	(132)	1,483	195	(429)	(38)	(295)	7	13,395	32
Changes to risk parameters – credit quality	–	150	–	(283)	–	(106)	–	(36)	–	(275)
Assets written off	–	–	–	–	(319)	319	–	–	(319)	319
Foreign exchange	(92)	(1)	(6)	–	(3)	–	–	–	(101)	(1)
Others ³	54,908	(38)	4,951	(37)	361	41	(22)	13	60,198	(21)
At 31 Dec 2018	124,740	(115)	11,439	(154)	1,179	(467)	108	(75)	137,466	(811)
ECL income statement charge for the period	–	83	–	(184)	–	(150)	–	(29)	–	(280)
Recoveries	–	–	–	–	–	–	–	–	–	57
Others	–	–	–	–	–	–	–	–	–	(4)
Total ECL income statement charge/ for the period	–	83	–	(184)	–	(150)	–	(29)	–	(227)

	At 31 Dec 2018		12 months ended 31 Dec 2018	
	Gross carrying/nominal amount	Allowance for ECL	ECL charge	
	£m	£m	£m	£m
As above	137,466	(811)	(227)	
Other financial assets measured at amortised cost	124,544	(1)	–	
Non-trading reverse purchase agreement commitments	1,525	–	–	
Performance and other guarantees not considered for IFRS 9	–	–	(16)	
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	263,535	(812)	(243)	
Debt instruments measured at FVOCI	26,646	(6)	1	
Total allowance for ECL/total income statement ECL charge for the period	n/a	(818)	(242)	

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

² The 31 December 2018 comparative 'Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers' disclosure presents 'New financial assets originated or purchased', 'Assets derecognised (including final repayments)' and 'Changes to risk parameters – further lending/repayments' under 'Net new lending and further lending/repayments'. To provide greater granularity, these amounts have been separately presented in the 31 December 2019 disclosure.

³ Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2018, these amounted to £33bn and were classified as Stage 1 with £21m in ECL.

Credit quality

Credit quality of financial instruments

(Audited)

We assess the credit quality of all financial instruments that are subject to credit risk. The credit quality of financial instruments is a point-in-time assessment of the probability of default ('PD'), whereas stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition. Accordingly, for non-credit-impaired financial instruments, there is no direct relationship between the credit quality assessment and stages 1 and 2, though typically the lower credit quality bands exhibit a higher proportion in stage 2.

The five credit quality classifications each encompass a range of granular internal credit rating grades assigned to wholesale and personal lending businesses and the external ratings attributed by external agencies to debt securities, as shown in the table on page 29.

Distribution of financial instruments by credit quality

(Audited)

	Gross carrying/notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total		
The group	£m	£m	£m	£m	£m	£m	£m	£m
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	43,805	32,224	27,863	3,423	2,113	109,428	(1,037)	108,391
– personal	16,704	4,902	2,597	143	487	24,833	(173)	24,660
– corporate and commercial	17,252	22,767	22,573	2,868	1,530	66,990	(809)	66,181
– non-bank financial institutions	9,849	4,555	2,693	412	96	17,605	(55)	17,550
Loans and advances to banks held at amortised cost	9,709	1,163	581	18	–	11,471	(4)	11,467
Cash and balances at central banks	51,658	42	116	–	–	51,816	–	51,816
Items in the course of collection from other	705	1	1	–	–	707	–	707
Reverse repurchase agreements – non-trading	72,587	10,819	2,258	92	–	85,756	–	85,756
Financial investments	2	–	11	–	–	13	–	13
Prepayments, accrued income and other assets	41,895	546	983	7	32	43,463	(9)	43,454
– endorsements and acceptances	33	35	13	–	1	82	–	82
– accrued income and other	41,862	511	970	7	31	43,381	(9)	43,372
Debt instruments measured at fair value through other comprehensive income ¹	41,431	2,105	811	191	1	44,539	(16)	44,523
Out-of-scope for IFRS 9								
Trading assets	42,335	6,934	9,731	956	–	59,956	–	59,956
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	1,265	684	3,367	7	–	5,323	–	5,323
Derivatives	130,929	24,973	8,048	588	–	164,538	–	164,538
Total gross carrying amount on balance sheet	436,321	79,491	53,770	5,282	2,146	577,010	(1,066)	575,944
Percentage of total credit quality	76%	14%	9%	1%	–	100%		
Loans and other credit-related commitments	74,056	27,374	18,721	1,162	134	121,447	(54)	121,393
Financial guarantees	1,822	1,103	1,001	326	66	4,318	(9)	4,309
In-scope: Irrevocable loan commitments and financial guarantees	75,878	28,477	19,722	1,488	200	125,765	(63)	125,702
Loans and other credit-related commitments	4,485	1,931	899	139	3	7,457	–	7,457
Performance and other guarantees	7,525	3,052	3,870	639	100	15,186	(39)	15,147
Out-of-scope: Revocable loan commitments and non-financial guarantees	12,010	4,983	4,769	778	103	22,643	(39)	22,604

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Distribution of financial instruments by credit quality (continued)

(Audited)

The group	Gross carrying/notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total		
	£m	£m	£m	£m	£m	£m	£m	£m
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	45,870	31,451	30,141	3,483	2,361	113,306	(1,342)	111,964
– personal	15,579	5,266	2,346	185	527	23,903	(206)	23,697
– corporate and commercial	20,868	23,016	25,342	3,072	1,760	74,058	(1,106)	72,952
– non-bank financial institutions	9,423	3,169	2,453	226	74	15,345	(30)	15,315
Loans and advances to banks held at amortised cost	11,735	1,536	355	5	–	13,631	(3)	13,628
Cash and balances at central banks	51,965	–	35	14	–	52,014	(1)	52,013
Items in the course of collection from other banks	839	–	–	–	–	839	–	839
Reverse repurchase agreements – non-trading	67,748	8,017	4,337	–	–	80,102	–	80,102
Financial investments	5	–	8	–	–	13	–	13
Prepayments, accrued income and other assets	31,885	486	444	7	5	32,827	(1)	32,826
– endorsements and acceptances	93	14	7	–	1	115	(1)	114
– accrued income and other	31,792	472	437	7	4	32,712	–	32,712
Debt instruments measured at fair value through other comprehensive income ¹	42,363	2,084	606	597	9	45,659	(45)	45,614
Out-of-scope for IFRS 9								
Trading assets	42,274	9,924	7,088	876	–	60,162	–	60,162
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	2,633	1,362	4,136	2	–	8,133	–	8,133
Derivatives	122,695	17,115	4,229	451	32	144,522	–	144,522
Total gross carrying amount on balance sheet	420,012	71,975	51,379	5,435	2,407	551,208	(1,392)	549,816
Percentage of total credit quality	78%	15%	6%	1%	–	100%		
Loans and other credit-related commitments	96,522	31,393	12,821	630	254	141,620	(66)	141,554
Financial guarantees	3,390	1,456	948	194	66	6,054	(17)	6,037
In-scope: Irrevocable loan commitments and financial guarantees	99,912	32,849	13,769	824	320	147,674	(83)	147,591
Loans and other credit-related commitments ²	7,275	–	–	–	–	7,275	–	7,275
Performance and other guarantees	8,631	5,236	2,682	592	103	17,244	(37)	17,207
Out-of-scope: Revocable loan commitments and non-financial guarantees	15,906	5,236	2,682	592	103	24,519	(37)	24,482

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

² In 2018, revocable loan and other commitments of £7.3bn, which are out-of-scope of IFRS 9, are presented within the 'Strong' classification.

Distribution of financial instruments by credit quality

(Audited)

	Gross carrying/notional amount					Total £m	Allowance for ECL £m	Net £m
	Strong £m	Good £m	Satisfactory £m	Sub- standard £m	Credit impaired £m			
The bank								
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	20,751	17,246	10,353	1,253	711	50,314	(388)	49,926
– personal	1,846	897	857	19	18	3,637	(8)	3,629
– corporate and commercial	6,976	13,043	8,165	1,007	648	29,839	(345)	29,494
– non-bank financial institutions	11,929	3,306	1,331	227	45	16,838	(35)	16,803
Loans and advances to banks held at amortised cost	8,166	915	431	13	–	9,525	(3)	9,522
Cash and balances at central banks	30,149	–	–	–	–	30,149	–	30,149
Items in the course of collection from other banks	44	–	–	–	–	44	–	44
Reverse repurchase agreements – non-trading	40,284	8,209	2,155	88	–	50,736	–	50,736
Financial investments	–	–	–	–	–	–	–	–
Prepayments, accrued income and other assets	33,100	182	111	–	8	33,401	–	33,401
– endorsements and acceptances	3	35	3	–	1	42	–	42
– accrued income and other	33,097	147	108	–	7	33,359	–	33,359
Debt instruments measured at fair value through other comprehensive income ¹	26,009	73	3	–	–	26,085	(4)	26,081
Out-of-scope for IFRS 9								
Trading assets	29,183	6,849	9,599	956	–	46,587	–	46,587
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	84	377	1,789	7	–	2,257	–	2,257
Derivatives	128,381	20,396	3,140	579	–	152,496	–	152,496
Total gross carrying amount on balance sheet	316,151	54,247	27,581	2,896	719	401,594	(395)	401,199
Percentage of total credit quality	79%	14%	7%	–	–	100%		
Loans and other credit-related commitments	22,854	9,955	6,708	142	23	39,682	(25)	39,657
Financial guarantees	2,964	210	410	54	57	3,695	(4)	3,691
In-scope: Irrevocable loan commitments and financial guarantees	25,818	10,165	7,118	196	80	43,377	(29)	43,348
Loans and other credit-related commitments	2,606	1,244	434	119	2	4,405	–	4,405
Performance and other guarantees	5,102	1,340	774	308	30	7,554	(9)	7,545
Out-of-scope: Revocable loan commitments and non-financial guarantees	7,708	2,584	1,208	427	32	11,959	(9)	11,950

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Distribution of financial instruments by credit quality (continued)

(Audited)

	Gross carrying/notional amount					Total £m	Allowance for ECL £m	Net £m
	Strong £m	Good £m	Satisfactory £m	Sub- standard £m	Credit impaired £m			
The bank								
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	23,923	17,828	15,123	1,586	1,067	59,527	(744)	58,783
– personal	1,782	695	734	14	24	3,249	(9)	3,240
– corporate and commercial	9,441	14,695	12,764	1,358	998	39,256	(685)	38,571
– non-bank financial institutions	12,700	2,438	1,625	214	45	17,022	(50)	16,972
Loans and advances to banks held at amortised cost	11,225	1,356	107	1	–	12,689	(3)	12,686
Cash and balances at central banks	40,657	–	–	–	–	40,657	–	40,657
Items in the course of collection from other banks	442	–	–	–	–	442	–	442
Reverse repurchase agreements – non-trading	48,220	6,668	1,607	–	–	56,495	–	56,495
Financial investments	–	–	–	–	–	–	–	–
Prepayments, accrued income and other assets	26,653	170	122	1	4	26,950	(1)	26,949
– endorsements and acceptances	67	14	–	–	1	82	(1)	81
– accrued income and other	26,586	156	122	1	3	26,868	–	26,868
Debt instruments measured at fair value through other comprehensive income ¹	26,272	40	12	2	3	26,329	(6)	26,323
Out-of-scope for IFRS 9								
Trading assets	28,973	7,379	6,873	845	–	44,070	–	44,070
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	303	939	3,800	2	–	5,044	–	5,044
Derivatives	120,848	14,240	3,684	427	30	139,229	–	139,229
Total gross carrying amount on balance sheet	327,516	48,620	31,328	2,864	1,104	411,432	(754)	410,678
Percentage of total credit quality	79%	12%	8%	1%	–	100%		
Loans and other credit-related commitments	37,245	14,927	8,499	379	146	61,196	(50)	61,146
Financial guarantees	4,448	598	383	96	53	5,578	(14)	5,564
In-scope: Irrevocable loan commitments and financial guarantees	41,693	15,525	8,882	475	199	66,774	(64)	66,710
Loans and other credit-related commitments ²	4,742	–	–	–	–	4,742	–	4,742
Performance and other guarantees	5,231	2,458	2,193	374	67	10,323	(27)	10,296
Out-of-scope: Revocable loan commitments and non-financial guarantees	9,973	2,458	2,193	374	67	15,065	(27)	15,038

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

² In 2018, revocable loan and other commitments of £4.7bn which are out-of-scope of IFRS 9, are presented within the 'Strong' classification.

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution

(Audited)

	Gross carrying/notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total		
The group	£m	£m	£m	£m	£m	£m	£m	£m
Loans and advances to customers at amortised cost	43,805	32,224	27,863	3,423	2,113	109,428	(1,037)	108,391
– stage 1	43,804	31,864	23,006	1,403	–	100,077	(104)	99,973
– stage 2	1	360	4,857	2,020	–	7,238	(126)	7,112
– stage 3	–	–	–	–	2,043	2,043	(774)	1,269
– POCI	–	–	–	–	70	70	(33)	37
Loans and advances to banks at amortised cost	9,709	1,163	581	18	–	11,471	(4)	11,467
– stage 1	9,671	1,161	561	15	–	11,408	(4)	11,404
– stage 2	38	2	20	3	–	63	–	63
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	166,847	11,408	3,369	99	32	181,755	(9)	181,746
– stage 1	166,847	11,402	3,352	96	–	181,697	–	181,697
– stage 2	–	6	17	3	–	26	–	26
– stage 3	–	–	–	–	32	32	(9)	23
– POCI	–	–	–	–	–	–	–	–
Loans and other credit-related commitments	74,056	27,374	18,721	1,162	134	121,447	(54)	121,393
– stage 1	73,949	26,824	16,868	437	–	118,078	(22)	118,056
– stage 2	107	550	1,853	725	–	3,235	(11)	3,224
– stage 3	–	–	–	–	129	129	(21)	108
– POCI	–	–	–	–	5	5	–	5
Financial guarantees	1,822	1,103	1,001	326	66	4,318	(9)	4,309
– stage 1	1,821	1,087	663	114	–	3,685	(2)	3,683
– stage 2	1	16	338	212	–	567	(6)	561
– stage 3	–	–	–	–	63	63	(1)	62
– POCI	–	–	–	–	3	3	–	3
At 31 Dec 2019	296,239	73,272	51,535	5,028	2,345	428,419	(1,113)	427,306
Debt instruments at FVOCI¹								
– stage 1	41,368	2,089	568	–	–	44,025	(7)	44,018
– stage 2	63	16	243	191	–	513	(9)	504
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	1	1	–	1
At 31 Dec 2019	41,431	2,105	811	191	1	44,539	(16)	44,523

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

(Audited)

The group	Gross carrying/notional amount					Total £m	Allowance for ECL £m	Net £m
	Strong £m	Good £m	Satisfactory £m	Sub- standard £m	Credit impaired £m			
Loans and advances to customers at amortised cost	45,870	31,451	30,141	3,483	2,361	113,306	(1,342)	111,964
– stage 1	45,313	28,889	24,417	1,774	–	100,393	(121)	100,272
– stage 2	557	2,562	5,724	1,709	–	10,552	(171)	10,381
– stage 3	–	–	–	–	2,244	2,244	(972)	1,272
– POCI	–	–	–	–	117	117	(78)	39
Loans and advances to banks at amortised cost	11,735	1,536	355	5	–	13,631	(3)	13,628
– stage 1	11,727	1,483	350	5	–	13,565	(2)	13,563
– stage 2	8	53	5	–	–	66	(1)	65
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	152,293	8,491	4,717	19	5	165,525	(2)	165,523
– stage 1	152,293	8,477	4,710	16	–	165,496	(1)	165,495
– stage 2	–	14	7	3	–	24	–	24
– stage 3	–	–	–	–	5	5	(1)	4
– POCI	–	–	–	–	–	–	–	–
Loans and other credit-related commitments	96,522	31,393	12,821	630	254	141,620	(66)	141,554
– stage 1	96,470	29,890	9,136	65	–	135,561	(27)	135,534
– stage 2	52	1,503	3,685	565	–	5,805	(26)	5,779
– stage 3	–	–	–	–	249	249	(13)	236
– POCI	–	–	–	–	5	5	–	5
Financial guarantees	3,390	1,456	948	194	66	6,054	(17)	6,037
– stage 1	3,354	1,429	585	34	–	5,402	(4)	5,398
– stage 2	36	27	363	160	–	586	(9)	577
– stage 3	–	–	–	–	64	64	(4)	60
– POCI	–	–	–	–	2	2	–	2
At 31 Dec 2018	309,810	74,327	48,982	4,331	2,686	440,136	(1,430)	438,706
Debt instruments at FVOCI ¹								
– stage 1	42,356	2,008	329	331	–	45,024	(8)	45,016
– stage 2	7	76	277	266	–	626	(36)	590
– stage 3	–	–	–	–	6	6	(1)	5
– POCI	–	–	–	–	3	3	–	3
At 31 Dec 2018 ²	42,363	2,084	606	597	9	45,659	(45)	45,614

1 For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

2 During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount. For further details, see page 30.

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

(Audited)

	Gross carrying/notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total		
	£m	£m	£m	£m	£m	£m	£m	£m
The bank								
Loans and advances to customers at amortised cost	20,751	17,246	10,353	1,253	711	50,314	(388)	49,926
– stage 1	20,751	17,027	8,310	85	–	46,173	(58)	46,115
– stage 2	–	219	2,043	1,168	–	3,430	(67)	3,363
– stage 3	–	–	–	–	678	678	(239)	439
– POCI	–	–	–	–	33	33	(24)	9
Loans and advances to banks at amortised cost	8,166	915	431	13	–	9,525	(3)	9,522
– stage 1	8,149	914	411	13	–	9,487	(3)	9,484
– stage 2	17	1	20	–	–	38	–	38
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	103,577	8,391	2,266	88	8	114,330	–	114,330
– stage 1	103,577	8,387	2,254	88	–	114,306	–	114,306
– stage 2	–	4	12	–	–	16	–	16
– stage 3	–	–	–	–	8	8	–	8
– POCI	–	–	–	–	–	–	–	–
Loans and other credit-related commitments	22,854	9,955	6,708	142	23	39,682	(25)	39,657
– stage 1	22,754	9,867	6,186	13	–	38,820	(15)	38,805
– stage 2	100	88	522	129	–	839	(8)	831
– stage 3	–	–	–	–	18	18	(2)	16
– POCI	–	–	–	–	5	5	–	5
Financial guarantees	2,964	210	410	54	57	3,695	(4)	3,691
– stage 1	2,963	200	200	–	–	3,363	(1)	3,362
– stage 2	1	10	210	54	–	275	(2)	273
– stage 3	–	–	–	–	57	57	(1)	56
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2019	158,312	36,717	20,168	1,550	799	217,546	(420)	217,126
Debt instruments at FVOCI¹								
– stage 1	26,009	73	–	–	–	26,082	(2)	26,080
– stage 2	–	–	3	–	–	3	(2)	1
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2019	26,009	73	3	–	–	26,085	(4)	26,081

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

(Audited)

	Gross carrying/notional amount						Allowance for ECL	Net
	Strong	Good	Satisfactory	Sub-standard	Credit impaired	Total		
The bank	£m	£m	£m	£m	£m	£m	£m	£m
Loans and advances to customers at amortised cost	23,923	17,828	15,123	1,586	1,067	59,527	(744)	58,783
– stage 1	23,371	15,354	11,593	929	–	51,247	(86)	51,161
– stage 2	552	2,474	3,530	657	–	7,213	(122)	7,091
– stage 3	–	–	–	–	964	964	(461)	503
– POCI	–	–	–	–	103	103	(75)	28
Loans and advances to banks at amortised cost	11,225	1,356	107	1	–	12,689	(3)	12,686
– stage 1	11,223	1,302	103	1	–	12,629	(2)	12,627
– stage 2	2	54	4	–	–	60	(1)	59
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	115,972	6,838	1,729	1	4	124,544	(1)	124,543
– stage 1	115,972	6,826	1,722	1	–	124,521	–	124,521
– stage 2	–	12	7	–	–	19	–	19
– stage 3	–	–	–	–	4	4	(1)	3
– POCI	–	–	–	–	–	–	–	–
Loans and other credit-related commitments	37,245	14,927	8,499	379	146	61,196	(50)	61,146
– stage 1	37,206	13,588	6,339	50	–	57,183	(24)	57,159
– stage 2	39	1,339	2,160	329	–	3,867	(24)	3,843
– stage 3	–	–	–	–	141	141	(2)	139
– POCI	–	–	–	–	5	5	–	5
Financial guarantees	4,448	598	383	96	53	5,578	(14)	5,564
– stage 1	4,412	593	202	20	–	5,227	(3)	5,224
– stage 2	36	5	181	76	–	298	(7)	291
– stage 3	–	–	–	–	53	53	(4)	49
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2018	192,813	41,547	25,841	2,063	1,270	263,534	(812)	262,722
Debt instruments at FVOCI ¹								
– stage 1	26,272	40	8	–	–	26,320	–	26,320
– stage 2	–	–	4	2	–	6	(6)	–
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	3	3	–	3
At 31 Dec 2018	26,272	40	12	2	3	26,329	(6)	26,323

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Credit-impaired loans

(Audited)

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 unlikelihood 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.

Renegotiated loans and forbearance

The following table shows the gross carrying amounts of the group's holdings of renegotiated loans and advances to customers by industry sector and by stages.

A summary of our current policies and practices for renegotiated loans and forbearance is set out in 'Credit risk management' on page 28.

Renegotiated loans and advances to customers at amortised costs by stage allocation

The group	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI £m	Total £m
Gross carrying amount					
Personal	–	–	75	–	75
– first lien residential mortgages	–	–	57	–	57
– other personal lending	–	–	18	–	18
Wholesale	285	327	346	69	1,027
– corporate and commercial	285	327	345	69	1,026
– non-bank financial institutions	–	–	1	–	1
At 31 Dec 2019	285	327	421	69	1,102
Allowance for ECL					
Personal	–	–	(14)	–	(14)
– first lien residential mortgages	–	–	(10)	–	(10)
– other personal lending	–	–	(4)	–	(4)
Wholesale	(2)	(6)	(84)	(32)	(124)
– corporate and commercial	(2)	(6)	(84)	(32)	(124)
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2019	(2)	(6)	(98)	(32)	(138)

The group					
Gross carrying amount					
Personal	–	–	75	–	75
– first lien residential mortgages	–	–	56	–	56
– other personal lending	–	–	19	–	19
Wholesale	394	429	568	117	1,508
– corporate and commercial	394	429	567	117	1,507
– non-bank financial institutions	–	–	1	–	1
At 31 Dec 2018	394	429	643	117	1,583
Allowance for ECL					
Personal	–	–	(14)	–	(14)
– first lien residential mortgages	–	–	(9)	–	(9)
– other personal lending	–	–	(5)	–	(5)
Wholesale	(4)	(10)	(169)	(78)	(261)
– corporate and commercial	(4)	(10)	(169)	(78)	(261)
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2018	(4)	(10)	(183)	(78)	(275)

The bank	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI £m	Total £m
Gross carrying amount					
Personal	–	–	4	–	4
– first lien residential mortgages	–	–	3	–	3
– other personal lending	–	–	1	–	1
Wholesale	171	201	135	33	540
– corporate and commercial	171	201	135	33	540
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2019	171	201	139	33	544
Allowance/ provision for ECL					
Personal	–	–	–	–	–
– first lien residential mortgages	–	–	–	–	–
– other personal lending	–	–	–	–	–
Wholesale	(1)	(5)	(21)	(24)	(51)
– corporate and commercial	(1)	(5)	(21)	(24)	(51)
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2019	(1)	(5)	(21)	(24)	(51)

Renegotiated loans and advances to customers at amortised costs by stage allocation (continued)

	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI £m	Total £m
The bank					
Gross carrying amount					
Personal	–	–	7	–	7
– first lien residential mortgages	–	–	5	–	5
– other personal lending	–	–	2	–	2
Wholesale	388	311	360	103	1,162
– corporate and commercial	388	311	360	103	1,162
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2018	388	311	367	103	1,169
Allowance/ provision for ECL					
Personal	–	–	(2)	–	(2)
– first lien residential mortgages	–	–	(1)	–	(1)
– other personal lending	–	–	(1)	–	(1)
Wholesale	(4)	(7)	(100)	(75)	(186)
– corporate and commercial	(4)	(7)	(100)	(75)	(186)
– non-bank financial institutions	–	–	–	–	–
At 31 Dec 2018	(4)	(7)	(102)	(75)	(188)

Wholesale lending

This section provides further details on the countries and industries comprising wholesale loans and advances to customers and banks. Industry granularity is also provided by stage with geographical data presented for loans and advances to customers and banks, loans and other credit-related commitments and financial guarantees.

Total wholesale lending for loans and advances to banks and customers by stage distribution

The group	Gross carrying amount					Allowance for ECL				
	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	POCI £m	Total £m
Corporate and commercial	59,654	5,806	1,460	70	66,990	(85)	(100)	(591)	(33)	(809)
– agriculture, forestry and fishing	86	7	10	–	103	–	–	(7)	–	(7)
– mining and quarrying	1,335	400	1	–	1,736	(3)	(6)	–	–	(9)
– manufacture	11,764	1,411	148	46	13,369	(18)	(33)	(66)	(9)	(126)
– electricity, gas, steam and air-conditioning supply	2,543	313	37	–	2,893	(4)	(14)	(5)	–	(23)
– water supply, sewerage, waste management and remediation	422	31	–	–	453	–	–	–	–	–
– construction	891	113	145	23	1,172	(1)	(2)	(62)	(23)	(88)
– wholesale and retail trade, repair of motor vehicles and motorcycles	8,534	903	316	1	9,754	(10)	(5)	(159)	(1)	(175)
– transportation and storage	5,112	216	264	–	5,592	(11)	(8)	(43)	–	(62)
– accommodation and food	985	286	16	–	1,287	(2)	–	(8)	–	(10)
– publishing, audiovisual and broadcasting	2,656	164	23	–	2,843	(5)	(2)	(4)	–	(11)
– real estate	6,414	979	218	–	7,611	(13)	(9)	(104)	–	(126)
– professional, scientific and technical activities	5,869	178	33	–	6,080	(4)	(1)	(20)	–	(25)
– administrative and support services	7,566	534	224	–	8,324	(7)	(6)	(100)	–	(113)
– public administration and defence, compulsory social security	555	138	–	–	693	–	(2)	–	–	(2)
– education	111	3	2	–	116	(1)	–	(1)	–	(2)
– health and care	305	38	8	–	351	(1)	(3)	(5)	–	(9)
– arts, entertainment and recreation	337	9	5	–	351	–	–	(4)	–	(4)
– other services	3,319	13	10	–	3,342	(4)	–	(3)	–	(7)
– activities of households	3	–	–	–	3	–	–	–	–	–
– extra-territorial organisations and bodies activities	–	–	–	–	–	–	–	–	–	–
– government	831	60	–	–	891	–	–	–	–	–
– asset-backed securities	16	10	–	–	26	(1)	(9)	–	–	(10)
Non-bank financial institutions	17,150	359	96	–	17,605	(13)	(3)	(39)	–	(55)
Loans and advances to banks	11,408	63	–	–	11,471	(4)	–	–	–	(4)
At 31 Dec 2019	88,212	6,228	1,556	70	96,066	(102)	(103)	(630)	(33)	(868)
By country										
UK	43,946	3,184	550	33	47,713	(52)	(49)	(187)	(24)	(312)
France	27,082	1,223	528	3	28,836	(17)	(21)	(316)	(1)	(355)
Germany	8,406	541	220	–	9,167	(1)	(4)	(40)	–	(45)
Other countries	8,778	1,280	258	34	10,350	(32)	(29)	(87)	(8)	(156)
At 31 Dec 2019	88,212	6,228	1,556	70	96,066	(102)	(103)	(630)	(33)	(868)

Total wholesale lending for loans and other credit-related commitments and financial guarantees¹ by stage distribution

	Nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Corporate and commercial	68,148	3,400	186	8	71,742	(22)	(15)	(21)	–	(58)
Financial	51,723	314	2	–	52,039	(2)	–	(1)	–	(3)
At 31 Dec 2019	119,871	3,714	188	8	123,781	(24)	(15)	(22)	–	(61)
By geography										
Europe	119,871	3,714	188	8	123,781	(24)	(15)	(22)	–	(61)
– of which: UK	32,779	943	75	5	33,802	(14)	–	–	–	(14)
– of which: France	69,226	913	48	–	70,187	(3)	(1)	(12)	–	(16)
– of which: Germany	13,634	1,389	63	–	15,086	(1)	(1)	(8)	–	(10)

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Total wholesale lending for loans and advances to banks and customers by stage distribution (continued)

	Gross carrying amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Corporate and commercial	63,145	9,153	1,643	117	74,058	(99)	(132)	(797)	(78)	(1,106)
– agriculture, forestry and fishing	187	5	10	–	202	–	–	(4)	–	(4)
– mining and quarrying	1,341	134	19	–	1,494	(4)	(3)	(2)	–	(9)
– manufacture	12,363	1,380	245	53	14,041	(23)	(19)	(100)	(33)	(175)
– electricity, gas, steam and air-conditioning supply	2,203	361	6	47	2,617	(3)	(19)	(2)	(43)	(67)
– water supply, sewerage, waste management and remediation	430	37	–	–	467	–	–	–	–	–
– construction	1,202	244	305	–	1,751	(2)	(18)	(141)	–	(161)
– wholesale and retail trade, repair of motor vehicles and motorcycles	9,323	2,662	291	11	12,287	(8)	(11)	(156)	–	(175)
– transportation and storage	5,213	582	148	–	5,943	(14)	(19)	(23)	–	(56)
– accommodation and food	1,169	29	23	2	1,223	(1)	(1)	(12)	(1)	(15)
– publishing, audiovisual and broadcasting	3,769	390	30	–	4,189	(8)	(4)	(8)	–	(20)
– real estate	7,073	611	398	1	8,083	(8)	(7)	(252)	–	(267)
– professional, scientific and technical activities	4,359	1,386	38	–	5,783	(3)	–	(8)	–	(11)
– administrative and support services	7,757	703	86	3	8,549	(8)	(16)	(64)	(1)	(89)
– public administration and defence, compulsory social security	562	21	–	–	583	–	(2)	–	–	(2)
– education	109	3	1	–	113	(2)	–	(1)	–	(3)
– health and care	425	29	10	–	464	(1)	(1)	(7)	–	(9)
– arts, entertainment and recreation	1,367	446	12	–	1,825	(2)	(1)	(8)	–	(11)
– other services	3,114	55	16	–	3,185	(12)	(1)	(8)	–	(21)
– activities of households	6	–	–	–	6	–	–	–	–	–
– extra-territorial organisations and bodies activities	15	–	5	–	20	–	–	(1)	–	(1)
– government	1,157	63	–	–	1,220	–	–	–	–	–
– asset-backed securities	1	12	–	–	13	–	(10)	–	–	(10)
Non-bank financial institutions	15,078	193	74	–	15,345	(13)	(12)	(5)	–	(30)
Loans and advances to banks	13,565	66	–	–	13,631	(2)	(1)	–	–	(3)
At 31 Dec 2018¹	91,788	9,412	1,717	117	103,034	(114)	(145)	(802)	(78)	(1,139)
By country										
UK	52,745	6,512	716	6	59,979	(69)	(100)	(354)	–	(523)
France	26,555	1,549	408	10	28,522	(18)	(16)	(298)	(3)	(335)
Germany	9,071	472	220	–	9,763	(1)	(2)	(25)	–	(28)
Other countries	3,417	879	373	101	4,770	(26)	(27)	(125)	(75)	(253)
At 31 Dec 2018	91,788	9,412	1,717	117	103,034	(114)	(145)	(802)	(78)	(1,139)

 Total wholesale lending for loans and other credit-related commitments and financial guarantees² by stage distribution (continued)

	Nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Corporate and commercial	67,357	5,877	307	7	73,548	(30)	(34)	(17)	–	(81)
Financial	71,558	461	2	–	72,021	(1)	(1)	–	–	(2)
At 31 Dec 2018¹	138,915	6,338	309	7	145,569	(31)	(35)	(17)	–	(83)
By geography										
Europe	138,915	6,338	309	7	145,569	(31)	(35)	(17)	–	(83)
– of which: UK	45,682	3,715	175	–	49,572	(23)	(29)	(5)	–	(57)
– of which: France	76,550	1,018	33	–	77,601	(1)	(2)	(7)	–	(10)
– of which: Germany	14,772	1,019	78	–	15,869	–	(1)	(4)	–	(5)

1 During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount. For further details, see page 30.

2 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Collateral and other credit enhancement

(Audited)

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 placing primary reliance on collateral and other credit risk enhancements. Depending on the customer's standing and the type of product, facilities may be provided without any collateral or other credit enhancements. 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 our exposure to credit risk. Where there is sufficient collateral, an expected credit loss is not recognised. This is the case for reverse repurchase agreements and for certain loans and advances to customers where the loan to value ('LTV') is very low.

Mitigants may include a charge on borrowers' specific assets, such as real estate or financial instruments. Other credit risk mitigants include short positions in securities and financial assets held as part of linked insurance/investment contracts where the risk is predominantly borne by the policyholder. Additionally, risk may be managed by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees. Guarantees are normally taken from corporates and export credit agencies. Corporates would normally provide guarantees as part of a parent/subsidiary relationship and span a number of credit grades. The export credit agencies will normally be investment grade.

Certain credit mitigants are used strategically in portfolio management activities. While single name concentrations arise in portfolios managed by Global Banking and Corporate Banking, it is only in Global Banking that their size requires the use of portfolio level credit mitigants. Across Global Banking, risk limits and utilisations, maturity profiles and risk quality are monitored and managed proactively. This process is key to the setting of risk appetite for these larger, more complex, geographically distributed customer groups. While the principal form of risk management continues to be at the point of exposure origination, through the lending decision-making process, Global Banking also utilises loan sales and credit default swap ('CDS') hedges to manage concentrations and reduce risk. These transactions are the responsibility of a dedicated Global Banking portfolio management team. Hedging activity is carried out within agreed credit parameters, and is subject to market risk limits and a robust governance structure. Where applicable, CDSs are entered into directly with a central clearing house counterparty. Otherwise our exposure to CDS protection providers is diversified among mainly banking counterparties with strong credit ratings.

CDS mitigants are held at portfolio level and are not included in the expected loss calculations. CDS mitigants are not reported in the following tables.

Collateral on loans and advances

The following tables include off-balance sheet loan commitments, primarily undrawn credit lines.

The collateral measured in the following tables consists of charges over cash and marketable financial instruments. The values in the tables represent the expected market value on an open market basis. No adjustment has been made to the collateral for any expected costs of recovery. Marketable securities are measured at their fair value.

Other types of collateral such as unsupported guarantees and floating charges over the assets of a customer's business are not measured in the following tables. While such mitigants have value, often providing rights in insolvency, their assignable value is not sufficiently certain and they are therefore assigned no value for disclosure purposes.

The LTV ratios presented are calculated by directly associating loans and advances with the collateral that individually and

uniquely supports each facility. When collateral assets are shared by multiple loans and advances, whether specifically or, more generally, by way of an all monies charge, the collateral value is pro-rated across the loans and advances protected by the collateral.

For credit-impaired loans, the collateral values cannot be directly compared with impairment allowances recognised. The LTV figures use open market values with no adjustments. Impairment allowances are calculated on a different basis, by considering other cash flows and adjusting collateral values for costs of realising collateral as explained further on page 112.

Other corporate, commercial and financial (non-bank) loans and advances

Other corporate, commercial and financial (non-bank) loans are analysed separately in the following table, which focuses on the countries containing the majority of our loans and advances balances. For financing activities in other corporate and commercial lending, 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 – corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral for key countries by stage (excluding commercial real estate)

(Audited)

	Total		Of which:					
			UK		France		Germany	
	Gross carrying/nominal amount £m	ECL coverage %	Gross carrying/nominal amount £m	ECL coverage %	Gross carrying/nominal amount £m	ECL coverage %	Gross carrying/nominal amount £m	ECL coverage %
The group								
Stage 1								
Not collateralised	131,034	0.1	59,634	0.1	43,672	–	18,298	–
Fully collateralised	16,650	0.1	11,610	0.1	3,069	–	898	–
LTV ratio:								
– less than 50%	3,360	0.1	2,462	0.1	794	–	–	–
– 51% to 75%	3,326	0.2	2,085	0.2	1,018	0.1	–	–
– 76% to 90%	1,013	0.1	259	–	548	–	–	–
– 91% to 100%	8,951	–	6,804	–	709	0.1	898	–
Partially collateralised (A):	2,316	0.1	335	–	1,759	0.1	–	–
– collateral value on A	1,753	–	203	–	1,448	–	–	–
Total Stage 1	150,000	0.1	71,579	0.1	48,500	–	19,196	–
Stage 2								
Not collateralised	7,050	1.2	2,910	1.7	1,456	0.6	1,534	0.3
Fully collateralised	865	1.2	623	0.8	142	2.1	76	–
LTV ratio:								
– less than 50%	271	1.1	253	0.8	17	–	–	–
– 51% to 75%	169	0.6	124	0.8	46	–	–	–
– 76% to 90%	29	–	18	–	11	–	–	–
– 91% to 100%	396	1.5	228	0.9	68	2.9	76	–
Partially collateralised (B):	86	–	29	–	55	–	–	–
– collateral value on B	34	–	1	–	32	–	–	–
Total Stage 2	8,001	1.2	3,562	1.5	1,653	0.7	1,610	0.3
Stage 3								
Not collateralised	1,161	45.7	442	41.2	414	68.1	228	18.9
Fully collateralised	147	12.2	78	2.6	31	25.8	11	18.2
LTV ratio:								
– less than 50%	48	16.7	19	–	10	30.0	–	–
– 51% to 75%	14	21.4	2	–	12	25.0	–	–
– 76% to 90%	32	3.1	25	–	7	14.3	–	–
– 91% to 100%	53	11.3	32	3.1	2	50.0	11	18.2
Partially collateralised (C):	141	20.6	47	8.5	76	22.4	–	–
– collateral value on C	50	–	30	–	10	–	–	–
Total Stage 3	1,449	39.8	567	33.2	521	58.9	239	18.8
POCI								
Not collateralised	57	52.6	23	100.0	–	–	–	–
Fully collateralised	–	–	–	–	–	–	–	–
LTV ratio:								
– less than 50%	–	–	–	–	–	–	–	–
– 51% to 75%	–	–	–	–	–	–	–	–
– 76% to 90%	–	–	–	–	–	–	–	–
– 91% to 100%	–	–	–	–	–	–	–	–
Partially collateralised (D):	18	16.7	15	6.7	4	50.0	–	–
– collateral value on D	16	–	12	–	4	–	–	–
Total POCI	75	44.0	38	63.2	4	50.0	–	–
At 31 Dec 2019	159,525	0.5	75,746	0.4	50,678	0.7	21,045	0.3

Wholesale lending – corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral for key countries by stage (excluding commercial real estate) (continued)

(Audited)

The group	Total		UK		Of which:			
					France		Germany	
	Gross carrying/nominal amount	ECL coverage	Gross carrying/nominal amount	ECL coverage	Gross carrying/nominal amount	ECL coverage	Gross carrying/nominal amount	ECL coverage
	£m	%	£m	%	£m	%	£m	%
Stage 1								
Not collateralised	136,337	0.1	70,242	0.1	36,118	–	19,908	–
Fully collateralised	28,052	–	9,837	–	16,521	–	949	–
LTV ratio:								
– less than 50%	2,154	0.1	1,206	0.1	868	0.1	–	–
– 51% to 75%	16,008	–	2,067	–	13,940	–	–	–
– 76% to 90%	994	0.1	368	–	626	–	–	–
– 91% to 100%	8,896	–	6,196	–	1,087	0.1	949	–
Partially collateralised (A):	1,833	0.1	624	–	1,161	0.1	–	–
– collateral value on A	343	–	295	–	33	–	–	–
Total Stage 1	166,222	0.1	80,703	0.1	53,800	–	20,857	–
Stage 2								
Not collateralised	12,422	1.0	8,039	1.2	2,131	0.3	1,181	0.2
Fully collateralised	1,683	1.1	1,333	0.9	135	3.0	80	–
LTV ratio:								
– less than 50%	324	0.6	270	–	39	2.6	–	–
– 51% to 75%	430	2.8	425	2.8	1	–	–	–
– 76% to 90%	38	–	33	–	5	–	–	–
– 91% to 100%	891	0.6	605	–	90	2.2	80	–
Partially collateralised (B):	164	0.6	9	–	148	0.7	–	–
– collateral value on B	11	–	1	–	7	–	–	–
Total Stage 2	14,269	1.0	9,381	1.2	2,414	0.5	1,261	0.2
Stage 3								
Not collateralised	1,488	43.9	664	48.6	336	61.0	240	12.1
Fully collateralised	188	20.7	124	6.5	16	100.0	12	–
LTV ratio:								
– less than 50%	54	42.6	15	20.0	10	100.0	–	–
– 51% to 75%	25	–	25	–	–	–	–	–
– 76% to 90%	37	16.2	34	8.8	3	100.0	–	–
– 91% to 100%	72	13.9	50	6.0	3	100.0	12	–
Partially collateralised (C):	83	42.2	33	6.1	33	72.7	–	–
– collateral value on C	26	–	21	–	1	–	–	–
Total Stage 3	1,759	41.3	821	40.6	385	63.4	252	11.5
POCI								
Not collateralised	111	66.7	–	–	9	22.2	–	–
Fully collateralised	4	75.0	–	–	–	–	–	–
LTV ratio:								
– less than 50%	–	–	–	–	–	–	–	–
– 51% to 75%	4	–	–	–	–	–	–	–
– 76% to 90%	–	–	–	–	–	–	–	–
– 91% to 100%	–	–	–	–	–	–	–	–
Partially collateralised (D):	6	–	6	–	–	–	–	–
– collateral value on D	3	–	3	–	–	–	–	–
Total POCI	121	63.6	6	–	9	33.3	–	–
At 31 Dec 2018¹	182,371	0.6	90,911	0.6	56,608	0.5	22,370	0.1

¹ During the period, the group has re-presented the UK wholesale lending stage 1 and stage 2 amount. For further details, see page 30. The 2018 comparative amounts have also been re-presented to reclassify amounts from fully collateralised to not collateralised and to include not collateralised amounts previously excluded. The impact of these re-presentations is to increase stage 1 not collateralised amounts by £23bn and decrease fully collateralised amounts by £21bn; increase stage 2 not collateralised amounts and decrease fully collateralised amounts by £1bn; and to increase stage 3 not collateralised amounts and decrease fully collateralised amounts by £0.05bn.

Other credit risk exposures

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

- Some securities issued by governments, banks and other financial institutions benefit from additional credit enhancement provided by government guarantees that cover the assets;
- Debt securities issued by banks and financial institutions include asset-backed securities ('ABSs') and similar instruments which are supported by underlying pools of financial assets.

Credit risk associated with ABSs is reduced through the purchase of credit default swap ('CDS') protection;

- Trading loan and advances mainly pledged against cash collaterals are posted to satisfy margin requirements. There is limited credit risk on trading loans and advances since in the event of default of the counterparty these would be set off against the related liability. Reverse repos and stock borrowings are by their nature collateralised.

Collateral accepted as security that the group is permitted to sell or repledge under these arrangements is described on page 141 of the financial statements.

- The group's maximum exposure to credit risk includes financial guarantees and similar contracts granted; as well as loan and other credit-related commitments. Depending on the terms of the arrangement, we may use additional credit mitigation if a guarantee is called upon or a loan commitment is drawn and subsequently defaults.

Derivatives

We participate in transactions exposing us to counterparty credit risk. Counterparty credit risk is the risk of financial loss if the counterparty to a transaction defaults before satisfactorily settling it. It arises principally from over-the-counter ('OTC') derivatives and securities financing transactions and is calculated in both the trading and non-trading books. Transactions vary in value by reference to a market factor such as an interest rate, exchange rate or asset price.

The counterparty risk from derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the fair value is known as the credit value adjustment ('CVA').

The ISDA master agreement is our preferred agreement for documenting derivatives activity. It is common, and our preferred practice, for the parties involved in a derivative transaction 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. The majority of our CSAs are with financial institutional clients.

We manage the counterparty exposure on our OTC derivative contracts by using collateral agreements with counterparties and netting agreements. Currently, we do not actively manage our general OTC derivative counterparty exposure in the credit markets, although we may manage individual exposures in certain circumstances.

We place strict policy restrictions on collateral types and as a consequence the types of collateral received and pledged are, by value, highly liquid and of a strong quality, being predominantly cash.

Where a collateral type is required to be approved outside the collateral policy, approval is required from a committee of senior representatives from Markets, Legal and Risk.

See Note 28 on the financial statements for details regarding legally enforceable right of offset in the event of counterparty default and collateral received in respect of derivatives.

Personal lending

This section provides further details on the countries and products comprising personal loans and advances to customers.

Further product granularity is also provided by stage, with geographical data presented for loans and advances to customers, loan and other credit-related commitments, and financial guarantees.

Total personal lending for loans and advances to customers at amortised costs by stage distribution

	Gross carrying amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m
By portfolio								
First lien residential mortgages	7,080	287	237	7,604	(2)	(7)	(71)	(80)
– of which: interest only (including offset)	3,414	228	112	3,754	–	(3)	(28)	(31)
– affordability including ARMs	378	3	1	382	–	–	–	–
Other personal lending	16,193	786	250	17,229	(4)	(16)	(73)	(93)
– other	15,867	750	234	16,851	(3)	(12)	(72)	(87)
– credit cards	326	36	16	378	(1)	(4)	(1)	(6)
– second lien residential mortgages	–	–	–	–	–	–	–	–
At 31 Dec 2019	23,273	1,073	487	24,833	(6)	(23)	(144)	(173)
By geography								
UK ¹	3,562	58	17	3,637	(1)	(4)	(3)	(8)
France	17,403	911	322	18,636	(3)	(15)	(87)	(105)
Germany	200	46	–	246	–	–	–	–
Other countries	2,108	58	148	2,314	(2)	(4)	(54)	(60)
At 31 Dec 2019	23,273	1,073	487	24,833	(6)	(23)	(144)	(173)

Total personal lending for loans and other credit-related commitments and financial guarantees² by stage distribution

	Nominal amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m
UK	308	3	–	311	–	(1)	–	(1)
France	961	35	4	1,000	–	–	–	–
Germany	129	46	–	175	–	–	–	–
Other countries	494	4	–	498	–	(1)	–	(1)
At 31 Dec 2019	1,892	88	4	1,984	–	(2)	–	(2)

¹ Includes primarily first lien residential mortgages in Channel Islands and Isle of Man.

² Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Total personal lending for loans and advances to customers at amortised costs by stage distribution (continued)

	Gross carrying amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	£m	£m	£m	£m	£m	£m	£m	£m
The group								
By portfolio								
First lien residential mortgages	6,832	349	276	7,457	(4)	(8)	(81)	(93)
– of which: interest only (including offset)	3,323	244	126	3,693	–	(3)	(32)	(35)
– affordability including ARMs	290	–	–	290	–	–	–	–
Other personal lending	15,338	857	251	16,446	(5)	(19)	(89)	(113)
– other	14,888	818	235	15,941	(4)	(15)	(88)	(107)
– credit cards	334	39	16	389	(1)	(4)	(1)	(6)
– second lien residential mortgages	116	–	–	116	–	–	–	–
At 31 Dec 2018	22,170	1,206	527	23,903	(9)	(27)	(170)	(206)
By geography								
UK ¹	3,133	92	24	3,249	(1)	(3)	(4)	(8)
France	16,756	984	328	18,068	(3)	(17)	(102)	(122)
Germany	186	40	–	226	–	–	–	–
Other countries	2,095	90	175	2,360	(5)	(7)	(64)	(76)
At 31 Dec 2018	22,170	1,206	527	23,903	(9)	(27)	(170)	(206)

Total personal lending for loans and other credit-related commitments and financial guarantees² by stage distribution (continued)

	Nominal amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	£m	£m	£m	£m	£m	£m	£m	£m
The group								
UK	305	3	–	308	–	–	–	–
France	1,022	31	3	1,056	–	–	–	–
Germany	181	5	–	186	–	–	–	–
Other countries	539	15	1	555	–	–	–	–
At 31 Dec 2018	2,047	54	4	2,105	–	–	–	–

¹ Includes primarily first lien residential mortgages in Channel Islands and Isle of Man.

² Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Collateral on loans and advances

The following table provides a quantification of the value of fixed charges we hold over specific assets where we have a history of enforcing, and are able to enforce, 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 excludes any adjustment for obtaining and selling the collateral and in particular loans shown as collateralised or partially collateralised may also benefit from other forms of credit mitigants.

Personal lending: residential mortgage loans including loan commitments by level of collateral for key countries

(Audited)

The group	Total		Of which:			
			UK		France	
	Gross exposure £m	ECL coverage %	Gross exposure £m	ECL coverage %	Gross exposure £m	ECL coverage %
Stage 1						
Fully collateralised	7,056	–	2,887	–	2,290	–
LTV ratio:						
– less than 50%	2,868	–	971	–	984	–
– 51% to 60%	961	–	271	–	502	–
– 61% to 70%	845	–	258	–	402	–
– 71% to 80%	676	–	218	–	273	–
– 81% to 90%	400	–	127	–	89	–
– 91% to 100%	1,306	0.1	1,042	–	40	–
Partially collateralised (A):	345	–	4	–	74	–
LTV ratio:						
– 101% to 110%	221	–	–	–	15	–
– 111% to 120%	65	–	1	–	11	–
– greater than 120%	59	–	3	–	48	–
– collateral value on A	323	–	2	–	73	–
Total	7,401	–	2,891	–	2,364	–
Stage 2						
Fully collateralised	272	2.2	43	–	190	0.5
LTV ratio:						
– less than 50%	128	1.6	15	–	91	1.1
– 51% to 60%	44	2.3	8	–	31	–
– 61% to 70%	34	2.9	1	–	28	–
– 71% to 80%	33	3.0	–	–	29	–
– 81% to 90%	9	–	–	–	8	–
– 91% to 100%	24	4.2	19	–	3	–
Partially collateralised (B):	15	6.7	–	–	8	–
LTV ratio:						
– 101% to 110%	7	14.3	–	–	2	–
– 111% to 120%	2	–	–	–	1	–
– greater than 120%	6	–	–	–	5	–
– collateral value on B	15	–	–	–	7	–
Total	287	–	43	–	198	–
Stage 3						
Fully collateralised	173	20.8	14	7.1	89	27.0
LTV ratio:						
– less than 50%	99	22.2	11	9.1	52	30.8
– 51% to 60%	25	16.0	1	–	13	15.4
– 61% to 70%	16	18.8	1	–	8	12.5
– 71% to 80%	17	17.6	1	–	8	25.0
– 81% to 90%	7	28.6	–	–	3	33.3
– 91% to 100%	9	22.2	–	–	5	40.0
Partially collateralised (C):	64	57.8	–	–	13	30.8
LTV ratio:						
– 101% to 110%	29	51.7	–	–	5	20.0
– 111% to 120%	14	71.4	–	–	2	50.0
– greater than 120%	21	57.1	–	–	6	33.3
– collateral value on C	51	–	–	–	10	–
Total	237	30.8	14	7.1	102	27.5
At 31 Dec 2019	7,925	–	2,948	–	2,664	–

Personal lending: residential mortgage loans including loan commitments by level of collateral for key countries (continued)

(Audited)

The group	Total		Of which:			
	Gross exposure £m	ECL coverage %	UK		France	
			Gross exposure £m	ECL coverage %	Gross exposure £m	ECL coverage %
Stage 1						
Fully collateralised	6,875	0.1	2,473	—	2,278	—
LTV ratio:						
– less than 50%	3,029	0.1	1,004	—	884	—
– 51% to 60%	963	—	271	—	452	—
– 61% to 70%	896	—	227	—	436	—
– 71% to 80%	823	0.1	208	—	317	—
– 81% to 90%	422	0.2	92	—	128	—
– 91% to 100%	742	—	671	—	61	—
Partially collateralised (A):	323	—	179	—	100	—
LTV ratio:						
– 101% to 110%	222	—	176	—	23	—
– 111% to 120%	26	—	1	—	16	—
– greater than 120%	75	—	2	—	61	—
– collateral value on A	305		177		99	
Total	7,198	0.1	2,652	—	2,378	—
Stage 2						
Fully collateralised	297	2.4	38	—	199	0.5
LTV ratio:						
– less than 50%	130	1.5	16	—	84	1.2
– 51% to 60%	46	2.2	4	—	33	—
– 61% to 70%	41	2.4	—	—	32	—
– 71% to 80%	40	5.0	—	—	30	—
– 81% to 90%	18	5.6	—	—	16	—
– 91% to 100%	22	—	18	—	4	—
Partially collateralised (B):	52	3.8	34	—	10	—
LTV ratio:						
– 101% to 110%	39	2.6	34	—	2	—
– 111% to 120%	4	—	—	—	2	—
– greater than 120%	9	11.1	—	—	6	—
– collateral value on B	52		34		10	
Total	349	—	72	—	209	—
Stage 3						
Fully collateralised	222	22.1	17	11.8	98	16.3
LTV ratio:						
– less than 50%	113	11.5	13	7.7	46	15.2
– 51% to 60%	27	18.5	—	—	15	13.3
– 61% to 70%	32	28.1	2	—	13	15.4
– 71% to 80%	20	35.0	1	—	8	25.0
– 81% to 90%	8	25.0	—	—	5	20.0
– 91% to 100%	22	59.1	1	100.0	11	18.2
Partially collateralised (C):	57	71.9	1	—	20	70.0
LTV ratio:						
– 101% to 110%	11	36.4	1	—	4	25.0
– 111% to 120%	12	50.0	—	—	4	25.0
– greater than 120%	34	91.2	—	—	12	100.0
– collateral value on C	47		1		20	
Total	279	32.3	18	11.1	118	25.4
At 31 Dec 2018	7,826	—	2,742	—	2,705	—

Capital and liquidity risk

Liquidity and funding risk management

Details of HSBC's Liquidity and Funding Risk Management Framework ('LFRF') can be found in the group's Pillar 3 document.

HSBC requires all operating entities to comply with HSBC Group's LFRF on a stand-alone basis and to meet regulatory and internal minimum requirements at all times. The liquidity coverage ratio ('LCR') and net stable funding ratio ('NSFR') are key components of the LFRF.

The elements of the LFRF are underpinned by a robust governance framework, the two major elements of which are:

- Group, regional and entity level asset and liability management committees ('ALCOs'); and
- Annual individual liquidity adequacy assessment process ('ILAAP') used to validate risk tolerance and set risk appetite.

The Group's operating entities are predominantly defined on a country basis to reflect the local management of liquidity and funding. However, where appropriate, this definition may be expanded to cover a consolidated group of legal entities or narrowed to a principal office (branch) of a wider legal entity to reflect the management under internal or regulatory definitions.

The RMM reviews and agrees annually the list of entities it directly oversees and the composition of these entities.

Liquidity and funding risk in 2019

Liquidity coverage ratio

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. HQLA consist of cash or assets that can be converted into cash at little or no loss of value in markets.

At 31 December 2019, all the group's principal operating entities were within the LCR risk tolerance level established by the Board and applicable under the LFRF.

The following table displays the individual LCR levels for HSBC Bank plc's principal operating entities on an EC LCR Delegated Regulation basis.

Operating entities' LCRs

	At	
	31 Dec 2019	31 Dec 2018
	%	%
HSBC Bank plc	142	147
HSBC France ¹	152	128
HSBC Trinkaus & Burkhardt AG	125	111

¹ HSBC France LCR increased mainly as a result of a growth in corporate deposits. It is to be noted that the ratio incorporates a change in the parameter as compared to 2018, following the transfer of European Economic Area branches from HSBC Bank plc to HSBC France in Q1 2019.

Net stable funding ratio

The Net Stable Funding Ratio ('NSFR') requires institutions to maintain sufficient stable funding relative to required stable funding, and reflects a bank's long-term funding profile (funding with a term of more than a year). It is designed to complement the LCR.

At 31 December 2019, all the group's principal operating entities were within the NSFR risk tolerance level established by the Board and applicable under the LFRF.

Operating entities' NSFRs

	At	
	31 Dec 2019	31 Dec 2018
	%	%
HSBC Bank plc ¹	122	113
HSBC France ²	117	113
HSBC Trinkaus & Burkhardt AG	121	116

- ¹ HSBC Bank plc uses an adjusted NSFR as a basis for establishing stable funding. The adjusted NSFR requires HSBC Bank plc to maintain sufficient stable funding and reflects its long term funding profile. The adjusted NSFR takes into account the anticipated regulatory changes approved under the Capital Requirements Regulation and Directive, as implemented ('CRR II'), and other internal adjustments commensurate with the risk profile of the balance sheet.
- ² In anticipation of amendments under CRR II that are not in force as of balance sheet date, the NSFR is estimated at the level of 127% at end 2019.

Depositor concentration and 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 undermined if the underlying depositors do not represent a large enough portfolio so that a depositor concentration exists.

In addition to this, 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.

Liquid assets of the group's principal operating entities

The table below shows the unweighted liquidity value of assets categorised as liquid, which is used for the purposes of calculating the LCR metric. This reflects the stock of unencumbered liquid assets at the reporting date, using the regulatory definition of liquid assets.

Operating entities' liquid assets

	At Estimated liquidity value	At Estimated liquidity value
	31 Dec 2019	31 Dec 2018
	£m	£m
HSBC Bank plc		
Level 1	68,467	84,185
Level 2a	6,922	4,243
Level 2b	6,569	7,764
HSBC France		
Level 1	32,410	15,545
Level 2a	747	435
Level 2b	—	24
HSBC Trinkaus & Burkhardt AG		
Level 1	7,606	5,605
Level 2a	32	60
Level 2b	588	520

Sources of funding

Our primary sources of funding are customer current accounts, repo and wholesale securities.

The following 'Funding sources and uses' table provides a consolidated view of how our balance sheet is funded, and should be read in light of the LFRF, which requires operating entities to manage liquidity and funding risk on a stand-alone basis.

The table analyses our consolidated balance sheet according to the assets that primarily arise from operating activities and the sources of funding primarily supporting these activities. Assets and liabilities that do not arise from operating activities are presented at other balance sheet lines. In 2019, the level of customer accounts continued to exceed the level of loans and advances to customers. The positive funding gap was predominantly deployed in liquid assets, cash and balances with central banks and financial investments, as required by the LFRF.

Funding sources and uses for the group

	2019	2018		2019	2018
	£m	£m		£m	£m
Sources			Uses		
Customer accounts	177,236	180,836	Loans and advances to customers	108,391	111,964
Deposits by banks	23,991	24,532	Loans and advances to banks	11,467	13,628
Repurchase agreements – non-trading	49,385	46,583	Reverse repurchase agreements – non-trading	85,756	80,102
Debt securities in issue	25,039	22,721	Cash collateral, margin and settlement accounts	40,254	28,870
Cash collateral, margin and settlement accounts	43,556	35,561	Assets held for sale	13	37
Subordinated liabilities	13,182	13,770	Trading assets	98,249	95,420
Financial liabilities designated at fair value	41,642	36,922	– reverse repos	8,358	6,141
Liabilities under insurance contracts	21,509	20,657	– stock borrowing	5,094	6,498
Trading liabilities	48,026	49,514	– other trading assets	84,797	82,781
– repos	349	1,027	Financial investments	46,464	47,272
– stock lending	7,498	9,161	Cash and balances with central banks	51,816	52,013
– other trading liabilities	40,179	39,326	Other balance sheet assets	194,081	175,652
Total equity	24,012	27,409			
Other balance sheet liabilities	168,913	146,453			
At 31 Dec	636,491	604,958	At 31 Dec	636,491	604,958

Contingent liquidity risk arising from committed lending facilities

The group provides customers with committed facilities such as standby facilities to corporate customers and committed backstop lines to conduits sponsored by the group. All of the undrawn commitments provided to conduits or external customers are accounted for in the LCR and NSFR in line with the applicable regulations. This ensures that under a stress scenario any additional outflow generated by increased utilisation of these

committed facilities by either customers or the group's sponsored conduits will not give rise to liquidity risk for the group.

Since the group controls the size of the portfolio of securities held by these conduits, no contingent liquidity risk exposure arises as a result of these undrawn committed lending facilities. In relation to commitments to customers, the table below shows the level of undrawn commitments outstanding in terms of the five largest single facilities and the largest market sector.

The group's contractual exposures at 31 December monitored under the contingent liquidity risk limit structure

	Footnotes	2019	2018
		£bn	£bn
Commitments to conduits			
Consolidated multi-seller conduits	1		
– total lines		4.4	5.6
– largest individual lines		0.2	0.3
Consolidated securities investment conduits – total lines		2.4	3.4
Commitments to customers			
– five largest	2	4.4	3.0
– largest market sector	3	8.7	9.1

1 Exposures relate to the Regency multi-seller conduit. This vehicle provides funding to group customers by issuing debt secured by a diversified pool of customer-originated assets. In 2019, Regency ceased to be consolidated in HSBC Bank plc's LCR and adjusted NSFR reports.

2 Represents the undrawn balance for the five largest committed liquidity facilities provided to customers, other than those facilities to conduits.

3 Represents the undrawn balance for the total of all committed liquidity facilities provided to the largest market sector, other than those facilities to conduits.

Asset encumbrance and collateral management

An asset is defined as encumbered if it has been pledged as collateral against an existing liability and, as a result, is no longer available to the group to secure funding, satisfy collateral needs or be sold to reduce the funding requirement. Collateral is managed on an operating entity basis consistent with the approach to managing liquidity and funding. Available collateral held in an operating entity is managed as a single consistent collateral pool from which each operating entity will seek to optimise the use of the available collateral. The objective of this disclosure is to facilitate an understanding of available and unrestricted assets that could be used to support potential future funding and collateral needs. The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

Summary of assets available to support potential future funding and collateral needs (on- and off-balance sheet)

	2019 £m	2018 £m
Total on-balance sheet assets at 31 Dec	636,491	604,958
Less:		
– reverse repo/stock borrowing receivables and derivative assets	(263,762)	(237,020)
– other assets that cannot be pledged as collateral	(52,292)	(56,982)
Total on-balance sheet assets that can support funding and collateral needs at 31 Dec	320,437	310,956
Add: off-balance sheet assets		
– fair value of collateral received in relation to reverse repo/stock borrowing/derivatives that is available to sell or repledge	239,032	250,277
Total assets that can support future funding and collateral needs	559,469	561,233
Less:		
– on-balance sheet assets pledged	(94,860)	(89,123)
– re-pledging of off-balance sheet collateral received in relation to reverse repo/stock borrowing/derivatives	(179,442)	(202,782)
Assets available to support funding and collateral needs at 31 Dec	285,167	269,328

Market risk

Where appropriate, we apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. Our objective is to manage and control market risk exposures to optimise return on risk while maintaining a market profile consistent with HSBC Group's status as one of the world's largest banking and financial services organisation.

The nature of the hedging and risk mitigation strategies performed across the group corresponds to the market risk management instruments available within each operating jurisdiction. These strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

Market risk governance

(Audited)

Market risk is managed and controlled through limits approved by the RMM of the HSBC Group Management Board ('GMB') for HSBC Holdings and the global businesses. These limits are allocated across business lines and agreed with HSBC group's legal entities, including HSBC Bank plc.

The management of market risk is principally undertaken in Markets using risk limits allocated from the risk appetite, which is subject to HSBC Bank plc RMM ratification. Limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set.

Global Risk is responsible for setting market risk management policies and measurement techniques. Each major operating entity has an independent market risk management and control function which is responsible for measuring market risk exposures in accordance with the policies defined by Global Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks arising on each product in its business and to transfer them to either its local Markets unit for management, to Balance Sheet management books or to separate books managed under the supervision of the local Asset-Liability Committee ('ALCO').

The aim is to ensure that all market risks are consolidated within operations which 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.

Model risk is governed through Model Oversight Committees ('MOCs') at the regional and global Wholesale Credit and Market Risk levels. They have direct oversight and approval responsibility for all traded risk models utilised for risk measurement and management and stress testing. The MOCs prioritise the development of models, methodologies and practices used for traded risk management within the HSBC group and ensure that they remain within our risk appetite and business plans. The Markets MOC reports into the HSBC group MOC, which oversees

all model risk types at group level. The group MOC informs the HSBC Group RMM about material issues at least on a bi-annual basis. The RMM is the HSBC Group's 'Designated Committee' according to regulatory rules and has delegated day-to-day governance of all traded risk models to the Markets MOC.

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

Market risk measures

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with the group's risk appetite.

We use a range of tools to monitor and limit market risk exposures including sensitivity analysis, value at risk ('VaR'), and stress testing

Sensitivity analysis

Sensitivity analysis measures the impact of individual market factor movements on specific instruments or portfolios, including interest rates, foreign exchange rates, credit spreads 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

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 use of VaR is integrated into market risk management and is calculated for all trading positions regardless of how the group capitalises those exposures. Where there is not an approved internal model, the group uses the appropriate local rules to capitalise exposures.

In addition, the group calculates VaR for non-trading portfolios in order to have a complete picture of risk. The models are predominantly based on historical simulation. VaR is calculated at a 99% confidence level for a one-day holding period. Where we do not calculate VaR explicitly, we use alternative tools as summarised in the Market Risk Stress Testing section.

The VaR models used by us are based predominantly 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 used incorporates the following features:

- historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements utilised for VaR are calculated with reference to data from the past two years; and
- VaR measures are calculated to a 99% confidence level and use a one-day holding period.

The nature of the VaR models means that an increase in observed market volatility will most likely lead to an increase in VaR without any changes in the underlying positions.

VaR model limitations

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

- 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 holding period assumes that all positions can be liquidated or the risks offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the 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; and
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures.

Risk not in VaR framework

Other basis risks which are not completely covered in VaR, such as the Libor tenor basis, are complemented by our risk not in VaR ('RNIV') calculations, and are integrated into our capital framework.

Risk factors are reviewed on a regular basis and either incorporated directly in the VaR models, where possible, or quantified through the VaR-based RNIV approach or a stress test approach within the RNIV framework. The outcome of the VaR-based RNIV is included in the VaR calculation; a stressed VaR RNIV is also computed for the risk factors considered in the VaR-based RNIV approach.

Stress-type RNIVs include a gap risk exposure measure to capture risk on non-recourse margin loans and a de-peg risk measure to capture risk to pegged and heavily managed currencies.

Stress testing

Stress testing is an important procedure that is integrated into our market risk management tool to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. In such scenarios, losses can be much greater than those predicted by VaR modelling.

Stress testing is implemented at legal entity, regional and overall Group levels. A standard set of scenarios is utilised consistently across all regions within the HSBC group. Scenarios are tailored to capture the relevant events or market movements at each level. The risk appetite around potential stress losses for the group is set and monitored against referral limits.

Market risk reverse stress tests are undertaken on the premise that there is a fixed loss. The stress testing process identifies which scenarios lead to this loss. The rationale behind the reverse stress test is to understand scenarios which are beyond normal business settings that could have contagion and systemic implications.

Stressed VaR and stress testing, together with reverse stress testing and the management of gap risk, provide management with insights regarding the 'tail risk' beyond VaR for which the group's appetite is limited.

Trading portfolios

Back-testing

We routinely validate the accuracy of our VaR models by back-testing them against both actual and hypothetical profit and loss against the corresponding VaR numbers. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenues of intra-day transactions.

We would expect on average to see two or three profits in excess of the VaR at 1% confidence level and two or three losses in excess of VaR at the 99% confidence level over a one-year period. The actual number of profits or losses in excess of VaR over this period can therefore be used to gauge how well the models are performing.

We back-test our VaR at various entity hierarchy levels. Back-testing using the regulatory hierarchy includes entities which have approval to use VaR in the calculation of market risk regulatory capital requirement.

Non-trading portfolios

Non-trading VaR of HSBC Bank plc includes the interest rate risk of non-trading financial instruments held by the global businesses and transferred into portfolios managed by Balance Sheet Management ('BSM') or Asset, Liability and Capital Management ('ALCM') functions. In measuring, monitoring and managing risk in our non-trading portfolios, VaR is just one of the tools used. The management of interest rate risk in the banking book is described further in 'Non-trading interest rate risk' below, including the role of BSM. The Group's and HSBC Bank plc's control of market risk in the non-trading portfolios is based on transferring the assessed market risk of non-trading assets and liabilities created outside BSM or Markets, to the books managed by BSM, provided the market risk can be neutralised. The net exposure is typically managed by BSM through the use of fixed rate government bonds (liquid asset held in held-to-collect-and-sale ('HTCS' books)) and interest rate swaps. The interest rate risk arising from fixed rate government bonds held within HTCS portfolios is reflected within the group's non-trading VaR. Interest rate swaps used by BSM are typically classified as either a fair value hedge or a cash flow hedge and included within the group's non-trading VaR. Any market risk that cannot be neutralised in the market is managed by HSBC Bank plc ALCM in segregated ALCO books.

Structural foreign exchange exposure

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

Unrealised gains or losses due to revaluations of structured foreign exchange exposures are recognised in other comprehensive income, whereas other unrealised gains or losses arising from revaluations of foreign exchange positions are reflected in the income statement.

The group's structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that the group's consolidated capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates. We hedge structural foreign exchange exposures only in limited circumstances.

Interest rate risk in the banking book

Overview

Interest Rate Risk in the Banking Book ('IRRBB') is the risk of an adverse impact to earnings or capital due to changes in market interest rates. IRRBB is generated by our non-traded assets and liabilities. The ALCM function is responsible for measuring and controlling IRRBB under the supervision of the RMM who approve risk limits used in the management of interest rate risk. IRRBB is transferred to and managed by BSM, who are overseen by Wholesale Market Risk and Product Control functions.

Key risk drivers

The bank's IRRBB can be segregated into the following drivers:

- Managed rate risk – the risk that the pricing of products, which are dependent upon business line decisions, do not correlate to movements in market interest rates.
- Re-investment risk – the risk arising due to change in rates when behaviouralised balances are reinvested as per the transfer pricing policy.
- Basis risk – the risk arising from assets and liabilities that are priced referencing different market indices creating a repricing mismatch.
- Prepayment risk – the risk that the actual customer prepayment in different interest rate scenarios does not match the profile used to hedge the interest rate risk.
- Duration risk – the risk that there are changes in the maturities of assets and liabilities due to changes in interest rate, which create or exacerbate a mismatch.

Governance and structure

ALCM monitors and control non-traded interest rate risk as well as reviewing and challenging the business prior to the release of new products and proposed behavioural assumptions used for hedging activities. ALCM is also responsible for maintaining and updating the transfer pricing framework, informing ALCO of the group's overall banking book interest rate risk exposure and managing the balance sheet in conjunction with BSM.

The internal transfer pricing framework is constructed to ensure that structural interest rate risk, arising due to differences in the repricing timing of assets and liabilities, is transferred to BSM and business lines are correctly allocated income and expense based on the products they write, inclusive of activities to mitigate this risk. Contractual principal repayments, payment schedules, expected prepayments, contractual rate indices used for repricing and interest rate reset dates are examples of elements transferred for risk management by BSM.

The internal transfer pricing framework is governed by ALCO whose responsibility it is to define each operating entity's transfer pricing curve as well as to review and approve the transfer pricing policy, including behaviouralisation assumptions used for products where there is either no defined maturity or where customer optionality exists. ALCO is also responsible for monitoring and reviewing the overall structural interest rate risk position. Interest rate behaviouralisation policies have to be formulated in line with HSBC group's behaviouralisation policies and approved at least annually by local ALCOs.

Non-traded assets and liabilities are transferred to BSM based on their repricing and maturity characteristics. For assets and liabilities with no defined maturity or repricing characteristics behaviouralisation is used to assess the interest rate risk profile.

BSM manages the banking book interest rate positions transferred to it within the Markets Risk limits approved by RMM. Effective governance across BSM is supported by the dual reporting lines it has to the Chief Executive Officer of GB&M and to the HSBC Group Treasurer. BSM will only receive non-trading assets and liabilities as long as they can economically hedge the risk they receive. Hedging is generally managed through vanilla interest rate derivatives or fixed rate government bonds. Any interest rate risk which BSM cannot economically hedge is not transferred and will remain within the business line where the risk is originated.

Measurement of interest rate risk in the banking book

The following measures are used by ALCM to monitor and control interest rate risk in the banking book including:

- non-traded VaR;
- Net Interest Income ('NII') sensitivity; and
- Economic Value of Equity ('EVE').

Non-traded VaR uses the same models as those used in the trading book but for banking book balances.

NII sensitivity reflects the group's sensitivity of earnings to changes in market interest rates. Entities forecast both one year and five year NII sensitivities across a range of interest rate scenarios based on a static balance sheet assumption. Sites include business line rate pass-on assumptions, re-investment of maturing assets and liabilities at market rates per shock scenario and prepayment risk. BSM is modelled based on no management actions i.e. the risk profile at the month end is assumed to remain constant throughout the forecast horizon.

Net interest income sensitivity

A principal part of our management of non-traded interest rate risk is to monitor the sensitivity of expected NII under varying interest rate scenarios (simulation modelling), where all other economic variables are held constant. This monitoring is undertaken by ALCO.

The group applies a combination of scenarios and assumptions relevant to the businesses as well as applying standard scenarios that are required throughout HSBC group.

Economic value of equity

EVE represents the present value of the future banking book cash flows that could be distributed to equity providers under a managed run-off scenario, i.e. the current book value of equity plus the present value of future net interest income in this scenario. EVE sensitivity is the extent to which the EVE value will change due to a pre-specified movement in interest rates, where all other economic variables are held constant.

Defined benefit pension scheme

Market risk also arises within the Bank's defined benefit pension schemes to the extent that the obligations of the schemes are not fully matched by assets with determinable cash flows. Refer to Pension risk section on page 70 for additional information.

Market risk in 2019

Market risk is the risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices will reduce the group's income or the value of its portfolios.

There were no material changes to our policies and practices for the management of market risk in 2019.

Exposure to market risk is separated into two portfolios.

Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions.

Non-trading portfolios including BSM comprise positions that primarily arise from the interest rate management of the group's retail and commercial banking assets and liabilities, financial investments designated as held-to-collect-and-sale ('HTCS'), and exposures arising from the group's insurance operations.

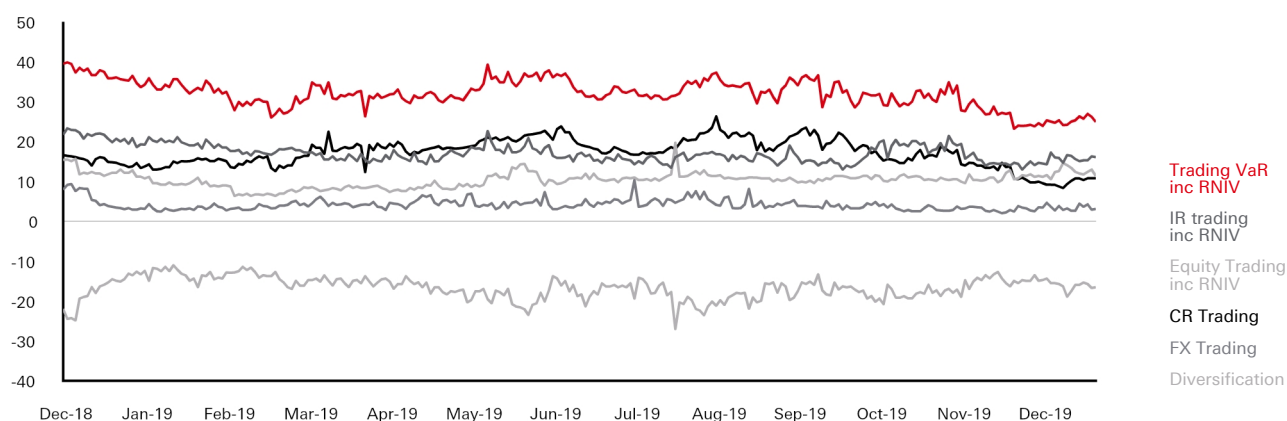
Trading portfolios

Value at risk of the trading portfolios

(Audited)

Trading VaR predominantly resides within Global Markets where it was £24.9m at 31 December 2019 compared with £39.6m at 31 December 2018. The Total Trading VaR has been fairly volatile in 2019; it first decreased during Q1 in line with the IR, FX and EQ Trading Vars which all reduced during this period. It then increased in Q2 back to its beginning of year level, driven by changes in positions under the IR and CS asset classes. It stayed roughly stable during Q3 before decreasing in Q4, predominantly driven by the CS and IR Var. This reduction was the result of risk position changes as well as ongoing improvement of times series and methodologies.

Daily VaR (trading portfolios), 99% 1 day (£m)



The group's trading VaR for the year is shown in the table below.

Trading VaR, 99% 1 day

(Audited)

	Foreign exchange (FX) and commodity	Interest rate (IR)	Equity (EQ)	Credit Spread (CS)	Portfolio Diversification ¹	Total ²
	£m	£m	£m	£m	£m	£m
Balance at 31 Dec 2019	3.1	16.1	11.4	10.8	(16.5)	24.9
Average	4.1	17.1	10.3	17.1	(16.6)	32.0
Maximum	10.3	23.3	19.7	26.3		39.8
Minimum	2.0	12.9	6.3	8.3		23.2
Balance at 31 Dec 2018	7.9	21.7	15.4	16.6	(22.0)	39.6
Average	5.2	18.4	14.1	13.9	(19.0)	32.6
Maximum	11.7	25.1	22.1	24.3		44.0
Minimum	2.1	14.5	9.6	8.1		24.1

¹ Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate, equity and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for this measure.

² The total VaR is non-additive across risk types due to diversification effect and it includes VaR RNIV.

Back-testing

In 2019, the bank experienced three back-testing exceptions, one against actual gain, one against actual loss and one against hypothetical gain. There was no evidence of model failure or control error.

Non-trading portfolios

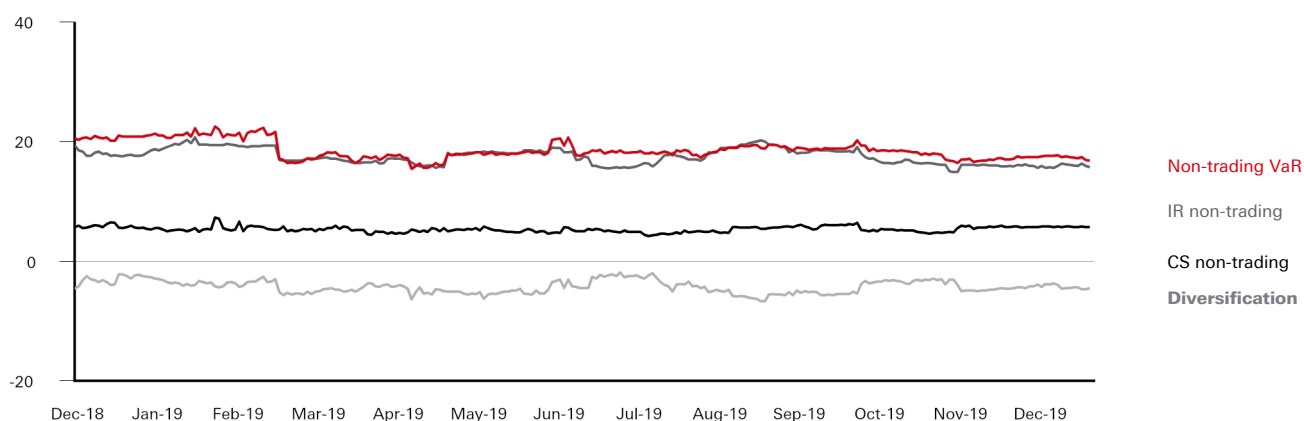
Value at risk of the non-trading portfolios

(Audited)

The non-trading VaR in 2019 was driven by interest rate risk in the banking book arising from BSM and ALCO book positions. The fluctuations in VaR during the year was mainly due to the active management of the securities portion of the Liquid Asset Buffer ('LAB') by the BSM business. Throughout the year, HSBC Bank plc's BSM business has on average increased the securities portion of the LAB via purchase of outright securities, increasing the IR outright sensitivity; this has had a net diversification VaR benefit with the rest of the positions in the banking book.

The daily levels of total non-trading VaR over the last year are set out in the graph below.

Daily VaR (non-trading portfolios), 99% 1 day (£m)



The group's non-trading VaR for the year is shown in the table below.

Non-trading VaR, 99% 1 day

(Audited)

	Interest rate (IR)	Credit spread (CS)	Portfolio diversification	Total
	£m	£m	£m	£m
Balance at 31 Dec 2019	15.7	5.7	(4.5)	16.9
Average	17.5	5.3	(4.3)	18.5
Maximum	20.7	7.3		22.5
Minimum	14.9	4.2		15.4
Balance at 31 Dec 2018	19.4	5.7	(4.6)	20.5
Average	32.8	16.4	(13.7)	35.5
Maximum	59.3	41.3		64.6
Minimum	17.4	4.9		17.7

- 1 Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate, equity and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for this measure.
- 2 The total VaR is non-additive across risk types due to diversification effect.

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 subsidiary undertakings, branches, joint ventures and associates.

For our policies and procedures for managing structural foreign exchange exposures, see page 65 of the 'Risk management' section.

Net structural foreign exchange exposures

	2019	2018
	£m	£m
Currency of structural exposure		
Euro	8,446	12,866
US Dollars	1,005	805
South African rand	324	357
Russian rouble	155	197
Others, each less than £150m	440	433
At 31 Dec	10,370	14,658

The decrease in our Euro structural foreign exchange exposure is primarily due to the impairment of the bank's investment in HSBC France. For further details refer to Note 18 on page 143.

Resilience Risk

Overview

Resilience risk is the risk that we are unable to provide critical services to our customers, affiliates and counterparties, as a result of sustained and significant operational disruption.

Sustained and significant operational disruption means events that affect:

- the stability of the financial system;
- the viability of the bank and our industry peers; or
- the ability of our customers to access our services.

Governance and structure

Within the group, Resilience Risk is managed within our RMM and Risk Committee, with a clear escalation path into the GRMM.

Key risk management process

Operational resilience is our ability to adapt operations to continue functioning when an operational disturbance occurs. We measure resilience in terms of the maximum disruption period or the impact tolerance that we are willing to accept for a business service. Resilience risk cannot be managed down to zero, so we concentrate on critical business and strategic change programmes that have the highest potential to threaten our ability to provide continued service to our customers. Our resilience strategy is focused on the establishment of robust back-up plans, detailed

response methods, alternative delivery channels and recovery options.

Regulatory compliance risk

Overview

The Regulatory Compliance sub-function ('RC') provides independent, objective oversight and challenge, and promotes a compliance-orientated culture that supports the business in delivering fair outcomes for customers, maintaining the integrity of financial markets and achieving HSBC's strategic objectives.

Key developments in 2019

There were no material changes to the policies and practices for the management of RC risk in 2019, except for the following:

- The Board of HSBC Bank plc maintains oversight of conduct matters following the demise of the Conduct and Values Committee.
- We implemented a number of initiatives to raise our standards in relation to the conduct of our business, as described below under 'Conduct of business'.

Governance and structure

The Europe Head of RC reports into the Global head of RC. Regulatory Compliance and Financial Crime Risk were integrated into a new Compliance function in 2019 which is headed by the Group Chief Compliance Officer. RC continues to be structured as a global sub function with regional and country RC teams, which support and advise each global business and global function.

Key risk management processes

We regularly review our policies and procedures. Global policies and procedures require the prompt identification and escalation of any actual or potential regulatory breach to RC. Reportable events are escalated to the bank's RMM and Risk Committee, as appropriate. Matters relating to the Group's regulatory conduct of business are reported to the Group Risk Committee.

Conduct of business

In 2019, we have continued to highlight conduct requirements, as a global principle and elsewhere within the risk management framework, reflecting the individual responsibility and accountability we have for delivery of good conduct outcomes for customers and market integrity. Other key activities in 2019 included:

- the inclusion of an annual conduct objective in performance management scorecards for executive Directors, Group Managing Directors, Group General Managers and Country CEOs across all regions, business lines, global functions and HSBC Operations Services and Technology. Executive Directors are also now subject to a new separate conduct-focused 'long-term incentive' measure;
- further development of digital products and supporting processes to ensure our digital offerings deliver fair outcomes for customers. Governance and controls continue to be strengthened to ensure they remain fit for purpose as new technology is introduced;
- enhanced global policy requirements helping customers who are, or may become, vulnerable. Business line-led initiatives in specific markets have addressed support for appointed representatives of vulnerable customers, customers in financial distress, financial inclusion, and a pilot programme of training to help customers with or affected by cancer or dementia; and
- the delivery of our fifth annual global mandatory training course on conduct for all employees. This is complemented by an ongoing programme of newsletter, intranet and live-streamed communications, internal surveys of staff sentiment regarding progress in delivering good conduct, and conduct awareness campaigns.

Further information on our conduct is provided in the Strategic Report on page 7 and www.hsbc.com/conduct, and for conduct-related costs relating to significant items, see page 14.

Financial crime risk

Overview

Financial crime risk is the risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity. Financial crime risk arises from day-to-day banking operations.

Key developments in 2019

During 2019, we continued to increase our efforts to strengthen our ability to combat financial crime. We integrated into our day-to-day operations the majority of the financial crime risk core capabilities delivered through the Global Standards programme, which we set up in 2013 to enhance our risk management policies, processes and systems. The global programme infrastructure closed in 2019, and we have begun several initiatives to define the next phase of financial crime risk management.

- AML and Sanctions are now largely embedded, and we are continuing developments in the AB&C and Tax space. Embedding of our AB&C programme is expected to be finalised by the end of 1Q20, and the transition of Tax Transparency responsibilities from Tax to FCC has now been completed, augmented by awareness sessions and updated procedures.
- We continued to strengthen our anti-fraud capabilities, focusing on threats posed by new and existing technologies, and have delivered a comprehensive fraud training programme to our people.
- We continued to invest in the use of artificial intelligence ('AI') and advanced analytics techniques to develop a financial crime risk management framework for the future.
- We launched industry-leading anti-money laundering ('AML') and sanctions automation systems to detect and disrupt financial crime in international trade. These systems will help strengthen our ability to fight financial crime through the identification of criminal activity and networks.

Governance and structure

Since establishing a global framework of financial crime risk management committees, in the first quarter of 2018, we have continued to strengthen and review the effectiveness of our governance framework to manage financial crime risk. Formal governance committees are held across all countries, territories, regions and Lines of Business, and are chaired by the respective CEOs. They help to enable compliance with the letter and the spirit of all applicable financial crime compliance laws and regulations, as well as our own standards, values and policies relating to financial crime risks. Significant changes have been made to simplify the FCC Europe structure, making us more efficient, providing clearer pathways for our stakeholders, and aligning to the FCC qualities of judgement, quality, speed and flexibility. The Regional Head of FCC for Continental Europe and France has been appointed, in a merged role reflecting the ring-fencing of the UK ring-fenced bank and Europe restructuring. Following the successful split of HSBC's UK based operations in 2018, the establishment of the HSBC London Office ('HBLO') management construct has allowed HSBC to separately manage the activity related to the UK non-ring-fenced bank ('NRFB') businesses.

Key Risk management processes

We continued to deliver a programme to further enhance the policies and controls around identifying and managing the risks of bribery and corruption across our business. Our transformation programme continued to focus on our anti-fraud and anti-tax evasion capabilities. Further enhancements have been made to our governance and policy frameworks, and to our management information reporting on the effectiveness of our financial crime controls. We are investing in the next generation of capabilities to fight financial crime by applying advanced analytics and AI. We remain committed to enhancing our risk assessment capabilities and to delivering more proactive risk management.

Working in partnership with the public sector and other financial institutions is vital to managing financial crime risk. We are a strong proponent of public-private partnerships and participate in

information-sharing initiatives to better understand these risks so that they can be mitigated more effectively.

Skilled Person/Independent Consultant

Following expiration in December 2017 of the anti-money laundering Deferred Prosecution Agreement entered into with the US Department of Justice ('DoJ'), the then Monitor has continued to work in his capacity as a Skilled Person under Section 166 of the Financial Services and Markets Act under the Direction issued by the UK Financial Conduct Authority ('FCA') in 2013. He has also continued to work in his capacity as an Independent Consultant under a cease-and-desist order issued by the US Federal Reserve Board ('FRB').

The Skilled Person has assessed HSBC's progress towards being able to effectively manage its financial risk on a business-as-usual basis. The Skilled Person issued several reports in 2019. The Skilled Person has noted that HSBC continues to make material progress towards its financial crime risk target end state in terms of key systems, processes and people. Nonetheless, the Skilled Person has identified some areas that require further work before HSBC reaches a business-as-usual state. Reflective of HSBC's significant progress in strengthening its financial crime risk management capabilities, HSBC's engagement with the current Skilled Person will be terminated and a new Skilled Person with a narrower mandate will be appointed to assess the remaining areas that require further work in order for HSBC to transition fully to business-as-usual financial crime risk management.

The Independent Consultant completed his sixth annual assessment, which was primarily focused on HSBC's sanctions programme. The Independent Consultant concluded that HSBC continues to make significant strides toward establishing an effective sanctions compliance programme, commending HSBC's material progress since the fifth annual assessment in 2018. However, he has determined that certain areas within HSBC's sanctions compliance programme require further work. A seventh annual assessment will take place in the first quarter of 2020. The Independent Consultant will continue to carry out an annual OFAC compliance review at the FRB's discretion.

Pension risk

Governance and structure

A global pension risk framework and accompanying global policies on the management of risks related to defined benefit and defined contribution plans are in place. Pension risk is managed by a network of local and regional pension risk forums. During H2 of 2019, the group's Europe Pension Oversight Forum ('POF')'s responsibilities changed and oversight of the largest two sections of the HSBC Bank (UK) Pension Scheme were removed. The governance and oversight of the Bank's section of this scheme and all other pension plans sponsored by HSBC within its European operations remain the responsibility of the Europe POF. The membership was revised at this time and the Europe POF is now chaired by the Bank's Head of Risk strategy.

Key risk management processes

HSBC provides future pension benefits on a defined contribution basis from many of its European operations. However, there remain future defined benefit pensions provided in the region.

In defined contribution pension plans, the contributions that HSBC is required to make are known, while the ultimate pension benefit will vary, typically with investment returns achieved by investment choices made by the employee. While the market risk to HSBC of defined contribution plans is low, the bank is still exposed to operational and reputational risk.

In defined benefit pension plans, the level of pension benefit is known. Therefore, the level of contributions required by HSBC will vary due to a number of risks, including:

- investments delivering a return below that required to provide the projected plan benefits;
- the prevailing economic environment leading to corporate failures, thus triggering write-downs in asset values (both equity and debt);

- a change in either interest rates or inflation, causing an increase in the value of the plan liabilities; and
- plan members living longer than expected (known as longevity risk).

Pension risk is assessed using an economic capital model that takes into account potential variations in these factors. The impact of these variations on both pension assets and pension liabilities is assessed using a one-in-200-year stress test. Scenario analysis and other stress tests are also used to support pension risk management.

To fund the benefits associated with defined benefit plans, sponsoring Group companies, and in some instances employees, make regular contributions in accordance with advice from actuaries and in consultation with the plan's trustees where relevant. These contributions are normally set to ensure that there are sufficient funds to meet the cost of the accruing benefits for the future service of active members. However, higher contributions are required when plan assets are considered insufficient to cover the existing pension liabilities. Contribution rates are typically revised annually or once every three years, depending on the plan.

The defined benefit plans invest contributions in a range of investments designed to limit the risk of assets failing to meet a plan's liabilities. Any changes in expected returns from the investments may also change future contribution requirements. In pursuit of these long-term objectives, an overall target allocation of the defined benefit plan assets between asset classes is established. In addition, each permitted asset class has its own benchmarks, such as stock market or property valuation indices or liability characteristics. The benchmarks are reviewed at least once every three to five years and more frequently if required by local legislation or circumstances. The process generally involves an extensive asset and liability review.

Model risk

Overview

Model risk is the potential for adverse consequences from business decisions informed by models, which can be exacerbated by errors in methodology, design or the way they are used. Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.

Key developments in 2019

In 2019 we carried out a number of initiatives to further develop and embed the Model Risk Management sub-function, including:

- We appointed a Head of Model Risk Management for the group.
- We refined the model risk policy to enable a more risk-based approach to model risk management.
- We conducted a full review of model governance arrangements overseeing model risk across the group, resulting in a range of enhancements to the underlying structure to improve effectiveness and increase business engagement.
- We designed a new target operating model for Model Risk Management, referring to internal and industry best practice.

On 1 January 2020, corporate exposures subject to the UK loss-given-default model moved from the advanced to the foundation internal ratings-based approach.

Governance and structure

Model Risk Management is headed by the group's Model Risk Steward and is structured as a sub-function within Risk Strategy. The group's Model Risk Management teams support and advise the CRO on model risk.

Key risk management processes

Global responsibility is delegated from the Risk Management Meeting of the Board to the Global Model Risk Committee, which is chaired by the Group Chief Risk Officer. This committee regularly reviews our model risk management policies and procedures, and requires the first line of defence to demonstrate

comprehensive and effective controls based on a library of model risk controls provided by Model Risk Management. The Global Model Risk Committee delegates responsibilities to oversee model risk in the group to the group's Model Risk Committee chaired by the CRO.

Model Risk Management also report on model risk to senior management on a regular basis through the use of the risk map, risk appetite metrics and top and emerging risks.

We regularly review the effectiveness of these processes, including the model oversight committee structure, to ensure appropriate understanding and ownership of model risk is embedded in the businesses and functions.

Insurance manufacturing operations risk

There were no material changes to our policies and practices for the management of risks arising in our insurance manufacturing operations in 2019.

Governance

(Audited)

Insurance risks are managed to a defined risk appetite, which is aligned to the bank's risk appetite and risk management framework, including the three lines of defence model. For details on the governance framework, see page 20. The Group Insurance Risk Management Meeting oversees the control framework globally and is accountable to the RBWM Risk Management Meeting on risk matters relating to the insurance business.

The monitoring of the risks within the insurance operations is carried out by insurance risk teams. Specific risk functions, including Wholesale Credit & Market Risk, Operational Risk, Information Security Risk and Financial Crime Risk, support Insurance Risk teams in their respective areas of expertise.

Stress and scenario testing

(Audited)

Stress testing forms a key part of the risk management framework for the insurance business. We participate in local and Group-wide regulatory stress tests, including the Bank of England stress test of the banking system, the European Insurance and Occupational Pensions Authority stress test, and individual country insurance regulatory stress tests.

These have highlighted that a key risk scenario for the insurance business is a prolonged low interest rate environment. In order to mitigate the impact of this scenario, the insurance operations are taking a number of actions including repricing some products to reflect lower interest rates, launching less capital intensive products, investing in more capital efficient assets and developing investment strategies to optimise the expected returns against the cost of economic capital.

Management and mitigation of key risk types

Our insurance manufacturing operations are subject to financial risk, including market risk, credit risk and liquidity risk, and insurance risk.

Market risk

All our insurance manufacturing subsidiaries have market risk mandates which specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk which they may retain. They manage market risk by using, among others, some or all of the techniques listed below, depending on the nature of the contracts written:

- For products with discretionary participating features ('DPF'), adjusting bonus rates to manage the liabilities to policyholders. The effect is that a significant portion of the market risk is borne by the policyholder.
- Asset and liability matching where asset portfolios are structured to meet projected liability cash flows. The Group manages its assets using an approach that considers asset quality, diversification, cash flows matching, liquidity, volatility and target investment return. It is not always possible to match asset and liability durations due to uncertainty over the receipt

of all future premiums and the timing of claims, and also because the forecast payment dates of liabilities may exceed the duration of the longest-dated investments available. We use models to assess the effect of a range of future scenarios on the values of assets and associated liabilities, and local ALCOs employ the outcomes in determining how to best structure asset holdings to support liabilities.

- Using derivatives to protect against adverse market movements or better match liability cash flows.
- For new products with investment guarantees, considering the cost when determining the level of premiums or the price structure.
- Periodically reviewing products identified as higher risk, which contain investment guarantees and embedded optionality features linked to savings and investment products, for active management.
- Designing new products to mitigate market risk, such as changing the investment return sharing between policyholders and the shareholder.
- Exiting, to the extent possible, investment portfolios whose risk is considered unacceptable.
- Repricing premiums charged on new contracts to policyholders.

Credit risk

Our insurance manufacturing subsidiaries are responsible for the credit risk, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information.

Investment credit exposures are monitored against limits by our insurance manufacturing subsidiaries, and are aggregated and reported to HSBC Group Insurance Credit Risk and Group Credit Risk functions. Stress testing is performed on the investment credit exposures using credit spread sensitivities and default probabilities.

We use a number of tools to manage and monitor credit risk. These include a credit report which contains a watch-list of investments with current credit concerns, primarily investments that may be at risk of future impairment or where high concentrations to counterparties are present in the investment portfolio. The report is circulated monthly to senior management in Group Insurance and the individual country chief risk officers to identify investments which may be at risk of future impairment.

Liquidity risk

Risk is managed by cash flow matching and maintaining sufficient cash resources, investing in high credit-quality investments with deep and liquid markets, monitoring investment concentrations and restricting them where appropriate, and establishing committed contingency borrowing facilities.

Insurance manufacturing subsidiaries are required to complete quarterly liquidity risk reports for HSBC Group Insurance Risk function and an annual review of the liquidity risks to which it is exposed.

Insurance risk

The bank primarily uses the following techniques to manage and mitigate insurance risk:

- product design, pricing and overall proposition management (for example, management of lapses by introducing surrender charges);
- underwriting policy;
- claims management processes; and
- reinsurance which cedes risks above our acceptable thresholds to an external reinsurer thereby limiting our exposure.

The group's bancassurance model

We operate an integrated bancassurance model that provides insurance products principally for customers with whom we have a banking relationship.

The insurance contracts we sell relate to the underlying needs of our banking customers, which we can identify from our point-of-sale contacts and customer knowledge. The majority of sales are of savings and investment products and term and credit life contracts.

By focusing largely on personal and SME lines of business, we are able to optimise volumes and diversify individual insurance risks.

We choose to manufacture these insurance products in HSBC subsidiaries based on an assessment of operational scale and risk appetite. Manufacturing insurance allows us to retain the risks and rewards associated with writing insurance contracts by keeping part of the underwriting profit and investment income within the bank.

We have life insurance manufacturing subsidiaries in France, Malta and the UK. Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a handful of leading external insurance companies in order to provide insurance products to our customers through our banking network and direct channels. These arrangements are generally structured with our exclusive strategic partners and earn

the bank a combination of commissions, fees and a share of profits.

Insurance products are sold through all global businesses, but predominantly by RBWM, GPB and CMB through our branches and direct channels.

Measurement

(Audited)

The risk profile of our insurance manufacturing businesses is measured using an economic capital approach. Assets and liabilities are measured on a market value basis, and a capital requirement is defined to ensure that there is a less than one-in-200 chance of insolvency over a one-year time horizon, given the risks to which the businesses are exposed. The methodology for the economic capital calculation is largely aligned to the pan-European Solvency II insurance capital regulations. The economic capital coverage ratio (economic net asset value divided by the economic capital requirement) is a key risk appetite measure. Each of the businesses operates to appetite limits of 135% or higher with a tolerance of 110%. In addition to economic capital, the regulatory solvency ratio is also a metric used to manage risk appetite on an entity basis.

The following table shows the composition of assets and liabilities by contract type.

Balance sheet of insurance manufacturing subsidiaries by type of contract

(Audited)

	Footnotes	With DPF £m	Unit-linked £m	Other contracts ¹ £m	Shareholder assets and liabilities £m	Total £m
Financial assets		19,258	2,116	233	2,231	23,838
– financial assets designated and otherwise mandatorily measured at fair value		8,222	2,057	78	1,359	11,716
– derivatives		61	–	–	2	63
– financial investments – at amortised cost		69	–	1	7	77
– financial investments – at fair value through other comprehensive income		9,033	–	105	749	9,887
– other financial assets	2	1,873	59	49	114	2,095
Reinsurance assets		–	50	129	–	179
PVIF	3	–	–	–	715	715
Other assets and investment properties		763	1	1	54	819
Total assets at 31 Dec 2019		20,021	2,167	363	3,000	25,551
Liabilities under investment contracts designated at fair value		–	862	–	–	862
Liabilities under insurance contracts		19,889	1,295	325	–	21,509
Deferred tax	4	137	6	–	31	174
Other liabilities		–	–	–	1,645	1,645
Total liabilities at 31 Dec 2019		20,026	2,163	325	1,676	24,190
Total equity at 31 Dec 2019		–	–	–	1,361	1,361
Total liabilities and equity at 31 Dec 2019		20,026	2,163	325	3,037	25,551
Financial assets		18,619	1,602	253	1,872	22,346
– financial assets designated and otherwise mandatorily measured at fair value		7,850	1,548	87	809	10,294
– derivatives		92	–	–	3	95
– financial investments – at amortised cost		182	–	–	6	188
– financial investments – at fair value through other comprehensive income		8,698	–	108	947	9,753
– other financial assets	2	1,797	54	58	107	2,016
Reinsurance assets		–	50	145	–	195
PVIF	3	–	–	–	652	652
Other assets and investment properties		774	1	–	48	823
Total assets at 31 Dec 2018		19,393	1,653	398	2,572	24,016
Liabilities under investment contracts designated at fair value		–	611	–	–	611
Liabilities under insurance contracts		19,262	1,041	354	–	20,657
Deferred tax	4	–	1	–	162	163
Other liabilities		–	–	–	1,294	1,294
Total liabilities at 31 Dec 2018		19,262	1,653	354	1,456	22,725
Total equity at 31 Dec 2018		–	–	–	1,291	1,291
Total liabilities and equity at 31 Dec 2018		19,262	1,653	354	2,747	24,016

1 'Other contracts' includes term assurance and credit life insurance.

2 Comprise mainly loans and advances to banks, cash and intercompany balances with other non-insurance legal entities.

3 Present value of in-force long-term insurance business.

4 'Deferred tax' includes the deferred tax liabilities arising on recognition of PVIF.

Key risk types

The key risks for the insurance operations are market risks (in particular interest rate and equity) and credit risks, followed by insurance underwriting risks and operational risks. Liquidity risk, whilst significant for the bank, is minor for our insurance operations.

Market risk

(Audited)

Description and exposure

Market risk is the risk of changes in market factors affecting the bank's capital or profit. Market factors include interest rates, equity and growth assets and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are investment contracts with discretionary participating features ('DPF') issued in France. These products typically include some form of capital guarantee or guaranteed return on the sums invested by the policyholders, to which discretionary bonuses are added if allowed by the overall performance of the funds. These funds are primarily invested in bonds with a proportion allocated to other asset classes,

to provide customers with the potential for enhanced returns.

DPF products expose the bank to the risk of variation in asset returns, which will impact our participation in the investment performance. In addition, in some scenarios the asset returns can become insufficient to cover the policyholders' financial guarantees, in which case the shortfall has to be met by the bank. Amounts are held against the cost of such guarantees, calculated by stochastic modelling.

Where local rules require, these reserves are held as part of liabilities under insurance contracts. Any remainder is accounted for as a deduction from the present value of in-force 'PVIF' long-term insurance contracts. The table below shows the total reserve held for the cost of guarantees, the range of investment returns on assets supporting these products and the implied investment return that would enable the business to meet the guarantees.

The cost of guarantees increased to £203m (2018: £191m) primarily due to the reduction in swap rates in France.

For unit-linked contracts, market risk is substantially borne by the policyholder, but some market risk exposure typically remains as fees earned are related to the market value of the linked assets.

Financial return guarantees

(Audited)

	Footnotes	2019			2018		
		Investment returns implied by guarantee	Long-term investment returns on relevant portfolios	Cost of guarantees	Investment returns implied by guarantee	Long-term investment returns on relevant portfolios	Cost of guarantees
		%	%	£m	%	%	£m
Capital		–	1.2 – 2.4	71	–	1.5 - 2.7	73
Nominal annual return	1	2.6	2.4	58	2.6	2.7	73
Nominal annual return		4.5	2.4	74	4.5	2.7	45
At 31 Dec				203			191

1 A block of contracts in France with guaranteed nominal annual returns in the range 1.25%–3.72% are reported in line with the average guaranteed return of 2.6% (2018: 2.6%) offered to policyholders on these contracts.

Sensitivities

The following table illustrates the effects of selected interest rate and equity price scenarios on our profit for the year and the total equity of our insurance manufacturing subsidiaries.

Where appropriate, the effects of the sensitivity tests on profit after tax and equity incorporate the impact of the stress on the PVIF. Due in part to the impact of the cost of guarantees and hedging strategies which may be in place, the relationship

between the profit and total equity and the risk factors is non-linear. Therefore, the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. For the same reason, the impact of the stress is not necessarily symmetrical on the upside and downside. The sensitivities are stated before allowance for management actions which may mitigate the effect of changes in the market environment. The sensitivities presented allow for adverse changes in policyholder behaviour that may arise in response to changes in market rates.

Sensitivity of the group's insurance manufacturing subsidiaries to market risk factors

(Audited)

	2019		2018	
	Effect on profit after tax	Effect on total equity	Effect on profit after tax	Effect on total equity
	£m	£m	£m	£m
+100 basis point parallel shift in yield curves	84	67	32	18
-100 basis point parallel shift in yield curves	(175)	(157)	(35)	(19)
10% increase in equity prices	28	28	23	23
10% decrease in equity prices	(30)	(30)	(21)	(21)

Credit risk

(Audited)

Description and exposure

Credit risk arises in two main areas for our insurance manufacturers:

- risk associated with credit spread volatility and default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and
- risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

The amounts outstanding at the balance sheet date in respect of these items are shown in the table on page 72.

The credit quality of the reinsurers' share of liabilities under insurance contracts is assessed as 'satisfactory' or higher as defined on page 29, with 100% of the exposure being neither past due nor impaired. Credit risk on assets supporting unit-linked liabilities is predominantly borne by the policyholder; therefore our exposure is primarily related to liabilities under non-linked insurance and investment contracts and shareholders' funds. The credit quality of these financial assets is included in the table on page 44.

Liquidity risk

(Audited)

Description and exposure

Liquidity risk is the risk that an insurance operation, though solvent, either does not have sufficient financial resources available to meet its obligations when they fall due, or can secure them only at excessive cost.

The following table shows the expected undiscounted cash flows for insurance contract liabilities at 31 December 2019. The liquidity

risk exposure is wholly borne by the policyholder in the case of unit-linked business and is shared with the policyholder for non-linked insurance.

The profile of the expected maturity of insurance contracts at 31 December 2019 remained comparable with 2018.

The remaining contractual maturity of investment contract liabilities is included in Note 27.

Expected maturity of insurance contract liabilities

(Audited)

	Expected cash flows (undiscounted)				Total £m
	Within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m	
Unit-linked	193	451	633	611	1,888
With DPF and Other contracts	1,373	5,163	6,815	6,714	20,065
At 31 Dec 2019	1,566	5,614	7,448	7,325	21,953
Unit-linked	177	362	472	433	1,444
With DPF and Other contracts	1,445	6,735	6,606	4,787	19,573
At 31 Dec 2018	1,622	7,097	7,078	5,220	21,017

Insurance risk

Description and exposure

Insurance risk is the risk of loss through adverse experience, in either timing or amount, of insurance underwriting parameters (non-economic assumptions). These parameters include mortality, morbidity, longevity, lapses and unit costs.

The principal risk we face is that, over time, the cost of the contract, including claims and benefits, may exceed the total amount of premiums and investment income received.

The table on page 72 analyses our insurance manufacturing exposures by type of contract.

The insurance risk profile and related exposures remain largely consistent with those observed at 31 December 2018.

Sensitivities

The table below shows the sensitivity of profit and total equity to reasonably possible changes in non-economic assumptions across all our insurance manufacturing subsidiaries.

Mortality and morbidity risk is typically associated with life insurance contracts. The effect on profit of an increase in mortality or morbidity depends on the type of business being written. Our largest exposure to mortality and morbidity risk exists in the UK.

Sensitivity to lapse rates depends on the type of contracts being written. For a portfolio of term assurance, an increase in lapse rates typically has a negative effect on profit due to the loss of future income on the lapsed policies. However, some contract lapses have a positive effect on profit due to the existence of policy surrender charges. We are most sensitive to a change in lapse rates in France.

Expense rate risk is the exposure to a change in the cost of administering insurance contracts. To the extent that increased expenses cannot be passed on to policyholders, an increase in expense rates will have a negative effect on our profits.

Sensitivity analysis

(Audited)

	2019 £m	2018 £m
Effect on profit after tax and total equity at 31 Dec		
10% increase in mortality and/or morbidity rates	(20)	(19)
10% decrease in mortality and/or morbidity rates	18	19
10% increase in lapse rates	(20)	(27)
10% decrease in lapse rates	23	30
10% increase in expense rates	(42)	(33)
10% decrease in expense rates	42	34

Capital

Capital overview

Key capital numbers

	Footnotes	At	
		31 Dec 2019	31 Dec 2018
Available capital (£m)	1		
Common equity tier 1 capital		17,791	19,831
Tier 1 capital		22,130	23,079
Total regulatory capital		34,929	37,671
Risk-weighted assets (£m)			
Credit risk	2	79,208	88,822
Counterparty credit risk		21,286	24,669
Market risk		13,107	17,534
Operational risk		11,812	12,850
Total risk-weighted assets		125,413	143,875
Capital ratios (%)			
Common equity tier 1		14.2	13.8
Total tier 1		17.6	16.0
Total capital		27.9	26.2
Leverage ratio (transitional)			
Tier 1 capital (£m)		22,130	23,079
Total leverage ratio exposure measure (£m)		571,302	570,001
Leverage ratio (%)		3.9	4.0
Leverage ratio (fully phased-in)			
Tier 1 capital (£m)		21,480	22,213
Total leverage ratio exposure measure (£m)		571,302	570,001
Leverage ratio (%)		3.8	3.9

1 Capital figures and ratios at 31 December 2019 are reported in accordance with the revised Capital Requirements Regulation and Directive, as implemented ('CRR II'). Prior period capital figures are reported on a Capital Requirements Regulation and Directive ('CRD IV') transitional basis. Unless otherwise stated, all figures are calculated using the EU's regulatory transitional arrangements for IFRS 9 'Financial Instruments' in article 473a of the Capital Requirements Regulation.

2 'Credit risk' here, and in all tables where the term is used, excludes counterparty credit risk.

Own funds

Own funds disclosure

(Audited)

Ref*	At	
	31 Dec 2019 £m	31 Dec 2018 £m
	Common equity tier 1 ('CET1') capital: instruments and reserves	
1	797	797
	797	797
2	19,272	30,668
3	2,048	2,953
5	350	372
5a	(3,019)	(12,049)
6	19,448	22,741
28	(1,657)	(2,910)
29	17,791	19,831
36	4,384	3,295
43	(45)	(47)
44	4,339	3,248
45	22,130	23,079
51	13,229	14,995
57	(430)	(403)
58	12,799	14,592
59	34,929	37,671

* The references identify the lines prescribed in the European Banking Authority template, which are applicable and where there is a value.

Capital management

Approach and policy

(Audited)

Our objective in managing the group's capital is to maintain appropriate levels of capital to support our business strategy and meet regulatory and stress testing related requirements.

We manage group capital to ensure that we exceed current and expected future requirements, and that we respect the payment priority of our capital providers. Throughout 2019, we complied with the Prudential Regulation Authority's ('PRA') regulatory capital adequacy requirements, including those relating to stress testing.

Capital measurement

The PRA is the supervisor of the bank and lead supervisor of the group. The PRA sets capital requirements and receives information on the capital adequacy of the bank and the group.

Individual banking subsidiaries are directly regulated by their local banking supervisors, who set and monitor their capital adequacy requirements.

All the capital instruments included in our capital base have either been issued as fully compliant CRD IV securities (on an end point basis) or in accordance with the rules and guidance in the PRA's previous General Prudential Sourcebook, which are included in the capital base by virtue of the application of CRR II.

At 31 December 2019, our common equity tier 1 ('CET1') capital ratio increased to 14.2% from 13.8% at 31 December 2018. Our CET1 capital decreased by £2.0bn during the year, mainly due to dividends paid to HSBC UK Holdings Ltd of £1.7bn and foreign currency translation differences of £0.5bn. The goodwill impairment loss of £1.2bn was offset by the fall in the corresponding deduction from CET1.

Risk-weighted assets

Risk-weighted assets ('RWAs') decreased by £18.5bn during the year, including a decrease of £2.1bn due to foreign currency translation differences. The £16.4bn decrease (excluding foreign currency translation differences) comprised reductions of £9.1bn from asset size, £9.1bn due to methodology and policy changes and £0.6bn due to model updates, partly offset by an increase in RWAs of £2.4bn from changes in asset quality.

Asset size

The £9.1bn decrease due to asset size movements included decreases of £4.4bn in GB&M, £2.1bn in Corporate Centre and

£0.9bn in CMB, reflecting active portfolio management, and a £1.9bn fall in market risk levels was largely due to reduced exposures.

Asset quality

The £2.4bn growth in RWAs as a result of changes in asset quality was predominantly due to changes in portfolio mix within GB&M.

Model updates

The £0.6bn reduction in RWAs due to model updates was primarily due to corporate model updates within GB&M and CMB.

Methodology and policy

The £9.1bn fall in RWAs due to changes in methodology and policy was primarily due to management initiatives in GB&M and CMB. These included risk parameter refinements, improved collateral recognition and synthetic securitisation transactions. The £2.5bn decrease in market risk RWAs derived mainly from increased diversification benefits following regulatory approval to expand the scope of consolidation during 1H19.

RWA movement by global business by key driver

	Credit risk, counterparty credit risk and operational risk						
	RBWM	CMB	GB&M	GPB	Corporate Centre	Market risk	Total RWAs
	£m	£m	£m	£m	£m	£m	£m
RWAs at 1 Jan 2019	7,032	31,910	73,874	2,012	11,513	17,534	143,875
Asset size	46	(947)	(4,406)	300	(2,140)	(1,931)	(9,078)
Asset quality	(112)	(191)	2,924	(195)	7	–	2,433
Model updates	–	(269)	(314)	–	–	–	(583)
Methodology and policy	106	(1,078)	(4,703)	(144)	(762)	(2,545)	(9,126)
Foreign exchange movement	(193)	(1,165)	(611)	(75)	(113)	49	(2,108)
Total RWA movement	(153)	(3,650)	(7,110)	(114)	(3,008)	(4,427)	(18,462)
RWAs at 31 Dec 2019	6,879	28,260	66,764	1,898	8,505	13,107	125,413

Leverage ratio

Our leverage ratio calculated in accordance with the Capital Requirements Regulation was 3.8% at 31 December 2019, down from 3.9% at 31 December 2018. This was largely driven by a decrease in tier 1 capital.

Pillar 3 disclosure requirements

Pillar 3 of the Basel regulatory framework is related to market discipline and aims to make financial services firms more transparent by requiring publication of wide-ranging information on their risks, capital and management. Our Pillar 3 Disclosures at 31 December 2019 is published on our website, www.hsbc.com, under 'Investors'.

Corporate Governance Report

The statement of corporate governance practices set out on pages 77 to 84 together with the information incorporated by reference, constitute the Corporate Governance Report of HSBC Bank plc (the 'bank'). The following disclosures read together with those in the Strategic Report, including the section 172 Statement on pages 9 and 10 and reporting on employee engagement on pages 7 to 10 describe how the Board has discharged its duty under section 172 of the Companies Act 2006 (the 'Act'), as well as the requirements under the Companies (Miscellaneous Reporting) Regulations 2018 (the 'Reporting Regulations').

Engagement with employees, suppliers, customers and others

Stakeholder	Page	Section
Customers	Page 7	How we do business
	Page 9	section 172 statement
Employees	Pages 7 and 8	How we do business
	Page 9	section 172 statement
	Page 81 to 83	Corporate Governance statement
Communities / the environment	Page 8	How we do business
Regulators	Page 9	How we do business
	Page 9	section 172 statement
Suppliers	Page 9	How we do business
	Page 9	section 172 statement

The bank is, together with the wider Group, committed to high standards of corporate governance. The Group has a comprehensive range of principles, policies and procedures influenced by the UK Corporate Governance Code with requirements in respect of Board independence, composition and effectiveness to ensure that the Group is well managed, with appropriate oversight and control. The bank is also subject to the corporate governance requirements imposed by its regulators which exceed those of the alternative governance codes. As such, the bank did not apply any specific corporate governance code during the financial year.

During the year, the bank complied with HSBC's corporate governance principles, policies and procedures.

The Directors serving at 31 December 2019 are set out below.

Directors

Stephen O'Connor

Chairman

Chairman of the Nomination, Remuneration & Governance Committee

Appointed to the Board: May 2018. Chairman since August 2018

Stephen is Chairman and Founder of Quantile Technologies Limited, and a non-executive Director, Chairman of the Risk Committee and member of both the Audit and Nomination Committees of The London Stock Exchange Group plc. He is also a non-executive Director of the FICC Markets Standards Board. He has more than 25 years' investment banking experience in London and New York.

Former appointments include: Chairman of the International Swaps and Derivatives Association and prior to that he was Managing Director and a member of the Fixed Income Management Committee at Morgan Stanley.

James Emmett

Executive Director and Chief Executive Officer

Chairman of the Executive Committee

Appointed to the Board and as Chief Executive Officer: September 2018; **to retire from the Board and as Chief Executive Officer on 29 February 2020**

James is the Chief Executive of HSBC Bank plc and a Group General Manager. James joined HSBC in 1994 and has over 20 years of international banking experience having performed a variety of senior management roles. He is a Director of HSBC France SA and a member of the Supervisory Board of HSBC Germany. Former appointments include: Chief Operating Officer of HSBC Bank plc and CEO of HSBC Bank A.S. (Turkey).

Jacques Fleurant

Executive Director and Chief Finance Officer

Member of the Executive Committee

Appointed to the Board and as Chief Finance Officer: August 2018

Jacques leads the Finance function in the support and control of HSBC's businesses and operations in Europe. Previously, he served as Chief Financial Officer for HSBC Bank Canada from July 2012 to August 2018.

Jacques joined HSBC in 2000 in Toronto, and has held a variety of senior roles in finance and operations. Prior to joining HSBC, he performed senior roles at Merrill Lynch and for the Canadian Revenue Agency.

Dame Mary Marsh

Independent non-executive Director

Member of the Risk Committee

Appointed to the Board: January 2009

Mary is the non-executive Chair of Trustees of the Royal College of Paediatrics and Child Health, a director of the London Symphony Orchestra, a member of the Governing Body of the London Business School and a Trustee of Teach First.

Former appointments include: founding Director of the Clore Social Leadership Programme and Chief Executive of the National Society for the Prevention of Cruelty to Children.

Yukiko Omura

Independent non-executive Director

Member of the Risk Committee

Appointed to the Board: May 2018

Yukiko is a non-executive Director of The Private Infrastructure Development Group Limited ('PIDG'), as well as Chair of GuarantCo Limited, a subsidiary of PIDG. She also serves as a non-executive Director of Assured Guaranty Ltd, and a member of the Supervisory Board of Nishimoto HD Co. Ltd. She has more than 35 years' international professional experience in both the public and private financial sector, performing senior roles for JP Morgan, Lehman Brothers, UBS and Dresdner Bank.

Former appointments include: Under-Secretary General and COO/ Vice President of the International Fund for Agricultural Development and, Executive Vice President and CEO of the Multilateral Investment Guarantee Agency of the World Bank Group.

Dr Eric Strutz

Independent non-executive Director

Chairman of the Risk Committee, Member of both the Audit Committee and the Nomination, Remuneration & Governance Committee

Appointed to the Board: October 2016

Eric is a member of the Supervisory Board and Chairs the Risk and Audit Committees of HSBC Germany, the Vice Chairman and Lead Independent Director of Partners Group Holding AG, where he also Chairs the Risk and Audit Committee, a member of the Board of Directors and Chairman of the Audit Committee of Global Blue SA, and a member of the Advisory Board and Chairman of the Audit & Risk Committee of Luxembourg Investment Company 261 Sarl.

Former appointments include: Chief Financial Officer of Commerzbank Group, Partner and Director of the Boston Consulting Group, as well as non-executive Director of Mediobanca Banca di Credito Finanziario SpA.

John Trueman

Deputy Chairman and independent non-executive Director

Member of the Nomination, Remuneration & Governance Committee

Appointed to the Board: September 2004. Deputy Chairman since December 2013

John is Chairman of HSBC Global Asset Management Limited. Former appointments include: Deputy Chairman of S.G. Warburg & Co Ltd.

Andrew Wright

Independent non-executive Director

Chairman of the Audit Committee, Member of both the Risk Committee and the Nomination, Remuneration & Governance Committee

Appointed to the Board: May 2018

Former appointments include: Treasurer to the Prince of Wales and the Duchess of Cornwall, a role he held from May 2012 until June 2019, Global Chief Financial Officer for the Investment Bank at UBS AG, Chief Financial Officer, Europe and the Middle East at Lehman Brothers; Chief Financial Officer for the Private Client and Asset Management Division at Deutsche Bank.

Board Changes

It was announced on 5 February 2020 that James Emmett will step down from the Board on 29 February 2020. Nuno Matos has been appointed to succeed him as a director of HSBC Bank plc and Chief Executive of the Bank and Europe with effect from 1 March 2020.

Company Secretary

The responsibilities of the Company Secretary include ensuring good governance practices at Board level and ensuring good information flows within the Board and its committees and between senior management and the non-executive Directors.

Loren Wulfsohn acted as Company Secretary of HSBC Bank plc throughout the year.

Board of Directors

The role of the Board, led by the Chairman, is to encourage entrepreneurial leadership of the Bank within a framework of prudent and effective controls which enables risks to be assessed and managed. The Board is collectively responsible for the long-term success of the bank and delivery of sustainable value to shareholders and internal and external stakeholders, as well as encouraging a culture of openness and debate.

The Board sets the strategy, risk appetite statement and also approves the capital and operating plans on the recommendation of management. The implementation of the strategy is delegated to the Chief Executive and the Executive Committee.

The Board meets regularly and Directors receive information between meetings about the activities of committees and developments in the Bank's business. All Directors have full and timely access to all relevant information and may take independent professional advice if necessary.

The Board is comprised of a majority of independent non-executive directors. Both the Chief Executive Officer and the Chief Finance Officer are members of the Board.

The role of the independent non-executive directors is to challenge and scrutinise the performance of management including executive directors and to help develop proposals on strategy. They also review the performance of management in meeting agreed goals and objectives and monitor the Group's risk profile.

All Directors are subject to annual re-election at the bank's Annual General Meeting. There were no changes to the Board during 2019.

During the year the Board conducted deep-dives on key aspects of the bank's business, considered the performance and strategy of the bank, including those specific to key businesses and countries, and approved the financial, and capital, liquidity and funding, plans put forward by management. Monitoring the implementation of plans in anticipation of the UK's exit from the European Union was a focus. During the year, the Board conducted a number of scenario planning exercises to test the processes and procedures in place to monitor and manage a potential stress event.

The Board held nine full meetings during 2019, with an additional six *ad hoc* meetings arranged to consider specific matters reserved to the Board.

Directors' emoluments

Details of the emoluments of the Directors of the bank for 2019, disclosed in accordance with the Companies Act, are shown in Note 5 'Employee compensation and benefits'.

Non-executive Directors do not have service contracts, but are bound by letters of appointment. There are no obligations in the non-executive Directors' letters of appointment that could give rise to payments other than fees due or payments for loss of office.

Board committees

The Board has a governance framework in terms of which it has established a number of committees to assist it in discharging its responsibilities. The Chairman of each non-executive Board committee reports to the Board on the activities of the committee since the previous Board meeting. All of the members of the Audit, Risk and the Nomination, Remuneration & Governance Committees are independent non-executive directors.

The board and its committees are subject to regular evaluation and performance review to ensure effectiveness. In 2019, the Board and its committees evaluated performance by considering feedback received after meetings in relation to papers and meeting effectiveness; a review of the work it had undertaken during the year compared to its terms of reference; and completion, for both board and committees, of a questionnaire covering a wide variety of measures to determine effectiveness. The results of the questionnaires were considered by the committee and actions agreed where necessary. Executive directors are subject to performance evaluation which helps to determine the level of variable pay they receive each year.

At the date of this report, the following are the principal committees of the Board:

Audit Committee

The Audit Committee is accountable to the Board and has non-executive responsibility for oversight of and advice to the Board on financial reporting related matters, internal controls over financial reporting and implementation of the Group's policies and procedures for capturing and responding to whistleblower concerns.

The Committee meets regularly with the bank's senior financial and internal audit management and the external auditors to consider, among other matters, the bank's financial reporting, the nature and scope of audit reviews, the effectiveness of the systems of internal control relating to financial reporting and the monitoring of the finance function transformation program. The Committee also has responsibility for the oversight of the bank's whistleblowing arrangements, and receives regular updates on matters raised by employees through the whistleblowing arrangements that are in place.

In addition to the significant accounting judgements, key matters considered by the Committee during the year included the bank's

capital and risk management and pillar 3 disclosures, the independence, fees and performance of the external auditor, PricewaterhouseCoopers LLP, and updates on key issues identified by internal audit related to the bank and its subsidiaries.

The Committee also received updates from the Chairs of the Audit Committees of material subsidiaries of the Bank, updates from the external auditor on the progress and findings of their audit, and bi-annual updates on the tax position of the bank and its subsidiaries. It also received regular reports on whistle blowing.

During the year, the Committee held separate meetings with each of the Chief Financial Officer, the Chief Risk Officer, the Head of Internal Audit and representatives of the external auditor without management present.

The current members are Andrew Wright (Chairman), Eric Strutz and John Trueman.

The Committee met seven times during 2019.

Significant accounting judgements and related matters considered by the Audit Committee ('AC') for the year ended 2019 included:

Key area	Action taken
Interim and annual reporting	The AC considered key judgements in relation to interim and annual reporting.
Expected credit loss ('ECL') allowances and charges	The AC considered the key judgements related to IFRS 9 and the related disclosures, the AC considered ECL allowances and charges for wholesale lending. Attention was paid to credit risk in the UK and the adjustment to ECL for UK economic uncertainty.
Valuation of financial instruments	The AC considered the key valuation metrics and judgements involved in the determination of the fair value of financial instruments.
Going concern	The AC considered a wide range of information relating to present and potential conditions, including projections for profitability, cash flows, liquidity and capital. Specific attention was paid to the potential impact of the business update and the UK's withdrawal from the European Union.
Impairment of investment in subsidiary	The AC reviewed management's periodic assessment of impairment of investments in subsidiaries and paid particular attention to the reliability of the cash flow projections and long term growth rate assumptions. Management assessed that the investment in HSBC France was impaired as at 31 December 2019.
Goodwill impairment testing	The AC considered the results of the annual goodwill impairment test and subsequent review for any impairment indicators. Management assessed that the Commercial Banking, Retail Banking and Wealth Management, and Global Private Banking cash-generating units ('CGUs') were fully impaired at 31 December 2019.
Appropriateness of provisioning for legal proceedings and regulatory matters	The HSBC Bank plc AC received reports from management on the recognition and measurement of provisions and contingent liabilities for legal proceedings and regulatory matters. Matters included accounting judgements in relation to provisions and contingent liabilities arising from investigations by regulators and competition and law enforcement authorities around the world on the trading in the foreign exchange market.
IBOR transition	The AC considered the accounting implications of benchmark interest rate replacement for hedge accounting relationships at 31 December 2019, the longer term broader implications for financial instruments and other areas of accounting, and the related disclosures. The AC concluded management's judgement of continuation of hedge accounting was appropriate as at 31 December 2019 and that this position will be kept under review in the context of future market developments in the transition of interest rate benchmarks to new risk free rates.
Controls	The AC considered the financial control environment on an ongoing basis, reviewing and challenging enhancements made. This includes confirmation of mitigating controls where programmes of work continue. Areas of particular focus in 2019 have been IFRS 9 data quality, general ledger substantiation, IFRS 16, Fair Value of Financial Instruments, Business User Access, models and third party risk management.
Tax	The AC considered key judgements in relation to tax, notably the contingent liability for retrospective VAT assessments issued by HMRC and deferred tax asset recognition.
Restructuring provisions	The AC considered key judgements in relation to restructuring provisions, notably around the programme commenced on 1 January 2019, and that an extension of activities until 31 December 2019 was endorsed by GMB and approved by HSBC Holdings plc Board.
Insurance business revenue and cost sharing assumptions.	The AC considered management's actions to address the impact of the prolonged low interest rate environment in the eurozone to the insurance business and its implications to the present value of in-force contracts.
EEA Branch Transfers	The AC considered impact of the transfer of European Economic Area ('EEA' branches) to HSBC France.
Sustainable Finance	The AC noted the regulatory developments on Environmental, Social, Governance ('ESG') reporting requirements; notably the updates on the EU Non-Financial Reporting ('NFR') directive and EU taxonomy.

Risk Committee

The Risk Committee is accountable to the Board and has non-executive responsibility for oversight of and advice to the Board on high-level risk related matters and risk governance.

The Committee meets regularly with the bank's senior financial, risk, internal audit and compliance management and the external Auditors to consider, among other matters, risk reports and internal audit reports and the effectiveness of compliance. The Risk Committee also has responsibility for the oversight of systems, operational resilience and the bank's IT infrastructure, and was assisted in the discharge of its duties by the Operational Resilience Forum (previously the Operations and Technology

Forum). The Forum focussed on the operational resilience of critical IT and other business services, cyber security, digital and major IT change programmes. The Forum reported into the Risk Committee on its activities. The work overseen by the Forum will be directly monitored by the Risk Committee from 2020 onwards.

Key matters considered by the Committee during the year included the Bank's approach to IBOR transition, third party risk management, non-financial risks and preparations for the UK exit from the European Union.

The Committee also reviewed and challenged key regulatory processes, including the bank's internal capital adequacy assessment process and the internal capital liquidity assessment

process; recovery and resolution plans; the outcome of stress tests undertaken during the year; and, the bank's capital and funding plans.

During the year, the Committee held separate meetings with the Head of Internal Audit, the Chief Risk Officer, the Chief Finance Officer and representatives of the external auditor without management present.

The current members are: Dr Eric Strutz (Chairman); Dame Mary Marsh; Yukiko Omura; John Trueman and Andrew Wright.

The Committee met ten times during 2019.

Nomination, Remuneration & Governance Committee

The Nomination, Remuneration & Governance Committee has responsibility for: (i) leading the process for Board appointments and for identifying and nominating, for the approval of the Board, candidates for appointment to the Board; (ii) the endorsement of the appointment of the individuals to certain roles on the Boards of certain subsidiaries; (iii) the endorsement of proposed fees payable to non-executive directors on subsidiary boards, and (iv) reviewing the implementation and appropriateness of HSBC Group's remuneration policy and the remuneration of the bank's senior executives, including the identification of the Material Risk Taker population for the purposes of the Capital Requirements Directive.

Other activities during the year included approval of a Board Diversity Policy and enhancing the Company's skills matrix based on individual board suitability assessments. The committee applies the principles in the policy when considering the composition of the board including in relation to gender, ethnicity and age. Other factors taken into account when assessing Board composition include the educational and professional background of directors.

The Group has implemented a Subsidiary Accountability Framework ("SAF") which sees to ensure a consistent approach to governance across all subsidiaries in the HSBC Group, and to strengthen interaction and information flows between the Company and the Group. The SAF has been rolled out to the Company's subsidiaries during 2019. The Committee's remit was expanded to include Governance oversight which includes the implementation of the SAF across the region. The Committee reports both to the Board and to the Group through the Group Chairman's Forum on progress.

The current members are: Stephen O'Connor (Chairman); Eric Strutz; John Trueman and Andrew Wright.

The Committee held eight scheduled meetings during 2019, with an additional four ad hoc meetings arranged to consider specific matters.

Executive Committee

The Executive Committee meets regularly and operates as a general management committee under the direct authority of the Board, exercising all of the powers, authorities and discretions of the Board in so far as they concern the management and day-to-day running of the bank, in accordance with such policies and directions as the Board may from time to time determine. The Chief Executive Officer, James Emmett, chairs the Committee. Regular Risk Management Meetings of the Executive Committee, chaired by the Chief Risk Officer, are held to establish, maintain and periodically review the policy and guidelines for the management of risk within the bank.

Regular meetings of the Financial Crime Risk Management Committee are held to ensure effective enterprise-wide management of financial crime risk within the bank.

During 2019, the Executive Committee proposed a number of changes to the bank's governance arrangements as a result of the transfer of the bank's European Economic Area ('EEA') branches to HSBC France SA as part of our Brexit preparations. As a result, it was agreed that the International governance structure, comprising the International Executive Committee and the International Risk Management Meeting be demised. As a result, the Executive Committee of HSBC France SA assumed the

governance oversight responsibility for the International business, comprising the EEA businesses transferred to HSBC France SA plus the non-EEA subsidiaries and branches of the Company, following the demise of the International governance structure.

The Company established a Disclosure Committee, under the authority of the Chief Executive Officer, during 2019 to support the Company in the discharge of its obligations under the EU Market Abuse Regulations. The Disclosure Committee is comprised of the Chief Finance Officer (Chairman), Chief Risk Officer, General Counsel, Company Secretary and the Global Head of Debt Investor Relations.

Dividends

Information about dividends paid during the year is provided on page 16 of the Strategic Report and in Note 8 to the financial statements.

Internal control

The Board is responsible for maintaining and reviewing the effectiveness of risk management and internal control systems and for determining the aggregate level and types of risks the bank is willing to take in achieving its strategic objectives.

To meet this requirement and to discharge its obligations under the FCA Handbook and the PRA Handbook, procedures have been designed for safeguarding assets against unauthorised use or disposal; for maintaining proper accounting records; and for ensuring the reliability and usefulness of financial information used within the business or for publication.

These procedures can only provide reasonable assurance against material misstatement, errors, losses or fraud. They are designed to provide effective internal control within the group and accord with the Financial Reporting Council's guidance for Directors issued in 2014, internal control and related financial and business reporting. The procedures have been in place throughout the year and up to 18 February 2020, the date of approval of this *Annual Report and Accounts 2019*.

The key risk management and internal control procedures include the following:

- **Global principles:** The Group's Global Principles set an overarching standard for all other policies and procedures and are fundamental to the Group's risk management structure. They inform and connect our purpose, values, strategy and risk management principles, guiding us to do the right thing and treat our customers and our colleagues fairly at all times.
- **Enterprise risk management framework:** The enterprise risk management framework provides an effective and efficient approach to how we govern and oversee the organisation as well as how we monitor and mitigate risks to the delivery of our strategy. It applies to all categories of risk, covering core governance, standards and principles that bring together all of the group's risk management practices into an integrated structure.
- **Delegation of authority within limits set by the Board:** Subject to certain matters reserved for the Board, the Chief Executive Officer has been delegated authority limits and powers within which to manage the day-to-day affairs of the Group, including the right to sub-delegate those limits and powers. Each relevant executive has authority within which to manage the day-to-day affairs of the business or function for which he or she is accountable. Those individuals are required to maintain a clear and appropriate apportionment of significant responsibilities and to oversee the establishment and maintenance of systems of control that are appropriate to their business or function. Authorities to enter into credit and market risk exposures are delegated with limits to line management of Group companies. However, credit proposals with specified higher-risk characteristics require the concurrence of the appropriate global function. Credit and market risks are measured and

reported at subsidiary company level and aggregated for risk concentration analysis on a Group-wide basis.

- **Risk identification and monitoring:** Systems and procedures are in place to identify, assess, control and monitor the material risk types facing HSBC as set out in the enterprise-wide risk framework. The Group's risk measurement and reporting systems are designed to help ensure that material risks are captured with all the attributes necessary to support well-founded decisions, that those attributes are accurately assessed and that information is delivered in a timely manner for those risks to be successfully managed and mitigated.
- **Changes in market conditions/practices:** Processes are in place to identify new risks arising from changes in market conditions/practices or customer behaviours, which could expose the group to heightened risk of loss or reputational damage. The group employs a top and emerging risks framework, which contains an aggregate of all current and forward-looking risks and enables it to take action that either prevents them materialising or limits their impact.
- **Responsibility for risk management:** All employees are responsible for identifying and managing risk within the scope of their role as part of the three lines of defence model, which is an activity-based model to delineate management accountabilities and responsibilities for risk management and the control environment. The second line of defence sets the policy and guidelines for managing specific areas, provides advice and guidance in relation to the risk, and challenges the first line of defence (the risk owners) on effective risk management.
- **The Board has delegated to the Audit Committee oversight for the implementation of the Group's policies and procedures for capturing and responding to whistleblower concerns, ensuring confidentiality, protection and fair treatment of whistleblowers, and receiving reports arising from the operation of those policies as well as ensuring arrangements are in place for independent investigation.**
- **Strategic plans:** Strategic plans are prepared for global businesses, global functions and geographical regions within the framework of the HSBC Group's overall strategy. The bank also prepares and adopts an Annual Operating Plan, which is informed by detailed analysis of risk appetite, describing the types and quantum of risk that the bank is prepared to take in executing its strategy and sets out the key business initiatives and the likely financial effects of those initiatives.
- **The effectiveness of the group's system of risk management and internal control is reviewed regularly by the Board, the Risk Committee and the Audit Committee.**
- **During 2019, the Group continued to focus on operational resilience and invest in the non-financial risk infrastructure. There was a particular focus on material and emerging risks with significant progress made enhancing the end-to-end risk and control assessment process. The Risk Committee and the Audit Committee received confirmation that executive management has taken or is taking the necessary actions to remedy any failings or weaknesses identified through the operation of the group's framework of controls.**

Internal control over financial reporting

The key risk management and internal control procedures over financial reporting include the following:

- **Entity level controls:** The primary mechanism through which comfort over risk management and internal control systems is achieved, is through assessments of the effectiveness of entity level controls ('ELC'), and the reporting of risk and control issues on a regular basis through the various risk management and risk governance forums. ELCs are internal controls that have a pervasive influence over the entity as a whole. They include controls related to the control environment, for example the Company's values and ethics, the promotion of effective risk management and the overarching governance exercised by the Board and its non-executive committees. The design and

operational effectiveness of ELCs are assessed annually as part of the assessment of the effectiveness of internal controls over financial reporting.

- **Process level transactional controls:** Key process level controls that mitigate risk of financial mis-statement are identified, recorded and monitored in accordance with the risk framework. This includes the identification and assessment of relevant control issues against which action plans are tracked through to remediation. Further details on the group's approach to risk management can be found on page 20. The Audit Committee has continued to receive regular updates on HSBC's ongoing activities for improving the effective oversight of end-to-end business processes; management continues to identify opportunities for enhancing key controls, such as through the use of automation technologies.
- **External Reporting Forum:** The External Reporting Forum reviews financial reporting disclosures made by the bank for any material errors, mis-statements or omissions. The integrity of disclosures is underpinned by structures and processes within the group's Finance and Risk functions that support rigorous analytical review of financial reporting and the maintenance of proper accounting records.
- **Disclosure Committee:** As indicated on page 80, the Disclosure Committee considers the external reporting obligations of the bank to ensure compliance with reporting obligations under the EU Market Abuse Regulations.
- **Financial reporting:** The group's financial reporting process is controlled using documented accounting policies and reporting formats, supported by detailed instructions and guidance on reporting requirements, issued to all reporting entities within the group in advance of each reporting period end. The submission of financial information from each reporting entity is supported by a certification by the responsible financial officer and analytical review procedures at subsidiary and group levels.
- **Subsidiary certifications:** Certifications are provided to the Audit Committee and the Risk Committees (full and half yearly) and to the NRCG (annually) from the audit, risk and remuneration committees of key material subsidiary companies confirming amongst other things that:
 - Audit – the financial statements of the subsidiary have been prepared in accordance with group policies, present fairly the state of affairs of the subsidiary and are prepared on a going concern basis;
 - Risk – the Risk Committee of the subsidiary has carried out its oversight activities consistent with and in alignment to the HSBC Enterprise Risk Management Framework; and
 - Remuneration – the Remuneration Committee of the subsidiary has discharged its obligations in overseeing the implementation and operation of HSBC's Group Remuneration Policy.

Employees

Health and safety

The Group is committed to providing a healthy and safe working environment for our employees, contractors, customers and visitors to HSBC premises, and where impacted by our operations. We aim to be compliant with all applicable health and safety legal requirements, and to ensure that best practice health and safety management standards are implemented and maintained across the Group.

Everyone at HSBC has a responsibility for helping to create a healthy and safe working environment. Employees are expected to take ownership of their safety, and are encouraged and empowered to report any concerns.

Chief Operating Officers have overall responsibility for ensuring that the correct policies, procedures and safeguards are put into practice. This includes making sure that everyone in HSBC has

access to appropriate information, instruction, training and supervision.

Putting our commitment into practice, we delivered a range of programmes in 2019 to help us understand and manage effectively the risks we face and improve the buildings in which we operate:

- We continued to deliver improvements in health and safety culture, through more than 2,000 hours of education and awareness programmes targeted at our areas of highest risk, which are construction and facilities management. This has helped to deliver continued reductions in the numbers of injuries, with HSBC’s injury rate for facilities management approximately one-tenth of the industry rate, according to the US Occupational Safety and Health Administration.
- We developed and implemented an improved health and safety training and awareness programme for all employees globally, ensuring roles and responsibilities were clear and understood. The programme, which included a new section for branch managers and staff, was completed by over 250,000 of our global employees.
- We implemented improved systems and processes for hazard identification and remediation. We also updated our suite of management information dashboards to continually improve our awareness and management of our key risks.
- An independent subject matter expert assessed our health and safety management system against the new international standard ISO 45001. The expert confirmed the robustness of our policies, procedures and processes, while identifying areas for continual improvement.
- Our global safety management system was subjected to an extensive third line of defence review and resulted in zero high risk items being identified.

We continue to focus on enhancing the safety culture in our supply chain through our SAFER Together programme, building the awareness and capability to act and behave in the safest ways.

Employee health and safety

	Footnotes	2019	2018	2017
Number of workplace fatalities		–	–	–
Number of major injuries to employees	1	13	9	19
All injury rate per 100,000 employees		373	343	448

1 Fractures, dislocation, concussion, hospitalisation, unconsciousness.

Diversity and inclusion

We are committed to developing a company-wide approach to diversity and inclusion ('D&I'). We want to embrace our people’s diverse ideas, styles and perspectives to reflect and understand our customers, communities, suppliers and investors. Our actions are focused on ensuring our people are valued, respected and supported to fulfil their potential and thrive. We want them to bring the best of themselves to work to help deliver more sustainable outcomes for all of our stakeholders.

In 2019, we began implementing a two-year global diversity and inclusion strategy to deliver more inclusive outcomes for our people, customers, suppliers and the communities in which we operate. We are working closely with our global employee networks to help accelerate our progress. We are expanding our focus beyond gender to include global approaches to ethnicity, disability and LGBT+ inclusion. Our global employee network for LGBT+ inclusion, Pride, continued to grow and entered new markets in 2019. The network’s efforts helped improve our standing on Stonewall’s Global Workplace Equality Index, and we were named as one of only 14 top global employers. We have launched a new global programme aimed at transforming disability confidence, working closely with the Business Disability Forum’s global taskforce. We have also started to explore ways we can better enable ethnic minority colleagues to progress their careers, feel confident about speaking up and build more trusting relationships with their colleagues.

Key achievements

In 2019 we launched our 10 Inclusive Hiring Principles, which includes mandatory diverse candidate shortlists and reaching out proactively to diverse recruitment channels and sources. As part of the Global Banking and Markets Global Diversity & Inclusion month, we had 130 Exchange meetings across Europe covering topics such as well-being, recruitment, career development and Diversity & Inclusion awareness.

HSBC France’s two Employee Resource Groups- 50 50 Partner of Balance and HSBC Pride Network France- have raised their visibility and influence and the Paris office hosted their first OutLeadership event.

HSBC France also increased their female share in senior leadership roles up to 29%.

HSBC Luxembourg hosted an event with external companies about embedding inclusivity in corporate culture, working closely with the Employee Resource Groups Pride and Balance.

HSBC Germany continued to establish an integrated talent development and diversity and inclusion approach by targeting development of female talents. The local Balance network continues to provide its members with opportunities to have an open dialogue, and share insights around career development within the firm. Typical activities include speaker events with senior women, blind date lunches and Quarterly Newsletters. Additionally, events are supported by external speakers who share best-practices around gender balance.

HSBC Germany launched a chapter of HSBC Pride in 2019 with great success. Official kick-off took place in October with speeches from the Executive Sponsor, Chapter Lead and external experts around LGBT+. Up to now more than 150 employees are part of the network. HSBC Germany is part of the external Diversity Network Rhine-Ruhr, a network of 15 large companies in the area, which aims to raise awareness about the importance of an inclusive environment and hosted an annual event to celebrate German Diversity Day.

In the UK, HSBC has carried out a wide range of activities to celebrate and support diversity and inclusion. For instance, all recruiters have undertaken D&I training and implemented basic principles around how to approach conversations with hiring managers, challenging in the right way and alternative routes to market. As an outcome, HSBC has broadened the pool of diverse talent.

Overall in the UK, there has been continuous engagement with our diverse colleagues through our Employee Resource Groups and Communities. Our 14 groups have a total of 14,000 members, with a focus on gender, age, ethnicity, LGBT+, faith, working parents and carers, and ability.

Diverse representation

Our focus on improving gender balance in senior leadership across Europe is ongoing.

Female representation by management level:

- All grades: 48%
- Clerical grades: 68%
- Junior management: 57%
- Management: 40%
- Senior management: 30%
- Executive management: 19%

Employment of people with a disability

We believe in providing equal opportunities for all employees. The employment of people with a disability is included in this commitment. The recruitment, training, career development and promotion of people with a disability are based on the aptitudes and abilities of the individual. Should employees become disabled during their employment with us, efforts are made to continue their employment and, if necessary, appropriate training and reasonable equipment and facilities are provided.

A number of countries have dedicated teams to ensure that barriers to work are removed for colleagues.

This year, HSBC UK committed to the Valuable 500 campaign, the global campaign which is calling on 500 national and multinational private sector corporations to put their support to change to help unlock the business, social and economic value of people living with disabilities across the world.

HSBC France has taken actions to create a more inclusive environment for disabled people through sensitization, communication, visibility and recruitment actions. For example employee testimonials are published on the intranet, awareness and hearing impairment detection workshops were conducted with the Occupational Health Service during Disability Week and raised awareness among more than 300 employees. A conference on mental health in October 2019 was delivered to more than 200 employees. Finally, a social media hiring campaign has also shown our commitment to the integration of people with disabilities.

In Germany, disability has been an area of focus in 2019 with special attention given to adaptive facilities in the new HSBC building and HSBC Germany being a sponsor of a D&I conference on Disability at the German Diversity Day.

Learning and talent development

The development of our people is core to the success of our organisation. We continue to develop and implement practices that build employee capability and identify, develop and deploy talented employees to ensure an appropriate supply of high calibre individuals with the right values, skills and experience for current and future senior management positions.

Year on year since the launch of HSBC University in 2017, we have continued to add to the portfolio of world class leadership and professional programmes that provide opportunity for leaders and people managers to both develop and connect with each other across the group. A key Flagship programme launch in 2019 has been Leading With Impact, an immersive three day residential programme that increases the personal leadership range of our Senior Leaders with the intent to inspire and allow talent to thrive in a HSBC that is shaping itself for business in the future.

As well as growing our learning and talent offering in traditional format, in 2019 we have also focused on the accessibility of the University offering with the primary launch of digital curriculum for the new Leading Myself suite of development and the Team Effectiveness toolkits. In addition, we piloted a mobile version of our Global Mandatory Training with a view to fully launch in 2020.

The 2019 launch of our Team Effectiveness toolkits has also been a key step in enabling HSBC Leader involvement in the facilitation of topics that inspires others and helps shape HSBC for the needs of today and the future

During 2019 just over 1,300* formal training classes were provided across Europe and training was accessed by just over 14,300* participants. Of these, over 1,000* participants attended a flagship Leadership programme in 2019 evidencing a 5%* increase in the mix of Leadership training versus risk and compliance training in the region compared to 2018.

*As at end of October 2019

Employee relations

We consult with and, where appropriate, negotiate with employee representative bodies where we have them. We also aim to maintain well-developed communications and consultation programmes with all employee representative bodies and there have been no material disruptions to our operations from labour disputes during the past five years.

Disclosure of information to auditors

The directors' are not aware that there is any relevant audit information (as defined in the Companies Act 2006) of which the bank's auditors are unaware and processes are in place to ensure that the bank's auditors are aware of any relevant audit information.

Auditors

PricewaterhouseCoopers LLP ('PwC') are the external auditors to the bank. PwC has expressed its willingness to continue in office and the Board recommends that PwC be re-appointed as the bank's auditors. A resolution proposing the re-appointment of PwC as the bank's auditors, and giving authority to the Audit Committee to determine its remuneration, will be submitted to the forthcoming AGM.

Branches

HSBC Bank plc currently has branches in 13 other jurisdictions. The business transfer of the following branches: Republic of Ireland, Belgium, Netherlands, Italy, Spain, the Czech Republic and Luxembourg was completed during the year. With the exception of the branch in Luxembourg, the branches in the countries listed above are in the process of being de-registered.

Disclosures required pursuant to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 as updated by Companies (Miscellaneous Reporting) Regulations 2018 can be found on the following pages:

Engagement with employees (Sch.7 Para 11 and 11A 2008/2018 Regs), s172 Statement)	Pages 9 and 10
Engagement with suppliers, customers and others in a business relationship with the bank (Sch.7 Para 11B 2008 Regs)	Page 9
Policy concerning the employment of disabled persons (Sch.7 Para 10 2008 Regs)	Page 82
Financial Instruments (Sch.7 Para 6 2008 Regs)	Pages 28 to 61
Hedge accounting policy (Sch.7 Para 6 2008 Regs)	Note 14, Pages 136 to 141

Articles of Association, Conflicts of interest and indemnification of Directors

The Articles of Association of HSBC Bank plc gives the Board authority to approve Directors' conflicts and potential conflicts of interest. The Board has adopted a policy and procedures for the approval of Directors' conflicts or potential conflicts of interest. On appointment, new Directors are advised of the process for dealing with conflicts and a review of those conflicts that have been authorised, and the terms of those authorisations, is routinely undertaken by the Board. The Articles of Association provide that Directors and directors of associated companies are entitled to be indemnified out of the assets of the bank against claims from third parties in respect of certain liabilities. Such indemnity provisions have been in place during the financial year and remain in place but have not been utilised by the Directors. Additionally, all Directors have the benefit of directors' and officers' liability insurance.

Research and Development

In the ordinary course, the lines of business develop new products and services.

Events after the Balance Sheet Date

After 31 December 2019, the bank initiated a process to re-assign the lease of 8 Canada Square to HSBC Global Services (UK) Limited, and the Group's Directors approved the 2020 business update which includes a change to HSBC's, and the group's, reportable segments. For further details, refer to Note 34 Events after the balance sheet date.

Statement on going concern

The Directors consider it appropriate to prepare the financial statements on the going concern basis. In making their going concern assessment, the Directors have considered a wide range of detailed information relating to present and potential conditions, including profitability, cash flows, capital requirements and capital resources.

Further information relevant to the assessment is provided in the Strategic Report and the Report of the Directors, in particular:

- a description of the group's strategic direction;
- a summary of the group's financial performance and a review of performance by business;
- the group's approach to capital management and its capital position; and
- the top and emerging risks facing the group, as appraised by the Directors, along with details of the group's approach to mitigating those risks and its approach to risk management in general.

In addition, the objectives, policies and processes for managing credit, liquidity and market risk are set out in the 'Report of the Directors: Risk'.

The Directors' Report comprising pages 20 to 84 was approved by the Board on 18 February 2020 and is signed on its behalf by.

By order of the Board

J Fleurant

Director

HSBC Bank plc

18 February 2020

Registered number 14259

Statement of Directors' Responsibilities

Statement of directors' responsibilities in respect of the financial statements

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the group financial statements in accordance with International Financial Reporting Standards ('IFRS's) as adopted by the European Union and company financial statements in accordance with International Financial Reporting Standards ('IFRS's) as adopted by the European Union. Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and company and of the profit or loss of the group and company for that period. In preparing the financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable IFRSs as adopted by the European Union have been followed for the group financial statements and IFRSs as adopted by the European Union have been followed for the company financial statements, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the group and company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the group and company's transactions and disclose with reasonable accuracy at any time the financial position of the group and company and enable them to ensure that the financial statements comply with the Companies Act 2006 and, as regards the group financial statements, Article 4 of the IAS Regulation.

They are also responsible for safeguarding the assets of the bank and the group, and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors of HSBC Holdings plc are responsible for the maintenance and integrity of the website on which the bank's financial results are located. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

By order of the Board

J Fleurant

Director

HSBC Bank plc

18 February 2020

Registered number 14259

Independent auditors' report to the member of HSBC Bank plc

Report on the audit of the financial statements

Opinion

In our opinion, HSBC Bank plc's group financial statements and parent company financial statements (the "financial statements"):

- give a true and fair view of the state of the group's and of the parent company's affairs as at 31 December 2019 and of the group's loss and the group's and the parent company's cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the parent company's financial statements, as applied in accordance with the provisions of the Companies Act 2006; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements, included within the HSBC Bank plc Annual Report and Accounts 2019 (the "Annual Report"), which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated income statement and consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of cash flows for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the HSBC Bank plc balance sheet as at 31 December 2019;
- the HSBC Bank plc statement of cash flows for the year then ended;
- the HSBC Bank plc statement of changes in equity for the year then ended; and
- the notes on the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the 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 remained independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the group or the parent company.

Other than those disclosed in note 6 on the financial statements, we have provided no non-audit services to the group or the parent company in the period from 1 January 2019 to 31 December 2019.

Our audit approach

Overview

- Overall group materiality: £221 million (2018: £282 million), based on 1% of Tier 1 capital.
- Overall parent company materiality: £142 million (2018: £235 million), based on 1% of Tier 1 capital.
- We performed audits of the complete financial information of two components, namely the UK business of HSBC Bank plc (referred to as UK Operations) and HSBC France.
- For five further components, specific audit procedures were performed over selected significant account balances.

The following areas were identified as key audit matters. These are discussed in further detail in the Appendix:

- Expected credit loss ('ECL') provision for loans and advances;
- Information Technology ('IT') Access Management;
- Valuation of financial instruments;
- Tax judgements;
- Goodwill; and
- Investments in subsidiaries.

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Capability of the audit in detecting irregularities, including fraud

Based on our understanding of the group and industry, we identified that the principal risks of non-compliance with laws and regulations include, but are not limited to, the Financial Conduct Authority's regulations, the Prudential Regulation Authority's regulations, UK Listing Rules, the UK tax legislation and equivalent local laws and regulations applicable to significant component teams. We considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations

Independent Auditors' Report to the Member of HSBC Bank plc

that have a direct impact on the preparation of the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. Our audit procedures included challenging assumptions and judgements made by management in their significant accounting estimates, in particular in relation to valuation of certain complex level 3 financial instrument portfolios and expected credit loss provision for loans and advances, goodwill, deferred tax assets and investments in subsidiaries (see related key audit matters in the Appendix), and identifying specific fraud criteria as part of our journals testing, for example unusual account combinations and journals posted by senior management. The group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the group engagement team and/or component auditors included review of the financial statement disclosures to underlying supporting documentation, review of correspondence with and reports to the regulators, review of correspondence with legal advisors, enquiries of management, enquiries of legal counsel, review of significant component auditors' work and review of internal audit reports in so far as they related to the financial statements.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit. The key audit matters are discussed further in the Appendix.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the group and the parent company, the accounting processes and controls, and the industry in which they operate.

HSBC Bank plc is structured into four divisions being Retail Banking and Wealth Management, Commercial Banking, Global Banking & Markets and Global Private Banking. The divisions operate across a number of operations, subsidiary entities and branches ('components') throughout Europe. Within the group's main consolidation and financial reporting system, the consolidated financial statements are an aggregation of the components. Each component submits their financial information to the group in the form of a consolidation pack.

In establishing the overall approach to the group and parent company audit, we scoped using the balances included in the consolidation pack. We determined the type of work that needed to be performed over the components by us, as the group engagement team, or auditors within PwC UK and from other PwC network firms operating under our instruction ('component auditors').

As a result of our scoping, for the group we determined that an audit of the complete financial information of the UK Operations and HSBC France were necessary, owing to their financial significance. We instructed component auditors, PwC UK and PwC France, to perform the audits of these components. Our interactions with component auditors included regular communication throughout the audit, including visits to France, the issuance of instructions, a review of working papers relating to the key audit matters and formal clearance meetings. The group audit engagement partner was also the partner on the audit of the UK Operations significant component.

We then considered the significance of other components in relation to primary statement account balances and note disclosures. In doing this we also considered the presence of any significant audit risks and other qualitative factors (including history of misstatements through fraud or error). For five components, specific audit procedures were performed over selected significant account balances. For the remainder, the risk of material misstatement was mitigated through group audit procedures including testing of entity level controls and group and parent company level analytical review procedures.

Certain group-level account balances (including goodwill) were audited by the group engagement team.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Parent company financial statements
Overall materiality	£221 million (2018: £282 million).	£142 million (2018: £235 million).
How we determined it	1% of Tier 1 capital.	1% of Tier 1 capital.
Rationale for benchmark applied	Tier 1 capital is used as a benchmark as it is considered to be a key driver of HSBC Bank plc's decision making process and has been a primary focus for regulators.	Tier 1 capital is used as a benchmark as it is considered to be a key driver of HSBC Bank plc's decision making process and has been a primary focus for regulators.

Total regulatory capital was used as the benchmark in the prior year. The basis for determining materiality was re-evaluated and Tier 1 capital was determined to be a more appropriate benchmark given the importance of this metric to the HSBC Bank plc decision making process.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was £10m to £108m. Certain components were audited to a local statutory audit materiality that was also less than our overall group materiality.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £6m (group audit and parent company audit) (2018: £10m) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's and parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the group's and parent company's ability to continue as a going concern. For example, the terms of the United Kingdom's withdrawal from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the group's business, customers, suppliers and the wider economy.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Report of the Directors, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Report of the Directors

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Report of the Directors for the year ended 31 December 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the group and parent company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Report of the Directors.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of directors' responsibilities in respect of the financial statements set out on page 86, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' 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 (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the parent company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the parent company financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the HSBC Bank plc Audit Committee, we were appointed by the directors on 31 March 2015 to audit the financial statements for the year ended 31 December 2015 and subsequent financial periods. The period of total uninterrupted engagement is 5 years, covering the years ended 31 December 2015 to 31 December 2019.

Claire Sandford

(Senior Statutory Auditor)

for and on behalf of **PricewaterhouseCoopers LLP**

Chartered Accountants and Statutory Auditors

London

18 February 2020

Appendix: Key audit matters discussed with the Audit Committee ('AC')

The key audit matters are discussed below together with an explanation of how the audit was tailored to address these specific areas.

All key audit matters are applicable to both the group and parent company, with the exception of goodwill which is only applicable to the group and investments in subsidiaries which is only applicable to the parent company.

Expected credit loss ('ECL') provision for loans and advances

Nature of key audit matter	Matters discussed with the Audit Committee
<p>The ECL provision for loans and advances has a significant number of data inputs for both the wholesale and retail portfolios. The most significant portfolios are the wholesale portfolios in the UK and France.</p> <p>In addition to the data inputs a number of key judgements are used to estimate the ECL provision, in particular the severity and likelihood of alternative downside economic scenarios that form part of the forward economic guidance, the determination of customer credit ratings and probabilities of default and the estimation of specific impairments for wholesale exposures.</p> <p>Whilst the credit environment has remained largely benign as a result of low interest rates and low unemployment, broader economic risks such as the impact of the UK's withdrawal from the EU remain which increase the estimation uncertainty in the ECL.</p>	<p>We discussed with the Audit Committee changes to risk factors and other inputs within the models, geopolitical risks, such as the terms of the UK's withdrawal from the EU; the migration of customer risk ratings; and impairments of significant wholesale exposures.</p> <p>We discussed the more judgemental decisions made by management, in particular the severity and likelihood of alternative downside economic scenarios that form part of the forward economic guidance including their impact on ECL and consideration of required post model adjustments, including the impact of model and data limitations.</p> <p>We also discussed how the control environment over the calculation of ECL evolved following initial adoption, reporting on areas of improvement and the results of our testing.</p> <p>No material misstatements have been identified from our work.</p>
Procedures performed to support our discussions and conclusions	
<ul style="list-style-type: none"> We performed risk based substantive testing of models, and utilised our credit modelling specialists to independently rebuild the modelling for certain assumptions. Independently reviewed 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. Controls over the inputs of critical data into source system and the flow and transformation of data between source systems to the impairment calculation engine were tested. Substantive testing was performed over the critical data used in the year end ECL calculation. Tested the review and challenge of multiple economic scenarios by an expert panel and internal governance committee, and assessed the reasonableness and likelihood of these scenarios using our economic experts. Relevant economic, political and other events were considered in assessing the reasonableness of alternative downside scenarios. 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. Observed management's review and challenge forums to assess the ECL output and approval of post model adjustments. 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. 	
Relevant references in the Annual Report and Accounts 2019	
<p>Credit risk, page 28. AC Report, page 79.</p>	

Information Technology ('IT') Access Management

Nature of key audit matter	Matters discussed with the Audit Committee
<p>Our audit approach relies extensively on automated controls and therefore on the effectiveness of controls over IT systems.</p> <p>In previous years, we identified and reported that controls over access to applications, operating systems and data in the financial reporting process required improvements. 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 progress being made in reducing the risk over access management in the financial reporting process. Controls continue to require some improvement going forward.</p>	<p>The significance of IT controls to our audit and the status of the remediation was discussed at Audit Committee meetings during the year.</p> <p>No material misstatements have been identified from our work.</p>
Procedures performed to support our discussions and conclusions	
<p>Access rights were tested over applications, operating systems and databases relied upon for financial reporting. Specifically, the audit tested that:</p> <ul style="list-style-type: none"> new access requests for joiners were properly reviewed and authorised. user access rights were removed on a timely basis when an individual left or moved role. access rights to applications, operating systems and databases were periodically monitored for appropriateness. highly privileged access was restricted to appropriate personnel. <p>Other areas that were independently assessed included password policies, security configurations, controls over changes to code, data and configuration; and that the ability to make such change via privileged operating system or databases access in the production environment was appropriately restricted. A number of control deficiencies were identified and, hence, we undertook a range of other procedures:</p> <ul style="list-style-type: none"> where access outside of policy was identified, we understood the nature of the access, and, where required, obtained additional evidence on whether that access had been exploited. testing of remediated controls to manage the monitoring of business access, including access that would allow a user to potentially override segregations of duties; and substantive testing of whether users inappropriately hold access to key functionality underpinning financial reporting processes, specific year-end reconciliations (i.e. custodian, bank account and suspense account reconciliations) and confirmations with external counterparties. 	
Relevant references in the Annual Report and Accounts 2019	
<p>AC Report, page 79. Internal control, page 80.</p>	

Independent Auditors' Report to the Member of HSBC Bank plc

Valuation of financial instruments

Nature of key audit matter	Matters discussed with the Audit Committee
<p>The financial instruments held by the group range from those that are traded daily on active markets with quoted prices, to more complex and bespoke positions. The valuation of these complex financial instruments can require the use of prices or inputs which are not readily observable in the market. Financial instruments classified as Level 3 (L3), per the IFRS 13 fair value hierarchy, are valued using some unobservable inputs. There is a risk that certain L3 portfolios are not valued appropriately due to the complexity of the trades and/or unobservability of some inputs.</p> <p>Valuation of the following L3 portfolios was therefore classified as a significant risk for the audit: asset-backed securities and structured interest rate derivatives (assets and liabilities).</p>	<p>We discussed with the Audit Committee our risk assessment with respect to valuation and the results of our controls testing. This included observations over how the controls over valuation, including valuation models, could be improved.</p> <p>We also discussed the results of our substantive testing which included independent revaluation of a range of financial instruments, including a sample of Level 3 positions.</p> <p>No material misstatements have been identified from our work.</p>

Procedures performed to support our discussions and conclusions

- We evaluated the design and tested the operating effectiveness of the key controls supporting the identification, measurement and oversight of the valuation of financial instruments, including the independent price verification process.
- Methodology and underlying assumptions of key valuation adjustments, including the Credit Valuation Adjustment, the Debit Valuation Adjustment and the Funding Fair Value Adjustment for Derivative financial instruments and Own Credit Spread adjustments for issued debt instruments held at fair value were assessed and compared with our knowledge of current industry practice. Controls over the calculation of these adjustments were also tested.
- We utilised our valuation specialists to perform independent valuations to determine if management's valuations fell within a reasonable range. The revaluation covered a range of product classes and was performed across Level 1, 2 and 3 of the group's IFRS 13 fair value hierarchy. This testing specifically included a sample of Level 3 positions as at the balance sheet date.
- As a response to the control findings noted, we increased the sample of independent revaluations performed.

Relevant references in the Annual Report and Accounts 2019

AC Report, page 79.
 Note 11: Fair values of financial instruments carried at fair value, page 127.

Tax judgements

Nature of key audit matter	Matters discussed with the Audit Committee
<p>Current and deferred tax balances are sensitive to a number of judgements. Recognition of deferred tax assets relies on an assessment of the availability of future profits, including those expected to arise across the wider UK tax group of HSBC Holdings plc entities.</p> <p>In addition, a number of judgements are required to assess uncertain tax positions both in relation to corporate income tax as well as transactional and operational tax matters. This includes judgements regarding the recognition and measurement of provisions under IAS 12 'Income Taxes' and IAS 37 'Provisions, contingent liabilities and contingent assets' and consideration of where contingent liability disclosure may be required.</p>	<p>We discussed with the Audit Committee our risk assessment with respect to tax. We also discussed the results of our challenge of the key judgements being made, with regard to both deferred tax and uncertain tax positions.</p> <p>No material misstatements have been identified from our work.</p>

Procedures performed to support our discussions and conclusions

- We tested the design and operational effectiveness of controls over deferred tax asset recognition and uncertain tax positions.
- With the support of tax specialists we assessed the viability of management's strategy to realise deferred tax assets.
- We reviewed correspondence with HMRC to test completeness of uncertain tax positions.
- We challenged management on their methodology and underlying assumptions in arriving at their judgements on tax matters, including in relation to transfer pricing and cost allocations, current tax assets in relation to past dividends received from EU resident subsidiaries and assessments relating to the VAT status of UK branches of overseas affiliates of HSBC Bank plc. In assessing these judgements, our tax specialists evaluated the work of management's experts, including legal opinions received and utilised their knowledge of current tax law and practice.

Relevant references in the Annual Report and Accounts 2019

AC Report, page 79.
 Note 7: Tax, page 122.
 Note 30: Contingent liabilities, contractual commitments and guarantees, page 155.

Goodwill

Nature of key audit matter

The macroeconomic and geopolitical environment in which the group operates has become more challenging, impacting both 2019 earnings and the outlook into 2020. Furthermore, a business update has been announced by HSBC Holdings plc that will impact the future profitability of certain businesses across the group. These matters are considered a potential indicator of impairment of the goodwill held by the group in respect of previously acquired businesses.

An impairment test was performed by the group using a value in use ('VIU') model that estimates the value of each cash generating unit ('CGU'). The VIU was less than the carrying value which resulted in a full impairment of goodwill being recognised of £1.2bn.

The determination of the VIUs is based on the requirements of the accounting standard IAS 36 'Impairment of assets' and assumptions about future cash flows which are estimated using the group's Annual Operating Plan ('AOP'), long term growth rates and discount rates. These assumptions, which are judgemental, are derived from a combination of management estimates, market data and other information provided by external parties.

Matters discussed with the Audit Committee

We discussed the appropriateness of the VIU methodology and assumptions with the Audit Committee, particularly those for which variations had the most significant impact on the VIU estimate. We focused on the assumptions related to the revenue growth rates and cost reduction targets in the AOP, the long term growth rates and discount rates. Our discussions and focus on assumptions was driven by consideration of the achievability of management's AOP and the prospects for different types of banking business in the future.

No material misstatements have been identified from our work.

Procedures performed to support our discussions and conclusions

- We assessed the appropriateness of the methodology, including the estimation of VIUs and the CGUs to which they relate.
- Reasonable ranges for the discount rates used within the model were independently calculated with the assistance of our valuation experts, and compared to the rates used by management.
- Inputs used in the determination of assumptions within the model including the terminal growth rates and the AOP were challenged. Where available, external information was obtained and used to audit management's assumptions. This included market data.
- We assessed whether the cash flows included in the model were in accordance with the relevant accounting standard.
- We performed sensitivity analysis on key assumptions used, both individually and in aggregate.
- The mathematical accuracy of the model was tested.
- We evaluated whether the disclosures within the financial statements appropriately address the significant judgement used to determine the impairment of goodwill.

Relevant references in the Annual Report and Accounts 2019

AC Report, page 79.

Note 20: Goodwill and intangible assets, page 146.

Investments in subsidiaries

Nature of key audit matter

An annual impairment indicators assessment is performed for each of the parent company's investments in subsidiaries. An impairment is recognised when the carrying amount exceeds the recoverable amount.

The net asset value of HSBC France was below the carrying amount as at 31 December 2019, which was considered an indicator for impairment.

An impairment test was performed using a value in use ('VIU') model based on discounted estimated cash flows for the investment. The VIU was less than the carrying value which resulted in an impairment of £3.2bn being recognised in the parent company with £4.3bn of the investment remaining on the balance sheet as at 31 December 2019.

The determination of the VIU is based on the requirements of the accounting standard IAS 36 'Impairment of assets' and assumptions about future cash flows which are estimated using HSBC France's Annual Operating Plan ('AOP'), long term growth rates and discount rates. These assumptions, which are judgemental, are derived from a combination of management estimates, market data and other information provided by external parties.

Matters discussed with the Audit Committee

We discussed the appropriateness of the VIU assumptions with the Audit Committee, particularly those for which variations had the most significant impact on the VIU estimate. We focused on the assumptions related to the revenue growth rates, the long term growth rates and discount rates. Our discussions and focus on assumptions was driven by consideration of the achievability of management's AOP and the prospects for the banking business in the future.

No material misstatements have been identified from our work.

Procedures performed to support our discussions and conclusions

- We assessed the appropriateness of the methodology used to calculate the VIU.
- A reasonable range for the discount rates used within the model was independently calculated with the assistance of our valuation experts, and compared to the rate used by management.
- Inputs used in the determination of assumptions within the model including the terminal growth rate and AOP were challenged. Where available, external information was obtained and used to audit management's assumptions. This included market data.
- We assessed whether the cash flows included in the model were in accordance with the relevant accounting standard.
- We performed sensitivity analysis on key assumptions used, both individually and in aggregate.
- The mathematical accuracy of the model was tested.
- We evaluated whether the disclosures within the financial statements appropriately address the significant judgement used to determine the impairment of the investment, specifically giving consideration to the sensitivity disclosures and the reasonable possible changes in key assumptions.

Relevant references in the Annual Report and Accounts 2019

AC Report, page 79.

Note 18: Investments in subsidiaries, page 143.

Financial statements

	Page
Consolidated income statement	95
Consolidated statement of comprehensive income	96
Consolidated balance sheet	97
Consolidated statement of cash flows	98
Consolidated statement of changes in equity	99
HSBC Bank plc balance sheet	101
HSBC Bank plc statement of cash flows	102
HSBC Bank plc statement of changes in equity	103

Notes on the financial statements

1	Basis of preparation and significant accounting policies	105
2	Net fee income	115
3	Net income/(expense) from financial instruments measured at fair value through profit or loss	116
4	Insurance business	116
5	Employee compensation and benefits	117
6	Auditors' remuneration	122
7	Tax	122
8	Dividends	124
9	Segmental analysis	125
10	Trading assets	126
11	Fair values of financial instruments carried at fair value	127
12	Fair values of financial instruments not carried at fair value	134
13	Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	136
14	Derivatives	136
15	Financial investments	141
16	Assets pledged, collateral received and assets transferred	141
17	Interests in associates	142
18	Investments in subsidiaries	143
19	Structured entities	144
20	Goodwill and intangible assets	146
21	Prepayments, accrued income and other assets	147
22	Trading liabilities	148
23	Financial liabilities designated at fair value	148
24	Accruals, deferred income and other liabilities	148
25	Provisions	149
26	Subordinated liabilities	150
27	Maturity analysis of assets, liabilities and off-balance sheet commitments	151
28	Offsetting of financial assets and financial liabilities	153
29	Called up share capital and other equity instruments	154
30	Contingent liabilities, contractual commitments and guarantees	155
31	Finance lease receivables	156
32	Legal proceedings and regulatory matters	157
33	Related party transactions	160
34	Events after the balance sheet date	162
35	HSBC Bank plc's subsidiaries, joint ventures and associates	162

Consolidated income statement for the year ended 31 December

	Notes	2019 £m	2018 £m
Net interest income		1,483	3,660
– interest income ^{1,2}		5,504	7,422
– interest expense ³		(4,021)	(3,762)
Net fee income	2	1,344	2,044
– fee income		2,590	3,402
– fee expense		(1,246)	(1,358)
Net income from financial instruments held for trading or managed on a fair value basis	3	2,055	2,733
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	3	1,288	(604)
Changes in fair value of designated debt and related derivatives	3	(8)	5
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	3	547	511
Gains less losses from financial investments		38	12
Net insurance premium income	4	2,147	2,005
Other operating income		516	580
Total operating income		9,410	10,946
Net insurance claims and benefits paid and movement in liabilities to policyholders	4	(3,366)	(1,478)
Net operating income before change in expected credit losses and other credit impairment charges⁷		6,044	9,468
Change in expected credit losses and other credit impairment charges		(124)	(159)
Net operating income		5,920	9,309
Total operating expenses		(6,782)	(7,351)
– employee compensation and benefits	5	(2,225)	(2,529)
– general and administrative expenses		(3,034)	(4,501)
– depreciation and impairment of property, plant and equipment ⁴		(210)	(150)
– amortisation and impairment of intangible assets	20	(161)	(171)
– goodwill impairment	20	(1,152)	–
Operating (loss)/profit		(862)	1,958
Share of (loss)/profit in associates and joint ventures	17	(10)	16
(Loss)/profit before tax		(872)	1,974
Tax expense ⁵	7	(119)	(442)
(Loss)/profit for the year		(991)	1,532
(Loss)/profit attributable to shareholders of the parent company		(1,013)	1,506
Profit attributable to non-controlling interests		22	26
Profit from discontinued operations attributable to shareholders of the company⁶		–	820

- Interest income includes £4,027m (2018: £6,178m) of interest recognised on financial assets measured at amortised cost; £934m (2018: £902m) of interest recognised on financial assets measured at fair value through other comprehensive income and £41m (2018: £54m) interest recognised on impaired financial assets.
- Interest revenue calculated using the effective interest method comprises interest recognised on financial assets measured at either amortised cost or fair value through other comprehensive income.
- Interest expense includes £2,917m (2018: £3,074m) of interest on financial instruments, excluding interest on trading liabilities designated or otherwise mandatorily measured at fair value.
- Includes depreciation of the right-of-use assets of £133m (2018: £0m). Right-of-use assets have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.
- From 2019, due to an amendment to IAS12 'Income Taxes', the tax relief on payments in relation to Additional Tier 1 instruments has been recognised in the tax charge shown in the income statement, whereas previously it was recorded direct in equity. The 2019 tax credit was £40m (2018: £48m) with no effect on equity. Comparatives have not been restated.
- Profit from discontinued operations relates to profit attributable to shareholders of the group from the separation of HSBC UK Bank plc from the group. HSBC completed the ring-fencing of its UK retail banking activities on 1 July 2018, transferring qualifying RBWM, CMB and GPB customers of the group to HSBC UK Bank plc, HSBC ring-fenced bank.
- Net operating income before change in expected credit losses and other credit impairment charges is also referred to as 'revenue'.

Consolidated statement of comprehensive income
for the year ended 31 December

	2019	2018
	£m	£m
(Loss)/profit for the year	(991)	1,532
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	121	83
– fair value gains	238	178
– fair value gains transferred to the income statement on disposal	(39)	(2)
– expected credit losses recognised in the income statement	(27)	(73)
– income taxes	(51)	(20)
Cash flow hedges	65	(16)
– fair value gains/(losses)	214	(159)
– fair value losses/(gains) reclassified to the income statement	(127)	157
– income taxes	(22)	(14)
Exchange differences	(707)	100
Items that will not be reclassified subsequently to profit or loss:		
Remeasurement of defined benefit asset/liability	12	171
– before income taxes	(14)	255
– income taxes	26	(84)
Equity instruments designated at fair value through other comprehensive income	2	36
– fair value gains	2	1
– income taxes	–	35
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	(251)	504
– Fair value gains/(losses)	(386)	707
– income taxes	135	(203)
Other comprehensive (expense)/income for the year, net of tax	(758)	878
Total comprehensive (expense)/income for the year	(1,749)	2,410
Attributable to:		
– shareholders of the parent company	(1,745)	2,387
– non-controlling interests	(4)	23
Total comprehensive (expense)/income for the year	(1,749)	2,410

Consolidated balance sheet

at 31 December

	Notes	2019 £m	2018 £m
Assets			
Cash and balances at central banks		51,816	52,013
Items in the course of collection from other banks		707	839
Trading assets	10	98,249	95,420
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	13	17,012	17,799
Derivatives	14	164,538	144,522
Loans and advances to banks		11,467	13,628
Loans and advances to customers		108,391	111,964
Reverse repurchase agreements – non-trading		85,756	80,102
Financial investments	15	46,464	47,272
Prepayments, accrued income and other assets	21	48,939	37,497
Current tax assets		725	337
Interests in associates and joint ventures	17	437	399
Goodwill and intangible assets	20	1,582	2,626
Deferred tax assets	7	408	540
Total assets		636,491	604,958
Liabilities and equity			
Liabilities			
Deposits by banks		23,991	24,532
Customer accounts		177,236	180,836
Repurchase agreements – non-trading		49,385	46,583
Items in the course of transmission to other banks		403	351
Trading liabilities	22	48,026	49,514
Financial liabilities designated at fair value	23	41,642	36,922
Derivatives	14	161,083	139,932
Debt securities in issue		25,039	22,721
Accruals, deferred income and other liabilities	24	50,315	41,036
Current tax liabilities		106	128
Liabilities under insurance contracts	4	21,509	20,657
Provisions	25	540	538
Deferred tax liabilities	7	22	29
Subordinated liabilities	26	13,182	13,770
Total liabilities		612,479	577,549
Equity			
Total shareholders' equity		23,503	26,878
– called up share capital	29	797	797
– other equity instruments	29	3,722	2,403
– other reserves		(5,465)	(4,971)
– retained earnings		24,449	28,649
Non-controlling interests		509	531
Total equity		24,012	27,409
Total liabilities and equity		636,491	604,958

The accompanying notes on pages 105 to 165, and the audited sections of the 'Report of the Directors' on pages 20 to 85 form an integral part of these financial statements.

The financial statements on pages 95 to 104 were approved by the Board of Directors on 18 February 2020 and signed on its behalf by:

J Fleurant

Director

Consolidated statement of cash flows
for the year ended 31 December

	2019 £m	2018 £m
(Loss)/profit before tax	(872)	1,974
Adjustments for non-cash items		
Depreciation, amortisation and impairment ¹	1,523	321
Net gain from investing activities	(59)	(14)
Share of losses/(profits) in associates and joint ventures	10	(16)
Change in expected credit losses gross of recoveries and other credit impairment charges	130	220
Provisions including pensions	231	(41)
Share-based payment expense	88	99
Other non-cash items included in profit before tax	(19)	40
Elimination of exchange differences ²	4,001	(2,081)
Changes in operating assets and liabilities	(1,840)	11,599
– change in net trading securities and derivatives	(1,310)	7,059
– change in loans and advances to banks and customers	3,441	(7,220)
– change in reverse repurchase agreements – non-trading	(7,293)	(21,066)
– change in financial assets designated and otherwise mandatorily measured at fair value	787	(2,246)
– change in other assets	(12,074)	10,517
– change in deposits by banks and customer accounts	(4,141)	(347)
– change in repurchase agreements – non-trading	2,803	8,807
– change in debt securities in issue	2,318	9,435
– change in financial liabilities designated at fair value	4,390	1,982
– change in other liabilities	9,539	5,171
– contributions paid to defined benefit plans	(13)	(20)
– tax paid	(287)	(473)
Net cash from operating activities	3,193	12,101
– purchase of financial investments	(26,200)	(29,235)
– proceeds from the sale and maturity of financial investments	24,304	26,937
– net cash flows from the purchase and sale of property, plant and equipment	(58)	(111)
– net investment in intangible assets	(385)	(433)
– net cash outflow from investment in associates and acquisition of businesses and subsidiaries	(49)	(227)
– net cash flow on disposal of subsidiaries, business, associates and joint ventures ³	–	(29,371)
Net cash from investing activities	(2,388)	(32,440)
– issue of ordinary share capital and other equity instruments	1,319	818
– subordinated loan capital issued ⁴	6,736	12,274
– subordinated loan capital repaid ⁴	(7,100)	(12,765)
– dividends to the parent company	(2,985)	(13,044)
– funds received from the parent company	–	3,512
– dividends paid to non-controlling interests	(17)	(28)
Net cash from financing activities	(2,047)	(9,233)
Net (decrease)/increase in cash and cash equivalents	(1,242)	(29,572)
Cash and cash equivalents at 1 Jan	97,058	125,475
Exchange difference in respect of cash and cash equivalents	(3,478)	1,155
Cash and cash equivalents at 31 Dec^{5,6}	92,338	97,058
Cash and cash equivalents comprise of		
– cash and balances at central banks	51,816	52,013
– items in the course of collection from other banks	707	839
– loans and advances to banks of one month or less	6,889	9,107
– reverse repurchase agreement with banks of one month or less	23,116	24,755
– treasury bills, other bills and certificates of deposit less than three months	728	409
– cash collateral and net settlement accounts	9,485	10,286
– less: items in the course of transmission to other banks	(403)	(351)
Cash and cash equivalents at 31 Dec^{5,6}	92,338	97,058

1 The impact of the right-of-use assets recognised under IFRS 16 at the beginning of 2019 is not recognised in 2018. This also includes the impact of a £1.2bn goodwill impairment in 2019.

2 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.

3 In 2018, no cash or cash equivalent was received as part of the Part VII transfer of asset and liabilities. The aggregate amount of cash and cash equivalent in the subsidiaries and other businesses over which control transferred was £29,410m.

4 Subordinated liabilities changes during the year are attributable to cash flows from issuance (£6,736m (2018: £12,274m)) and repayment (£(7,100)m (2018: £(12,765)m)) of securities as presented in the Consolidated statement of cash flows. Non-cash changes during the year included foreign exchanges gains/(losses) (£(281)m (2018: £112m)) and fair value gains/(losses) (£82m (2018: £(132)m)).

5 At 31 December 2019, £10,533m (2018: £10,478m) was not available for use by the group, of which £1,427m (2018: £1,410m) related to mandatory deposits at central banks.

6 In 2019, HSBC included settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented and also include the net impact of other cash equivalents not previously included in cash and cash equivalents. The net effect of these changes increased cash and cash equivalents by £8.1 bn in 2018.

Interest received was £7,569m (2018: £8,034m), interest paid was £5,804m (2018: £3,177m) and dividends received were £1,237m (2018: £938m).

Consolidated statement of changes in equity
for the year ended 31 December

	Other reserves									
	Called up share capital and share premium	Other equity instruments	Retained earnings	Financial assets at FVOCI reserve	Cash flow hedging reserve	Foreign exchange reserve	Group reorganisation reserve (GRR)	Total shareholders' equity	Non-controlling interests	Total equity
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 Jan 2019	797	2,403	28,649	969	(25)	1,777	(7,692)	26,878	531	27,409
Loss for the period	–	–	(1,013)	–	–	–	–	(1,013)	22	(991)
Other comprehensive income/ (expense) (net of tax)	–	–	(238)	120	65	(679)	–	(732)	(26)	(758)
– debt instruments at fair value through other comprehensive income	–	–	–	118	–	–	–	118	3	121
– equity instruments designated at fair value through other comprehensive income	–	–	–	2	–	–	–	2	–	2
– cash flow hedges	–	–	–	–	65	–	–	65	–	65
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk ¹	–	–	(251)	–	–	–	–	(251)	–	(251)
– remeasurement of defined benefit asset/liability	–	–	13	–	–	–	–	13	(1)	12
– exchange differences	–	–	–	–	–	(679)	–	(679)	(28)	(707)
Total comprehensive income/ (expense) for the year	–	–	(1,251)	120	65	(679)	–	(1,745)	(4)	(1,749)
Capital securities issued during the period ²	–	1,319	–	–	–	–	–	1,319	–	1,319
Dividends to the parent company ³	–	–	(2,985)	–	–	–	–	(2,985)	(17)	(3,002)
Transfer	–	–	–	–	–	–	–	–	–	–
Net impact of equity-settled share-based payments	–	–	16	–	–	–	–	16	–	16
Capital contribution	–	–	–	–	–	–	–	–	–	–
Change in business combinations and other movements	–	–	20	–	–	–	–	20	(1)	19
Tax on items taken directly to equity	–	–	–	–	–	–	–	–	–	–
At 31 Dec 2019	797	3,722	24,449	1,089	40	1,098	(7,692)	23,503	509	24,012

¹ At 31 December 2019, the cumulative amount of change in fair value attributable to changes in own credit risk of financial liabilities designated at fair value was a loss of £346m. The cumulative change on 31 December 2018 was a gain of £201m.

² HSBC Bank plc issued three additional tier 1 capital instruments to HSBC UK Holdings Ltd of £175m in January 2019, £713m in November 2019 and £431m in December 2019.

³ The dividends to the parent company includes a £2,787m dividend paid, £51m on preference shares and £147m paid as coupons on additional tier 1 instruments.

Consolidated statement of changes in equity (continued)
for the year ended 31 December

	Called up share capital and share premium	Other equity instruments	Retained earnings	Financial assets at FVOCI reserve	Other reserves			Total shareholders' equity	Non-controlling interests	Total equity
					Cash flow hedging reserve	Foreign exchange reserve	Group reorganisation reserve (GRR)			
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 31 Dec 2017	797	3,781	36,140	1,099	(38)	1,683	—	43,462	587	44,049
Impact on transition to IFRS 9	—	—	(283)	(249)	—	—	—	(532)	—	(532)
At 1 Jan 2018	797	3,781	35,857	850	(38)	1,683	—	42,930	587	43,517
Profit for the period	—	—	1,506	—	—	—	—	1,506	26	1,532
Other comprehensive income (net of tax)	—	—	677	126	(16)	94	—	881	(3)	878
– debt instruments at fair value through other comprehensive income	—	—	—	90	—	—	—	90	(7)	83
– equity instruments designated at fair value through other comprehensive income	—	—	—	36	—	—	—	36	—	36
– cash flow hedges	—	—	—	—	(16)	—	—	(16)	—	(16)
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk ¹	—	—	504	—	—	—	—	504	—	504
– remeasurement of defined benefit asset/liability ²	—	—	173	—	—	—	—	173	(2)	171
– exchange differences	—	—	—	—	—	94	—	94	6	100
Total comprehensive income for the year	—	—	2,183	126	(16)	94	—	2,387	23	2,410
Capital securities issued during the period ³	—	818	—	—	—	—	—	818	—	818
Dividends to the parent company ⁴	—	—	(13,044)	—	—	—	—	(13,044)	(28)	(13,072)
Transfer ⁵	—	(2,196)	—	—	—	—	—	(2,196)	—	(2,196)
Net impact of equity-settled share-based payments	—	—	17	—	—	—	—	17	—	17
Capital contribution ⁶	—	—	3,377	—	—	—	—	3,377	—	3,377
Change in business combinations and other movements ⁷	—	—	218	(3)	—	—	—	215	(51)	164
Tax on items taken directly to equity	—	—	41	—	—	—	—	41	—	41
Group reorganisation reserve ('GRR') ⁸	—	—	—	(4)	29	—	(7,692)	(7,667)	—	(7,667)
At 31 Dec 2018	797	2,403	28,649	969	(25)	1,777	(7,692)	26,878	531	27,409

- 1 At 1 January 2018, the cumulative changes in fair value attributable to changes in own credit risk of financial liabilities designated at fair value was a loss of £312m.
- 2 An actuarial gain has arisen as a result of the remeasurement of the defined benefit pension obligation of the HSBC Bank (UK) Pension Scheme.
- 3 HSBC Bank plc issued additional tier 1 capital instruments of £818m to HSBC Holdings plc in March 2018. See Note 29 for further details.
- 4 The dividends to the parent company includes a £12,000m dividend distributed to HSBC Holdings plc in July 2018 to capitalise HSBC UK Bank plc. See Note 8 for further details of the remaining £1,044m dividend paid to the parent company.
- 5 HSBC Bank plc transferred two additional tier 1 capital instruments of £2,196m to HSBC UK Bank plc in July 2018.
- 6 HSBC Holdings plc injected £1,900m of CET1 capital into HSBC Bank plc during March 2018. There was no new issuance of share capital. In December 2018 HSBC UK Holdings Ltd injected £1,477m of CET1 capital into HSBC Bank plc. There was no new issuance of share capital.
- 7 HSBC Holdings plc provided £135m to HSBC Bank plc for the acquisition of HSBC Investment Bank Holdings Limited and its subsidiaries from HSBC Holdings plc in January 2018. The difference between the cost of investment and the net assets on acquisition was recognised as a further capital contribution of £102m.
- 8 The Group reorganisation reserve ('GRR') of £7,692m is an accounting reserve, which relates primarily to the recognition of goodwill (£3,285m) and the pension asset net of deferred tax (£4,776m), resulting from the ring-fencing implementation. The GRR does not form part of regulatory capital.

HSBC Bank plc balance sheet

at 31 December

	<i>Notes</i>	2019	2018
		£m	£m
Assets			
Cash and balances at central banks		30,149	40,657
Items in the course of collection from other banks		44	442
Trading assets	<i>10</i>	83,285	77,765
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		3,129	5,745
Derivatives	<i>14</i>	152,496	139,229
Loans and advances to banks		9,522	12,686
Loans and advances to customers		49,926	58,783
Reverse repurchase agreements – non-trading		50,736	56,495
Financial investments	<i>15</i>	26,561	26,699
Prepayments, accrued income and other assets	<i>21</i>	37,322	30,488
Current tax assets		683	278
Investments in subsidiary undertakings	<i>18</i>	6,025	7,215
Goodwill and intangible assets	<i>20</i>	535	500
Deferred tax assets	<i>7</i>	327	447
Total assets		450,740	457,429
Liabilities and equity			
Liabilities			
Deposits by banks		16,356	18,148
Customer accounts		109,040	125,871
Repurchase agreements – non-trading		36,327	35,693
Items in the course of transmission to other banks		44	83
Trading liabilities	<i>22</i>	27,014	27,301
Financial liabilities designated at fair value	<i>23</i>	24,663	22,931
Derivatives	<i>14</i>	149,607	135,307
Debt securities in issue		15,038	19,085
Accruals, deferred income and other liabilities	<i>24</i>	40,165	35,150
Current tax liabilities		19	40
Provisions	<i>25</i>	308	400
Deferred tax liabilities	<i>7</i>	2	2
Subordinated liabilities	<i>26</i>	12,783	13,323
Total liabilities		431,366	433,334
Equity			
Called up share capital	<i>29</i>	797	797
Other equity instruments	<i>29</i>	3,722	2,403
Other reserves		(5,021)	(5,138)
Retained earnings		19,876	26,033
Total equity		19,374	24,095
Total liabilities and equity		450,740	457,429

Loss after tax for the year was £(3,064)m (2018: profit after tax £1,411m) which includes the impairment of the bank's investment in HSBC France (Refer Note 18).

In Q1 2019, the activities of HSBC Bank plc's branches in Belgium, the Netherlands, Spain, Italy, Ireland, Luxembourg and Czech Republic were transferred to HSBC France.

The accompanying notes on pages 105 to 165, and the audited sections of the 'Report of the Directors' on pages 20 to 85 form an integral part of these financial statements.

The financial statements on pages 95 to 104 were approved by the Board of Directors on 18 February 2020 and signed on its behalf by:

J Fleurant

Director

HSBC Bank plc statement of cash flows
for the year ended 31 December

	2019 £m	2018 £m
(Loss)/profit before tax	(3,070)	1,699
Adjustments for non-cash items		
Depreciation, amortisation and impairment of PP&E, RoU and intangibles ¹	265	238
Net loss/(gain) from investing activities ²	3,110	(24)
Change in expected credit losses gross of recoveries and other credit impairment charges	1	294
Provisions including pensions	96	(113)
Share-based payment expense	64	74
Other non-cash items included in profit before tax	46	25
Elimination of exchange differences ³	1,584	(1,577)
Changes in operating assets and liabilities	(19,282)	12,938
– change in net trading securities and derivatives	(4,801)	8,577
– change in loans and advances to banks and customers	(1,801)	(3,176)
– change in reverse repurchase agreements – non-trading	(1,004)	(14,306)
– change in financial assets designated and otherwise mandatorily measured at fair value	2,616	(2,032)
– change in other assets ⁴	(9,073)	7,126
– change in deposits by banks and customer accounts	(7,365)	(220)
– change in repurchase agreements – non-trading	634	472
– change in debt securities in issue	(4,047)	12,977
– change in financial liabilities designated at fair value	1,544	(2,183)
– change in other liabilities	4,210	6,095
– contributions paid to defined benefit plans	(13)	(20)
– tax paid	(182)	(372)
Net cash from operating activities	(17,186)	13,554
– purchase of financial investments	(18,878)	(23,545)
– proceeds from the sale and maturity of financial investments	18,781	17,303
– net cash flows from the purchase and sale of property, plant and equipment	(24)	(75)
– net investment in intangible assets	(190)	(295)
– net cash flow on disposal of subsidiaries, business, associates and joint ventures	(17)	(29,246)
Net cash from investing activities	(328)	(35,858)
– issue of ordinary share capital and other equity instruments	1,319	818
– subordinated loan capital issued ⁵	6,740	12,274
– subordinated loan capital repaid ⁵	(7,076)	(12,726)
– funds received from the parent company	–	3,512
– dividends to the parent company	(2,985)	(13,044)
Net cash from financing activities	(2,002)	(9,166)
Net (decrease)/increase in cash and cash equivalents	(19,516)	(31,470)
Cash and cash equivalents at 1 Jan	72,296	102,950
Exchange difference in respect of cash and cash equivalents	(1,545)	816
Cash and cash equivalents at 31 Dec⁶	51,235	72,296
Cash and cash equivalents comprise of:		
– cash and balances at central banks	30,149	40,657
– items in the course of collection from other banks	44	442
– loans and advances to banks of one month or less	4,549	8,023
– reverse repurchase agreement with banks of one month or less	9,267	15,520
– treasury bills, other bills and certificates of deposit less than three months	346	223
– cash collateral and net settlement accounts	6,924	7,514
– less: items in the course of transmission to other banks	(44)	(83)
Cash and cash equivalents at 31 Dec⁶	51,235	72,296

1 2018 does not include the impact of the right-of-use assets recognised under IFRS 16 beginning in 2019.

2 Includes the impairment of investment in HSBC France subsidiary (refer Note 18).

3 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.

4 Includes additional investment in subsidiaries £1,949m (2018: £436m).

5 Subordinated liabilities changes during the year are attributable to cash flows from issuance (£6,740m (2018: £12,274m)) and repayment (£(7,076)m (2018: £(12,726)m)) of securities as presented in the bank's statement of cash flows. Non-cash changes during the year included foreign exchanges gain(losses) (£(259)m (2018: £108m)) and fair value gains/(losses) (£82m (2018: £(150)m)).

6 In 2019, HSBC included settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented and also include the net impact of other cash equivalents not previously included in cash and cash equivalents. The net effect of these changes increased cash and cash equivalents by £11.8bn in 2018.

Interest received was £5,352m (2018: £6,328m), interest paid was £4,679m (2018: £2,304m) and dividends received was £1,197m (2018: £905m).

HSBC Bank plc statement of changes in equity

for the year ended 31 December

	Other reserves							Total shareholders' equity
	Called up share capital and share premium	Other equity instruments	Retained earnings	Financial assets at FVOCI reserve	Cash flow hedging reserve	Foreign exchange reserve	Group reorganisation reserve ('GRR')	
	£m	£m	£m	£m	£m	£m	£m	
At 1 Jan 2019	797	2,403	26,033	77	(47)	80	(5,248)	24,095
Loss for the year	–	–	(3,064)	–	–	–	–	(3,064)
Other comprehensive income/(expense) (net of tax)	–	–	(122)	105	15	(3)	–	(5)
– debt instruments at fair value through other comprehensive income	–	–	–	105	–	–	–	105
– equity instruments designated at fair value through other comprehensive income	–	–	–	–	–	–	–	–
– cash flow hedges	–	–	–	–	15	–	–	15
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk ¹	–	–	(148)	–	–	–	–	(148)
– remeasurement of defined benefit asset/liability	–	–	26	–	–	–	–	26
– exchange differences	–	–	–	–	–	(3)	–	(3)
Total comprehensive income/(expense) for the period	–	–	(3,186)	105	15	(3)	–	(3,069)
Capital securities issued during the period ²	–	1,319	–	–	–	–	–	1,319
Dividends to the parent company ³	–	–	(2,985)	–	–	–	–	(2,985)
Transfers	–	–	–	–	–	–	–	–
Net impact of equity-settled share-based payments	–	–	–	–	–	–	–	–
Capital contribution	–	–	–	–	–	–	–	–
Change in business combinations and other movements	–	–	14	–	–	–	–	14
Tax on items taken directly to equity	–	–	–	–	–	–	–	–
At 31 Dec 2019	797	3,722	19,876	182	(32)	77	(5,248)	19,374

¹ At 31 December 2019, the cumulative amount of change in fair value attributable to changes in own credit risk of financial liabilities designated at fair value was a loss of £227m. The cumulative change on 31 December 2018 was a gain of £112m.

² HSBC Bank plc issued three additional tier 1 capital instruments to HSBC UK Holdings Ltd of £175m in January 2019, £713m in November 2019 and £431m in December 2019.

³ The dividends to the parent company includes a £2,787m dividend paid, £51m on preference shares and £147m paid as coupons on additional tier 1 instruments.

HSBC Bank plc statement of changes in equity (continued)

for the year ended 31 December

	Called up share capital and share premium	Other equity instruments	Retained earnings	Other reserves				Total shareholders' equity
				Financial assets at FVOCI reserve	Cash flow hedging reserve	Foreign exchange reserve	Group reorganisation reserve ('GRR')	
	£m	£m	£m	£m	£m	£m	£m	£m
At 31 Dec 2017	797	3,781	33,845	190	(18)	105	—	38,700
Impact on transition to IFRS 9	—	—	(227)	(163)	—	—	—	(390)
1 January, 2018	797	3,781	33,618	27	(18)	105	—	38,310
Profit for the year	—	—	1,411	—	—	—	—	1,411
Other comprehensive income (net of tax)	—	—	543	33	(58)	(25)	—	493
– debt instruments at fair value through other comprehensive income	—	—	—	(3)	—	—	—	(3)
– equity instruments designated at fair value through other comprehensive income	—	—	—	36	—	—	—	36
– cash flow hedges	—	—	—	—	(58)	—	—	(58)
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk ¹	—	—	364	—	—	—	—	364
– remeasurement of defined benefit asset/liability ²	—	—	179	—	—	—	—	179
– exchange differences	—	—	—	—	—	(25)	—	(25)
Total comprehensive income for the period	—	—	1,954	33	(58)	(25)	—	1,904
Capital securities issued during the period ³	—	818	0	—	—	—	—	818
Dividends to the parent company ⁴	—	—	(13,044)	—	—	—	—	(13,044)
Transfers ⁵	—	(2,196)	0	—	—	—	—	(2,196)
Net impact of equity-settled share-based payments	—	—	12	—	—	—	—	12
Capital contribution ⁶	—	—	3,377	—	—	—	—	3,377
Change in business combinations and other movements	—	—	75	21	—	—	—	96
Tax on items taken directly to equity	—	—	41	—	—	—	—	41
Group reorganisation reserve ('GRR') ⁷	—	—	—	(4)	29	0	(5,248)	(5,223)
At 31 Dec 2018	797	2,403	26,033	77	(47)	80	(5,248)	24,095

1 At 1 January 2018, the cumulative changes in fair value attributable to changes in own credit risk of financial liabilities designated at fair value was a loss of £204m.

2 An actuarial gain has arisen as a result of the remeasurement of the defined benefit pension obligation of the HSBC Bank (UK) Pension Scheme.

3 HSBC Bank plc issued additional tier 1 capital instruments of £818m to HSBC Holdings plc in March 2018. See Note 29 for further details.

4 The dividends to the parent company includes a £12,000m dividend distributed to HSBC Holdings plc in July 2018 to capitalise HSBC UK Bank plc. See Note 8 for further details of the remaining £1,044m dividend paid to the parent company.

5 HSBC Bank plc transferred two additional tier 1 capital instruments of £2,196m to HSBC UK Bank plc in July 2018.

6 HSBC Holdings plc injected £1,900m of CET1 capital into HSBC Bank plc during March 2018. There was no new issuance of share capital. In December 2018 HSBC UK Holdings Ltd injected £1,477m of CET1 capital into HSBC Bank plc. There was no new issuance of share capital.

7 The Group reorganisation reserve ('GRR') of £5,248m is an accounting reserve, which relates primarily to the recognition of goodwill (£223m) and the pension asset net of deferred tax (£4,776m), resulting from the ring-fencing implementation. The GRR does not form part of regulatory capital.

Notes on the Financial Statements

1 Basis of preparation and significant accounting policies

1.1 Basis of preparation

(a) Compliance with International Financial Reporting Standards

The consolidated financial statements of the group and the separate financial statements of HSBC Bank plc have been prepared in accordance with International Financial Reporting Standards ('IFRSs') as issued by the International Accounting Standards Board ('IASB'), including interpretations issued by the IFRS Interpretations Committee, and as endorsed by the European Union ('EU'). Interest Rate Benchmark Reform: Amendments to IFRS 9 and IAS 39 'Financial Instruments', was endorsed in January 2020 and has been early adopted as set out below. Therefore, there were no unendorsed standards effective for the year ended 31 December 2019 affecting these consolidated and separate financial statements, and the group'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'

On 1 January 2019, we adopted the requirements of IFRS 16 retrospectively. The cumulative effect of initially applying the standard was recognised as an adjustment to the opening balance of retained earnings at that date. Comparatives were not restated. The adoption of the standard increased assets by £0.9bn in the group (£0.6bn in the separate financial statements of HSBC Bank plc), and increased financial liabilities by the same amount with no effect on net assets or retained earnings.

On adoption of IFRS 16, we 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 the 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, we 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 we operate and for each term by adjusting swap rates with funding spreads (own credit spread) and cross-currency basis where appropriate.

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 interest rate benchmark on which the hedged cash flows are based, or on which the cash flows of the hedging instrument are based, to be assumed to be unaltered 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. Further information is included in Note 14.

Amendment to IAS 12 'Income Taxes' and other changes

An amendment to IAS 12 was issued in December 2017 as part of the annual improvements 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.

In addition, HSBC has adopted a number of interpretations and amendments to standards, which have had an insignificant effect on the consolidated group and the separate financial statements of HSBC Bank plc.

(b) Future accounting developments

Minor amendments to IFRSs

The IASB published a number of minor amendments to IFRSs which are effective from 1 January 2020, some of which have been

Notes on the financial statements

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 and the separate financial statements of HSBC Bank plc.

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 currently effective from 1 January 2021. However, the IASB is considering delaying the mandatory implementation date by one year and may make additional changes to the standard. The group is in the process of implementing IFRS 17. Industry practice and interpretation of the standard are still developing and there may be changes to it. Therefore, the likely impact of its implementation remains uncertain.

(c) Foreign currencies

The functional currency of the bank is sterling, which is also the presentational currency of the consolidated financial statements of the group.

Transactions in foreign currencies are recorded at the rate of exchange on the date of the transaction. Assets and liabilities denominated in foreign currencies are translated at the rate of exchange at the balance sheet date except non-monetary assets and liabilities measured at historical cost, which are translated using the rate of exchange at the initial transaction date. Exchange differences are included in other comprehensive income or in the income statement depending on where the gain or loss on the underlying item is recognised.

In the consolidated financial statements, the assets, liabilities and results of foreign operations, whose functional currency is not sterling, are translated into the group's presentation currency at the reporting date. Exchange differences arising are recognised in other comprehensive income. On disposal of a foreign operation, exchange differences previously recognised in other comprehensive income are reclassified to the income statement.

(d) Presentation of information

Certain disclosures required by IFRSs have been included in the audited sections of this *Annual Report and Accounts 2019* as follows:

- disclosures concerning the nature and extent of risks relating to financial instruments and insurance contracts are included in the 'Report of the Directors: Risk' on pages 20 to 74;
- the 'Own funds' disclosure included in the 'Report of the Directors: Capital' on pages 75 to 76; and
- in publishing the parent company financial statements together with the group financial statements, the bank has taken advantage of the exemption in section 408(3) of the Companies Act 2006 not to present its individual income statement and related notes.

(e) 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 1.2 below, it is possible that the outcomes in the next financial year could differ from those on which management's estimates are based. This could result in materially different estimates and judgements from those reached by management for the purposes of these financial statements. Management's selection of the group's accounting policies that 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.

(f) Segmental analysis

HSBC Bank plc's chief operating decision maker is the group Chief Executive, supported by the group Executive Committee, and operating segments are reported in a manner consistent with the internal reporting provided to the group Chief Executive and the group Executive Committee.

Measurement of segmental assets, liabilities, income and expenses is in accordance with the bank'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.

The types of products and services from which each reportable segment derives its revenue are discussed in the 'Strategic Report – Products and services'.

(g) Going concern

The financial statements are prepared on a going concern basis, as the Directors are satisfied that the group and bank have the resources to continue in business for the foreseeable future. In making this assessment, the Directors have considered a wide range of information relating to present and future conditions, including future projections of profitability, cash flows and capital resources.

1.2 Summary of significant accounting policies

(a) Consolidation and related policies

Investments in subsidiaries

Where an entity is governed by voting rights, the group consolidates 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 to direct relevant activities and whether power is held as agent or principal.

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

The bank's investments in subsidiaries are stated at cost less impairment losses.

Critical accounting estimates and judgements

Investments in subsidiaries are tested for impairment when there is an indication that the investment may be impaired, which involves estimations of value in use reflecting management's best estimate of the future cash flows of the investment and the rates used to discount these cash flows, both of which are subject to uncertain factors as follows:

Judgements	Estimates
<ul style="list-style-type: none">The accuracy of forecast cash flows is subject to a high degree of uncertainty in volatile market conditions. Where such circumstances are determined to exist, management re-tests for impairment more frequently than once a year when indicators of impairment exist. This ensures that the assumptions on which the cash flow forecasts are based continue to reflect current market conditions and management's best estimate of future business prospects	<ul style="list-style-type: none">The future cash flows of each investment are sensitive to the cash flows projected for the periods for which detailed forecasts are available and to assumptions regarding the long-term pattern of sustainable cash flows thereafter. Forecasts are compared with actual performance and verifiable economic data, but they reflect management's view of future business prospects at the time of the assessmentThe rates used to discount future expected cash flows can have a significant effect on their valuation, and are based on the costs of capital assigned to the investment. The cost of capital percentage is generally derived from a capital asset pricing model, which incorporates inputs reflecting a number of financial and economic variables, including the risk-free interest rate in the country concerned and a premium for the risk of the business being evaluated. These variables are subject to fluctuations in external market rates and economic conditions beyond management's controlKey assumptions used in estimating impairment in subsidiaries are described in Note 18

Goodwill

Goodwill is allocated to cash-generating units ('CGUs') for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. The group's CGUs are based on global businesses. Impairment testing is performed once a year, or whenever there is an indication of impairment, by comparing the recoverable amount of a CGU with its carrying amount.

Goodwill is included in a disposal group if the disposal group is a CGU to which goodwill has been allocated or it is an operation within such a CGU. The amount of goodwill included in a disposal group is measured on the basis of the relative values of the operation disposed of and the portion of the CGU retained.

Critical accounting estimates and judgements

The review of goodwill for impairment reflects management's best estimate of the future cash flows of the CGUs and the rates used to discount these cash flows, both of which are subject to uncertain factors as follows:

Judgements	Estimates
<ul style="list-style-type: none">The accuracy of forecast cash flows is subject to a high degree of uncertainty in volatile market conditions. Where such circumstances are determined to exist, management re-tests goodwill for impairment more frequently than once a year when indicators of impairment exist. This ensures that the assumptions on which the cash flow forecasts are based continue to reflect current market conditions and management's best estimate of future business prospects	<ul style="list-style-type: none">The future cash flows of the CGUs are sensitive to the cash flows projected for the periods for which detailed forecasts are available and to assumptions regarding the long-term pattern of sustainable cash flows thereafter. Forecasts are compared with actual performance and verifiable economic data, but they reflect management's view of future business prospects at the time of the assessmentThe rates used to discount future expected cash flows can have a significant effect on their valuation, and are based on the costs of capital assigned to individual CGUs. The cost of capital percentage is generally derived from a capital asset pricing model, which incorporates inputs reflecting a number of financial and economic variables, including the risk-free interest rate in the country concerned and a premium for the risk of the business being evaluated. These variables are subject to fluctuations in external market rates and economic conditions beyond management's controlKey assumptions used in estimating goodwill impairment are described in Note 20

Group sponsored structured entities

The group is considered to sponsor another entity if, in addition to ongoing involvement with the entity, it had a key role in establishing that entity or in bringing together relevant counterparties so the transaction that is the purpose of the entity could occur. The group is generally not considered a sponsor if the only involvement with the entity is merely administrative.

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 those 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 and interests in joint ventures are recognised using the equity method. The attributable share of the results and reserves of joint ventures and associates are included in the consolidated financial statements of the 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 the financial statements are available and 31 December.

Investments in associates and joint ventures are assessed at each reporting date and tested for impairment when there is an indication that the investment may be impaired. Goodwill on acquisition of interests in joint ventures and associates is not tested separately for impairment, but is assessed as part of the carrying amount of the investment.

(b) Income and expense

Operating income

Interest income and expense

Interest income and expense for all financial instruments, excluding those classified as held for trading or designated at fair value, are recognised in 'Interest income' and 'Interest expense' in the income statement using the effective interest method. However, as an exception to this, interest on debt instruments issued by the group for funding purposes that are designated under the fair value option to reduce an accounting mismatch and on derivatives managed in conjunction with those debt instruments is included in interest expense.

Interest on credit-impaired financial assets is recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

Notes on the financial statements

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 a 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 HSBC'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 it has 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 comprises net trading income, which includes all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading and other financial instruments managed on a fair value basis, together with the related interest income, expense and dividends, excluding the effect of changes in the credit risk of liabilities managed on a fair value basis. 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.
- 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss': This includes interest income, interest expense and dividend income in respect of financial assets and liabilities measured at fair value through profit or loss; and those derivatives managed in conjunction with the above that can be separately identifiable from other trading derivatives.
- 'Changes in fair value of designated debt instruments and related derivatives': Interest paid on the debt instruments and interest cash flows on related derivatives is presented in interest expense where doing so reduces and accounting mismatch.
- 'Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss': This includes interest on instruments that fail the solely payments of principal and interest ('SPPI') test, see (d) below.

The accounting policies for insurance premium income are disclosed in Note 1.2(j).

(c) Valuation of financial instruments

All financial instruments are initially recognised 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 or the valuation inputs become observable.

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 fair value of the group of financial instruments is measured on a net basis but the underlying financial assets and liabilities are presented separately in the financial statements, unless they satisfy the IFRS offsetting criteria. Financial instruments are classified into one of three fair value hierarchy levels, described in Note 11, 'Fair values of financial instruments carried at fair value'.

Critical accounting estimates and judgements

The majority of valuation techniques employ only observable market data. However, certain financial instruments are classified 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:

Judgements	Estimates
<ul style="list-style-type: none">• 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)	<ul style="list-style-type: none">• Details on the Group's level 3 financial instruments and the sensitivity of their valuation to the effect of applying reasonable possible alternative assumptions in determining their fair value are set out in Note 11

(d) Financial instruments measured at amortised cost

Financial assets that are held to collect the contractual cash flows and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at amortised cost. Such financial assets include most loans and advances to banks and customers and some debt securities. 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 set out below.

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 repo or repo 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 repo or repo agreements.

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

Financial assets held for a business model that is achieved by both collecting contractual cash flows and selling and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at fair value through other comprehensive income ('FVOCI'). These comprise primarily debt securities. They are recognised on the trade date when HSBC 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 set out below and impairment is recognised in profit or loss.

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

The equity securities for which fair value movements are shown in other comprehensive income are business facilitation and other similar investments where HSBC 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;
- a group of financial assets and liabilities 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
- the financial liability contains one or more non-closely related embedded derivatives.

Designated financial assets are recognised when HSBC 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 HSBC 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' or 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss' except for the effect of changes in the liabilities' credit risk, which is presented in 'Other comprehensive income', unless that treatment would create or enlarge an accounting mismatch in profit or loss.

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

- Debt instruments for funding purposes that are designated to reduce an accounting mismatch: 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.
- Financial assets and financial liabilities under unit-linked and non-linked investment contracts: A contract under which HSBC does not accept significant insurance risk from another party is not classified as an insurance contract, other than investment contracts with discretionary participation features ('DPF'), but is accounted for as a financial liability. Customer liabilities under linked and certain non-linked investment contracts issued by insurance subsidiaries are determined based on the fair value of the assets held in the linked funds. If no fair value designation was made for the related assets, at least some of the assets would otherwise be measured at either fair value through other comprehensive income or amortised cost. The related financial assets and liabilities are managed and reported to management on a fair value basis. Designation at fair value of the financial assets and related liabilities allows changes in fair values to be recorded in the income statement and presented in the same line.
- Financial liabilities that contain both deposit and derivative components: These financial liabilities are managed and their performance evaluated on a fair value basis.

(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 or loss, with changes in fair value generally recorded in the income statement. 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 HSBC that are designated at fair value, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Notes on the financial statements

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. The 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 and 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 and 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 trading income'. 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. 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 and 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.

(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 FVOCI, 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 when 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 unlikelihood 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 that 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 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 HSBC'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 with 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, which are 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 ('PD'), which encompasses a wide range of information including the obligor's customer risk rating ('CRR'), macroeconomic condition forecasts and credit transition probabilities. For origination CRRs up to 3.3, 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. 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	30bps

For CRRs greater than 3.3 that are not impaired, a significant increase in credit risk is considered to have occurred when the origination PD has doubled. 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.

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 ('TTC') PDs and TTC 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 28.

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 incorporates 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 what 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.

Notes on the financial statements

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 that 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, HSBC calculates ECL using three main components, a probability of default, a loss given default ('LGD') 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.

HSBC leverages the Basel II IRB framework where possible, with recalibration to meet the differing IFRS 9 requirements as set out in the following table:

Model	Regulatory capital	IFRS 9
PD	<ul style="list-style-type: none"> 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, although this has been modified to 180+ days past due for some portfolios, particularly UK and US mortgages 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Cannot be lower than current balance 	<ul style="list-style-type: none"> Amortisation captured for term products
LGD	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> Discounted back from point of default to balance sheet date

While 12-month PDs are recalibrated from Basel II 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 ('DCF') 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 economic scenarios applied more generally by HSBC 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 HSBC 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 HSBC'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 HSBC 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

HSBC applies multiple forward-looking global economic scenarios determined with reference to external forecast distributions representative of our view of forecast economic conditions. This approach is considered sufficient to calculate unbiased expected loss in most economic environments. In certain economic environments, additional analysis may be necessary and may result in additional scenarios or adjustments, to reflect a range of possible economic outcomes sufficient for an unbiased estimate. The detailed methodology is disclosed in 'Measurement uncertainty and sensitivity analysis of ECL estimates' on page 37.

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
<ul style="list-style-type: none"> Defining what is considered to be a significant increase in credit risk 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 	<ul style="list-style-type: none"> The sections marked as audited on pages 37 to 61, '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) Insurance contracts

A contract is classified as an insurance contract where the group accepts significant insurance risk from another party by agreeing to compensate that party on the occurrence of a specified uncertain future event. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant. In addition, the group issues investment contracts with discretionary participation features ('DPF') which are also accounted for as insurance contracts as required by IFRS 4 'Insurance Contracts'.

Net insurance premium income

Premiums for life insurance contracts are accounted for when receivable, except in unit-linked insurance contracts where premiums are accounted for when liabilities are established.

Reinsurance premiums are accounted for in the same accounting period as the premiums for the direct insurance contracts to which they relate.

Net insurance claims and benefits paid and movements in liabilities to policyholders

Gross insurance claims for life insurance contracts reflect the total cost of claims arising during the year, including claim handling costs and any policyholder bonuses allocated in anticipation of a bonus declaration.

Maturity claims are recognised when due for payment. Surrenders are recognised when paid or at an earlier date on which, following notification, the policy ceases to be included within the calculation of the related insurance liabilities. Death claims are recognised when notified.

Reinsurance recoveries are accounted for in the same period as the related claim.

Liabilities under insurance contracts

Liabilities under non-linked life insurance contracts are calculated by each life insurance operation based on local actuarial principles. Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value, which is calculated by reference to the value of the relevant underlying funds or indices.

Future profit participation on insurance contracts with DPF

Where contracts provide discretionary profit participation benefits to policyholders, liabilities for these contracts include provisions for the future discretionary benefits to policyholders. These provisions reflect the actual performance of the investment portfolio to date and management's expectation of the future performance of the assets backing the contracts, as well as other experience factors such as mortality, lapses and operational efficiency, where appropriate. The benefits to policyholders may be determined by the contractual terms, regulation or past distribution policy.

Investment contracts with DPF

While investment contracts with DPF are financial instruments, they continue to be treated as insurance contracts as required by IFRS 4. The group therefore recognises the premiums for these contracts as revenue and recognises as an expense the resulting increase in the carrying amount of the liability.

In the case of net unrealised investment gains on these contracts, whose discretionary benefits principally reflect the actual performance of the investment portfolio, the corresponding increase in the liabilities is recognised in either the income statement or other comprehensive income, following the treatment of the unrealised gains on the relevant assets. In the case of net unrealised losses, a deferred participating asset is recognised only to the extent that its recoverability is highly probable. Movements in the liabilities arising from realised gains and losses on relevant assets are recognised in the income statement.

Present value of in-force long-term insurance business

The group recognises the value placed on insurance contracts, and investment contracts with DPF, that are classified as long-term and in-force at the balance sheet date, as an asset. The asset represents the present value of the equity holders' interest in the issuing insurance companies' profits expected to emerge from these contracts written at the balance sheet date. The present value of in-force long-term insurance business ('PVIF') is determined by discounting those expected future profits using appropriate assumptions in assessing factors such as future mortality, lapse rates and levels of expenses, and a risk discount rate that reflects the risk premium

Notes on the financial statements

attributable to the respective contracts. The PVIF incorporates allowances for both non-market risk and the value of financial options and guarantees. The PVIF asset is presented gross of attributable tax in the balance sheet and movements in the PVIF asset are included in 'Other operating income' on a gross of tax basis.

(k) Employee compensation and benefits

Share-based payments

The group enters into both equity-settled and cash-settled share-based payment arrangements with its employees as compensation for the provision of their services. The vesting period for these schemes may commence before the legal grant date if the employees have started to render services in respect of the award before the legal grant date, where there is a shared understanding of the terms and conditions of the arrangement. 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 operates a number of pension schemes including defined benefit, defined contribution and post-employment benefit schemes. Payments to defined contribution schemes are charged as an expense as the employees render service.

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.

Remeasurements 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.

(l) 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 the tax 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 on 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. Payments associated with any incremental base erosion and anti-abuse tax are reflected in tax expense in the period incurred.

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 as the assets will be realised or the liabilities settled.

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

Critical accounting estimates and judgements

The recognition of deferred tax assets depends on judgements, particularly with regard to the UK deferred tax assets of HBSB Bank plc.

Judgements	Estimates
<ul style="list-style-type: none">Assessing the probability and sufficiency of future taxable profits in the UK tax group against which the assets can be recoveredConsidering profit forecasts and taking account of the manner and expected timing of the reversal of the deferred tax assets.	

(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 that has arisen as a result of past events and for which a reliable estimate can be made.

Critical accounting estimates and judgements

The recognition and measurement of provisions requires the Group to make a number of judgements, assumptions and estimates. The most significant are set out below:

Judgements	Estimates
<ul style="list-style-type: none">Determining whether a present obligation exists. Professional advice is taken on the assessment of litigation and similar obligationsProvisions 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 estimates as appropriate. At more advanced stages, it is typically easier to make estimates around a better defined set of possible outcomes	<ul style="list-style-type: none">Provisions for legal proceedings and regulatory matters remain very sensitive to the assumptions used in the estimate. There could be a wider 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

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 that 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.

The bank has issued financial guarantees and similar contracts to other group entities. The group elects to account for certain guarantees as insurance contracts in the bank's financial statements, in which case they are measured and recognised as insurance liabilities. This election is made on a contract by contract basis, and is irrevocable.

2 Net fee income

Net fee income by global business

	2019					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m
Account services	31	91	194	18	—	334
Funds under management	184	24	190	29	—	427
Cards	24	18	5	—	—	47
Credit facilities	1	91	203	6	—	301
Broking income	10	26	220	33	—	289
Unit trusts	3	—	—	3	—	6
Imports/exports	—	14	37	—	—	51
Remittances	7	26	39	2	—	74
Underwriting	—	3	282	2	—	287
Global custody	4	9	94	11	—	118
Insurance agency commission	10	1	—	9	—	20
Other	213	89	872	26	(564)	636
Fee income	487	392	2,136	139	(564)	2,590
Less: fee expense	(209)	(41)	(1,508)	(35)	547	(1,246)
Net fee income	278	351	628	104	(17)	1,344

	2018					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m
Account services	203	214	179	13	—	609
Funds under management	228	26	150	47	—	451
Cards	105	39	6	—	—	150
Credit facilities	1	157	229	6	—	393
Broking income	16	23	215	28	—	282
Unit trusts	9	—	—	2	—	11
Imports/exports	—	44	36	—	—	80
Remittances	13	23	50	2	—	88
Underwriting	—	3	238	3	—	244
Global custody	6	8	106	9	—	129
Insurance agency commission	40	2	—	9	—	51
Other	316	230	894	30	(556)	914
Fee income	937	769	2,103	149	(556)	3,402
Less: fee expense	(339)	(56)	(1,464)	(40)	541	(1,358)
Net fee income	598	713	639	109	(15)	2,044

Net fee income includes £906m of 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) (2018: £1,875m), £198m of 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) (2018: £365m), £580m of fees earned on trust and other fiduciary activities (2018: £613m), and £53m of fees payable relating to trust and other fiduciary activities (2018: £2m).

3 Net income/(expense) from financial instruments measured at fair value through profit or loss

	2019 £m	2018 £m
Net income/(expense) arising on:		
Net Trading activities	4,054	391
Other instruments managed on a fair value basis	(1,999)	2,342
Net income from financial instruments held for trading or managed on a fair value basis	2,055	2,733
Financial assets held to meet liabilities under insurance and investment contracts	1,364	(626)
Liabilities to customers under investment contracts	(76)	22
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	1,288	(604)
Derivatives managed in conjunction with the group's issued debt securities	124	(157)
Other changes in fair value	(132)	162
Changes in fair value of designated debt and related derivatives	(8)	5
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	547	511
Year ended 31 Dec	3,882	2,645

4 Insurance business

Net insurance premium income

	Non-linked insurance £m	Linked life insurance £m	Investment contracts with DPF ¹ £m	Total £m
Gross insurance premium income	231	245	1,772	2,248
Reinsurers' share of gross insurance premium income	(98)	(3)	–	(101)
Year ended 31 Dec 2019	133	242	1,772	2,147
Gross insurance premium income	202	166	1,734	2,102
Reinsurers' share of gross insurance premium income	(94)	(3)	–	(97)
Year ended 31 Dec 2018	108	163	1,734	2,005

¹ Discretionary participation features.

Net insurance claims and benefits paid and movement in liabilities to policyholders

	Non-linked insurance £m	Linked life insurance £m	Investment contracts with DPF ¹ £m	Total £m
Gross claims and benefits paid and movement in liabilities	105	363	2,957	3,425
– claims, benefits and surrenders paid	136	96	1,490	1,722
– movement in liabilities	(31)	267	1,467	1,703
Reinsurers' share of claims and benefits paid and movement in liabilities	(56)	(3)	–	(59)
– claims, benefits and surrenders paid	(61)	(3)	–	(64)
– movement in liabilities	5	–	–	5
Year ended 31 Dec 2019	49	360	2,957	3,366
Gross claims and benefits paid and movement in liabilities	167	(40)	1,284	1,411
– claims, benefits and surrenders paid	169	90	1,407	1,666
– movement in liabilities	(2)	(130)	(123)	(255)
Reinsurers' share of claims and benefits paid and movement in liabilities	(69)	136	–	67
– claims, benefits and surrenders paid	(64)	(2)	–	(66)
– movement in liabilities	(5)	138	–	133
Year ended 31 Dec 2018	98	96	1,284	1,478

¹ Discretionary participation features.

Liabilities under insurance contracts

	Non-linked insurance	Linked life insurance	Investment contracts with DPF ¹	Total
	£m	£m	£m	£m
Gross liabilities under insurance contracts at 1 Jan 2019	616	1,042	18,999	20,657
Claims and benefits paid	(119)	(96)	(1,474)	(1,689)
Increase in liabilities to policyholders	(30)	267	1,483	1,720
Exchange differences and other movements ²	109	82	630	821
Gross liabilities under insurance contracts at 31 Dec 2019	576	1,295	19,638	21,509
Reinsurers' share of liabilities under insurance contracts	(113)	(50)	–	(163)
Net liabilities under insurance contracts at 31 Dec 2019	463	1,245	19,638	21,346
Gross liabilities under insurance contracts at 1 Jan 2018	617	1,166	19,250	21,033
Claims and benefits paid	(169)	(90)	(1,407)	(1,666)
Increase in liabilities to policyholders	167	(40)	1,284	1,411
Exchange differences and other movements	2	5	(128)	(121)
Gross liabilities under insurance contracts at 31 Dec 2018	617	1,041	18,999	20,657
Reinsurers' share of liabilities under insurance contracts	(129)	(50)	–	(179)
Net liabilities under insurance contracts at 31 Dec 2018	488	991	18,999	20,478

1 Discretionary participation features.

2 'Exchange differences and other movements' includes movements in liabilities arising from net unrealised investment gains recognised in other comprehensive income.

The key factors contributing to the movement in liabilities to policyholders included movement in the market value of assets supporting policyholder liabilities, death claims, surrenders, lapses, liabilities to policyholders created at the initial inception of the policies, the declaration of bonuses and other amounts attributable to policyholders.

5 Employee compensation and benefits

	2019	2018
	£m	£m
Wages and salaries	1,752	2,035
Social security costs	383	434
Post-employment benefits ¹	90	60
Year ended 31 Dec	2,225	2,529

1 Includes £48m (2018: £91m) in employer contributions to the defined contribution pension plans. It is impacted by the transfers to HSBC UK Bank plc following the completion of ring-fencing in 2018.

Average number of persons employed by the group during the year

	2019	2018
Retail Banking and Wealth Management	5,198	14,699
Commercial Banking	2,507	4,943
Global Banking and Markets	4,844	4,659
Global Private Banking	399	541
Corporate Centre	4,806	5,595
Year ended 31 Dec¹	17,754	30,437

1 Impacted by the transfers to HSBC UK Bank plc following the completion of ring-fencing in 2018.

Share-based payments

The share-based payment income statement charge is recognised in wages and salaries as follows:

	2019	2018
	£m	£m
Restricted share awards	86	99
Savings-related and other share award option plans	2	4
Year ended 31 Dec	88	103

Notes on the financial statements

HSBC share awards

Award	Policy
Restricted share awards (including annual incentive awards delivered in shares) and Group Performance Share Plan ('GPSP')	<ul style="list-style-type: none"> An assessment of performance over the relevant period ending on 31 December is used to determine the amount of the award to be granted. Deferred awards generally require employees to remain in employment over the vesting period and are not subject to performance conditions after the grant date. Deferred share awards generally vest over a period of three years and GPSP awards vest after five years. Vested shares may be subject to a retention requirement post-vesting. GPSP awards are retained until cessation of employment. Awards granted from 2010 onwards are subject to a malus provision prior to vesting.
International Employee Share Purchase Plan ('ShareMatch')	<ul style="list-style-type: none"> The plan was first introduced in Hong Kong in 2013 and now includes employees based in 25 jurisdictions. Shares are purchased in the market each quarter up to a maximum value of £750, or the equivalent in local currency. Matching awards are added at a ratio of one free share for every three purchased. Matching awards vest subject to continued employment and the retention of the purchased shares for a maximum period of two years and nine months.

Movement on HSBC share awards

	2019 Number (000s)	2018 Number (000s)
Restricted share awards outstanding at 1 Jan	23,395	25,368
Transfers to HSBC UK Bank plc and its subsidiaries	–	(883)
Additions during the year ¹	19,358	20,315
Released in the year ¹	(17,742)	(20,737)
Forfeited in the year	(433)	(668)
Restricted share awards outstanding at 31 Dec	24,578	23,395
Weighted average fair value of awards granted (£)	5.99	6.35

¹ Includes a number of share option plans transferred from or to other subsidiaries of HSBC Holdings plc.

HSBC share option plans

Main plans	Policy
Savings-related share option plans ('Sharesave')	<ul style="list-style-type: none"> Two plans: the UK Plan and the International Plan. The last grant of options under the International Plan was in 2012. From 2014, eligible employees can save up to £500 per month with the option to use the savings to acquire shares. Exercisable within six months following either the third or fifth anniversary of the commencement of a three-year or five-year contract, respectively. The exercise price is set at a 20% (2018: 20%) discount to the market value immediately preceding the date of invitation.
HSBC Holdings Group share option plan	<ul style="list-style-type: none"> Plan ceased in May 2005. Exercisable between the third and tenth anniversaries of the date of grant.

Calculation of fair values

The fair values of share options are calculated using a Black-Scholes model. The fair value of a share award is based on the share price at the date of the grant.

Movement on HSBC share option plans

	Savings-related share option plans	
	Number (000s)	WAEP ¹ £
Outstanding at 1 Jan 2019	4,008	4.88
Granted during the year ²	2,078	4.68
Exercised during the year ²	(801)	4.32
Expired during the year	(35)	4.17
Forfeited during the year	(1,005)	5.43
Outstanding at 31 Dec 2019	4,245	4.78
Weighted average remaining contractual life (years)	2.76	
Outstanding at 1 Jan 2018	32,567	4.51
Transfers to HSBC UK Bank plc and its subsidiaries	(25,608)	4.50
Granted during the year ²	2,205	5.19
Exercised during the year ²	(3,742)	4.42
Expired during the year	(987)	4.99
Forfeited during the year	(427)	4.54
Outstanding at 31 Dec 2018	4,008	4.88
Weighted average remaining contractual life (years)	2.54	

¹ Weighted average exercise price.

² Includes a number of share option plans transferred from or to other subsidiaries of HSBC Holdings plc.

Post-employment benefit plans

We operate a number of pension plans throughout Europe for our employees. Some are defined benefit plans, and prior to ring-fencing, the largest was HSBC Bank (UK) Pension Scheme. After the completion of the ring-fencing in 2018, HSBC Trinkaus & Burkhardt Pension Scheme became more prominent within the group. The pension risk section on page 70 contains details about policies and practices associated with the pensions plans.

The group's balance sheet includes the net surplus or deficit, being the difference between the fair value of plan assets and the discounted value of scheme liabilities at the balance sheet date for each plan. Surpluses are only recognised to the extent that they are recoverable through reduced contributions in the future, or through potential future refunds from the schemes. In assessing whether a surplus is recoverable, the group has considered its current right to obtain a future refund or a reduction in future contributions.

HSBC Trinkaus & Burkhardt Pension Scheme

The plan is a final salary scheme and is calculated based on the employee length of service multiplied by a predefined benefit accrual and earnings. The pension is paid when the benefit falls due and is a specified pension payment, lump-sum or combination thereof. The plan is overseen by an independent corporate trustee, who has a fiduciary responsibility for the operation of the plan. Its assets are held separately from the assets of the group.

The strategic aim of the investment is to achieve, as continuous as possible, an increase in value as possible over time. For this purpose, the fund invests mainly in government bonds, corporate bonds, investment funds and equities. It invests predominantly in developed regions. Overall, emphasis is placed on having a high degree of diversification.

The latest funding valuation of the plan at 31 December 2018 was carried out by Tim Voetmann and Anna May, at Willis Towers Watson GmbH, who are Fellows of the German Association of Actuaries (DAV), using the projected unit credit method. The next funding valuation will have an effective date of 31 December 2019.

Net assets/(liabilities) recognised on the balance sheet in respect of defined benefit plans

	Fair value of plan assets	Present value of defined benefit obligations	Effect of limit on plan surpluses	Total
	£m	£m	£m	£m
Defined benefit pension plans	580	(759)	–	(179)
Defined benefit healthcare plans	–	(74)	–	(74)
At 31 Dec 2019	580	(833)	–	(253)
Total employee benefit liabilities (within 'Accruals, deferred income and other liabilities')				(275)
Total employee benefit assets (within 'Prepayments, accrued income and other assets')				22
Defined benefit pension plans	496	(723)	–	(227)
Defined benefit healthcare plans	–	(81)	–	(81)
At 31 Dec 2018	496	(804)	–	(308)
Total employee benefit liabilities (within 'Accruals, deferred income and other liabilities')				(332)
Total employee benefit assets (within 'Prepayments, accrued income and other assets')				24

Defined benefit pension plans

Net asset/(liability) under defined benefit pension plans

	Fair value of plan assets		Present value of defined benefit obligations		Net defined benefit asset/(liability)	
	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans
	£m	£m	£m	£m	£m	£m
At 1 Jan 2019	329	167	(417)	(306)	(88)	(139)
Service cost	–	–	(21)	(15)	(21)	(15)
– current service cost			(21)	(9)	(21)	(9)
– past service cost and gains from settlements	–	–	–	(6)	–	(6)
Net interest income/(cost) on the net defined benefit asset/(liability)	9	3	(6)	(5)	3	(2)
Remeasurement effects recognised in other comprehensive income	18	4	(14)	(27)	4	(23)
– return on plan assets (excluding interest income)	18	4	–	–	18	4
– actuarial gains	–	–	(14)	(27)	(14)	(27)
– other changes	–	–	–	–	–	–
Exchange differences	(20)	(8)	22	18	2	10
Benefits paid	–	(4)	9	12	9	8
Other movements ¹	69	13	(7)	(2)	62	11
At 31 Dec 2019	405	175	(434)	(325)	(29)	(150)

Notes on the financial statements

Net asset/(liability) under defined benefit pension plans (continued)

	Fair value of plan assets		Present value of defined benefit obligations		Net defined benefit asset/(liability)	
	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans	HSBC Trinkaus & Burkhardt Pension Plan ²	Other plans
	£m	£m	£m	£m	£m	£m
At 1 Jan 2018	330	27,979	(394)	(22,087)	(64)	5,892
Reorganisation resulting from ring-fencing	—	(26,948)	—	20,580	—	(6,368)
Transfer into HSBC Trinkaus & Burkhardt Pension Scheme	—	8	—	(4)	—	4
Service cost	—	—	(17)	(9)	(17)	(9)
– current service cost	—	—	(17)	(13)	(17)	(13)
– past service cost and gains from settlements	—	—	—	4	—	4
Net interest income/(cost) on the net defined benefit asset/(liability)	3	359	(7)	(280)	(4)	79
Remeasurement effects recognised in other comprehensive income	(15)	(826)	(1)	1,081	(16)	255
– return on plan assets (excluding interest income)	(15)	(826)	—	—	(15)	(826)
– actuarial gains	—	—	1	1,079	1	1,079
– other changes	—	—	(2)	2	(2)	2
Exchange differences	12	39	(9)	(44)	3	(5)
Benefits paid	—	(444)	—	462	—	18
Other movements ¹	—	(1)	9	(3)	9	(4)
12/31/2018	330	166	(419)	(304)	(89)	(138)

¹ Other movements include contributions by the group, contributions by employees, administrative costs and tax paid by plan.

² The HSBC Trinkaus & Burkhardt Pension Plan and its comparatives have been disclosed as it is considered to be a prominent plan within the group post ring-fencing in 2018.

HSBC does not expect to make contributions to the HSBC Trinkaus & Burkhardt Pension Plan during 2020. Benefits expected to be paid from the HSBC Trinkaus & Burkhardt Pension Plan to retirees over each of the next five years, and in aggregate for the five years thereafter, are as follows:

Benefits expected to be paid from plans

	2020	2021	2022	2023	2024	2025-2029
	£m	£m	£m	£m	£m	£m
HSBC Trinkaus & Burkhardt Pension Plan¹	6	5	5	5	5	25

¹ The duration of the defined benefit obligation is 18.1 years for the HSBC Trinkaus & Burkhardt Pension Plan under the disclosure assumptions adopted (2018: 18.1 years).

Fair value of plan assets by asset classes

	31 Dec 2019				31 Dec 2018			
	Value	Quoted market price in active market	No quoted market price in active market	Thereof HSBC ¹	Value	Quoted market price in active market	No quoted market price in active market	Thereof HSBC ¹
	£m	£m	£m	£m	£m	£m	£m	£m
HSBC Trinkaus & Burkhardt Pension Plan								
Fair value of plan assets	405	389	16	146	329	311	18	85
– equities	26	26	—	—	26	26	—	—
– bonds	97	97	—	—	94	94	—	—
– derivatives	—	—	—	—	—	—	—	—
– other	282	266	16	146	209	191	18	85

¹ The fair value of plan assets includes derivatives entered into by HSBC Trinkaus & Burkhardt AG with HSBC Bank plc detailed in Note 33.

Post-employment defined benefit plans' principal actuarial financial assumptions

The group determines the discount rates to be applied to its obligations in consultation with the plans' local actuaries, on the basis of current average yields of high quality (AA-rated or equivalent) debt instruments with maturities consistent with those of the defined benefit obligations.

Key actuarial assumptions

	Discount rate	Inflation rate	Rate of increase for pensions	Rate of pay increase
	%	%	%	%
HSBC Trinkaus & Burkhardt Pension Plan				
At 31 Dec 2019	1.05	1.75	1.50	2.50
At 31 Dec 2018	1.81	2.00	2.00	3.00

Mortality tables and average life expectancy at age 65

	Mortality table	Life expectancy at age 65 for a male member currently:		Life expectancy at age 65 for a female member currently:	
		Aged 65	Aged 45	Aged 65	Aged 45
HSBC Trinkaus & Burkhardt Pension Plan					
At 31 Dec 2019	RT 2018G¹	20.2	23.0	23.7	27.0
At 31 Dec 2018	RT 2018G	20.2	23.0	23.7	27.0

¹ Heubeck tables: RT 2018G. It is generally accepted and used mortality tables for occupational pension plans in Germany taking into account future mortality improvements and lighter mortality for higher-paid pensioners.

The effect of changes in key assumptions

	HSBC Trinkaus & Burkhardt Pension Plan Obligation			
	Financial impact of increase		Financial impact of decrease	
	2019	2018	2019	2018
	£m	£m	£m	£m
Discount rate – increase/decrease of 0.25%	(13)	(13)	14	14
Inflation rate – increase/decrease of 0.25%	9	13	(9)	(12)
Pension payments and deferred pensions – increase/decrease of 0.25%	9	9	(9)	(9)
Pay – increase/decrease of 0.25%	4	4	(3)	(4)
Change in mortality – increase of 1 year	14	14	n/a	n/a

Directors' emoluments

The aggregate emoluments of the Directors of the bank, computed in accordance with the Companies Act 2006 as amended by statutory instrument 2008 No.410, were:

	2019	2018
	£000	£000
Fees ¹	1,136	1,586
Salaries and other emoluments ²	1,958	1,276
Annual incentives ³	472	515
Long-term incentives ⁴	160	679
Year ended 31 Dec	3,726	4,056

¹ Fees paid to non-executive Directors.

² Salaries and other emoluments include Fixed Pay Allowances.

³ Discretionary annual incentives for executive Directors are based on a combination of individual and corporate performance, and are determined by the Remuneration Committee of the bank's parent company, HSBC Holdings plc. Incentive awards made to executive directors are delivered in the form of cash and HSBC Holdings plc shares. The total amount shown is comprised of £235,752 (2018: £257,400) in cash and £235,752 (2018: £257,400) in Restricted Shares, which is the upfront portion of the annual incentive granted in respect of performance year 2019.

⁴ The amount shown is comprised of £48,002 (2018: £135,525) in deferred cash, £64,097 (2018: £223,451) in deferred Restricted Shares, and £48,050 (2018: £319,734) in shares under the Group Performance Share Plan ('GPSP'). These amounts relate to the portion of the awards that will vest following the substantial completion of the vesting condition attached to these awards in 2020. The total vesting period of deferred cash and share awards is no less than three years, with 33% of the award vesting on each of the first and second anniversaries of the date of the award, and the balance vesting on the third anniversary of the date of the award. The deferred share awards are subject to a six-month retention period upon vesting. GPSP awards are subject to a five-year vesting period and a retention requirement until cessation of employment upon vesting. Details of the Plans are contained within the Directors' Remuneration Report of HSBC Holdings plc. The cost of any awards subject to service conditions under the HSBC Share Plan 2011 are recognised through an annual charge based on the fair value of the awards, apportioned over the period of service to which the award relates.

No Director exercised share options over HSBC Holdings plc ordinary shares during the year.

There were no retirement benefits accruing to any Director under money purchase schemes in respect of Directors' qualifying services (2018: one Director). There were no pension contributions made by the bank during the year in respect of Directors' qualifying services (2018: £3,778).

In addition, there were payments under retirement benefit agreements with former Directors of £815,772 (2018: £817,163), including payments in respect of unfunded pension obligations to former Directors of £681,549 (2018: £687,227). The provision at 31 December 2019 in respect of unfunded pension obligations to former Directors amounted to £10,737,186 (2018: £10,956,784).

Notes on the financial statements

Of these aggregate figures, the following amounts are attributable to the highest paid Director:

	2019 £000	2018 £000
Salaries and other emoluments	1,190	623
Annual incentives ¹	260	361
Long-term incentives ²	105	575
Year ended 31 Dec	1,555	1,559

1 Awards made to the highest paid Director are delivered in the form of cash and HSBC Holdings plc shares. The amount shown is comprised of £130,000 (2018: £180,277) in cash and £130,000 (2018: £180,277) in Restricted Shares.

2 The amount shown is comprised of £28,429 (2018: £108,586) in deferred cash, £28,459 (2018: £178,022) in deferred Restricted Shares and £48,050 (2018: £288,351) in shares under the GPSP. These amounts relate to a portion of the awards that will vest following the substantial completion of the vesting condition attached to these awards in 2020. The total vesting period of deferred cash and share awards is no less than three years, with 33% of the award vesting on each of the first and second anniversaries of the date of the award, and the balance vesting on the third anniversary of the date of the award. The share awards are subject to a six-month retention period upon vesting. GPSP awards are subject to a five-year vesting period and a retention requirement until cessation of employment upon vesting.

The highest paid Director received shares in respect of qualifying services under a long-term incentive scheme.

There were no pension contributions made by the bank in respect of services by the highest paid Director during the year (2018: £3,778).

6 Auditors' remuneration

	2019 £m	2018 £m
Audit fees payable to PwC	10.5	11.8
Other audit fees payable	0.4	0.4
Year ended 31 Dec	10.9	12.2

Fees payable by the group to PwC

	2019 £m	2018 £m
Audit fees for HSBC Bank plc's statutory audit ¹	5.5	6.7
Fees for other services provided to the group	11.6	11.8
– audit of the group's subsidiaries ²	5.0	5.1
– audit-related assurance services ³	2.7	2.2
– other assurance services	3.9	4.4
– other non-audit services ⁴	–	0.1
Year ended 31 Dec	17.1	18.5

1 Fees payable to PwC for the statutory audit of the consolidated financial statements of the group and the separate financial statements of HSBC Bank plc. They exclude amounts payable for the statutory audit of the bank's subsidiaries which have been included in 'Fees for other services provided to the group'.

2 Including fees payable to PwC for the statutory audit of the bank's subsidiaries.

3 Including services for assurance and other services that relate to statutory and regulatory filings, including comfort letters and interim reviews.

4 Including other permitted services relating to advisory, corporate finance transactions, etc.

Fees payable for non-audit services for HSBC Bank plc are not disclosed separately because such fees are disclosed on a consolidated basis for the group.

7 Tax

Tax expense

	2019 £m	2018 £m
Current tax	(103)	490
– for this year	(75)	512
– adjustments in respect of prior years	(28)	(22)
Deferred tax	222	(48)
– origination and reversal of temporary differences	48	(61)
– effect of changes in tax rates	–	13
– adjustments in respect of prior years	174	–
Year ended 31 Dec¹	119	442
Continued operations	119	119
Discontinued operations	–	323

1 In addition to amounts recorded in the income statement, a tax credit of £100m (2018: charge of £275m) was recorded directly to equity.

The group's profits are taxed at different rates depending on the country in which the profits arise. The key applicable corporate tax rates in 2019 include the UK and France. The UK tax rate applying to HSBC Bank plc and its banking subsidiaries was 27.00% (2018: 27%), comprising 19% corporation tax plus 8% surcharge on UK banking profits. The 19% rate of corporation tax in the UK will be reduced to

17% on 1 April 2020. The applicable tax rate in France was 34% (2018: 34%) and will be reduced to 26% from 1 January 2022. Other overseas subsidiaries and overseas branches provided for taxation at the appropriate rates in the countries in which they operate. The tax relating to discontinued operations in 2018 relates to the activities transferred to HSBC UK Bank plc on 1 July 2018.

Tax reconciliation

The tax charged to the income statement differs from the tax expense that would apply if all profits had been taxed at the UK corporation tax rate as follows:

	2019		2018	
	£m	%	£m	%
(Loss)/profit before tax	(872)		1,974	
Tax expense				
UK corporation tax at 19.00% (2018: 19.00%)	(166)	19.0	375	19.0
Impact of taxing overseas profits at different rates	(5)	0.5	32	1.6
8% surcharge on UK banking profits	(34)	3.9	94	4.8
Impairment of goodwill	219	(25.1)	–	–
Adjustment in respect of prior years	146	(16.6)	(22)	(1.1)
Non-taxable income and gains subject to tax at a lower rate	(94)	10.8	(106)	(5.4)
Permanent disallowables	37	(4.3)	38	1.9
Local taxes and overseas withholding taxes	16	(1.8)	52	2.6
Change in tax rates	(16)	1.8	13	0.7
Non-deductible customer compensation expense	(6)	0.6	(2)	(0.1)
Other	22	(2.4)	(16)	(0.8)
Non-deductible regulatory settlements	–	–	(8)	(0.4)
Movements in unrecognised deferred tax	–	–	(8)	(0.4)
Year ended 31 Dec	119	(13.6)	442	22.4
Continued operations	119		119	
Discontinued operations	–		323	

The effective tax rate for the year was (13.6)% (2018: 22.4%), reflecting a tax charge arising on a loss before tax. The effective tax rate excluding the impact of non-deductible goodwill impairments is 42.5%. This was higher than 2018 mainly due to charges in respect of prior years, a lower level of non-taxable regulatory provision releases and other non-taxable income, offset by a lower level of non-deductible expenses and deductions for AT1 coupon payments previously accounted for in equity. 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 current tax asset includes an estimate of tax recoverable from HMRC with regards to past dividends received from EU resident companies. The ultimate resolution of this matter involves litigation for which the outcome is uncertain and is unlikely to be resolved in the short term.

Movement of deferred tax assets and liabilities

	Retirement benefits	Loan impairment provisions	Property, plant and equipment	FVOCI investments	Goodwill and intangibles	Other ^{1, 2}	Total
	£m	£m	£m	£m	£m	£m	£m
The group							
Assets	92	32	281	–	174	26	605
Liabilities	–	(4)	(9)	(73)	–	(8)	(94)
At 1 Jan 2019	92	28	272	(73)	174	18	511
Income statement	(30)	7	(106)	–	(32)	(61)	(222)
Other comprehensive income	20	–	–	(50)	–	127	97
At 31 Dec 2019	82	35	166	(123)	142	84	386
Assets ³	82	41	172	–	142	84	521
Liabilities ³	–	(6)	(6)	(123)	–	–	(135)
Assets	34	35	349	–	185	134	737
Liabilities	(1,455)	(5)	–	(80)	–	–	(1,540)
At 1 Jan 2018	(1,421)	30	349	(80)	185	134	(803)
IFRS 9 transitional adjustment	–	38	(1)	153	(1)	(17)	172
Transfer to HSBC UK Bank plc and its subsidiaries	1,592	(156)	(73)	1	(20)	(10)	1,334
Income statement	8	(13)	(3)	–	10	46	48
Other comprehensive income	(87)	129	–	(147)	–	(135)	(240)
At 31 Dec 2018	92	28	272	(73)	174	18	511
Assets ³	92	32	281	–	174	26	605
Liabilities ³	–	(4)	(9)	(73)	–	(8)	(94)

1 Other deferred tax assets and liabilities relate to unused tax losses, share-based payments and cash flow hedges.

2 The deferred tax asset recognised in respect of losses mainly relates to US State tax losses of the New York branch and losses in France; both are supported by future profit forecasts.

3 After netting off balances within countries, the balances as disclosed in the accounts are as follows: deferred tax assets £408m (2018: £540m); and deferred tax liabilities £22m (2018: £29m).

Based on the enacted law at 31 December 2019, the UK corporation tax rate is due to reduce from 19% to 17% on 1 April 2020. The Conservative Party (now in Government) has indicated its intention to reverse this rate reduction as part of the UK Budget on 11 March 2020, which, if enacted, will result in a £23m increase to the group's (£25m increase to the Bank's) net deferred tax liability, as at 31 December 2019.

Notes on the financial statements

Deferred tax assets recognised in the UK are supported by future profit forecasts for the whole of HSBC's UK tax group. This includes a number of companies which are not part of the HSBC Bank plc group, in particular HSBC UK Bank plc and its subsidiaries.

Movement of deferred tax assets and liabilities

	Retirement benefits	Property, plant and equipment	Goodwill and intangibles	Other ^{1,2}	Total
	£m	£m	£m	£m	£m
The bank					
Assets ²	22	257	177	–	456
Liabilities ²	–	(2)	–	(9)	(11)
At 1 Jan 2019	22	255	177	(9)	445
Income statement	(25)	(104)	(32)	(61)	(222)
Other comprehensive income	26	–	–	76	102
Foreign exchange and other adjustments	–	–	–	–	–
At 31 Dec 2019	23	151	145	6	325
Assets ³	23	151	145	8	327
Liabilities ³	–	–	–	(2)	(2)
Assets	–	289	192	81	562
Liabilities	(1,489)	–	–	–	(1,489)
At 1 Jan 2018	(1,489)	289	192	81	(927)
IFRS 9 transitional adjustment	1	–	–	143	144
Transfer to HSBC UK Bank plc	1,592	(47)	(23)	(154)	1,368
Income statement	7	13	8	(2)	26
Other comprehensive income	(89)	–	–	(76)	(165)
Foreign exchange and other adjustments	–	–	–	(1)	(1)
At 31 Dec 2018	22	255	177	(9)	445
Assets ³	22	257	177	–	456
Liabilities ³	–	(2)	–	(9)	(11)

1 Other deferred tax assets and liabilities relate to fair value of own debt, loan impairment allowances, unused tax losses, share-based payments and cash flow hedges.

2 The deferred tax asset recognised in respect of losses mainly relates to US State tax losses of the New York branch and losses in France; both are supported by future profit forecasts.

3 After netting off balances within countries, the balances as disclosed in the accounts are as follows: deferred tax assets £327m (2018: £447m) and deferred tax liabilities £2m (2018: £2m).

Unrecognised deferred tax

The group

The amount of temporary differences, unused tax losses and tax credits for which no deferred tax asset is recognised in the balance sheet was £695m (2018: £870m). These amounts consist of unused tax losses, tax credits and temporary differences arising in the US branch of £675m (2018: £694m) and unused temporary differences and tax losses in Europe of £20m (2018: £176m). Of the unrecognised losses, £234m expire within 10 years, and the remainder expire after 10 years.

The bank

The amount of temporary differences, unused tax losses and tax credits for which no deferred tax asset is recognised in the balance sheet was £675m (2018: £825m). These amounts include unused tax losses, tax credits and temporary differences arising in the US branch of £675m (2018: £694m) and unused temporary differences and tax losses in Europe of £nil (2018: £131m). Of the unrecognised losses, £234m expire within 10 years and the remainder expire after 10 years.

There are no unrecognised deferred tax liabilities arising from the group's investments in subsidiaries and branches.

8 Dividends

Dividends to the parent company

	2019		2018	
	£ per share	£m	£ per share	£m
Dividends paid on ordinary shares				
Second interim dividend in respect of the previous year	0.51	406	0.73	583
First interim dividend in respect of the current year	–	–	0.30	234
First special dividend in respect of previous year	0.85	674	–	–
First special dividend in respect of current year	1.60	1,277	–	–
Second special dividend in respect of current year	0.54	430	–	–
Total	3.50	2,787	1.03	817
Dividends on preference shares classified as equity				
Dividend on HSBC Bank plc non-cumulative third dollar preference shares	1.47	51	1.47	51
Total	1.47	51	1.47	51

The total dividend declared on ordinary shares in respect of 2019 was £1,707m (2018: £1,314m).

Total coupons on capital securities classified as equity

	First call date	2019 £m	2018 £m
Undated Subordinated additional Tier 1 instruments			
- £555m	Mar 2023	28	—
- £1,096m ¹	Dec 2019	—	31
- £1,100m ¹	Dec 2024	—	31
- €235m	Jan 2022	12	12
- €300m	Mar 2023	10	—
- €1,900m	Dec 2020	97	102
		147	176

¹ With effect from 1 July 2018 under the ring-fencing transfer scheme, all rights and obligations in respect of the existing £1,096m Undated Subordinated Additional Tier 1 Instrument issued 2014 (Callable December 2019 onwards) and £1,100m Undated Subordinated Additional Tier 1 Instrument issued 2014 (Callable December 2024 onwards) issued by HSBC Bank plc were transferred to HSBC UK Bank plc.

9 Segmental analysis

Basis of preparation

The Chief Executive, supported by the rest of the Executive Committee, is considered the Chief Operating Decision Maker ('CODM') for the purposes of identifying the group's reportable segments. Business results are assessed by the CODM on the basis of adjusted performance that removes the effects of significant items from reported results. We therefore present a reconciliation between reported and adjusted results as required by IFRSs.

Our operations are closely integrated and, accordingly, the presentation of data includes internal allocations of certain items of income and expense. These allocations include the costs of certain support services and functions to the extent that they can be meaningfully attributed to businesses and countries. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity. Costs that are not allocated to businesses are included in Corporate Centre.

Where relevant, income and expense amounts presented include the results of inter-segment funding along with inter-company and inter-business line transactions. All such transactions are undertaken on arm's length terms. The intra-group elimination items for the businesses are presented in Corporate Centre.

Our businesses

HSBC provides a comprehensive range of banking and related financial services to its customers in its four global businesses. The products and services offered to customers are organised by these global businesses.

Our operating model consists of four businesses and a Corporate Centre, all supported by HSBC Operations, HSBC Services and Technology, and 11 functions, of which risk, finance, compliance, legal, marketing and human resources are included.

By operating segment:

Adjusted profit before tax

	2019					
	RBWM £m	CMB £m	GB&M £m	GPB £m	Corporate Centre £m	Total £m
Net operating income/(expense) before change in expected credit losses and other credit impairment charges¹	1,140	1,170	3,654	189	(84)	6,069
- external	1,151	1,164	3,942	190	(378)	6,069
- inter-segment	(11)	6	(288)	(1)	294	—
Change in expected credit losses and other credit impairment charges	(3)	(109)	(41)	1	28	(124)
Net operating income/(expense)	1,137	1,061	3,613	190	(56)	5,945
Total operating expenses	(924)	(630)	(3,478)	(142)	(158)	(5,332)
Operating profit/(loss)	213	431	135	48	(214)	613
Share of loss in associates and joint ventures	—	—	—	—	(10)	(10)
Adjusted profit/(loss) before tax	213	431	135	48	(224)	603
	%	%	%	%	%	%
Adjusted cost efficiency ratio	81.1	53.8	95.2	75.1		87.9
	2018					
Net operating income/(expense) before change in expected credit losses and other credit impairment charges ¹	2,580	2,445	4,207	249	(87)	9,394
- external	2,530	2,252	4,554	248	(190)	9,394
- inter-segment	50	193	(347)	1	103	—
Change in expected credit losses and other credit impairment charges	(103)	(26)	(110)	1	79	(159)
Net operating income/(expense)	2,477	2,419	4,097	250	(8)	9,235
Total operating expenses	(2,034)	(1,134)	(3,391)	(188)	(404)	(7,151)
Operating profit/(loss)	443	1,285	706	62	(412)	2,084
Share of profit in associates and joint ventures	—	—	—	—	16	16
Adjusted profit/(loss) before tax	443	1,285	706	62	(396)	2,100
	%	%	%	%	%	%
Adjusted cost efficiency ratio	78.8	46.4	80.6	75.5		76.1

¹ Net operating income before change in expected credit losses and other credit impairment charges, also referred to as revenue.

Notes on the financial statements

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:

	2019 £m	2018 £m
External net operating income by country¹	6,044	9,468
– United Kingdom	2,987	6,537
– France	1,653	1,532
– Germany	710	654
– Other countries	694	745

Adjusted results reconciliation

	2019			2018		
	Adjusted £m	Significant items £m	Reported £m	Adjusted £m	Significant items £m	Reported £m
Revenue ¹	6,069	(25)	6,044	9,394	74	9,468
ECL	(124)	–	(124)	(159)	–	(159)
Operating expenses	(5,332)	(1,450)	(6,782)	(7,151)	(200)	(7,351)
Share of (loss)/profit in associates and joint ventures	(10)	–	(10)	16	–	16
(Loss)/profit before tax	603	(1,475)	(872)	2,100	(126)	1,974

¹ Net operating income before change in expected credit losses and other credit impairment charges, also referred to as revenue.

Adjusted profit reconciliation

	2019 £m	2018 £m
Year ended 31 Dec		
Adjusted profit before tax	603	2,100
Significant items	(1,475)	(126)
– UK customer redress programmes	(1)	(22)
– debit valuation adjustment on derivative contracts	(27)	42
– fair value movement on non-qualifying hedges	3	(2)
– cost of structural reform	(87)	(184)
– restructuring and other related costs	(204)	(30)
– settlements and provisions in connection with legal and regulatory matters	(7)	70
– impairment of goodwill	(1,152)	–
Reported (loss)/profit before tax	(872)	1,974

Balance sheet by business

	RBWM £m	CMB £m	GB&M £m	GPB £m	Corporate Centre £m	Total £m
31 Dec 2019						
Loans and advances to customers	22,597	27,204	53,866	4,285	439	108,391
Customer accounts	31,310	36,923	95,774	7,502	5,727	177,236
31 Dec 2018						
Loans and advances to customers	21,924	29,021	56,464	3,541	1,014	111,964
Customer accounts	29,961	34,716	103,387	6,514	6,258	180,836

10 Trading assets

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Treasury and other eligible bills	1,991	2,411	780	1,104
Debt securities ^{1, 2}	40,481	41,108	28,330	26,144
Equity securities	38,292	35,257	36,696	33,695
Trading securities	80,764	78,776	65,806	60,943
Loans and advances to banks ³	6,371	7,857	5,611	7,148
Loans and advances to customers ³	11,114	8,787	11,868	9,674
At 31 Dec	98,249	95,420	83,285	77,765

¹ Included within the above figures for the group are debt securities issued by banks and other financial institutions of £8,551m (2018: £9,564m), of which £1,676m (2018: £1,486m) are guaranteed by various governments.

² Included within the above figures for the bank are debt securities issued by banks and other financial institutions of £7,014m (2018: £6,951m), of which £1,504m (2018: £985m) are guaranteed by various governments.

³ Loans and advances to banks and customers include reverse repos, stock borrowing and other amounts.

11 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.

For all financial instruments where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. In inactive markets, the group will source alternative market information to validate the financial instrument's fair value, with greater weight given to information that is considered to be more relevant and reliable. The factors that are considered in this regard are, *inter alia*:

- the extent to which prices may be expected to represent genuine traded or tradable prices;
- the degree of similarity between financial instruments;
- the degree of consistency between different sources;
- the process followed by the pricing provider to derive the data;
- the elapsed time between the date to which the market data relates and the balance sheet date; and
- the manner in which the data was sourced.

For fair values determined using valuation models, the control framework may include, as applicable, development or validation by independent support functions of: (i) the logic within valuation models; (ii) the inputs to these models; (iii) any adjustments required outside the valuation models; and (iv) where possible, model outputs. Valuation models are subject to a process of due diligence and calibration before becoming operational and are calibrated against external market data on an ongoing basis.

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. When quoted market prices are unavailable, the own debt in issue is valued using valuation techniques, the inputs for which are based either on 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 that is appropriate to the group's liabilities.

Structured notes issued and certain other hybrid instruments are included within trading liabilities and are measured at fair value. The spread applied to these instruments is derived from the spreads at which the group issues structured notes.

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 HSBC 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 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
The group								
Recurring fair value measurements at 31 Dec								
Assets								
Trading assets	69,292	25,754	3,203	98,249	69,774	22,094	3,552	95,420
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	10,932	3,649	2,431	17,012	10,128	5,590	2,081	17,799
Derivatives	869	162,032	1,637	164,538	1,101	141,341	2,080	144,522
Financial investments	40,388	5,413	650	46,451	40,237	6,232	790	47,259
Liabilities								
Trading liabilities	37,195	10,791	40	48,026	35,964	13,504	46	49,514
Financial liabilities designated at fair value	7,222	33,477	943	41,642	5,337	30,595	990	36,922
Derivatives	672	158,730	1,681	161,083	1,420	137,049	1,463	139,932
The bank								
Recurring fair value measurements at 31 Dec								
Assets								
Trading assets	56,229	23,858	3,198	83,285	53,104	21,075	3,586	77,765
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	279	2,326	524	3,129	24	5,051	670	5,745
Derivatives	685	150,152	1,659	152,496	849	136,247	2,133	139,229
Financial investments	25,023	1,480	58	26,561	24,511	2,116	72	26,699
Liabilities								
Trading liabilities	17,393	9,594	27	27,014	15,128	12,154	19	27,301
Financial liabilities designated at fair value	–	23,980	683	24,663	–	22,203	728	22,931
Derivatives	533	147,145	1,929	149,607	1,237	132,351	1,719	135,307

Notes on the financial statements

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise measured at fair value through profit or loss ²	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	£m	£m	£m	£m	£m	£m	£m
At 31 Dec 2019							
Transfers from Level 1 to Level 2 ¹	-	1,336	-	18	194	-	-
Transfers from Level 2 to Level 1	-	552	141	85	106	-	90
At 31 Dec 2018							
Transfers from Level 1 to Level 2	-	183	-	-	33	-	-
Transfers from Level 2 to Level 1 ²	-	1,625	-	(96)	1,275	-	(103)

1 Refinement methodology for government bonds and illiquid corporate bonds drove Trading Assets transfers from Level 1 to Level 2 during the period.

2 Liquid corporate bonds of £1,547m in trading assets and £1,220m in trading liabilities were transferred from Level 2 to Level 1 during the period.

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarterly reporting period. Transfers into and out of levels of the fair value hierarchy are normally attributable to observability of valuation inputs and price transparency. In the current year the majority of the transfer relates to the reclassification of certain positions where improved data is now available.

Fair value adjustments

Fair value adjustments are adopted when the group determines there are additional factors considered by market participants that 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, such as when models are enhanced and fair value adjustments may no longer be required.

Bid-offer

IFRS 13 'Fair value measurement' 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 costs 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, an adjustment may be necessary to reflect the likelihood that 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 adjustments

The CVA is an adjustment to the valuation of over-the-counter ('OTC') derivative contracts to reflect the possibility that the counterparty may default, and that the group may not receive the full market value of the transactions.

The DVA is an adjustment to the valuation of OTC derivative contracts to reflect the possibility that HSBC may default, and that it may not pay the full market value of the transactions.

HSBC calculates a separate CVA and DVA for each legal entity, and for each counterparty to which the entity has exposure. With the exception of central clearing parties, all third-party counterparties are included in the CVA and DVA calculations, and these adjustments are not netted across Group entities.

HSBC calculates the CVA by applying the probability of default ('PD') of the counterparty, conditional on the non-default of HSBC, to HSBC's expected positive exposure to the counterparty and multiplying the result by the loss expected in the event of default.

Conversely, HSBC calculates the DVA by applying the PD of HSBC, conditional on the non-default of the counterparty, to the expected positive exposure of the counterparty to HSBC and multiplying the result by the proportional loss expected in the event of default. Both calculations are performed over the life of the potential exposure.

For most products, HSBC uses a simulation methodology, which incorporates a range of potential exposures over the life of the portfolio, to calculate the expected positive exposure to a counterparty. The simulation methodology includes credit mitigants, such as counterparty netting agreements and collateral agreements with the counterparty.

The methodologies do not, in general, account for 'wrong-way risk', which arises when the underlying value of the derivative prior to any CVA is positively correlated to the PD of the counterparty. When there is significant wrong-way risk, a trade-specific approach is applied to reflect this risk in the valuation.

Funding fair value adjustment

The FFVA is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. The expected future funding exposure is calculated by a simulation methodology, where available, and is adjusted for events that may terminate the exposure, such as the default of HSBC or the counterparty. The FFVA and DVA are calculated independently.

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. The accounting for inception profit adjustments is discussed in Note 1.

Fair value valuation bases

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

	Assets					Liabilities			
	Financial Investments	Held for trading	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Total	Held for trading	Designated at fair value	Derivatives	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m
Private equity including strategic investments	66	3	2,134	–	2,203	3	–	–	3
Asset-backed securities	578	694	21	–	1,293	–	–	–	–
Structured notes	–	2	–	–	2	35	943	–	978
Derivatives	–	–	–	1,637	1,637	–	–	1,677	1,677
Other portfolios ¹	6	2,504	276	–	2,786	2	–	4	6
At 31 Dec 2019	650	3,203	2,431	1,637	7,921	40	943	1,681	2,664
Private equity including strategic investments	62	10	1,673	–	1,745	10	–	–	10
Asset-backed securities	723	730	24	–	1,477	–	–	–	–
Structured notes	–	2	–	–	2	36	990	–	1,026
Derivatives	–	–	–	2,080	2,080	–	–	1,463	1,463
Other portfolios ¹	5	2,810	384	–	3,199	–	–	–	–
At 31 Dec 2018	790	3,552	2,081	2,080	8,503	46	990	1,463	2,499
The bank									
Private equity including strategic investments	54	–	524	–	578	–	–	–	–
Asset-backed securities	4	693	–	–	697	–	–	–	–
Structured notes	–	1	–	–	1	25	683	–	708
Derivatives	–	–	–	1,659	1,659	–	–	1,919	1,919
Other portfolios ¹	–	2,504	–	–	2,504	2	–	10	12
At 31 Dec 2019	58	3,198	524	1,659	5,439	27	683	1,929	2,639
Private equity including strategic investments	53	1	444	–	498	–	–	–	–
Asset-backed securities	19	776	226	–	1,021	–	–	–	–
Structured notes	–	–	–	–	–	19	728	–	747
Derivatives	–	–	–	2,133	2,133	–	–	1,713	1,713
Other portfolios ¹	–	2,809	–	–	2,809	–	–	6	6
At 31 Dec 2018	72	3,586	670	2,133	6,491	19	728	1,719	2,466

¹ Includes £1.2bn (2018: £1.5bn) in repurchase agreements and £0.8bn (2018: £0.9bn) in structured certificates.

Level 3 instruments are present in both ongoing and legacy businesses. Loans held for securitisation, derivatives with monolines, certain 'other derivatives' and predominantly all Level 3 ABSs are legacy positions. HSBC has the capability to hold these positions.

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.

Asset-backed securities

While quoted market prices are generally used to determine the fair value of these securities, valuation models are used to substantiate the reliability of the limited market data available and to identify whether any adjustments to quoted market prices are required. For certain ABSs, such as residential mortgage-backed securities, the valuation uses an industry standard model with assumptions relating to prepayment speeds, default rates and loss severity based on collateral type, and performance, as appropriate. The valuations output is benchmarked for consistency against observable data for securities of a similar nature.

Structured notes

The fair value of Level 3 structured notes is derived from the fair value of the underlying debt security, and the fair value of the embedded derivative is determined as described in the paragraph below on derivatives. These structured notes comprise principally equity-linked notes, issued by HSBC, which provide the counterparty with a return linked to the performance of equity securities and other portfolios. Examples of the unobservable parameters include long-dated equity volatilities and correlations between equity prices, and interest and foreign exchange rates.

Derivatives

OTC derivative valuation models calculate the present value of expected future cash flows, based upon 'no-arbitrage' principles. For many vanilla derivative products, the modelling approaches used are standard across the industry. For more complex derivative products,

Notes on the financial statements

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 through 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	Trading liabilities	Designated at fair value	Derivatives
The group	£m	£m	£m	£m	£m	£m	£m
At 1 Jan 2019	790	3,552	2,081	2,080	43	990	1,463
Total gains/(losses) recognised in profit or loss	4	(104)	273	189	(3)	111	587
– net income from financial instruments held for trading or managed on a fair value basis	–	(104)	–	189	(3)	–	587
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	273	–	–	111	–
– gains less losses from financial investments at fair value through other comprehensive income	4	–	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI') ¹	(17)	(50)	(106)	(23)	(1)	(16)	(7)
– financial investments: fair value gains/(losses)	2	–	–	–	–	–	–
– exchange differences	(19)	(50)	(106)	(23)	(1)	(16)	(7)
Purchases	3	1,468	623	–	5	123	–
New issuances	–	120	–	–	5	686	–
Sales	(8)	(499)	(178)	–	(7)	(149)	–
Settlements	(123)	(598)	(252)	(98)	(4)	(450)	(51)
Transfers out	(167)	(1,029)	(10)	(610)	(7)	(366)	(372)
Transfers in	168	343	–	99	9	14	61
At 31 Dec 2019	650	3,203	2,431	1,637	40	943	1,681
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2019	–	(17)	168	127	–	8	239
– trading income/(expense) excluding net interest income	–	(17)	–	127	–	–	239
– net income/(expense) from other financial instruments designated at fair value	–	–	168	–	–	8	–
At 1 Jan 2018	943	2,284	1,794	1,764	67	937	1,333
Total gains/(losses) recognised in profit or loss	(1)	118	307	586	(2)	(111)	181
– net income from financial instruments held for trading or managed on a fair value basis	–	118	–	586	(2)	–	181
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	307	–	–	(111)	–
– gains less losses from financial investments at fair value through other comprehensive income	(1)	–	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI') ¹	61	145	–	(4)	–	3	1
– financial investments: fair value gains/(losses)	25	–	–	–	–	–	–
– exchange differences	36	145	–	(4)	–	3	1
Purchases	25	3,059	524	6	3	57	79
New issuances	–	701	–	6	4	1,287	26
Sales	(35)	(991)	(240)	–	(9)	–	(11)
Settlements	(93)	(1,463)	(282)	(123)	(1)	(812)	59
Transfers out	(347)	(1,114)	(71)	(257)	(16)	(371)	(354)
Transfers in	237	813	49	102	–	–	149
At 31 Dec 2018	790	3,552	2,081	2,080	46	990	1,463
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2018	–	(5)	89	302	4	56	245
– trading income/(expense) excluding net interest income	–	(5)	–	302	4	–	245
– net income from other financial instruments designated at fair value	–	–	89	–	–	56	–
– loan impairment charges and other credit risk provisions	–	–	–	–	–	–	–

¹ Included in 'financial investments: fair value gains/(losses)' in the current year and 'exchange differences' in the consolidated statement of comprehensive income.

Movement in Level 3 financial instruments (continued)

	Assets				Liabilities		
	Financial Investments	Trading Assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading Liabilities	Designated at fair value	Derivatives
	£m	£m	£m	£m	£m	£m	£m
The bank							
At 1 Jan 2019	72	3,586	670	2,133	19	728	1,719
Entity transfer out of the bank ¹	–	–	–	–	–	–	(40)
Total gains/(losses) recognised in profit or loss	–	(102)	92	188	3	105	679
– net income from financial instruments held for trading or managed on a fair value basis	–	(102)	–	188	3	–	679
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	92	–	–	105	–
– gains less losses from financial investments at fair value through other comprehensive income	–	–	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI') ²	–	(49)	(24)	–	–	–	–
– exchange differences	–	(49)	(24)	–	–	–	–
Purchases	–	1,466	10	–	–	–	–
New issuances	–	120	–	–	–	650	–
Sales	(3)	(499)	(2)	–	–	–	–
Settlements	(9)	(638)	(222)	(141)	5	(470)	(113)
Transfers out	(54)	(1,029)	–	(612)	(7)	(330)	(397)
Transfers in	52	343	–	91	7	–	81
At 31 Dec 2019	58	3,198	524	1,659	27	683	1,929
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2019	–	(18)	–	38	–	23	(285)
– trading income/(expense) excluding net interest income	–	(18)	–	38	–	–	(285)
– net income/(expense) from other financial instruments designated at fair value	–	–	–	–	–	23	–
At 1 Jan 2018	140	2,362	980	1,808	32	700	1,605
Total gains/(losses) recognised in profit or loss	(1)	117	98	610	(2)	(87)	187
– net income from financial instruments held for trading or managed on a fair value basis	–	117	–	610	(2)	–	187
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	98	–	–	(87)	–
– gains less losses from financial investments at fair value through other comprehensive income	(1)	–	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI')	1	144	16	–	–	–	–
– exchange differences	1	144	16	–	–	–	–
Purchases	23	3,126	18	–	–	–	76
New issuances	–	701	–	6	–	1,273	39
Sales	(12)	(1,101)	(278)	–	–	–	(11)
Settlements	(10)	(1,462)	(164)	(130)	6	(797)	52
Transfers out	(73)	(1,114)	–	(265)	(17)	(361)	(367)
Transfers in	4	813	–	104	–	–	138
At 31 Dec 2018	72	3,586	670	2,133	19	728	1,719
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2018	–	(5)	6	255	(4)	48	(246)
– trading income/(expense) excluding net interest income	–	(5)	–	255	(4)	–	(246)
– net income from other financial instruments designated at fair value	–	–	6	–	–	48	–
– loan impairment charges and other credit risk provisions	–	–	–	–	–	–	–

1 Position transferred in the first quarter to the Spanish branch of HSBC France.

2 Included in 'financial investments: fair value gains/(losses)' in the current year and 'exchange differences' in the consolidated statement of comprehensive income.

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

Sensitivity of Level 3 fair values to reasonably possible alternative assumptions

	2019				2018			
	Reflected in profit or loss		Reflected in OCI		Reflected in profit or loss		Reflected in OCI	
	Favourable changes £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m
The group								
Derivatives, trading assets and trading liabilities ¹	140	(131)	–	–	155	(147)	–	–
Designated and otherwise mandatorily measured at fair value through profit or loss	223	(146)	–	–	177	(124)	3	(1)
Financial investments	7	(10)	17	(17)	7	(9)	17	(17)
At 31 Dec	370	(287)	17	(17)	339	(280)	20	(18)
The bank								
Derivatives, trading assets and trading liabilities ¹	122	(113)	–	–	136	(127)	–	–
Designated and otherwise mandatorily measured at fair value through profit or loss	57	(55)	–	–	53	(51)	–	–
Financial investments	6	(6)	–	–	6	(6)	–	–
At 31 Dec	185	(174)	–	–	195	(184)	–	–

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 £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m	Favourable changes £m	Un-favourable changes £m
Private equity including strategic investments	219	(143)	–	–	173	(119)	–	–
Asset-backed securities	32	(8)	17	(17)	38	(18)	20	(18)
Structured notes	6	(6)	–	–	10	(10)	–	–
Derivatives	62	(63)	–	–	74	(74)	–	–
Other derivatives	–	–	–	–	–	–	–	–
Other portfolios	51	(67)	–	–	44	(59)	–	–
At 31 Dec	370	(287)	17	(17)	339	(280)	20	(18)

The sensitivity analysis aims to measure a range of fair values consistent with the application of a 95% confidence interval. Methodologies take account of the nature of the valuation technique employed, as well as the availability and reliability of observable proxy and historical data.

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		Valuation techniques	Key unobservable inputs	2019				2018			
	Assets £m	Liabilities £m			Full range of inputs		Core range of inputs ¹		Full range of inputs		Core range of inputs ¹	
					Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher
Private equity including strategic investments	2,203	3	See Below	See below	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Asset-backed securities	1,293	–										
– CLO/CDO ²	270	–	Market proxy	Bid quotes	–	100	–	100	–	100	88	100
– Other ABSs	1,023	–	Market proxy	Bid quotes	–	99	74	95	–	100	68	99
Structured notes	2	978										
– equity-linked notes	–	791	Model – Option model	Equity Volatility	5%	90%	7%	45%	8%	79%	13%	43%
				Equity	31%	91%	36%	78%	31%	88%	40%	77%
– fund-linked notes	–	90	Model – Option model	Fund Volatility	5%	21%	5%	21%	7%	21%	7%	21%
– FX-linked notes	–	26	Model – Option model	FX Volatility	4%	23%	4%	22%	8%	27%	8%	25%
– other	2	71										
Derivatives	1,637	1,677										
– Interest rate												
securitisation swaps	237	484	Model – Discounted cash flow	Constant Prepayment Rate	6%	7%	6%	7%	6%	7%	6%	7%
long-dated swaptions	634	38	Model – Option model	IR Volatility	8%	22%	13%	21%	13%	39%	18%	31%
other	188	133										
– FX derivatives:												
FX options	240	311	Model – Option model	FX Volatility	–%	25%	4%	13%	3%	27%	6%	18%
– Equity derivatives:												
long-dated single stock options	112	126	Model – Option model	Equity Volatility	4%	89%	9%	38%	5%	83%	13%	46%
other	139	507										
– Credit derivatives:												
other	87	78										
Other portfolios	2,786	6										
– structured certificates	760	–	Model – Discounted cash flow	Credit Volatility	4%	4%	4%	4%	2%	4%	2%	4%
– other	2,026	6										
At 31 Dec	7,921	2,664										

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

2 Collateralised loan obligation/collateralised debt obligation.

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 when specific market pricing is not available, but there is evidence from instruments with 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.

Notes on the financial statements

Certain volatilities, typically those of a longer-dated nature, are unobservable and 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 HSBC 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, HSBC 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 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 and 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 effect of changing market variables on the HSBC portfolio will depend on HSBC's net risk position in respect of each variable.

12 Fair values of financial instruments not carried at fair value

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

The group	Carrying amount £m	Fair value			Total £m
		Quoted market price Level 1 £m	Observable inputs Level 2 £m	Significant unobservable inputs Level 3 £m	
At 31 Dec 2019					
Assets					
Loans and advances to banks	11,467	–	11,459	18	11,477
Loans and advances to customers	108,391	–	–	108,526	108,526
Reverse repurchase agreements – non-trading	85,756	–	85,756	–	85,756
Financial investments – at amortised cost	13	–	6	7	13
Liabilities					
Deposits by banks	23,991	–	23,978	–	23,978
Customer accounts	177,236	–	177,170	113	177,283
Repurchase agreements – non-trading	49,385	–	49,385	–	49,385
Debt securities in issue	25,039	–	25,039	–	25,039
Subordinated liabilities	13,182	–	13,638	–	13,638
At 31 Dec 2018					
Assets					
Loans and advances to banks	13,628	–	11,970	1,662	13,632
Loans and advances to customers	111,964	–	3	112,662	112,665
Reverse repurchase agreements – non-trading	80,102	–	80,102	–	80,102
Financial investments – at amortised cost	13	–	8	5	13
Liabilities					
Deposits by banks	24,532	–	24,514	–	24,514
Customer accounts	180,836	–	180,719	119	180,838
Repurchase agreements – non-trading	46,583	–	46,582	–	46,582
Debt securities in issue	22,721	–	22,721	–	22,721
Subordinated liabilities	13,770	–	13,999	–	13,999

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

	Fair value				Total
	Carrying amount	Quoted market price Level 1	Observable inputs Level 2	Significant unobservable inputs Level 3	
	£m	£m	£m	£m	£m
The bank					
At 31 Dec 2019					
Assets					
Loans and advances to banks	9,522	–	9,518	4	9,522
Loans and advances to customers	49,926	–	–	50,380	50,380
Reverse repurchase agreements – non-trading	50,736	–	50,737	–	50,737
Liabilities					
Deposits by banks	16,356	–	16,356	–	16,356
Customer accounts	109,040	–	109,039	–	109,039
Repurchase agreements – non-trading	36,327	–	36,327	–	36,327
Debt securities in issue	15,038	–	15,038	–	15,038
Subordinated liabilities	12,783	–	13,359	–	13,359
At 31 Dec 2018					
Assets					
Loans and advances to banks	12,686	–	11,556	1,130	12,686
Loans and advances to customers	58,783	–	5	59,425	59,430
Reverse repurchase agreements – non-trading	56,495	–	56,494	–	56,494
Liabilities					
Deposits by banks	18,148	–	18,147	–	18,147
Customer accounts	125,871	–	125,871	–	125,871
Repurchase agreements – non-trading	35,693	–	35,693	–	35,693
Debt securities in issue	19,085	–	19,085	–	19,085
Subordinated liabilities	13,323	–	13,535	–	13,535

Other financial instruments not carried at fair value are typically short-term in nature and reprice to current market rates frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. They include cash and balances at central banks and items in the course of collection from and transmission to other banks, all of which are measured at amortised cost.

Valuation

Fair value is an 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 HSBC expects to flow from an instrument's cash flow over its expected future life. Our valuation methodologies and assumptions in determining fair values for which no observable market prices are available may differ from those of other companies.

Loans and advances to banks and customers

To determine the fair value of loans and advances to banks and customers, loans are segregated, as far as possible, into portfolios of similar characteristics. Fair values are based on observable market transactions, when available. When they are unavailable, fair values are estimated using valuation models incorporating a range of input assumptions. These assumptions may include: value estimates from third-party brokers reflecting over-the-counter trading activity; forward-looking discounted cash flow models, taking account of expected customer prepayment rates, using assumptions that HSBC believes are consistent with those that would be used by market participants in valuing such loans; new business rates estimates for similar loans; and trading inputs from other market participants including observed primary and secondary trades. From time to time, we may engage a third-party valuation specialist to measure the fair value of a pool of loans.

The fair value of loans reflects expected credit losses 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. For credit impaired loans, fair value is estimated by discounting the future cash flows over the time period they are expected to be recovered.

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 incorporate the prices and future earnings streams of equivalent quoted securities.

Deposits by banks and customer accounts

The fair values of on-demand deposits are approximated by their carrying value. For deposits with longer-term maturities, fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities.

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 balances are generally short dated.

13 Financial assets designated and otherwise mandatorily measured at fair value through profit or loss

	2019	2018
	Designated at fair value and otherwise mandatorily measured at fair value £m	Designated at fair value and otherwise mandatorily measured at fair value £m
Securities	14,313	12,515
– debt securities	2,867	2,992
– equity securities	11,446	9,523
Loans and advances to banks and customers	2,456	5,141
Other	243	143
At 31 Dec	17,012	17,799

14 Derivatives

Notional contract amounts and fair values of derivatives by product contract type

	Notional contract amount		Fair value – Assets		Fair value – Liabilities			Total £m
	Trading £m	Hedging £m	Trading £m	Hedging £m	Total £m	Trading £m	Hedging £m	
The group								
Foreign exchange	4,671,667	5,377	48,994	240	49,234	(48,556)	(102)	(48,658)
Interest rate	9,192,428	39,928	120,867	476	121,343	(115,308)	(482)	(115,790)
Equities	816,306	–	7,397	–	7,397	(9,437)	–	(9,437)
Credit	247,107	–	3,684	–	3,684	(4,322)	–	(4,322)
Commodity and other	61,974	–	974	–	974	(970)	–	(970)
Offset (Note 28)					(18,094)			18,094
At 31 Dec 2019	14,989,482	45,305	181,916	716	164,538	(178,593)	(584)	(161,083)
Foreign exchange	4,341,381	4,227	50,881	109	50,990	(48,088)	(155)	(48,243)
Interest rate	13,252,292	38,617	107,028	497	107,525	(104,490)	(812)	(105,302)
Equities	984,963	–	9,131	–	9,131	(9,181)	–	(9,181)
Credit	304,263	–	2,893	–	2,893	(3,190)	–	(3,190)
Commodity and other	47,470	–	675	–	675	(708)	–	(708)
Offset (Note 28)					(26,692)			26,692
At 31 Dec 2018	18,930,369	42,844	170,608	606	144,522	(165,657)	(967)	(139,932)

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

Derivative asset and liability fair values increased during 2019, driven by yield curve movements and changes in foreign exchange rates.

	Notional contract amount		Fair value – Assets		Fair value – Liabilities			Total £m
	Trading £m	Hedging £m	Trading £m	Hedging £m	Total £m	Trading £m	Hedging £m	
The bank								
Foreign exchange	4,642,626	5,366	48,485	240	48,725	(48,293)	(101)	(48,394)
Interest rate	7,258,834	24,350	105,187	543	105,730	(100,001)	(393)	(100,394)
Equities	802,676	–	7,270	–	7,270	(9,433)	–	(9,433)
Credit	240,813	–	3,600	–	3,600	(4,219)	–	(4,219)
Commodity and other	62,013	–	975	–	975	(971)	–	(971)
Offset					(13,804)			13,804
At 31 Dec 2019	13,006,962	29,716	165,517	783	152,496	(162,917)	(494)	(149,607)
Foreign exchange	4,338,438	4,215	50,638	109	50,747	(47,976)	(155)	(48,131)
Interest rate	11,462,267	25,685	90,831	494	91,325	(88,976)	(670)	(89,646)
Equities	979,037	–	8,976	–	8,976	(9,031)	–	(9,031)
Credit	304,093	–	2,901	–	2,901	(3,185)	–	(3,185)
Commodity and other	47,463	–	675	–	675	(709)	–	(709)
Offset					(15,395)			15,395
At 31 Dec 2018	17,131,298	29,900	154,021	603	139,229	(149,877)	(825)	(135,307)

Use of derivatives

We undertake derivatives activity 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 our own risks.

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.

Substantially all of the group's derivatives entered into with subsidiaries are managed in conjunction with financial liabilities designated at fair value.

Derivatives valued using models with unobservable inputs

The difference between the fair value at initial recognition (the transaction price) and the value that would have been derived had the valuation techniques used for subsequent measurement been applied at initial recognition, less subsequent releases, is in the following table:

Unamortised balance of derivatives valued using models with significant unobservable inputs

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Unamortised balance at 1 Jan	58	72	55	69
Deferral on new transactions	70	88	70	88
Recognised in the income statement during the year:				
– amortisation	(43)	(59)	(43)	(59)
– maturity, termination or offsetting derivative	(42)	(28)	(42)	(28)
Exchange differences and other	(1)	(15)	–	(15)
Unamortised balance at 31 Dec¹	42	58	40	55

¹ This amount is yet to be recognised in the consolidated income statement.

Hedge accounting derivatives

The group applies hedge accounting to manage the following risks: interest rate and foreign exchange. The Report of the Directors – Risk presents more details on how these risks arise and how they are managed by the group.

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

The group	Hedging instrument					Balance sheet presentation	Change in fair value ² £m
	Notional amount ¹ £m	Carrying amount		Liabilities £m	Assets £m		
		Assets £m	Liabilities £m				
Hedged risk							
Interest rate ³	30,154	473	(479)			Derivatives	(173)
At 31 Dec 2019	30,154	473	(479)				(173)
Interest rate ³	29,142	433	(787)			Derivatives	161
31 December 2018	29,142	433	(787)				161

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 The hedged risk 'interest rate' includes inflation risk.

Hedged item by hedged risk

The group	Hedged item					Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²		Balance sheet presentation	Change in fair value ¹ £m	Recognised in profit and loss £m	Profit and loss presentation
	Assets £m	Liabilities £m	Assets £m	Liabilities £m				
Hedged risk								
	15,528	–	312	–	Financial assets at fair value through other comprehensive income	330		
	2	–	2	–	Loans and advances to banks	2		
Interest rate ³	926	–	5	–	Loans and advances to customers	15		
	–	821	–	102	Debt securities in issue	(9)		
	–	8,393	–	28	Subordinated liabilities and deposits by banks ⁴	(165)		
At 31 Dec 2019	16,456	9,214	319	130		173		(1)

Notes on the financial statements

Hedged item by hedged risk (continued)

The group Hedged risk	Hedged item				Balance sheet presentation	Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²			Change in fair value ¹	Recognised in profit and loss	Profit and loss presentation
	Assets £m	Liabilities £m	Assets £m	Liabilities £m				
	16,242	—	55	—	Financial assets at fair value through other comprehensive income	(132)		
Interest rate ³	997	—	(3)	—	Loans and advances to customers	(3)	(12)	Net income from financial instruments held for trading or managed on a fair value basis
	—	570	—	97	Debt securities in issue	(16)		
	—	10,048	—	35	Subordinated liabilities and deposits by banks ⁴	(23)		
At 31 Dec 2018	17,239	10,618	52	132		(174)	(12)	

- 1 Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component.
- 2 The accumulated amounts of fair value adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses were £(14)m (2018: £(58)m) for 'Financial assets at fair value through other comprehensive income', £157m (2018: nil) for 'Deposits by banks' and £26m (2018: £34m) for 'Debt securities in issue'.
- 3 The hedged risk 'interest rate' includes inflation risk.
- 4 The notional amount of non-dynamic fair value hedges was £8,177m (2018: £9,953m) of which the weighted-average maturity is July 2023 and the weighted average swap rate is 0.58% (2018: 0.45%). £5,970m (2018: £6,276m) of these hedges are internal to HSBC Group and composed by internal funding between HSBC Holdings and the group.

Hedging instrument by hedged risk

The bank Hedged risk	Hedging instrument			Balance sheet presentation	Change in fair value ²
	Notional amount ¹	Carrying amount			
		Assets	Liabilities		
Interest rate ³	£m	£m	£m	Derivatives	£m
At 31 Dec 2019	18,906	540	(392)		(110)
At 31 Dec 2018	20,438	481	(656)	Derivatives	94

- 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 The hedged risk 'interest rate' includes inflation risk.

Hedged item by hedged risk

The bank Hedged risk	Hedged item				Balance sheet presentation	Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²			Change in fair value ¹	Recognised in profit and loss	Profit and loss presentation
	Assets £m	Liabilities £m	Assets £m	Liabilities £m				
	11,881	—	214	—	Financial assets at fair value through other comprehensive income	282		Net income from financial instruments held for trading or managed on a fair value basis
Interest rate ³	60	—	(1)	—	Loans and advances to customers	(1)	(3)	
	—	545	—	102	Debt securities in issue	(9)		
	—	6,149	—	—	Subordinated liabilities and deposits by banks ⁴	(165)		
At 31 Dec 2019	11,941	6,694	213	102		107	(3)	

Hedged item by hedged risk (continued)

The bank Hedged risk	Hedged item				Balance sheet presentation	Change in fair value ¹ £m	Ineffectiveness	
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²				Recognised in profit and loss £m	Profit and loss presentation
	Assets £m	Liabilities £m	Assets £m	Liabilities £m				
	12,490	—	55	—	Financial assets at fair value through other comprehensive income	(77)		Net income from financial instruments held for trading or managed on a fair value basis
Interest rate ³	73	—	(3)	—	Loans and advances to customers	(2)	(12)	
	—	570	—	97	Debt securities in issue	(16)		
	—	6,305	—	—	Subordinated liabilities and deposits by banks ⁴	(11)		
At 31 Dec 2018	12,563	6,875	52	97		(106)	(12)	

1 Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component.

2 The accumulated amounts of fair value adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses were £(14)m (2018: £(58)m) for 'Financial assets at fair value through other comprehensive income', £157m (2018: nil) for 'Deposits by banks' and £26m (2018: £34m) for 'Debt securities in issue'.

3 The hedged risk 'interest rate' includes inflation risk.

4 The notional amount of non-dynamic fair value hedges was £5,970m (2018: £6,276m), of which the weighted-average maturity is August 2024 and the weighted average swap rate is 0.85% (2018: 0.87%). Those hedges are internal to HSBC Group and composed by internal funding between HSBC Holdings and the group.

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 dynamic hedges.

Hedging instrument by hedged risk

Hedged risk	Hedging instrument			Balance sheet presentation	Change in fair value ² £m	Change in fair value ³ £m	Recognised in profit and loss £m	Profit and loss presentation
	Notional amount ¹ £m	Carrying amount						
		Assets £m	Liabilities £m					
Foreign exchange	5,366	240	(101)	Derivatives	123	123	—	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	9,774	3	(1)		92	92	—	
At 31 Dec 2019	15,140	243	(102)		215	215	—	

Hedged risk	Hedging instrument			Balance sheet presentation	Change in fair value ² £m	Change in fair value ³ £m	Recognised in profit and loss £m	Profit and loss presentation
	Notional amount ¹ £m	Carrying amount						
		Assets £m	Liabilities £m					
Foreign exchange	4,215	109	(155)	Derivatives	(121)	(121)	—	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	9,475	64	(25)		(44)	(38)	(6)	
At 31 Dec 2018	13,690	173	(180)		(165)	(159)	(6)	

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.

Notes on the financial statements

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

Reconciliation of equity and analysis of other comprehensive income by risk type	Interest rate	Foreign exchange
	£m	£m
Cash flow hedging reserve at 1 Jan 2019	(24)	(1)
Fair value losses	92	123
Fair value losses reclassified from cash flow hedge reserve to income statement in respect of:		
– hedged items that have affected profit or loss	30	(158)
Income taxes	(22)	–
Cash flow hedging reserve at 31 Dec 2019	76	(36)
Cash flow hedging reserve at 1 Jan 2018	(42)	4
Fair value losses	(38)	(121)
Fair value losses reclassified from cash flow hedge reserve to income statement in respect of:		
– hedged items that have affected profit or loss	44	113
Income taxes	(14)	–
Transfer to HSBC UK Bank plc and its subsidiaries	26	3
Cash flow hedging reserve at 31 Dec 2018	(24)	(1)

Interest rate benchmark reform: amendments to IFRS 9 and IAS 39 'Financial Instruments'

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 (the 'temporary exceptions'). Under these temporary exceptions, Inter-Bank 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, Sterling Libor, and Euribor as well as overnight rates subject to the market-wide benchmarks reform, such as the European overnight Index Average rate ('Eonia'). 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. The group cross-currency swaps designated in hedge accounting relationships and affected by Ibor reform are not significant and have not been presented below.

Hedging instrument impacted by Ibor Reform

	Hedging instrument						Notional Amount ¹	
	Impacted by Ibor Reform					Total		NOT Impacted by Ibor Reform
	EUR	GBP	USD	Other				
The group	£m	£m	£m	£m	£m	£m	£m	
Fair Value Hedges	16,180	1,916	2,350	45	20,491	9,663	30,154	
Cash Flow Hedges	4,330	2,777	867	–	7,974	1,800	9,774	
At 31 Dec 2019	20,510	4,693	3,217	45	28,465	11,463	39,928	
The bank	£m	£m	£m	£m	£m	£m	£m	
Fair Value Hedges	5,771	1,891	1,889	29	9,580	9,326	18,906	
Cash Flow Hedges	–	2,777	867	–	3,644	1,800	5,444	
At 31 Dec 2019	5,771	4,668	2,756	29	13,224	11,126	24,350	

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.

The calculation of the Eonia changed on the 2 October 2019, so that going forward it is calculated as the Euro Short Term rate ('€STR') plus a fixed spread of 8.5 basis points. This change has triggered a structural change in the sale and repurchase agreement ('repo') market in France, whereby the overnight floating rate repo market referencing Eonia has significantly shifted into an overnight fixed rate repo market referencing repo rates. In this context, regarding the accounting standard setters' activities, management considered that

continuing to apply hedge accounting to the existing hedge relationships using forecast issuances of overnight repos, provides the most relevant accounting.

15 Financial investments

Carrying amount of financial investments

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Financial investments measured at fair value through other comprehensive income	46,451	47,259	26,561	26,699
– treasury and other eligible bills	3,091	3,123	2,237	2,135
– debt securities	43,204	43,973	24,269	24,511
– equity securities	91	87	55	53
– other instruments ¹	65	76	–	–
Debt instruments measured at amortised cost	13	13	–	–
– treasury and other eligible bills	5	8	–	–
– debt securities	8	5	–	–
At 31 Dec	46,464	47,272	26,561	26,699

1 'Other instruments' are comprised of loans and advances.

Equity instruments measured at fair value through other comprehensive income

Type of equity instruments	Instruments held at year end	
	Fair value £m	Dividends recognised £m
Business facilitation	75	1
Investments required by central institutions	11	–
Others	5	–
At 31 Dec 2019	91	1
Business facilitation	75	1
Investments required by central institutions	9	7
Others	3	–
At 31 Dec 2018	87	8

16 Assets pledged, collateral received and assets transferred

Assets pledged

Financial assets pledged as collateral

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Treasury bills and other eligible securities	1,162	1,317	–	–
Loans and advances to banks	–	29	–	–
Loans and advances to customers	13,997	22,148	–	–
Debt securities	25,491	37,250	19,586	26,555
Equity securities	20,669	18,644	20,610	18,561
Other	33,541	21,810	25,671	18,530
Assets pledged at 31 Dec	94,860	101,198	65,867	63,646

Financial assets pledged as collateral which the counterparty has the right to sell or repledge

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Trading assets	41,734	43,505	35,767	36,945
Financial investments	347	1,637	328	236
At 31 Dec	42,081	45,142	36,095	37,181

Assets pledged as collateral includes all assets categorised as encumbered in the disclosure on page 64.

The amount of assets pledged to secure liabilities may be greater than the book value of assets utilised as collateral. For example, in the case of securitisations and covered bonds, the amount of liabilities issued, plus mandatory over-collateralisation, is less than the book value of the pool of assets available for use as collateral. This is also the case where assets are placed with a custodian or a settlement agent that has a floating charge over all the assets placed to secure any liabilities under settlement accounts.

Notes on the financial statements

These transactions are conducted under terms that are usual and customary to collateralised transactions including, where relevant, standard securities lending and borrowing, repurchase agreements and derivative margining. The group places both cash and non-cash collateral in relation to derivative transactions.

Collateral received

The fair value of assets accepted as collateral, relating primarily to standard securities lending, reverse repurchase agreements and derivative margining, that the group is permitted to sell or repledge in the absence of default was £239,032m (2018: £250,277m) (the bank: 2019: £191,372m; 2018: £201,548m). The fair value of any such collateral sold or repledged was £179,442m (2018: £202,782m) (the bank: 2019: £140,786m; 2018: £152,454m).

The group is obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard securities lending, reverse repurchase agreements and derivative margining.

Assets transferred

The assets pledged include transfers to third parties that do not qualify for derecognition, notably secured borrowings such as debt securities held by counterparties as collateral under repurchase agreements and equity securities lent under securities lending agreements, as well as swaps of equity and debt securities. For secured borrowings, the transferred asset collateral continues to be recognised in full and a related liability, reflecting the group's obligation to repurchase the assets for a fixed price at a future date is also recognised on the balance sheet. Where securities are swapped, the transferred asset continues to be recognised in full. There is no associated liability as the non-cash collateral received is not recognised on the balance sheet. The group is unable to use, sell or pledge the transferred assets for the duration of these transactions, and remains exposed to interest rate risk and credit risk on these pledged assets. The counterparty's recourse is not limited to the transferred assets.

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	Carrying amount of:		Fair value of:		Net position £m
	Transferred assets £m	Associated liabilities £m	Transferred assets £m	Associated liabilities £m	
The group					
At 31 Dec 2019					
Repurchase agreements	15,262	15,252	–	–	–
Securities lending agreements	26,821	4,329	–	–	–
At 31 Dec 2018					
Repurchase agreements	19,375	19,396	–	–	–
Securities lending agreements	25,765	2,865	–	–	–

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	Carrying amount of:		Fair value of:		Net position £m
	Transferred assets £m	Associated liabilities £m	Transferred assets £m	Associated liabilities £m	
The bank					
At 31 Dec 2019					
Repurchase agreements	8,922	8,922	–	–	–
Securities lending agreements	27,174	4,293	–	–	–
At 31 Dec 2018					
Repurchase agreements	8,976	8,976	–	–	–
Securities lending agreements	28,205	2,794	–	–	–

17 Interests in associates

Principal associates of the group and the bank

Business Growth Fund Group plc ('BGF') is a principal associate of the group. BGF is an independent company, established in 2011 to provide investment to growing small to medium-sized British businesses. BGF is backed by five of the UK's main banking groups: Barclays, HSBC, Lloyds, RBS and Standard Chartered. At 31 December 2019, the group had a 24.54% interest in the equity capital of BGF. Share of (Loss)/profit in BGF is £(8m) (2018:£17m) and carrying amount of interest in BGF is £426m (2018:£386m).

Interests in joint ventures

A list of all associates is set out on page 164.

18 Investments in subsidiaries

Main subsidiaries of HSBC Bank plc

	At 31 Dec 2019		
	Country of incorporation or registration	HSBC Bank plc's interest in equity capital %	Share class
HSBC Investment Bank Holdings Limited	England and Wales	100.00	£1 Ordinary
HSBC Asset Finance (UK) Limited	England and Wales	100.00	£1 Ordinary
HSBC Life (UK) Limited	England and Wales	100.00	£1 Ordinary
HSBC France	France	99.99	€5 Actions
HSBC Trinkaus & Burkhardt AG	Germany	80.67	Stückaktien no par value
HSBC Bank Malta p.l.c	Malta	70.03	€0.30 Ordinary

All the above prepare their financial statements up to 31 December. Details of all group subsidiaries, as required under Section 409 of the Companies Act 2006, are set out in Note 35. The principal countries of operation are the same as the countries of incorporation.

Impairment testing of investments in subsidiaries

At each reporting period end, HSBC Bank plc reviews investments in subsidiaries for indicators of impairment. An impairment is recognised when the carrying amount exceeds the recoverable amount for that investment.

The recoverable amount is the higher of the investment's fair value less costs of disposal and its value in use. The value in use is calculated by discounting management's cash flow projections for the investment.

- The cash flow projections for each investment are based on the latest approved plans and a long-term growth rate is used to extrapolate the cash flows in perpetuity.
- The growth rate reflects inflation for the country within which the investment operates and is based on the long-term average growth rates.
- The rate used to discount the cash flows is based on the cost of capital assigned to each investment, which is derived using a capital asset pricing model ('CAPM'). CAPM depends on a number of inputs reflecting financial and economic variables, including the risk-free rate and a premium to reflect the inherent risk of the business being evaluated. These variables are based on the market's assessment of the economic variables and management's judgement. The discount rates for each investment are refined to reflect the rates of inflation for the countries within which the investment operates. In addition, for the purposes of testing investments for impairment, management supplements this process by comparing the discount rates derived using the internally generated CAPM, with cost of capital rates produced by external sources for businesses operating in similar markets.

In light of an increasingly challenging global economic outlook, management considered it is appropriate to base the long-term growth rate assumption on country level inflation data; moving away from a higher nominal GDP view that was used previously. A capital maintenance charge calculation was also introduced when estimating value in use. A charge is required if the Common Equity Tier 1 ratio of a subsidiary falls below the minimum regulatory requirement.

An impairment of £3.2bn was recognised in the fourth quarter as a result of the impairment test performed and relates to the investment in subsidiary HSBC France. This was due to updates to inputs and assumptions in the model used to estimate value-in-use ('VIU') (long-term growth rate in particular) and reductions in forecast future cash flows reflecting challenging market conditions and negative interest rates in the Eurozone. No investments in subsidiaries were impaired in 2018.

Impairment test results

Investment	Carrying amount	Value in use	Discount rate	Growth rate beyond initial cash flow projections	Impairment
At 31 Dec	£m	£m	%	%	£m
HSBC France	7,447	4,288	9.25%	1.54%	3,159

Sensitivities of key assumptions in calculating VIU

At 31 December 2019, the investment in HSBC France was sensitive to reasonably possible changes in the key assumptions supporting the recoverable amount.

In making an estimate of reasonably possible changes to assumptions, management considers the available evidence in respect of each input to the model. These include the external range of observable discount rates, historical performance against forecast, and risks attaching to the key assumptions underlying cash flow projections.

The following table presents a summary of the key assumptions underlying the most sensitive inputs to the model for HSBC France, the key risks attaching to each, and details of a reasonably possible change to assumptions where, in the opinion of management, these could result in an impairment.

Notes on the financial statements

Reasonably possible changes in key assumptions

	Input	Key assumptions	Associated risks	Reasonably possible change
Investment				
HSBC France	Cash flow projections	<ul style="list-style-type: none"> Level of interest rates and yield curves. Competitors' positions within the market. Level and change in unemployment rates. 	<ul style="list-style-type: none"> Uncertain regulatory environment. Customer remediation and regulatory actions. 	<ul style="list-style-type: none"> Cash flow projections decrease by 10%.
	Discount rate	<ul style="list-style-type: none"> Discount rate used is a reasonable estimate of a suitable market rate for the profile of the business. 	<ul style="list-style-type: none"> External evidence arises to suggest that the rate used is not appropriate to the business. 	<ul style="list-style-type: none"> Discount rate increases by 1%.
	Long-term growth rates	<ul style="list-style-type: none"> Business growth will reflect inflation rates of the country the subsidiary conducts business in the long term. 	<ul style="list-style-type: none"> Growth does not match inflation or there is a fall in inflation forecasts. 	<ul style="list-style-type: none"> Real inflation does not occur or is not reflected in performance.

Sensitivity of VIU to reasonably possible changes in key assumptions and changes to current assumptions to achieve nil headroom

Investments	Carrying amount	Value in use	Increase/(decrease)		
			Discount rate	Cash flows	Long-term growth
At 31 Dec	£m	£m	bps	%	bps
HSBC France	7,447	4,288	(317)	73.5%	366

19 Structured entities

The group is mainly involved with both consolidated and unconsolidated structured entities through the securitisation of financial assets, conduits and investment funds, established either by the group or a third party.

Consolidated structured entities

Total assets of the group's consolidated structured entities, split by entity type

	Conduits	Securitisations	Group managed funds		Other	Total
			£m	£m		
At 31 Dec 2019	6,541	471	3,183	2,789	12,984	
At 31 Dec 2018	7,218	232	3,378	2,912	13,740	

Conduits

The group has established and manages two types of conduits: securities investment conduits ('SICs') and multi-seller conduits.

Securities investment conduits

The SICs purchase highly rated ABSs to facilitate tailored investment opportunities.

- At 31 December 2019, Solitaire, the group's principal SIC held £1.6bn of ABSs (2018: £1.8bn). It is currently funded entirely by commercial paper ('CP') issued to the group. Although the group continues to provide a liquidity facility, Solitaire has no need to draw on it as long as the group purchases its issued CP, which the group intends to do for the foreseeable future. At 31 December 2019, the group held £2.4bn of CP (2018: £2.7bn).
- As at 31 December 2019, Barion, Malachite and Mazarin are all fully redeemed vehicles with no current trading activity.

Multi-seller conduits

The group's multi-seller conduit was established to provide access to flexible market-based sources of finance for its clients. Currently, the group bears risk equal to transaction-specific facility offered to the multi-seller conduits, amounting to £8.6bn at 31 December 2019 (2018: £9.7bn). First loss protection is provided by the originator of the assets, and not by the group, through transaction-specific credit enhancements. A layer of secondary loss protection is provided by the group in the form of programme-wide enhancement facilities.

Securitisations

The group uses structured entities to securitise customer loans and advances it originates in order to diversify the sources of funding for asset origination and capital efficiency purposes. The loans and advances are transferred by the group to the structured entities for cash or synthetically through credit default swaps, and the structured entities issue debt securities to investors.

Group managed funds

The group has established a number of money market and non-money market funds. Where it is deemed to be acting as principal rather than agent in its role as investment manager, the group controls these funds.

Other

The group has entered into a number of transactions in the normal course of business, which include asset and structured finance transactions where it has control of the structured entity. In addition, the group is deemed to control a number of third-party managed funds through its involvement as a principal in the funds.

Unconsolidated structured entities

The term 'unconsolidated structured entities' refers to all structured entities not controlled by the group. The group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities.

Nature and risks associated with the group's interests in unconsolidated structured entities

	Securitisations	Group managed funds	Non-group managed funds	Other	Total
Total asset values of the entities (£m)					
0 – 400	4	88	712	24	828
400 – 1,500	3	15	619	4	641
1,500 – 4,000	–	1	345	–	346
4,000 – 20,000	–	–	253	–	253
20,000+	–	–	36	2	38
Number of entities at 31 Dec 2019	7	104	1,965	30	2,106

	£m	£m	£m	£m	£m
Total assets in relation to the group's interests in the unconsolidated structured entities	1,296	2,143	8,526	1,481	13,446
– trading assets	–	–	2,687	952	3,639
– financial assets designated and otherwise mandatorily measured at fair value	–	2,139	5,180	10	7,329
– loans and advances to customers	1,296	–	290	497	2,083
– financial investments	–	4	369	22	395
Total liabilities in relation to the group's interests in the unconsolidated structured entities	–	–	5	–	5
Other off-balance sheet commitments	156	–	1,552	–	1,708
The group's maximum exposure at 31 Dec 2019	1,452	2,143	10,073	1,481	15,149

Total asset values of the entities (£m)					
0 – 400	6	81	884	37	1,008
400 – 1,500	3	6	505	3	517
1,500 – 4,000	–	–	229	–	229
4,000 – 20,000	–	–	74	1	75
20,000+	–	–	5	–	5
Number of entities at 31 Dec 2018	9	87	1,697	41	1,834

	£m	£m	£m	£m	£m
Total assets in relation to the group's interests in the unconsolidated structured entities	1,160	2,038	4,788	1,788	9,774
– trading assets	–	1	281	1,051	1,333
– financial assets designated at fair value	–	2,032	3,944	–	5,976
– loans and advances to customers	1,160	–	211	536	1,907
– financial investments	–	5	352	201	558
Total liabilities in relation to group's interests in the unconsolidated structured entities	–	8	–	–	8
Other off-balance sheet commitments	608	5	1,666	–	2,279
The group's maximum exposure at 31 Dec 2018	1,768	2,035	6,454	1,788	12,045

The maximum exposure to loss from the group's interests in unconsolidated structured entities represents the maximum loss it could incur as a result of its involvement with these entities regardless of the probability of the loss being incurred.

- For commitments, guarantees and written credit default swaps, the maximum exposure to loss is the notional amount of potential future losses.
- For retained and purchased investments and loans to unconsolidated structured entities, the maximum exposure to loss is the carrying value of these interests at the balance sheet reporting date.

The maximum exposure to loss is stated gross of the effects of hedging and collateral arrangements entered into to mitigate the group's exposure to loss.

Securitisations

The group has interests in unconsolidated securitisation vehicles through holding notes issued by these entities. In addition, the group has investments in ABSs issued by third-party structured entities.

Group managed funds

The group establishes and manages money market funds and non-money market investment funds to provide customers with investment opportunities. The group, as fund manager, may be entitled to receive management and performance fees based on the assets under management. The group may also retain units in these funds.

Non-group managed funds

The group purchases and holds units of third-party managed funds in order to facilitate business and meet customer needs.

Other

The group has established structured entities in the normal course of business, such as structured credit transactions for customers, to provide finance to public and private sector infrastructure projects, and for asset and structured finance transactions.

In addition to the interests disclosed above, the group enters into derivative contracts, reverse repos and stock borrowing transactions with structured entities. These interests arise in the normal course of business for the facilitation of third-party transactions and risk management solutions.

Group sponsored structured entities

The amount of assets transferred to and income received from such sponsored entities during 2019 and 2018 was not significant.

20 Goodwill and intangible assets

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Goodwill	–	1,323	23	84
Present value of in-force long-term insurance business	715	651	–	–
Other intangible assets ¹	867	652	512	416
At 31 Dec	1,582	2,626	535	500

¹ Included within the group's other intangible assets is internally generated software with a net carrying value of £776m (2018: £572m). During the year, amortisation and impairment of other intangible assets totalled £161m for the group (2018: £171m).

Movement analysis of goodwill

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
At 1 Jan	1,323	4,559	84	369
Transfer to HSBC UK Bank plc and its subsidiaries	–	(3,285)	–	(223)
Exchange differences	(171)	45	–	–
Other ¹	(1,152)	4	(61)	(62)
At 31 Dec	–	1,323	23	84

¹ During the year, goodwill was fully impaired by the group.

Impairment testing

The group's impairment test in respect of goodwill allocated to each cash-generating unit ('CGU') is performed annually at 1 July each year. A review for indicators of impairment is undertaken at each subsequent quarter-end and at 31 December 2019.

31 December 2019 impairment test

Having considered the extent of the Group's 2020 Business Update, current market conditions and their combined potential impact on HSBC's operations, an interim impairment test was performed at 31 December 2019 for all CGUs. As a result, we recognised £1.2bn of goodwill impairment related to RBWM (£339m), CMB (£520m) and GPB (£293m).

Impairment resulted from a combination of factors including our macro-economic outlook, a corresponding judgement to reduce the basis of the long-term growth rate assumption used to estimate value in use ('VIU'), IFRS requirements which limit elements of management approved forecasts that may be considered when testing goodwill for impairment (see 'Management's judgement in estimating cash flows of a CGU' below and lower forecast profitability in some businesses. Significant inputs to the VIU calculation are discussed in more detail below.

The calculation deficit - which is the amount by which the carrying amount of a CGU exceeds the VIU calculation - for RBWM, CMB and GPB resulted in the impairment of goodwill. Based on the sensitivity of certain assumptions and the outcome of reasonably possible alternative scenarios, it was considered appropriate to recognise full goodwill impairment on these three CGUs at 31 December 2019.

Impairment results and key assumptions in the VIU calculation

Cash-generating unit	Goodwill at 31 Dec 2019	Growth rate beyond initial cash flow projections	2019 Discount rate	2018 Discount rate
	£m	%	%	%
RBWM	339	1.3	8.5	8.3
CMB	520	1.7	9.5	9.3
GPB	293	1.6	9.7	9.4
Total	1,152			

Management's judgement in estimating the cash flows of a CGU

The cash flow projections for each CGU are based on plans approved by the Board. The Board challenge and endorse planning assumptions in light of internal capital allocation decisions necessary to support group's strategy, current market conditions, and macro-economic outlook. As required by IFRSs, estimates of future cash flows may not include estimated cash inflows or outflows that are expected to arise from restructuring initiatives before an entity has a constructive obligation to carry out the plan, and would therefore have recognised a provision for restructuring costs. Accordingly, we have excluded these components of the plan approved by the Board as they relate to the individual CGUs when calculating VIU.

Discount rate

The rate used to discount the cash flows is based on the cost of capital assigned to each CGU, which is derived using a capital asset pricing model ('CAPM'). CAPM depends on a number of inputs reflecting financial and economic variables, including the risk-free rate and a premium to reflect the inherent risk of the business being evaluated. These variables are based on the market's assessment of the economic variables and management's judgement. The discount rates for each CGU are refined to reflect the rates of inflation for the countries within which the CGU operates. In addition, for the purposes of testing goodwill for impairment, management supplements this process by comparing the discount rates derived using the internally generated CAPM, with the cost of capital rates produced by external sources for businesses operating in similar markets.

Long-term growth rate

The long-term growth rate is used to extrapolate the cash flows in perpetuity because of the long-term perspective within the group of business units making up the CGUs. Prior to the 31 December impairment test, these growth rates reflected GDP and inflation (nominal GDP) for the countries within which the CGU operates or from which it derives revenue. At 31 December 2019 we considered the extent to which growth rates based on nominal GDP data remained appropriate given the uncertainty in the macroeconomic environment from

the impact of the UK's withdrawal from the European Union. We anticipate that when growth in the European region does stabilise it will be at a slightly lower level than recent years. As a result, we considered it appropriate to base the long-term growth rate assumption on inflation data, moving away from a higher nominal GDP basis. This judgement had a material impact on the goodwill impairment outcome.

Present value of in-force long-term insurance business

When calculating the present value of in-force long-term ('PVIF') insurance business, expected cash flows are projected after adjusting for a variety of assumptions made by each insurance operation to reflect local market conditions and management's judgement of future trends and uncertainty in the underlying assumptions is reflected by applying margins (as opposed to a cost of capital methodology) including valuing the cost of policyholder options and guarantees using stochastic techniques.

Actuarial Control Committees of each key insurance entity meet on a quarterly basis to review and approve PVIF assumptions. All changes to non-economic assumptions, economic assumptions that are not observable and model methodology must be approved by the Actuarial Control Committee.

Movements in PVIF

	2019	2018
	£m	£m
PVIF at 1 Jan	651	572
Change in PVIF of long-term insurance business	89	74
– value of new business written during the year	46	32
– expected return ¹	(68)	(65)
– assumption changes and experience variances ² (see below)	114	113
– other adjustments	(3)	(6)
Exchange differences	(25)	5
PVIF at 31 Dec	715	651

¹ 'Expected return' represents the unwinding of the discount rate and reversal of expected cash flows for the period.

² Represents the effect of changes in assumptions on expected future profits and the difference between assumptions used in the previous PVIF calculation and actual experience observed during the year to the extent that this affects future profits. The gain of £114m (2018: £113m) was driven by modelling methodology updates in France.

Key assumptions used in the computation of PVIF for main life insurance operations

Economic assumptions are set in a way that is consistent with observable market values. The valuation of PVIF is sensitive to observed market movements and the impact of such changes is included in the sensitivities presented below.

	2019		2018	
	UK	France ¹	UK	France ¹
	%	%	%	%
Weighted average risk-free rate	0.72	0.44	1.19	1.52
Weighted average risk discount rate	1.22	1.27	1.69	2.35
Expense inflation	3.04	1.70	3.49	1.70

¹ For 2019, the calculation of France's PVIF assumes a risk discount rate of 1.27% (2018: 2.35%) plus a risk margin of £98m (2018: £85m).

Sensitivity to changes in economic assumptions

The group sets the risk discount rate applied to the PVIF calculation by starting from a risk-free rate curve and adding explicit allowances for risks not reflected in the best estimate cash flow modelling. Where the insurance operations provide options and guarantees to policyholders the cost of these options and guarantees is an explicit reduction to PVIF, unless it is already allowed for as an explicit addition to the technical provisions required by regulators. See page 73 for further details of these guarantees and the impact of changes in economic assumptions on our insurance manufacturing subsidiaries.

Sensitivity to changes in non-economic assumptions

Policyholder liabilities and PVIF are determined by reference to non-economic assumptions including mortality and/or morbidity, lapse rates and expense rates. See page 74 for further details on the impact of changes in non-economic assumptions on our insurance manufacturing operations.

21 Prepayments, accrued income and other assets

	The group		The bank	
	2019	2018	2019	2018
	£m	£m	£m	£m
Prepayments and accrued income	1,604	1,683	873	863
Settlement accounts	6,611	7,047	6,066	5,638
Cash collateral and margin receivables	33,643	21,823	25,671	18,502
Assets held for sale	13	37	–	1
Bullion	2,921	2,995	2,919	2,994
Endorsements and acceptances	82	115	42	81
Reinsurers' share of liabilities under insurance contracts (Note 4)	163	179	–	–
Employee benefit assets (Note 5)	22	24	22	24
Other accounts	2,146	2,475	1,208	2,263
Right-of-use assets ¹	643	N/A	416	N/A
Property, plant and equipment	1,091	1,119	105	122
At 31 Dec	48,939	37,497	37,322	30,488

¹ Right-of-use assets have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.

Notes on the financial statements

Prepayments, accrued income and other assets include £43,656m (2018: £32,826m) of financial assets, the majority of which are measured at amortised cost.

Assets held for sale

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Property, plant and equipment	13	36	–	–
Assets of disposal groups held for sale	–	1	–	1
Assets classified as held for sale at 31 Dec	13	37	–	1

22 Trading liabilities

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Deposits by banks ¹	3,148	3,942	3,095	3,853
Customer accounts ¹	5,102	6,627	4,898	6,385
Other debt securities in issue	1,042	1,095	102	50
Other liabilities – net short positions in securities	38,734	37,850	18,919	17,013
At 31 Dec	48,026	49,514	27,014	27,301

¹ 'Deposits by banks' and 'Customer accounts' include repos, stock lending and other amounts.

23 Financial liabilities designated at fair value

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Deposits by banks and customer accounts	150	169	78	93
Liabilities to customers under investment contracts	862	611	–	–
Debt securities in issue	38,044	33,643	22,000	20,339
Subordinated liabilities (Note 26)	2,268	2,177	2,585	2,499
Preferred securities (Note 26)	318	322	–	–
At 31 Dec	41,642	36,922	24,663	22,931

The group

The carrying amount of financial liabilities designated at fair value was £1,771m higher than the contractual amount at maturity (2018: £9,438m less). The cumulative amount of change in fair value attributable to changes in credit risk was a loss of £346m (2018: gain of £201m).

The bank

The carrying amount of financial liabilities designated at fair value was £1,238m higher than the contractual amount at maturity (2018: £9,636m less). The cumulative amount of change in fair value attributable to changes in credit risk was a loss of £227m (2018: gain of £113m).

24 Accruals, deferred income and other liabilities

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
Accruals and deferred income	2,033	2,333	1,046	1,336
Settlement accounts	5,295	5,814	4,655	5,443
Cash collateral and margin payables	38,261	29,747	32,297	26,642
Endorsements and acceptances	74	115	42	82
Employee benefit liabilities (Note 5)	275	332	85	95
Amount due to investors in funds consolidated by the group	928	598	–	–
Share-based payment liability to HSBC Holdings	126	155	103	128
Lease liabilities ¹	783	N/A	504	N/A
Other liabilities	2,540	1,942	1,433	1,424
At 31 Dec	50,315	41,036	40,165	35,150

¹ Lease liabilities have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.

For the group, accruals, deferred income and other liabilities include £48,907m (2018: £40,327m), and for the bank £39,379m (2018: £34,740m) of financial liabilities, the majority of which are measured at amortised cost.

25 Provisions

	Restructuring costs	Legal proceedings and regulatory matters	Customer remediation	Other provisions	Total
	£m	£m	£m	£m	£m
The group					
Provisions (excluding contractual commitments)					
At 31 Dec 2018	31	231	35	121	418
Additions	113	37	10	87	247
Amounts utilised	(42)	(38)	(7)	(32)	(119)
Unused amounts reversed	(1)	(5)	(9)	(40)	(55)
Exchange and other movements	(7)	(14)	–	(32)	(53)
At 31 Dec 2019	94	211	29	104	438
Contractual commitments¹					
At 31 Dec 2018					120
Net change in expected credit loss provision and other movements					(18)
At 31 Dec 2019					102
Total Provisions					
At 31 Dec 2018					538
At 31 Dec 2019					540
Provisions (excluding contractual commitments)					
At 31 Dec 2017	94	406	1,065	176	1,741
Additions	2	65	91	86	244
Amounts utilised	(34)	(138)	(337)	(66)	(575)
Unused amounts reversed	(29)	(107)	(47)	(73)	(256)
Unwinding of discounts	–	–	–	4	4
Transfer to HSBC UK Bank plc and its subsidiaries	(2)	(2)	(742)	(5)	(751)
Exchange and other movements	–	7	5	(1)	11
At 31 Dec 2018	31	231	35	121	418
Contractual commitments¹					
At 31 Dec 2017					55
Impact on transition to IFRS 9					104
Transfer to HSBC UK Bank plc					(72)
Net change in expected credit loss provision and other movements					33
At 31 Dec 2018					120
Total Provisions					
At 31 Dec 2017					1,796
At 31 Dec 2018					538

¹ Contractual commitments include the provision for contingent liabilities measured under IFRS 9 'Financial Instruments' in respect of financial guarantees and the expected credit loss provision on off-balance sheet guarantees and commitments.

	Restructuring costs	Legal proceedings and regulatory matters	Customer remediation	Other provisions	Total
	£m	£m	£m	£m	£m
The bank					
Provisions (excluding contractual commitments)					
At 31 Dec 2018	–	214	24	70	308
Additions	69	5	8	37	119
Amounts utilised	(27)	(33)	(6)	(11)	(77)
Unused amounts reversed	(1)	(4)	(6)	(27)	(38)
Exchange and other movements	–	(9)	–	(33)	(42)
At 31 Dec 2019	41	173	20	36	270
Contractual commitments¹					
At 31 Dec 2018					92
Net change in expected credit loss provision and other movements					(54)
At 31 Dec 2019					38
Total Provisions					
At 31 Dec 2018					400
At 31 Dec 2019					308

Notes on the financial statements

	Restructuring costs	Legal proceedings and regulatory matters	Customer remediation	Other provisions	Total
Provisions (excluding contractual commitments)					
At 31 Dec 2017	37	355	850	119	1,361
Additions	–	60	57	39	156
Amounts utilised	(9)	(115)	(226)	(36)	(386)
Unused amounts reversed	(27)	(92)	(46)	(49)	(214)
Unwinding of discounts	1	–	–	3	4
Transfer to HSBC UK Bank plc and its subsidiaries	(2)	–	(615)	(5)	(622)
Exchange and other movements	–	6	4	(1)	9
At 31 Dec 2018	–	214	24	70	308
Contractual commitments ¹					
At 31 Dec 2017					33
Impact on transition to IFRS 9					97
Transfer to HSBC UK Bank plc					(71)
Net change in expected credit loss provision and other movements					33
At 31 Dec 2018					92
Total Provisions					
At 31 Dec 2017					1,394
At 31 Dec 2018					400

¹ Contractual commitments include the provision for contingent liabilities measured under IFRS 9 'Financial Instruments' in respect of financial guarantees and the expected credit loss provision on off-balance sheet guarantees and commitments.

Legal proceedings and regulatory matters

Further details of legal proceedings and regulatory matters are set out in Note 32. Legal proceedings include civil court, arbitration or tribunal proceedings brought against HSBC companies (whether by way of claim or counterclaim), or civil disputes that may, if not settled, result in court, arbitration or tribunal proceedings. Regulatory matters refer to investigations, reviews and other actions carried out by, or in response to the actions of, regulatory or law enforcement agencies in connection with alleged wrongdoing.

Customer remediation

Provisions include £29m (2018: £35m) in respect of customer redress programmes. The majority of the provisions relating to the Payment Protection Insurance were transferred to HSBC UK Bank plc under the ring-fence implementation in 2018. At 31 December 2019 HSBC Bank plc holds £5m (2018: £5m) in provisions in respect to Payment Protection Insurance claims for Channel Island and Isle of Man customers.

Contractual commitments

The contractual commitments provisions at 31 December 2019 represented provisions on off-balance sheet loan commitments and guarantees, for which expected credit losses are provided following IFRS 9. Further analysis of the movement in the expected credit loss is disclosed within the 'Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees' table on page 40.

Other provisions

Since January, £95m has been transferred to right-of-use ('ROU') assets following IFRS 16. Other provisions at 31 December 2019 includes £10m (2018: £48m) for vacant space provision not applicable for transfer to the right-of-use assets as defined by IFRS 16 (e.g. rates, dilapidation and taxes etc).

26 Subordinated liabilities

Subordinated liabilities

	The group		The bank	
	2019 £m	2018 £m	2019 £m	2018 £m
At amortised cost	13,182	13,770	12,783	13,323
– subordinated liabilities	12,482	13,070	12,783	13,323
– preferred securities	700	700	–	–
Designated at fair value (Note 23)	2,586	2,499	2,585	2,499
– subordinated liabilities	2,268	2,177	2,585	2,499
– preferred securities	318	322	–	–
At 31 Dec	15,768	16,269	15,368	15,822

Subordinated liabilities rank behind senior obligations and consist of capital instruments and other instruments. Capital instruments generally count towards the capital base of the group and may be called and redeemed by the group subject to prior notification to the PRA and, where relevant, the consent of the local banking regulator. If not redeemed at the first call date, coupons payable may step up or become floating rate based on interbank rates. On capital instruments other than floating rate notes, interest is payable at fixed rates of up to 7.65%.

The balance sheet amounts disclosed below are presented on an IFRS basis and do not reflect the amount that the instruments contribute to regulatory capital due to the inclusion of issuance costs, regulatory amortisation and regulatory eligibility limits prescribed in the grandfathering provisions under CRD IV.

Subordinated liabilities of the group

		Carrying amount	
		2019	2018
		£m	£m
Capital instruments			
Additional tier 1 instruments guaranteed by the bank			
£300m	5.862% Non-cumulative Step-up Perpetual Preferred Securities ¹	318	322
£700m	5.844% Non-cumulative Step-up Perpetual Preferred Securities ²	700	700
Tier 2 instruments			
\$450m	Subordinated Floating Rate Notes 2021	340	352
\$750m	3.43% Subordinated Loan 2022	582	585
\$2,000m	3.5404% Subordinated Loan 2023	1,513	1,566
£300m	6.5% Subordinated Notes 2023	300	300
€1,500m	Floating Rate Subordinated Loan 2023	1,273	1,345
€2,000m	1.125% Subordinated Loan 2024	1,698	1,794
€1,500m	Floating Rate Subordinated Loan 2024	1,273	1,345
€2,000m	1.728% Subordinated Loan 2024	1,698	1,794
\$300m	7.65% Subordinated Notes 2025	227	235
\$750m	4.168% Subordinated Loan 2027	609	598
€1,250m	1.4648% Subordinated Loan 2027	1,061	1,121
€300m	Floating Rate Subordinated Loan 2027	255	269
£200m	Floating Rate Subordinated Loan 2028	200	200
€300m	Floating Rate Subordinated Loan 2028	255	269
€260m	Floating Rate Subordinated Loan 2029	221	233
£350m	5.375% Callable Subordinated Step-up Notes 2030 ³	415	401
£500m	5.375% Subordinated Notes 2033	662	593
£225m	6.25% Subordinated Notes 2041	224	224
£600m	4.75% Subordinated Notes 2046	594	594
\$750m	Undated Floating Rate Primary Capital Notes	567	587
\$500m	Undated Floating Rate Primary Capital Notes	378	392
\$300m	Undated Floating Rate Primary Capital Notes (Series 3)	227	235
Other Tier 2 instruments each less than £100m		178	215
At 31 Dec		15,768	16,269

1 In April 2020, the distribution rate changes to six month sterling Libor plus 1.85%.

2 In November 2031, the distribution rate changes to six month sterling Libor plus 1.76%.

3 In November 2025, the interest rate changes to three month sterling Libor plus 1.50%.

Footnotes 1, 2, and 3 all relate to instruments that are redeemable at the option of the issuer on the date of the change in the distribution or interest rate, and on subsequent rate reset and payment dates in some cases, subject to prior notification to the PRA.

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

Contractual maturity of financial liabilities

The balances in the table below do not agree directly with those in our consolidated balance sheet as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for trading liabilities and derivatives not treated as hedging derivatives).

Undiscounted cash flows payable in relation to hedging derivative liabilities are classified according to their contractual maturities. Trading liabilities and derivatives not treated as hedging derivatives are included in the 'Due not more than 1 month' time bucket and not by contractual maturity.

In addition, loans and other credit-related commitments, and financial guarantees are generally not recognised on our balance sheet. The undiscounted cash flows potentially payable under loan and other credit-related commitments and financial guarantees are classified on the basis of the earliest date they can be called.

Notes on the financial statements

Cash flows payable under financial liabilities by remaining contractual maturities

	Due not more than 1 month	Due over 1 month but not more than 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
	£m	£m	£m	£m	£m	£m
The group						
Deposits by banks	16,817	2,416	2,652	1,499	820	24,204
Customer accounts	167,623	5,299	4,090	304	112	177,428
Repurchase agreements – non-trading	45,379	1,728	2,068	277	–	49,452
Trading liabilities	48,026	–	–	–	–	48,026
Financial liabilities designated at fair value	5,725	395	5,027	16,546	16,490	44,183
Derivatives	160,536	41	133	382	402	161,494
Debt securities in issue	2,561	5,115	15,282	1,501	733	25,192
Subordinated liabilities	88	–	278	9,036	5,726	15,128
Other financial liabilities	46,153	456	1,507	596	1,321	50,033
	492,908	15,450	31,037	30,141	25,604	595,140
Loan and other credit-related commitments	128,905	–	–	–	–	128,905
Financial guarantees ¹	4,318	–	–	–	–	4,318
At 31 Dec 2019	626,131	15,450	31,037	30,141	25,604	728,363
Deposits by banks	15,181	2,624	880	5,456	436	24,577
Customer accounts	167,970	6,519	6,141	214	66	180,910
Repurchase agreements – non-trading	40,883	4,921	847	–	–	46,651
Trading liabilities	49,514	–	–	–	–	49,514
Financial liabilities designated at fair value	391	862	2,822	22,285	29,909	56,269
Derivatives	139,063	2	242	518	340	140,165
Debt securities in issue	3,631	4,786	11,018	2,785	842	23,062
Subordinated liabilities	97	18	205	4,798	11,057	16,175
Other financial liabilities	38,637	552	534	96	773	40,592
	455,367	20,284	22,689	36,152	43,423	577,915
Loan and other credit-related commitments	148,888	1	6	–	–	148,895
Financial guarantees ¹	6,054	–	–	–	–	6,054
At 31 Dec 2018	610,309	20,285	22,695	36,152	43,423	732,864
The bank						
Deposits by banks	13,322	2,033	484	528	66	16,433
Customer accounts	103,697	3,272	2,042	51	–	109,062
Repurchase agreements – non-trading	32,507	1,549	2,065	277	–	36,398
Trading liabilities	27,014	–	–	–	–	27,014
Financial liabilities designated at fair value	4,742	382	3,378	8,146	9,236	25,884
Derivatives	149,124	41	133	343	393	150,034
Debt securities in issue	787	4,750	7,743	1,489	406	15,175
Subordinated liabilities	88	–	219	9,141	5,870	15,318
Other financial liabilities	39,227	394	255	303	170	40,349
	370,508	12,421	16,319	20,278	16,141	435,667
Loan and other credit-related commitments	44,087	–	–	–	–	44,087
Financial guarantees ¹	3,695	–	–	–	–	3,695
At 31 Dec 2019	418,290	12,421	16,319	20,278	16,141	483,449
Deposits by banks	14,040	2,392	1,476	276	–	18,184
Customer accounts	119,736	4,298	1,870	29	–	125,933
Repurchase agreements – non-trading	31,986	3,101	676	–	–	35,763
Trading liabilities	27,301	–	–	–	–	27,301
Financial liabilities designated at fair value	379	734	2,613	13,817	24,220	41,763
Derivatives	134,548	–	194	482	309	135,533
Debt securities in issue	2,018	4,934	9,028	2,848	601	19,429
Subordinated liabilities	91	–	239	4,799	11,177	16,306
Other financial liabilities	34,259	435	89	–	–	34,783
	364,358	15,894	16,185	22,251	36,307	454,995
Loan and other credit-related commitments	65,938	–	–	–	–	65,938
Financial guarantees ¹	5,578	–	–	–	–	5,578
At 31 Dec 2018	435,874	15,894	16,185	22,251	36,307	526,511

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Maturity analysis of financial assets and financial liabilities

The following table provides an analysis of financial assets and liabilities by residual contractual maturity at the balance sheet date. These balances are included in the maturity analysis as follows:

- Financial assets and liabilities with no contractual maturity (such as equity securities) are included in the 'Due after more than 1 year' time bucket. Undated or perpetual instruments are classified based on the contractual notice period, which the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the 'Due after more than 1 year' time bucket.
- Financial instruments included within assets and liabilities of disposal groups held for sale are classified on the basis of the contractual maturity of the underlying instruments and not on the basis of the disposal transaction.
- Liabilities under investment contracts are classified in accordance with their contractual maturity. Undated investment contracts are included in the 'Due after more than 1 year' time bucket, however, such contracts are subject to surrender and transfer options by the policyholders.

Maturity analysis of financial assets and financial liabilities

The group	2019			2018		
	Due within 1 year £m	Due after more than 1 year £m	Total £m	Due within 1 year £m	Due after more than 1 year £m	Total £m
Assets						
Financial assets designated or otherwise mandatorily measured at fair value	2,651	14,361	17,012	5,171	12,628	17,799
Loans and advances to banks	8,849	2,618	11,467	9,805	3,823	13,628
Loans and advances to customers	52,408	55,983	108,391	55,481	56,483	111,964
Reverse repurchase agreement – non-trading	84,047	1,709	85,756	79,739	363	80,102
Financial investments	7,113	39,351	46,464	9,677	37,595	47,272
Other financial assets	43,281	367	43,648	32,481	345	32,826
At 31 Dec	198,349	114,389	312,738	192,354	111,237	303,591
Liabilities						
Deposits by banks	21,704	2,287	23,991	18,612	5,920	24,532
Customer accounts	176,855	381	177,236	180,544	292	180,836
Repurchase agreements – non-trading	49,116	269	49,385	46,583	–	46,583
Financial liabilities designated at fair value	11,826	29,816	41,642	3,857	33,065	36,922
Debt securities in issue	22,843	2,196	25,039	19,552	3,169	22,721
Other financial liabilities	47,723	1,841	49,564	39,108	880	39,988
Subordinated liabilities	93	13,089	13,182	25	13,745	13,770
At 31 Dec	330,160	49,879	380,039	308,281	57,071	365,352
The bank						
Assets						
Financial assets designated or otherwise mandatorily measured at fair value	2,413	716	3,129	4,799	946	5,745
Loans and advances to banks	5,352	4,171	9,523	8,948	3,738	12,686
Loans and advances to customers	35,076	14,850	49,926	39,844	18,939	58,783
Reverse repurchase agreement – non-trading	49,460	1,276	50,736	56,357	138	56,495
Financial investments	4,269	22,292	26,561	5,506	21,193	26,699
Other financial assets	33,483	1	33,484	27,210	11	27,221
At 31 Dec	130,053	43,306	173,359	142,664	44,965	187,629
Liabilities						
Deposits by banks	15,804	552	16,356	17,882	266	18,148
Customer accounts	108,990	50	109,040	125,843	28	125,871
Repurchase agreements – non-trading	36,058	269	36,327	35,693	–	35,693
Financial liabilities designated at fair value	9,184	15,479	24,663	3,516	19,415	22,931
Debt securities in issue	13,181	1,857	15,038	15,859	3,226	19,085
Other financial liabilities	39,345	436	39,781	34,485	–	34,485
Subordinated liabilities	–	12,783	12,783	–	13,323	13,323
At 31 Dec	222,562	31,426	253,988	233,278	36,258	269,536

28 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 of set off only in the event of default, insolvency or bankruptcy, or the offset criteria are not otherwise satisfied.
- 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 of offset remains appropriate.

Notes on the financial statements

	Amounts subject to enforceable netting arrangements								Total
	Gross amounts	Amounts offset	Net amounts in the balance sheet	Amounts not set off in the balance sheet			Net amount	Amounts not subject to enforceable netting arrangements ⁵	
				Financial instruments	Non-cash collateral	Cash collateral			
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Financial assets									
Derivatives (Note 14) ¹	181,449	(18,094)	163,355	(119,222)	(9,344)	(34,543)	246	1,183	164,538
Reverse repos, stock borrowing and similar agreements classified as ² :									
– trading assets	13,558	(203)	13,355	(1,174)	(12,181)	–	–	96	13,451
– non-trading assets	163,790	(79,963)	83,827	(21,848)	(61,832)	(147)	–	1,946	85,773
Loans and advances to customers ³	18,726	(6,334)	12,392	(10,066)	–	–	2,326	–	12,392
At 31 Dec 2019	377,523	(104,594)	272,929	(152,310)	(83,357)	(34,690)	2,572	3,225	276,154
Derivatives (Note 14) ¹	169,923	(26,692)	143,231	(104,948)	(6,816)	(29,081)	2,386	1,291	144,522
Reverse repos, stock borrowing and similar agreements classified as ² :									
– trading assets	12,661	(619)	12,042	(975)	(11,068)	–	(1)	597	12,639
– non-trading assets	184,887	(107,441)	77,446	(17,084)	(60,288)	(73)	1	2,674	80,120
Loans and advances to customers ³	24,698	(7,744)	16,954	(12,040)	–	–	4,914	–	16,954
At 31 Dec 2018	392,169	(142,496)	249,673	(135,047)	(78,172)	(29,154)	7,300	4,562	254,235
Financial liabilities									
Derivatives (Note 14) ¹	178,466	(18,094)	160,372	(119,222)	(14,633)	(26,130)	387	711	161,083
Repos, stock lending and similar agreements classified as ² :									
– trading liabilities	8,013	(203)	7,810	(1,174)	(6,636)	–	–	36	7,846
– non-trading liabilities	129,247	(79,963)	49,284	(21,848)	(27,167)	(269)	–	101	49,385
Customer accounts ⁴	20,032	(6,334)	13,698	(10,066)	–	–	3,632	19	13,717
At 31 Dec 2019	335,758	(104,594)	231,164	(152,310)	(48,436)	(26,399)	4,019	867	232,031
Derivatives (Note 14) ¹	164,194	(26,692)	137,502	(104,948)	(10,685)	(20,914)	955	2,430	139,932
Repos, stock lending and similar agreements classified as ² :									
– trading liabilities	10,706	(619)	10,087	(975)	(9,113)	–	(1)	101	10,188
– non-trading liabilities	153,926	(107,441)	46,485	(17,084)	(29,271)	(129)	1	98	46,583
Customer accounts ⁴	23,364	(7,744)	15,620	(12,040)	–	–	3,580	8	15,628
At 31 Dec 2018	352,190	(142,496)	209,694	(135,047)	(49,069)	(21,043)	4,535	2,637	212,331

1 At 31 December 2019, the amount of cash margin received that had been offset against the gross derivatives assets was £1,030m (2018: £2,354m). The amount of cash margin paid that had been offset against the gross derivatives liabilities was £5,213m (2018: £4,269m).

2 For the amount of repos, reverse repos, stock lending, stock borrowing and similar agreements recognised on the balance sheet within 'Trading assets' and 'Trading liabilities', see the 'Funding sources and uses' table on page 63.

3 At 31 December 2019, the total amount of 'Loans and advances to customers' recognised on the balance sheet was £108,391m (2018: £111,964m) of which £12,392m (2018: £16,954m) was subject to offsetting.

4 At 31 December 2019, the total amount of 'Customer accounts' recognised on the balance sheet was £177,236m (2018: £180,836m) of which £13,698m (2018: £15,620m) was subject to offsetting.

5 These exposures continue to be secured by financial collateral, but we may not have sought or been able to obtain a legal opinion evidencing enforceability of the right of offset.

29 Called up share capital and other equity instruments

Issued and fully paid

HSBC Bank plc £1.00 ordinary shares

	2019		2018	
	Number	£m	Number	£m
At 1 Jan	796,969,111	797	796,969,110	797
Re-designation of the £1.00 preferred ordinary share	–	–	1	–
At 31 Dec	796,969,111	797	796,969,111	797

HSBC Bank plc £1.00 preferred ordinary shares

	2019		2018	
	Number	£000	Number	£000
At 1 Jan	–	–	1	–
Shares re-designated into ordinary shares	–	–	(1)	–
At 31 Dec	–	–	–	–

At the Board's General Meeting held on 23 November 2018, a resolution was passed to amend the rights of the one preferred ordinary share of £1.00 in the capital of HSBC Bank plc, so it has the same rights, is subject to the same restrictions, and ranks *pari passu* in all respects with the ordinary shares of £1.00. This resulted in the preferred ordinary share to be re-designated as an ordinary share.

HSBC Bank plc \$0.01 non-cumulative third dollar preference shares

	2019		2018	
	Number	£000	Number	£000
At 1 Jan and 31 Dec	35,000,000	172	35,000,000	172

The bank has no obligation to redeem the preference shares but may redeem them in part or in whole at any time, subject to prior notification to the Prudential Regulation Authority. Dividends on the preference shares in issue are paid annually at the sole and absolute discretion of the Board of Directors. The Board of Directors will not declare a dividend on the preference shares in issue if payment of the dividend would cause the bank not to meet the capital adequacy requirements of the Prudential Regulation Authority or the profit of the bank, available for distribution as dividends, is not sufficient to enable the bank to pay in full both dividends on the preference shares in issue and dividends on any other shares that are scheduled to be paid on the same date and have an equal right to dividends or if payment of the dividend is prohibited by the rights attached to any class of shares in the capital of the bank, excluding ordinary shares.

The preference shares in issue carry no rights to conversion into ordinary shares of the bank. Holders of the preference shares in issue will be able to attend any general meetings of shareholders of the bank and to vote on any resolution proposed to vary or abrogate any of the rights attaching to the preference shares or any resolution proposed to reduce the paid up capital of the preference shares. If the dividend payable on the preference shares in issue has not been paid in full for the most recent dividend period or any resolution is proposed for the winding-up of the bank or the sale of its entire business then, in such circumstances, holders of preference shares will be entitled to vote on all matters put to general meetings. In the case of unpaid dividends, the holders of preference shares in issue will be entitled to attend and vote at any general meetings until such time as dividends on the preference shares have been paid in full, or a sum set aside for such payment in full, in respect of one dividend period. All shares in issue are fully paid.

Other equity instruments

HSBC Bank plc additional tier 1 instruments

	2019	2018
	£m	£m
£555m Undated Subordinated Resettable Additional Tier 1 instrument 2018 (Callable March 2023 onwards)	555	555
€1,900m Undated Subordinated Resettable Additional Tier 1 instrument issued 2015 (Callable December 2020 onwards)	1,388	1,388
€235m Undated Subordinated Resettable Additional Tier 1 instrument issued 2016 (Callable January 2022 onwards)	197	197
€300m Undated Subordinated Resettable Additional Tier 1 instrument 2018 (Callable March 2023 onwards)	263	263
£500m Undated Subordinated Resettable Additional Tier 1 instrument 2019 (Callable November 2024 onwards)	500	—
£250m Undated Subordinated Resettable Additional Tier 1 instrument 2019 (Callable November 2024 onwards)	213	—
£431m Undated Subordinated Resettable Additional Tier 1 instrument 2019 (Callable December 2024 onwards)	431	—
€200m Undated Subordinated Resettable Additional Tier 1 instrument 2019 (Callable January 2025 onwards)	175	—
At 31 Dec	3,722	2,403

These instruments are held by HSBC UK Holdings Ltd. During March 2019, the bank issued four new Undated Subordinated Additional Tier 1 Instruments.

The bank has issued capital instruments that are included in the group's capital base as fully CRD IV compliant additional tier 1 capital.

Interest on these instruments will be due and payable only at the sole discretion of the bank, and the bank has sole and absolute discretion at all times and for any reason to cancel (in whole or in part) any interest payment that would otherwise be payable on any date. There are limitations on the payment of principal, interest or other amounts if such payments are prohibited under UK banking regulations, or other requirements, if the bank has insufficient distributable reserves or if the bank fails to satisfy the solvency condition as defined in the instruments terms.

The instruments are undated and are repayable, at the option of the bank, in whole at the initial call date, or on any Interest Payment Date after the initial call date. In addition, the instruments are repayable at the option of the bank in whole for certain regulatory or tax reasons. Any repayments require the prior consent of the Prudential Regulation Authority. These instruments rank *pari passu* with the bank's most senior class or classes of issued preference shares and therefore ahead of ordinary shares. These instruments will be written down in whole, together with any accrued but unpaid interest if either the group's solo or consolidated Common Equity Tier 1 Capital Ratio falls below 7.00%.

30 Contingent liabilities, contractual commitments and guarantees

	The group		The bank	
	2019	2018	2019	2018
	£m	£m	£m	£m
Guarantees and other contingent liabilities:				
– financial guarantees	4,318	6,054	3,695	5,578
– performance and other guarantees	15,186	17,244	7,554	10,323
– other contingent liabilities	609	590	526	588
At 31 Dec	20,113	23,888	11,775	16,489
Commitments: ¹				
– documentary credits and short-term trade-related transactions	1,810	2,186	642	963
– forward asset purchases and forward deposits placed	37,998	50,116	2,906	1,526
– standby facilities, credit lines and other commitments to lend	89,096	96,593	40,539	63,449
At 31 Dec	128,904	148,895	44,087	65,938

¹ Includes £121,447m of commitments (2018: £141,620m), to which the impairment requirements in IFRS 9 are applied where the group has become party to an irrevocable commitment.

Notes on the financial statements

The above table discloses the nominal principal amounts, which represent the maximum amounts at risk should the 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 the nominal principal amounts is not indicative of future liquidity requirements.

UK branches of HSBC overseas entities

In December 2017, HM Revenue & Customs ('HMRC') challenged the VAT status of certain UK branches of HSBC overseas entities. HMRC has also issued notices of assessment covering the period from 1 October 2013 to 31 December 2017 totalling £262m, with interest to be determined. No provision has been recognised in respect of these notices. In March 2018, HSBC requested that HMRC reconsider its assessment. In January 2019, HMRC reaffirmed its assessment that the UK branches are ineligible to be members of the UK VAT group. In February 2019, HSBC paid HMRC the sum of £262m and filed appeals which remain pending. The payment of £262m is recorded as an asset on HSBC's balance sheet at 31 December 2019. Since January 2018, HSBC's returns have been prepared on the basis that the UK branches are not in the UK VAT group. In the event that HSBC's appeals are successful, HSBC will seek a refund of this VAT, of which £72m is estimated to be attributable to HSBC Bank plc.

Contingent liabilities arising from legal proceedings, regulatory and other matters against group companies are disclosed in Note 32.

Financial Services Compensation Scheme

The Financial Services Compensation Scheme ('FSCS') provides compensation to customers of financial services firms that have failed. Following the Financial Crisis, the compensation paid out to customers was initially funded through loans from HM Treasury which was fully repaid in 2018 by the FSCS. The bank could be liable to pay a proportion of any future amounts that the FSCS borrows from HM Treasury to the extent the industry levies imposed to date are not sufficient to cover the compensation due to customers in any future possible collapse. The ultimate FSCS levy to the industry as a result of a collapse cannot be estimated reliably. It is dependent on various uncertain factors including the potential recovery of assets by the FSCS, changes in the level of protected products (including deposits and investments) and the population of FSCS members at the time.

Guarantees

	The group				The bank			
	2019		2018		2019		2018	
	In favour of third parties	By the group in favour of other HSBC Group entities	In favour of third parties	By the group in favour of other HSBC Group entities	In favour of third parties	By the bank in favour of other HSBC Group entities	In favour of third parties	By the bank in favour of other HSBC Group entities
	£m	£m	£m	£m	£m	£m	£m	£m
Financial guarantees ¹	3,832	486	5,457	597	1,289	2,406	2,698	2,880
Performance and other guarantees	14,129	1,057	16,243	1,001	6,634	920	9,238	1,085
Total	17,961	1,543	21,700	1,598	7,923	3,326	11,936	3,965

¹ Financial guarantees contracts 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, in accordance with the original or modified terms of a debt instrument. The amounts in the above table are nominal principal amounts. 'Financial guarantees' to which the impairment requirements in IFRS 9 are applied have been presented separately from other guarantees to align with credit risk disclosures.

The group provides guarantees and similar undertakings on behalf of both third-party customers and other entities within HSBC Group. These guarantees are generally provided in the normal course of the group's banking businesses. Guarantees with terms of more than one year are subject to the group's annual credit review process.

31 Finance lease receivables

The group leases a variety of assets to third parties under finance leases, including transport assets (such as aircraft), property and general plant and machinery. 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 ¹	Unearned finance income ¹	Present Value ¹
	£m	£m	£m	£m	£m	£m
Lease receivables:						
No later than one year	392	(18)	374	290	(23)	267
One to two years	256	(19)	237	N/A	N/A	N/A
Two to three years	306	(17)	289	N/A	N/A	N/A
Three to four years	279	(15)	264	N/A	N/A	N/A
Four to five years	168	(13)	155	N/A	N/A	N/A
Later than one year and no later than five years	1,009	(64)	945	1,348	(82)	1,266
Later than five years	840	(33)	807	837	(45)	792
At 31 Dec	2,241	(115)	2,126	2,475	(150)	2,325

¹ The disclosure requirements of IFRS16 were adopted from 1 January 2019. Comparatives have not been restated.

32 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 1. 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 (see Note 25). Where an individual provision is material, the fact that a provision has been made is stated and quantified, except to the extent that 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.

Bernard L. Madoff Investment Securities LLC

Bernard L. Madoff ('Madoff') was arrested in December 2008 and later pleaded guilty to running a Ponzi scheme. His firm, Bernard L. Madoff Investment Securities LLC ('Madoff Securities'), is being liquidated in the US by a trustee (the 'Trustee').

Various non-US HSBC companies provided custodial, administration and similar services to a number of funds incorporated outside the US whose assets were invested with Madoff Securities. Based on information provided by Madoff Securities as at 30 November 2008, the purported aggregate value of these funds was \$8.4bn, including fictitious profits reported by Madoff.

Based on information available to HSBC, the funds' actual transfers to Madoff Securities minus their actual withdrawals from Madoff Securities during the time HSBC serviced the funds are estimated to have totalled approximately \$4bn. Various HSBC companies have been named as defendants in lawsuits arising out of Madoff Securities' fraud.

US litigation: The Trustee has brought lawsuits against various HSBC companies and others in the US Bankruptcy Court for the Southern District of New York (the 'US Bankruptcy Court'), seeking recovery of transfers from Madoff Securities to HSBC in an amount not yet pleaded or determined. HSBC and other parties to the actions have moved to dismiss the Trustee's claims. The US Bankruptcy Court granted HSBC's motion to dismiss with respect to certain of the Trustee's claims in November 2016. In February 2019, the US Court of Appeals for the Second Circuit (the 'Second Circuit Court of Appeals') reversed that dismissal and remanded the cases to the US Bankruptcy Court. In August 2019, HSBC and other parties filed a petition for writ of *certiorari* to the US Supreme Court seeking review of the Second Circuit Court of Appeals decision. Further proceedings in the US Bankruptcy Court have been stayed pending the resolution of that petition.

Fairfield Sentry Limited, Fairfield Sigma Limited and Fairfield Lambda Limited (together, 'Fairfield') (in liquidation since July 2009) have brought a lawsuit in the US against fund shareholders, including HSBC companies that acted as nominees for clients, seeking restitution of redemption payments. In December 2018, the US Bankruptcy Court issued an opinion, which ruled in favour of the defendants' motion to dismiss in respect of certain claims by the liquidators for Fairfield and granted a motion by the liquidators to file amended complaints. As a result of that opinion, all claims against one of the HSBC companies have been dismissed, and certain claims against the remaining HSBC defendants have also been dismissed. In May 2019, the liquidators appealed certain issues from the US Bankruptcy Court opinion to the US District Court for the Southern District of New York (the 'New York District Court').

UK litigation: The Trustee has filed a claim against various HSBC companies in the High Court of England and Wales, seeking recovery of transfers from Madoff Securities to HSBC in an amount not yet pleaded or determined. The deadline for service of the claim has been extended to September 2020 for UK-based defendants and November 2020 for all other defendants.

Cayman Islands litigation: In February 2013, Primeo Fund ('Primeo') (in liquidation since April 2009) brought an action against HSBC Securities Services Luxembourg ('HSSL') and Bank of Bermuda (Cayman) Limited (now known as HSBC Cayman Limited), alleging breach of contract and breach of fiduciary duty and claiming damages and equitable compensation. The trial concluded in February 2017 and, in August 2017, the court dismissed all claims against the defendants. In September 2017, Primeo appealed to the Court of Appeal of the Cayman Islands and, in June 2019, the Court of Appeal of the Cayman Islands dismissed Primeo's claims against HSSL and HSBC Cayman Limited. In August 2019, Primeo filed a notice of appeal to the UK Privy Council and, in September 2019, HSSL and HSBC Cayman Limited indicated that they will seek to dismiss the appeal.

Luxembourg litigation: In April 2009, Herald Fund SPC ('Herald') (in liquidation since July 2013) brought an action against HSSL before the Luxembourg District Court, seeking restitution of cash and securities that Herald purportedly lost because of Madoff Securities' fraud, or money damages. The Luxembourg District Court dismissed Herald's securities restitution claim, but reserved Herald's cash restitution claim and its claim for money damages. Herald has appealed this judgment to the Luxembourg Court of Appeal, where the matter is pending. In late 2018, Herald brought additional claims against HSSL and HSBC Bank plc before the Luxembourg District Court, seeking further restitution and damages.

In October 2009, Alpha Prime Fund Limited ('Alpha Prime') brought an action against HSSL before the Luxembourg District Court, seeking the restitution of securities, or the cash equivalent, or money damages. In December 2018, Alpha Prime brought additional claims before the Luxembourg District Court seeking damages against various HSBC companies. A preliminary hearing is scheduled for June 2020.

In December 2014, Senator Fund SPC ('Senator') brought an action against HSSL before the Luxembourg District Court, seeking restitution of securities, or the cash equivalent, or money damages. In April 2015, Senator commenced a separate action against the Luxembourg branch of HSBC Bank plc asserting identical claims before the Luxembourg District Court. In December 2018, Senator brought additional claims against HSSL and HSBC Bank plc Luxembourg branch before the Luxembourg District Court, seeking restitution of Senator's securities or money damages. These matters are currently pending before the Luxembourg District Court.

Ireland litigation: In November 2013, Defender Limited brought an action against HSBC Institutional Trust Services (Ireland) Limited ('HTIE') and others, based on allegations of breach of contract and claiming damages and indemnification for fund losses. The trial commenced in October 2018. In December 2018, the Irish High Court issued a judgment in HTIE's favour on a preliminary issue, holding that Defender Limited had no effective claim against HTIE. This judgment concluded the trial without further issues in dispute being heard. In February 2019, Defender Limited appealed to the Irish Supreme Court, and a hearing is scheduled for March 2020.

There are many factors that may affect the range of possible outcomes, and the resulting financial impact, of the various Madoff-related proceedings described above, including but not limited to the multiple jurisdictions in which the proceedings have been brought. Based upon the information currently available, management's estimate of the possible aggregate damages that might arise as a result of all

Notes on the financial statements

claims in the various Madoff-related proceedings is up to or exceeding \$500m, excluding costs and interest. Due to uncertainties and limitations of this estimate, the ultimate damages could differ significantly from this amount.

Anti-money laundering and sanctions-related matters

In December 2012, among other agreements, HSBC Holdings plc ('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 also agreed to retain an independent compliance monitor (who is, for FCA purposes, a 'Skilled Person' under section 166 of the Financial Services and Markets Act and, for FRB purposes, an 'Independent Consultant') to produce periodic assessments of the Group's AML and sanctions compliance programme (the 'Skilled Person/Independent Consultant'). In December 2012, HSBC Holdings also entered into an agreement with the Office of Foreign Assets Control ('OFAC') regarding historical transactions involving parties subject to OFAC sanctions. Reflective of HSBC's significant progress in strengthening its financial crime risk management capabilities, HSBC's engagement with the current Skilled Person will be terminated and a new Skilled Person with a narrower mandate will be appointed to assess the remaining areas that require further work in order for HSBC 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. The role of the Skilled Person/Independent Consultant is discussed on page 70.

Through the Skilled Person/Independent Consultant's prior reviews, as well as internal reviews conducted by HSBC, certain potential AML and sanctions compliance issues have been identified that HSBC is reviewing further with the FRB, FCA and/or OFAC. The 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, are investigating the collection and transmittal of third-party originator information in certain payments instructed over HSBC's proprietary payment systems. The FCA is also conducting an investigation into HSBC Bank plc's and HSBC UK Bank plc's compliance with UK money laundering regulations and financial crime systems and controls requirements. HSBC is cooperating with all of these investigations.

Since November 2014, a number of lawsuits have been filed in federal courts in the US against various HSBC companies and others on behalf of plaintiffs who are, or are related to, victims of terrorist attacks in the Middle East. In each case, it is alleged that the defendants aided and abetted the unlawful conduct of various sanctioned parties in violation of the US Anti-Terrorism Act. Currently, nine actions against HSBC Bank plc remain pending in federal courts in New York or the District of Columbia. Motions to dismiss were filed in two of those cases and the courts granted HSBC's motions in both cases in March and September 2019. The plaintiffs are seeking to amend their complaint in one of the cases and have appealed the decision in the other case. HSBC has filed motions to dismiss in three further cases which remain pending. The four remaining actions are at a very early stage.

Based on the facts currently known, it is not practicable at this time for HSBC to predict the resolution of these matters, including the timing or any possible impact on HSBC, which could be significant.

London interbank offered rates, European interbank offered rates and other benchmark interest rate investigations and litigation

Euro interest rate derivatives: In December 2016, the European Commission (the 'EC') issued a decision finding that HSBC, among other banks, engaged in anti-competitive practices in connection with the pricing of euro interest rate derivatives in early 2007. The EC imposed a fine on HSBC based on a one-month infringement. HSBC appealed the decision and, in September 2019, the General Court of the European Union (the 'General Court') issued a decision largely upholding the EC's findings on liability but annulling the fine. HSBC and the EC have both appealed the General Court's decision to the European Court of Justice.

US dollar Libor: Beginning in 2011, HSBC and other panel banks have been named as defendants in a number of private lawsuits filed in the US with respect to the setting of US dollar Libor. The complaints assert claims under various US laws, including US antitrust and racketeering laws, the US Commodity Exchange Act ('US CEA') and state law. The lawsuits include individual and putative class actions, most of which have been transferred and/or consolidated for pre-trial purposes before the New York District Court.

In 2017 and 2018, HSBC reached agreements with plaintiffs to resolve putative class actions brought on behalf of the following five groups of plaintiffs: persons who purchased US dollar Libor-indexed bonds; persons who purchased US dollar Libor-indexed exchange-traded instruments; US-based lending institutions that made or purchased US dollar Libor-indexed loans (the 'Lender class'); persons who purchased US dollar Libor-indexed interest rate swaps and other instruments directly from the defendant banks and their affiliates (the 'OTC class'); and persons who purchased US dollar Libor-indexed interest rate swaps and other instruments from certain financial institutions that are not the defendant banks or their affiliates. During 2018, the New York District Court granted final approval of the settlements with the OTC and Lender classes. The remaining settlements are subject to final court approval. Additionally, a number of other US dollar Libor-related actions remain pending against HSBC in the New York District Court and the Second Circuit Court of Appeals.

Intercontinental Exchange ('ICE') Libor: Between January and March 2019, HSBC and other panel banks were named as defendants in three putative class actions filed in the New York District Court on behalf of persons and entities who purchased instruments paying interest indexed to US dollar ICE Libor from a panel bank. The complaints allege, among other things, misconduct related to the suppression of this benchmark rate in violation of US antitrust and state law. In July 2019, the three putative class actions were consolidated, and the plaintiffs filed a consolidated amended complaint. In August 2019, the defendants filed a motion to dismiss the complaint, which remains pending.

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

Foreign exchange-related investigations and litigation

Various regulators and competition authorities around the world, including in the EU, 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.

In January 2018, HSBC Holdings entered into a three-year deferred prosecution agreement with the Criminal Division of the US Department of Justice ('DoJ') (the 'FX DPA'), 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 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.

In February 2017, the Competition Commission of South Africa (the 'Competition Commission') referred a complaint for proceedings before the South African Competition Tribunal (the 'Tribunal') against 18 financial institutions, including HSBC Bank plc, for alleged anti-competitive behaviour in the South African foreign exchange market. In April 2017, HSBC Bank plc filed an exception to the complaint based on a lack of jurisdiction and statute of limitations. In June 2019, the Tribunal issued a decision requiring the Competition Commission to revise its complaint. Several financial institutions named in the complaint have appealed part of the decision to the Competition Appeal Court of South Africa, and the Competition Commission has cross-appealed.

In October 2018, HSBC Holdings and HSBC Bank plc received an information request from the EC concerning potential coordination in foreign exchange options trading. This matter is at an early stage.

In late 2013 and early 2014, various HSBC companies and other banks were named as defendants in various putative class actions consolidated in the New York District Court. The consolidated complaint alleged, among other things, that the defendants conspired to manipulate the WM/Reuters foreign exchange benchmark rates. In September 2015, HSBC reached an agreement with the plaintiffs to resolve the consolidated action, and the court granted final approval of the settlement in August 2018.

In 2017, putative class action complaints making similar allegations on behalf of purported indirect purchasers of foreign exchange products were filed in New York and were subsequently consolidated in the New York District Court, where they remain pending.

In September 2018, various HSBC companies and other banks were named as defendants in two motions for certification of class actions filed in Israel alleging foreign exchange-related misconduct. In July 2019, the Tel Aviv Court allowed the plaintiffs to consolidate their claims and, in September 2019, the plaintiffs filed a motion for certification of the consolidated class action. In November and December 2018, complaints alleging foreign exchange-related misconduct were filed in the New York District Court and the High Court of England and Wales against HSBC and other defendants by certain plaintiffs that opted out of the US class action settlement. In February 2019, various HSBC companies were named as defendants in a claim issued in the High Court of England and Wales that alleges foreign exchange-related misconduct. These matters are at an early stage. It is possible that additional civil actions will be initiated against HSBC in relation to its historical foreign exchange activities.

As at 31 December 2019, the bank has recognised a provision for these and similar matters in the amount of £152m. There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters. Due to uncertainties and limitations of these estimates, the ultimate financial impact could differ significantly from the amount provided.

Precious metals fix-related litigation

Gold: Beginning in March 2014, numerous putative class actions were filed in the New York District Court and the US District Courts for the District of New Jersey and the Northern District of California, naming HSBC and other members of The London Gold Market Fixing Limited as defendants. The complaints allege that, from January 2004 to June 2013, the defendants conspired to manipulate the price of gold and gold derivatives for their collective benefit in violation of US antitrust laws, the US CEA and New York state law. The actions were consolidated in the New York District Court. The defendants' motion to dismiss the consolidated action was granted in part and denied in part in October 2016. In June 2017, the court granted the plaintiffs leave to file a third amended complaint, naming a new defendant. The court has denied the pre-existing defendants' request for leave to file a joint motion to dismiss, and discovery is proceeding.

Beginning in December 2015, numerous putative class actions under Canadian law were filed in the Ontario and Quebec Superior Courts of Justice against various HSBC companies and other financial institutions. The plaintiffs allege that, among other things, from January 2004 to March 2014, the defendants conspired to manipulate the price of gold and gold derivatives in violation of the Canadian Competition Act and common law. These actions are at an early stage.

Silver: Beginning in July 2014, numerous putative class actions were filed in the US District Courts for the Southern and Eastern Districts of New York, naming HSBC and other members of The London Silver Market Fixing Limited as defendants. The complaints allege that, from January 2007 to December 2013, the defendants conspired to manipulate the price of silver and silver derivatives for their collective benefit in violation of US antitrust laws, the US CEA and New York state law. The actions were consolidated in the New York District Court. The defendants' motion to dismiss the consolidated action was granted in part and denied in part in October 2016. In June 2017, the court granted the plaintiffs leave to file a third amended complaint, which names several new defendants. The court has denied the pre-existing defendants' request for leave to file a joint motion to dismiss, and discovery is proceeding.

In April 2016, two putative class actions under Canadian law were filed in the Ontario and Quebec Superior Courts of Justice against various HSBC companies and other financial institutions. The plaintiffs in both actions allege that, from January 1999 to August 2014, the defendants conspired to manipulate the price of silver and silver derivatives in violation of the Canadian Competition Act and common law. The Ontario action is at an early stage. The Quebec action has been temporarily stayed.

Platinum and palladium: Between late 2014 and early 2015, numerous putative class actions were filed in the New York District Court, naming HSBC and other members of The London Platinum and Palladium Fixing Company Limited as defendants. The complaints allege that, from January 2008 to November 2014, the defendants conspired to manipulate the price of platinum group metals ('PGM') and PGM-based financial products for their collective benefit in violation of US antitrust laws and the US CEA. In March 2017, the defendants' motion to dismiss the second amended consolidated complaint was granted in part and denied in part. In June 2017, the plaintiffs filed a third amended complaint. The defendants filed a joint motion to dismiss, which remains pending.

Based on the facts currently known, it is not practicable at this time for HSBC to predict the resolution of these matters, including the timing or any possible impact on HSBC, which could be significant.

Other regulatory investigations, reviews and litigation

HSBC Bank plc and/or certain of its affiliates are subject to a number of other investigations and reviews by various regulators and competition and law enforcement authorities, as well as litigation, in connection with various matters relating to the firm's businesses and operations, including:

- an investigation by the Swiss Competition Commission in connection with the setting of Euribor and Japanese yen Libor;
- an investigation by the FCA in connection with collections and recoveries operations in the UK;
- an information request from the UK Competition and Markets Authority concerning the financial services sector;
- a putative class action brought in the New York District Court relating to the market for US dollar-denominated supranational sovereign and agency bonds; and

Notes on the financial statements

- two group actions pending in the US courts and a claim issued in the High Court of England and Wales in connection with HSBC Bank plc's role as a correspondent bank to Stanford International Bank Ltd from 2003 to 2009.

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

33 Related party transactions

The immediate parent company of the group is HSBC UK Holdings Limited and the ultimate parent company is HSBC Holdings plc, both of which are incorporated in England.

Copies of the Group financial statements may be obtained from the below address.

HSBC Holdings plc
8 Canada Square
London E14 5HQ

IAS 24 'Related party disclosures' defines related parties as including the parent, fellow subsidiaries, associates, joint ventures, post-employment benefit plans for HSBC employees, Key Management Personnel ('KMP') of the group and its ultimate parent company, close family members of the KMP and entities which are controlled, jointly controlled or significantly influenced by the KMP or their close family members.

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

Key Management Personnel

The KMP of the bank are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the bank. They include the Directors of HSBC Bank plc, and Directors and certain members of the Group Management Board of HSBC Holdings plc, to the extent they have a role in directing the affairs of the bank.

A number of the bank's KMP are not Directors of the group, but are Directors or Group Management Board members of HSBC Holdings plc. The emoluments of these KMP are paid by other members of the Group who make no recharge to the bank. It is not possible to make a reasonable apportionment of their emoluments in respect of the bank. Accordingly, no emoluments in respect of these KMP are included in the following disclosure.

The tables below represent the compensation for Directors of the bank in exchange for services rendered to the bank for the period they served during the year.

Compensation of Key Management Personnel

	2019 £000	2018 £000
Short-term employee benefits	3,330	3,115
Post-employment benefits	—	4
Other long-term employee benefits	48	136
Share-based payments	348	801
Year ended 31 Dec	3,726	4,056

Transactions and balances during the year with Key Management Personnel of the bank

	2019		2018	
	Balance at 31 Dec ² £m	Highest amounts outstanding during year ³ £m	Balance at 31 Dec £m	Highest amounts outstanding during year £m
Key Management Personnel¹				
Advances and credits ²	0.2	0.4	2	4
Guarantees	—	—	—	—
Deposits	8	21	29	60

1 Includes close family members and entities which are controlled or jointly controlled by KMP of the bank or their close family members.

2 Exchange rate applied for non-GBP amounts is at 31 December 2019.

3 Exchange rate applied for non-GBP amounts is the average for the year.

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.

In addition to the requirements of IAS 24, particulars of advances (loans and quasi-loans), credits and guarantees entered into by the group with Directors of HSBC Bank plc are required to be disclosed pursuant to section 413 of the Companies Act 2006. Under the Companies Act, there is no requirement to disclose transactions with KMP of the bank's ultimate parent company, HSBC Holdings plc.

Transactions with Directors: advances, credits and guarantees (Companies Act 2006)

	2019	2018
	Balance at 31 Dec	Balance at 31 Dec
	£000	£000
Directors		
Loans	150	265
Guarantees	—	—

Other related parties

Transactions and balances during the year with KMP of the bank's ultimate parent company

During the course of 2018 and 2019, there were no transactions and balances between KMP of the bank's ultimate parent company, who were not considered KMP of the bank, in respect of Advances and Credits, Guarantees and Deposits.

Transactions and balances during the year with associates and joint ventures

	2019		2018	
	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec
	£m	£m	£m	£m
Unsubordinated amounts due from joint ventures ¹	—	—	102	—
Subordinated amounts due from associates	—	—	—	—
Guarantees and commitments ¹	—	—	610	—

¹ Impacted by the transfers to HSBC UK Bank plc following the completion of the ring-fencing in 2018.

The group provides certain banking and financial services to associates and joint ventures, including loans, overdrafts, interest and non-interest bearing deposits and current accounts. Details of the interests in associates and joint ventures are given in Notes 17 and 35.

The group's transactions and balances during the year with HSBC Holdings plc and subsidiaries of HSBC Holdings plc

	2019				2018			
	Due to/from HSBC Holdings plc		Due to/from subsidiaries of HSBC Holdings plc		Due to/from HSBC Holdings plc		Due to/from subsidiaries of HSBC Holdings plc	
	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec
	£m	£m	£m	£m	£m	£m	£m	£m
Assets								
Trading assets	98	75	676	302	351	24	4,725	276
Derivatives	1,685	1,447	24,696	18,130	2,651	1,685	20,224	18,135
Financial assets designated at fair value	8	7	198	27	15	7	201	198
Loans and advances to banks	—	—	5,341	1,957	—	—	6,703	2,780
Loans and advances to customers	406	—	612	400	924	—	3,610	539
Financial investments	229	160	—	—	238	229	28	—
Total related party assets at 31 Dec	2,426	1,689	31,523	20,816	4,179	1,945	35,491	21,928
Liabilities								
Trading liabilities	348	326	1,591	293	968	303	18,634	1,114
Financial liabilities designated at fair value	1,241	—	1,310	1,191	2,167	1,183	68	66
Deposits by banks	—	—	7,373	2,928	—	—	8,647	2,859
Customer accounts	3,855	1,762	3,119	1,992	15,024	2,708	5,095	1,716
Derivatives	3,163	1,501	22,940	18,055	770	559	21,145	17,594
Subordinated liabilities	6,060	—	10,509	9,787	13,444	6,060	4,230	4,230
Total related party liabilities at 31 Dec	14,667	3,589	46,842	34,246	32,373	10,813	57,819	27,579
Guarantees and commitments	—	—	467	371	—	—	482	397

	Due to/from HSBC Holdings plc		Due to/from subsidiaries of HSBC Holdings plc	
	2019	2018	2019	2018
	£m	£m	£m	£m
Income statement				
Interest income	9	6	142	119
Interest expense	84	448	329	141
Fee income	10	13	47	95
Fee expense	2	—	356	387
Trading income	—	—	8	5
Trading expense	—	3	15	125
Other operating income	69	97	322	316
General and administrative expenses	38	67	2,207	2,719

Notes on the financial statements

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.

The bank's transactions and balances during the year with HSBC Bank plc subsidiaries, HSBC Holdings plc and subsidiaries of HSBC Holdings plc

	2019						2018					
	Due to/from subsidiaries of HSBC Bank plc subsidiaries		Due to/from HSBC Holdings plc		Due to/from subsidiaries of HSBC Holdings plc		Due to/from subsidiaries of HSBC Bank plc subsidiaries		Due to/from HSBC Holdings plc		Due to/from subsidiaries of HSBC Holdings plc	
	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Assets												
Trading assets	1,363	907	98	75	676	302	3,547	1,051	351	24	4,403	276
Derivatives	30,022	13,839	1,685	1,447	23,229	17,134	11,668	11,557	2,651	1,685	29,257	17,329
Loans and advances to banks	6,290	4,029	–	–	4,871	1,404	7,491	4,142	–	–	6,570	2,650
Loans and advances to customers	7,771	6,969	406	–	586	353	15,422	7,444	911	–	3,594	539
Financial investments	185	–	–	–	–	–	820	185	–	–	–	–
Total related party assets at 31 Dec	45,631	25,744	2,189	1,522	29,362	19,193	38,948	24,379	3,913	1,709	43,824	20,794
Liabilities												
Trading liabilities	3	–	348	326	1,591	293	679	–	968	303	18,543	1,114
Deposits by banks	3,905	1,428	–	–	5,003	1,416	4,777	2,542	–	–	8,164	2,104
Customer accounts	924	534	3,855	1,762	3,063	1,890	1,410	922	15,024	2,708	4,997	1,705
Derivatives	26,270	13,702	3,163	1,501	21,730	17,243	12,444	12,309	770	559	34,043	16,709
Subordinated liabilities	701	700	5,827	–	10,272	9,566	700	700	13,137	5,827	4,230	4,230
Total related party liabilities at 31 Dec	31,803	16,364	13,193	3,589	41,659	30,408	20,010	16,473	29,899	9,397	69,977	25,862
Guarantees and commitments	1,475	1,294	–	–	267	112	1,502	1,475	–	–	361	273

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.

Post-employment benefit plans

The HSBC Bank (UK) Pension Scheme (the 'Scheme') entered into swap transactions with the bank to manage the inflation and interest rate sensitivity of the liabilities. At 31 December 2019, the gross notional value of the swaps was £7,464m (2018: £8,250m), the swaps had a positive fair value of £895m to the bank (2018: negative fair value of £810m) and the bank had delivered collateral of £904m (2018: £801m) to the Scheme in respect of these swaps. All swaps were executed at prevailing market rates and within standard market bid/offer spreads.

34 Events after the balance sheet date

In January 2020, the bank initiated the process to assign the lease of 8 Canada Square to HSBC Global Services (UK) Limited. Execution of the assignment is expected to be concluded during the first half of 2020. This will lead to the de-recognition of the right-of-use asset and lease liability. As at 31 December 2019, a £0.4bn right-of-use asset and £0.5bn lease liability were recognised.

The Group Directors approved the 2020 business update after 31 December 2019, setting out a plan that aims to reallocate capital to areas that can deliver stronger returns, to reduce costs across the Group, and to simplify the business. One change as part of this plan is a change to the global businesses that form HSBC's, and the group's, reportable segments as described in Note 9 of the Financial Statements. The existing Retail Banking & Wealth Management and Global Private Banking global businesses will be merged to create one new Global Business, Wealth and Personal Banking, which will become a reportable segment during 2020.

35 HSBC Bank plc's subsidiaries, joint ventures and associates

In accordance with section 409 of the Companies Act 2006 a list of HSBC Bank plc subsidiaries, joint ventures and associates, the registered office address and the effective percentage of equity owned at 31 December 2019 is disclosed below.

Unless otherwise stated, the share capital comprises ordinary or common shares which are held by HSBC Bank plc subsidiaries. The ownership percentage is provided for each undertaking. The undertakings below are consolidated by HSBC Bank plc unless otherwise indicated.

HSBC Bank plc's registered office address is:

HSBC Bank plc
8 Canada Square
London E14 5HQ

Subsidiaries

The undertakings below are consolidated by the group.

Subsidiaries	% of share class held by immediate parent company (or by HSBC Bank plc where this varies)	Footnotes
Assetfinance December (H) Limited	100.00	15
Assetfinance December (M) Limited (In Liquidation)	100.00	20
Assetfinance December (P) Limited	100.00	2, 15
Assetfinance December (R) Limited	100.00	15
Assetfinance June (A) Limited	100.00	15
Assetfinance Limited	100.00	15
Assetfinance March (B) Limited	100.00	16
Assetfinance March (F) Limited	100.00	15
Assetfinance September (F) Limited	100.00	15
Banco Nominees (Guernsey) Limited	100.00 (99.99)	17
Banco Nominees 2 (Guernsey) Limited	100.00 (99.99)	17
Beau Soleil Limited Partnership	n/a	0, 18
Billingsgate Nominees Limited	100.00	2, 15
Canada Crescent Nominees (UK) Limited	100.00	2, 15
CCF & Partners Asset Management Limited	100.00 (99.99)	15
CCF Holding (LIBAN) S.A.L. (In Liquidation)	74.99	19
Charterhouse Administrators (D.T.) Limited	100.00 (99.99)	15
Charterhouse Management Services Limited	100.00 (99.99)	15
Charterhouse Pensions Limited	100	2, 15
CL Residential Limited (In Liquidation)	100.00	20
COIF Nominees Limited	n/a	0, 2, 15
Dem 9	100.00 (99.99)	4, 21
Dempar 1	100.00 (99.99)	22
Elysées Immo Invest	100.00 (99.99)	23
Equator Holdings Limited (In Liquidation)	100.00	2, 20
Eton Corporate Services Limited	100.00	17
Finanpar 7	100.00 (99.99)	23
Flandres Contentieux S.A.	100.00 (99.99)	24
Foncière Elysées	100.00 (99.99)	22
Griffin International Limited	100.00	15
Grundstuecksgesellschaft Trinkausstrasse Kommanditgesellschaft	n/a	0, 25
HSBC (BGF) Investments Limited	100.00	2, 15
HSBC Asset Finance (UK) Limited	100.00	2, 15
HSBC Asset Finance Holdings Limited (In Liquidation)	100.00	2, 20
HSBC Asset Finance M.O.G. Holdings (UK) Limited	100.00	2, 15
HSBC Assurances Vie (France)	100.00 (99.99)	24
HSBC Bank (General Partner) Limited	100.00	2, 26
HSBC Bank (RR) (Limited Liability Company)	n/a	0, 13, 27
HSBC Bank Armenia cjsc	70.00	28
HSBC Bank Capital Funding (Sterling 1) LP	n/a	0, 26
HSBC Bank Capital Funding (Sterling 2) LP	n/a	0, 26
HSBC Bank Malta p.l.c.	70.03	29
HSBC Bank Pension Trust (UK) Limited	100.00	2, 15
HSBC City Funding Holdings	100.00	15
HSBC Client Holdings Nominee (UK) Limited	100.00	2, 15
HSBC Client Nominee (Jersey) Limited	100.00	2, 30
HSBC Corporate Trustee Company (UK) Limited	100.00	2, 15
HSBC Custody Services (Guernsey) Limited	100.00 (99.99)	17
HSBC Enterprise Investment Company (UK) Limited (In Liquidation)	100.00	2, 20
HSBC Epargne Entreprise (France)	100.00 (99.99)	24
HSBC Equator (UK) Limited (In Liquidation)	100.00	20
HSBC Equity (UK) Limited	100.00	2, 15
HSBC Europe B.V.	100.00 (99.99)	15
HSBC Factoring (France)	100.00 (99.99)	22
HSBC France	99.99	22
HSBC Germany Holdings GmbH	100.00	2, 25
HSBC Global Asset Management (Deutschland) GmbH	100 (80.67)	25
HSBC Global Asset Management (France)	100.00 (99.99)	31

Subsidiaries	% of share class held by immediate parent company (or by HSBC Bank plc where this varies)	Footnotes
HSBC Global Asset Management (International) Limited (In Liquidation)	100.00	2, 32
HSBC Global Asset Management (Malta) Limited	100.00 (70.03)	33
HSBC Global Asset Management (Oesterreich) GmbH	100.00 (80.67)	6, 34
HSBC Global Asset Management (Switzerland) AG	100.00 (90.33)	4, 35
HSBC Global Custody Nominee (UK) Limited	100.00	2, 15
HSBC Global Custody Proprietary Nominee (UK) Limited	100.00	1, 2, 15
HSBC Global Shared Services (India) Private Limited (In Liquidation)	99.99	1, 36
HSBC Infrastructure Limited	100.00	15
HSBC INKA Investment-AG TGV	100.00 (80.67)	14, 37
HSBC Insurance Services Holdings Limited	100.00	2, 15
HSBC International Holdings (Jersey) Limited (In Liquidation)	100.00 (99.99)	30
HSBC Investment Bank Holdings Limited	100.00	2, 15
HSBC Issuer Services Common Depository Nominee (UK) Limited	100.00	2, 15
HSBC Issuer Services Depository Nominee (UK) Limited	100.00	2, 15
HSBC Leasing (France)	100.00 (99.99)	21
HSBC Life (UK) Limited	100.00	2, 15
HSBC Life Assurance (Malta) Limited	100.00 (70.03)	33
HSBC LU Nominees Limited	100.00	2, 15
HSBC Marking Name Nominee (UK) Limited	100.00	2, 15
HSBC Middle East Leasing Partnership	n/a	0, 38
HSBC Operational Services GmbH	90.10 (72.68)	39
HSBC Overseas Nominee (UK) Limited	100.00	2, 15
HSBC PB Corporate Services 1 Limited	100.00	40
HSBC Pension Trust (Ireland) DAC	100.00	2, 41
HSBC PI Holdings (Mauritius) Limited	100.00	42
HSBC Preferential LP (UK)	100.00	2, 15
HSBC Private Bank (C.I.) Limited	100.00	2, 17
HSBC Private Banking Nominee 3 (Jersey) Limited	100.00	40
HSBC Private Equity Investments (UK) Limited	100.00	15
HSBC Property Funds (Holding) Limited	100.00	15
HSBC Real Estate Leasing (France)	100.00 (99.99)	24
HSBC REIM (France)	100.00 (99.99)	24
HSBC Representative Office (Nigeria) Limited (In Liquidation)	100.00 (99)	43
HSBC Securities (South Africa) (Pty) Limited	100.00	2, 45
HSBC Securities Services (Guernsey) Limited	100.00	17
HSBC Securities Services (Ireland) DAC	100.00	41
HSBC Securities Services (Luxembourg) S.A.	100.00	2, 46
HSBC Securities Services Holdings (Ireland) DAC	100.00	41
HSBC Services (France)	100.00 (99.99)	22
HSBC SFH (France)	100.00 (99.99)	4, 24
HSBC Specialist Investments Limited	100.00	15
HSBC Transaction Services GmbH	100.00 (80.67)	6, 47
HSBC Trinkaus & Burkhardt (International) S.A.	100.00 (80.67)	46
HSBC Trinkaus & Burkhardt AG	99.32 (80.67)	25
HSBC Trinkaus & Burkhardt Gesellschaft fur Bankbeteiligungen mbH	100.00 (80.67)	25
HSBC Trinkaus Europa Immobilien-Fonds Nr. 5 GmbH	100.00 (80.67)	25
HSBC Trinkaus Family Office GmbH	100.00 (80.67)	6, 25
HSBC Trinkaus Immobilien Beteiligungs KG	100.00 (80.67)	25
HSBC Trinkaus Real Estate GmbH	100.00 (80.67)	6, 25
HSBC Trustee (C.I.) Limited	100.00	2, 40
HSBC Trustee (Guernsey) Limited	100.00	2, 17

Notes on the financial statements

Subsidiaries	% of share class held by immediate parent company (or by HSBC Bank plc where this varies)	Footnotes
HSIL Investments Limited	100.00	15
INKA Internationale Kapitalanlagegesellschaft mbH	100.00 (80.67)	47
IRERE Property Investments (French Offices) Sarl (In Liquidation)	100.00	48
James Capel & Co. Limited	100.00	2, 15
James Capel (Nominees) Limited	100.00	2, 15
James Capel (Taiwan) Nominees Limited	100.00	2, 15
Keyser Ullmann Limited	100.00 (99.99)	15
Midcorp Limited	100.00	2, 15
Prudential Client HSBC GIS Nominee (UK) Limited	100.00	2, 15
Republic Nominees Limited	100.00	2, 17
RLUKREF Nominees (UK) One Limited	100.00	1, 2, 15
RLUKREF Nominees (UK) Two Limited	100.00	1, 2, 15
S.A.P.C. – Ufipro Recouvrement	99.99	21
Saf Baiyun	100.00 (99.99)	4, 23
Saf Guangzhou	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Ba	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Er	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Jiu	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Liu	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Qi	100.00 (99.99)	4, 23
Saf Zhu Jiang Shi Wu	100.00 (99.99)	4, 23
SAS Cyatheas Pasteur	94.93	4, 21
SCI HSBC Assurances Immo	100.00 (99.99)	24
SFM	100.00 (99.99)	22
SFSS Nominees (Pty) Limited	100.00	49
SNC Dorique	99.99	1, 11, 50
SNC Kerouan	99.99	11, 23
SNC Les Mercuriales	100.00 (99.99)	1, 11, 23
SNC Les Oliviers D'Antibes	60.00	24
SNC Makala	100.00 (99.99)	1, 11, 23
SNC Nuku-Hiva Bail	100.00 (99.99)	1, 11, 24
SNCB/M6 - 2008 A	100.00 (99.99)	23
SNCB/M6-2007 A	100.00 (99.99)	4, 23
SNCB/M6-2007 B	100.00 (99.99)	4, 23
Societe CCF Finance Moyen-Orient S.A.L. (in liquidation)	99.64 (99.08)	1, 20
Société Française et Suisse	100.00 (99.99)	23
Somers Dublin DAC	100.00 (99.99)	41
Sopigest	100.00 (99.99)	23
South Yorkshire Light Rail Limited	100.00	15
Swan National Leasing (Commercials) Limited (In Liquidation)	100.00	20
Swan National Limited	100.00	15
Thasosfin	100.00 (99.99)	24
The Venture Catalysts Limited	100.00	2, 15
Trinkaus Australien Immobilien Fonds Nr. 1 Brisbane GmbH & Co. KG	100.00 (80.67)	25
Trinkaus Australien Immobilien-Fonds Nr. 1 Treuhand-GmbH	100.00 (80.67)	6, 25
Trinkaus Europa Immobilien-Fonds Nr.3 Objekt Utrecht Verwaltungs-GmbH	100.00 (80.67)	25
Trinkaus Immobilien-Fonds Geschaefstfuehrungs-GmbH	100.00 (80.67)	6, 25
Trinkaus Immobilien-Fonds Verwaltungs-GmbH	100.00 (80.67)	6, 25
Trinkaus Private Equity Management GmbH	100.00 (80.67)	25
Trinkaus Private Equity Verwaltungs GmbH	100.00 (80.67)	6, 25
Valeurs Mobilières Elysées	100.00 (99.99)	51

Joint ventures

The undertakings below are joint ventures and equity accounted.

Joint Ventures	% of share class held by immediate parent company (or by HSBC Bank plc where this varies)	Footnotes
HCM Holdings Limited (In Liquidation)	50.99	20
The London Silver Market Fixing Limited	n/a	0, 1, 2, 52

Associates

The undertakings below are associates and equity accounted.

Associates	% of share class held by immediate parent company (or by HSBC Bank plc where this varies)	Footnotes
BGF Group plc	24.54	53
Bud Financial Limited	8.20	1, 54
CFAC Payment Scheme Limited	33.33	55
Chemi & Cotex (Rwanda) Limited	33.99	1, 56
Chemi & Cotex Kenya Limited	33.99	1, 57
Chemi and Cotex Industries Limited	33.99	58
Euro Secured Notes Issuer	16.66	59
GIE GNIFI	n/a	0, 60
Jeppe Star Limited	33.99	61
Novo Star Limited	33.99	62
Quantexa Ltd	10.51	63
Services Epargne Enterprise	14.34	64
sino AG	24.94 (20.11)	65
Trinkaus Europa Immobilien-Fonds Nr. 7 Frankfurt Mertonviertel KG	n/a	0, 25
Vizolution Limited	17.95	1, 66
We Trade Innovation Designated Activity Company	8.52	1, 67

Footnotes

0 *Where an entity is governed by voting rights, HSBC consolidates 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 to direct relevant activities, and whether power is held as an agent or principal. HSBC's consolidation policy is described in Note 1.2(a)*

1 *Management has determined that these undertakings are excluded from consolidation in the Group accounts as these entities do not meet the definition of subsidiaries in accordance with IFRSs. HSBC's consolidation policy is described in Note 1.2(a).*

2 *Directly held by HSBC Bank plc*

Description of shares

3 *Preference Shares*

4 *Actions*

5 *Redeemable Preference Shares*

6 *GmbH Anteil*

7 *Limited and Unlimited Liability Shares*

8 *Liquidating Share Class*

9 *Nominal Shares*

10 *Non-Participating Voting Shares*

11 *Parts*

12 *Registered Capital Shares*

13 *Russian Limited Liability Company Shares*

14 *Stückaktien*

Registered offices

15 *8 Canada Square, London, United Kingdom, E14 5HQ*

16 *5 Donegal Square South, Belfast, Northern Ireland, BT1 5JP*

17 *Arnold House St Julians Avenue, St Peter Port, Guernsey, GY1 3NF*

18 *HSBC Main Building 1 Queen's Road Central, Hong Kong*

19 *Solidere - Rue Saad Zaghloul Immeuble - 170 Marfaa, PO Box 17 5476 Mar Michael 11042040, Beyrouth, Lebanon*

20 *Hill House 1 Little New Street, London, United Kingdom, EC4A 3TR*

21 *39, rue de Bassano, Paris, France, 75008*

22 *103, avenue des Champs-Élysées, Paris, France, 75008*

23 *64, rue Galilée, Paris, France, 75008*

24 *15, rue Vernet, Paris, France, 75008*

25 *Königsallee 21/23, Düsseldorf, Germany, 40212*

26 *HSBC House Esplanade, St. Helier, Jersey, JE4 8UB*

27 *2 Paveletskaya square, building 2, Moscow, Russian Federation, 115054*

28 *66 Teryan street, Yerevan, Armenia, 0009*

29 *116 Archbishop Street, Valletta, Malta*

30 *HSBC House Esplanade, St. Helier, Jersey, JE1 1HS*

31 *Immeuble Coeur Défense 110, Esplanade du Général de Gaulle-La défense 4, Courbevoie, France, 92400*

32 *HSBC House Esplanade, St. Helier, Jersey, JE4 8WP*

33 *80 Mill Street, Qormi, Malta, QRM 3101*

34 *Herrengasse 1-3, Wien, Austria, 1010*

35 *Gartenstrasse 26, Zurich, Switzerland*

36 *52/60 M G Road, Fort, Mumbai, India, 400 001*

37 *Breite Str. 29/31, Düsseldorf, Germany, 40213*

38 *Unit 101 Level 1, Gate Village Building No. 8 Dubai International Financial Centre, Dubai, United Arab Emirates, PO BOX 506553*

39 *21-23 Yorckstraße, Düsseldorf, Nordrhein-Westfalen, Germany, 40476*

40 *HSBC House Esplanade, St. Helier, Jersey, JE1 1GT*

41 *1 Grand Canal Square Grand Canal Harbour, Dublin 2, D02 P820, Ireland*

42 *18 HSBC Centre, 6th Floor, Cybercity, Ebene, Mauritius, 72201*

43 *St Nicholas House, 10th Floor Catholic Mission St Lagos, Nigeria*

44 *306 Corniche El Nil, Maadi, Egypt, 11728*

45 *1 Mutual Place 107 Rivonia Road, Sandton, Sandton, Gauteng, South Africa, 2196*

46 *16 Boulevard d'Avranches, Luxembourg, Luxembourg, 1160*

47 *Yorckstraße 21 - 23 40476, Duesseldorf, Germany*

48 *6, rue Adolphe, Luxembourg, L-1116*

49 *No 1 Mutual Place 107 Rivonia Road, Sandton, Sandton, Gauteng, South Africa, 2196*

50 *43 rue de Paris, Saint Denis, France, 97400*

51 *109 avenue des Champs-Élysées, Paris, France, 75008*

52 *c/o Hackwood Secretaries Limited One Silk Street, London, United Kingdom, EC2Y 8HQ*

53 *13-15 York Buildings, London, United Kingdom, WC2N 6JU*

54 *First Floor The Bower, 207 Old Street, England, United Kingdom, EC1V 9NR*

55 *65 Gresham Street, 6th Floor, London, United Kingdom, EC2V 7NQ*

56 *Kacyiru BP 3094, Kigali, Rwanda*

57 *LR No. 1758/13 Grevella Grove Road, Kalamu House PO Box 47323-00100, Nairobi, Kenya*

58 *Plot No. 89-90 Mbezi Industrial Area Box 347, Dar es Salaam City*

59 *3 avenue de l'Opera, Paris, France, 75001*

60 *37 avenue Henri Lafleur, Nouméa, New Caledonia, BP K3 98849*

61 *c/o Trident Trust Company Trident Chambers, PO Box 146, Tortola, British Virgin Islands*

62 *Jayla Place Wickhams Cay I, PO Box 3190, Road Town, British Virgin Islands*

63 *75 Park Lane, Croydon, Surrey, United Kingdom, CR9 1XS*

64 *32, rue du Champ de Tir, Nantes, France, 44300*

65 *Ernst-Schneider-Platz 1, Duesseldorf, Germany, 40212*

66 *Office Block A, Bay Studios Business Park, Fabian Way, Swansea, SA1 8QB, Wales, United Kingdom*

67 *10 Earlsfort Terrace, Dublin, Ireland, D02 T380*

HSBC Bank plc

8 Canada Square
London E14 5HQ
United Kingdom
Telephone: 44 020 7991 8888
www.hsbc.co.uk