Risk management

All narrative and quantitative tables are unaudited unless otherwise stated. The audited information is required to comply with the requirements of relevant International Financial Reporting Standards.

Further information on risk management can be found:

The Group supports the recommendations made in the report 'Enhancing the Risk Disclosures of Banks' issued by the Enhanced Disclosure Task Force of the Financial Stability Board in October 2012.

Supporting green transport in London

A new fleet of hybrid and electric buses is arriving on the streets of London, with funding provided through our Clean Growth Finance Initiative (CGFI). Metroline, one of the capital's largest bus providers, has used a £50 million asset finance facility to fund its fleet renewal programme, in line with London Mayor Sadiq Khan's plans to make London the world's greenest global city. Targets have been set by Transport for London to operate low-emission transport across the city and reduce carbon dioxide emissions by 60 per cent before 2025. Metroline is one of a number of businesses that have accessed discounted funding to support low carbon projects through the CGFI.

£50m
asset finance facility to fund Metroline's fleet renewal programme

visit **lloydsbankinggroup.com/prosperplan**

Risk management

Risk management is at the heart of our strategy to become the best bank for customers.

Our mission is to protect our customers, colleagues and the Group, whilst enabling sustainable growth in targeted segments. This is achieved through informed risk decision-making and superior risk and capital management, supported by a consistent risk-focused culture.

The risk overview (pages 30 to 35) provides a summary of risk management within the Group. It highlights the important role of risk as a strategic differentiator, key areas of focus for risk during 2018, and the role of risk management in enhancing the customer experience, along with an overview of the Group's Risk Management Framework, and the principal risks faced by the Group and key mitigating actions.

This full risk management section provides a more in-depth picture of how risk is managed within the Group, detailing the Group's emerging risks, approach to stress testing, risk governance, committee structure, appetite for risk (pages 106 to 114) and a full analysis of the primary risk categories (pages 114 to 159) – the framework by which risks are identified, managed, mitigated and monitored.

Each risk category is described and managed using the following standard headings: definition, exposures, measurement, mitigation and monitoring.

The Group's approach to risk

The Group operates a prudent approach to risk with rigorous management controls to support sustainable business growth and minimise losses. Through a strong and independent risk function (Risk division), a robust control framework is maintained to identify and escalate current and emerging risks, support sustainable growth within Group risk appetite, and to drive and inform good risk reward decision-making.

To meet ring-fencing requirements from 1 January 2019, core UK retail financial services and ancillary retail activities have been ring-fenced from other activities of the Group. The Group Risk Management Framework and Group Risk Appetite apply across the Group and are supplemented by risk management frameworks and risk appetites for the sub-groups to meet sub-group specific needs. In each case these are aligned to the Group position. The Group's Corporate Governance Framework applies across Lloyds Banking Group plc, Lloyds Bank plc, Bank of Scotland plc and HBOS plc. It is tailored where needed to meet the entity specific needs of Lloyds Bank plc and Bank of Scotland plc, and supplementary Corporate Governance Frameworks are in place to address sub-group specific requirements of the other sub-groups (LBCM, Insurance and LBG Equity Investments). See our revised Group governance arrangements and Group restructure to comply with ring-fencing on page 58.

Risk culture

Based on the Group's conservative business model, prudent approach to risk management, and guided by the Board, the senior management articulates the core risk values to which the Group aspires, and sets the tone at the top, with a strong focus on building and sustaining long-term relationships with customers through the economic cycle. The Group's code of responsibility reinforces colleague accountability for the risks they take and their responsibility to prioritise their customers' needs.

Risk appetite

We define our risk appetite as 'the amount and type of risk that the Group is prepared to seek, accept or tolerate' in delivering our Group strategy.

Group strategy and risk appetite are developed in tandem. Business planning aims to optimise value within our risk appetite parameters and deliver on our promise to Help Britain Prosper.

The Group's risk appetite statement details the risk parameters within which the Group operates. The statement forms part of our control framework and is embedded into our policies, authorities and limits, to guide decision-making and risk management. The Board is responsible for approving the Group's risk appetite statement at least annually. Group Board-level metrics are cascaded into more detailed business appetite metrics and limits.

Group risk appetite includes the following areas:

Credit – the Group has a conservative and well-balanced credit portfolio through the economic cycle, generating an appropriate return on equity, in line with the Group's target return on equity in aggregate.

Regulatory and legal – the Group complies with all relevant regulation and all applicable laws (including codes of practice which have legal implications) and/or legal obligations.

Conduct – the Group's product design and sales practices ensure that products are transparent and meet customer needs.

Operational – the Group has robust controls in place to manage operational losses, reputational events and regulatory breaches. It identifies and assesses emerging risks and acts to mitigate these.

People – the Group leads responsibly and proficiently, manages its people resource effectively, supports and develops colleague talent, and meets legal and regulatory obligations related to its people.

Capital – the Group maintains capital levels commensurate with a prudent level of solvency, and aims to deliver consistent and high quality earnings.

Funding and liquidity – the Group maintains a prudent liquidity profile and a balance sheet structure that limits its reliance on potentially volatile sources of funding.

Governance – the Group has governance arrangements that support the effective long-term operation of the business, maximise shareholder value and meet regulatory and societal expectations.

Market – the Group has robust controls in place to manage its inherent market risk and does not engage in any proprietary trading, reflecting the customer focused nature of the Group's activities.

Model – the Group has embedded a framework for the management of model risk to ensure effective control and oversight, compliance with all regulatory rules and standards, and to facilitate appropriate customer outcomes.

Governance and control

The Group's approach to risk is founded on a robust control framework and a strong risk management culture which are the foundation for the delivery of effective risk management and guide the way all employees approach their work, behave and make decisions.

Governance is maintained through delegation of authority from the Board down to individuals through the management hierarchy. Senior executives are supported by a committee based structure which is designed to ensure open challenge and support effective decision-making.

The Group's risk appetite, principles, policies, procedures, controls and reporting are regularly reviewed and updated where needed to ensure they remain fully in line with regulations, law, corporate governance and industry good-practice.

The interaction of the executive and non-executive governance structures relies upon a culture of transparency and openness that is encouraged by both the Board and senior management.

Board-level engagement, coupled with the direct involvement of senior management in Group-wide risk issues at Group Executive Committee level, ensures that escalated issues are promptly addressed and remediation plans are initiated where required.

Line managers are directly accountable for identifying and managing risks in their individual businesses, ensuring that business decisions strike an appropriate balance between risk and reward and are consistent with the Group's risk appetite.

Clear responsibilities and accountabilities for risk are defined across the Group through a three lines of defence model which ensures effective independent oversight and assurance in respect of key decisions.

Financial reporting risk management systems and internal controls

The Group maintains risk management systems and internal controls relating to the financial reporting process which are designed to:

- ensure that accounting policies are appropriately and consistently applied, transactions are recorded accurately, and undertaken in accordance with delegated authorities, that assets are safeguarded and liabilities are properly stated;
- enable the calculation, preparation and reporting of financial, prudential regulatory and tax outcomes in accordance with applicable International Financial Reporting Standards, statutory and regulatory requirements;
- enable annual certifications relating to maintenance of appropriate tax accounting by the Senior Accounting Officer in accordance with the 2009 Finance Act;
- ensure that disclosures are made on a timely basis in accordance with statutory and regulatory requirements (for example UK Finance Code for Financial Reporting Disclosure; US Sarbanes Oxley Act) and, as far as possible, consistent with best practice;
- ensure ongoing monitoring to assess the impact of emerging regulation and legislation on financial, prudential regulatory and tax reporting; and
- ensure an accurate view of the Group's performance to allow the Board and senior management to appropriately manage the affairs and strategy of the business as a whole and each of its sub-groups.

The Group has a Disclosure Committee which assists the Group Chief Executive and Chief Financial Officer in fulfilling their disclosure responsibilities under relevant listing and other regulatory and legal requirements. In addition, the Audit Committee reviews the quality and acceptability of the Group's financial disclosures. For further information on the Audit Committee's responsibilities relating to financial reporting see pages 70 to 73.

Risk decision-making and reporting

Risk analysis and reporting enables better understanding of risks and returns, supporting the identification of opportunities as well as better management of risks.

An aggregate view of the Group's overall risk profile, key risks and management actions, and performance against risk appetite is reported to and discussed monthly at the Group Risk Committee with regular reporting to the Board Risk Committee and the Board.

Rigorous stress testing exercises are carried out to assess the impact of a range of adverse scenarios with different probabilities and severities to inform strategic planning.

The Chief Risk Officer regularly informs the Board Risk Committee of the aggregate risk profile and has direct access to the Chairman and members of Board Risk Committee.

Table 1.1: Exposure to risk arising from the business activities of the Group

The table below provides a high level guide to how the Group's business activities are reflected through its risk-weighted assets. Details of the business activities for each division are provided in the Divisional Results on pages 27 to 29.

	Retail £bn	Commercial Banking £bn	Insurance and Wealth[1] £bn	Central items[2] £bn	Group £bn
Risk-weighted assets (RWAs)					
– Credit risk	**74.5**	**74.7**	**0.6**	**11.7**	**161.5**
– Counterparty credit risk[3]	–	**4.7**	–	**2.5**	**7.2**
– Market risk	–	**2.0**	–	**0.1**	**2.1**
– Operational risk	**19.8**	**4.6**	**0.6**	**0.5**	**25.5**
Total (excluding threshold)	**94.3**	**86.0**	**1.2**	**14.8**	**196.3**
– Threshold[4]	–	–	–	**10.1**	**10.1**
Total	**94.3**	**86.0**	**1.2**	**24.9**	**206.4**

1 As a separate regulated business, Insurance (excluding Wealth) maintains its own regulatory solvency requirements, including appropriate management buffers, and reports directly to the Insurance Board. Insurance does not hold any RWAs, as its assets are removed from the Banking Group's regulatory capital calculations. However, in accordance with Capital Requirements Directive and Regulation (CRD IV) rules, part of the Group's investment in Insurance is included in the calculation of threshold RWAs, while the remainder is taken as a capital deduction.

2 Central Items include assets held outside the main operating divisions, including assets relating to Group Corporate Treasury which holds the Group's liquidity portfolio, and other supporting functions.

3 Exposures relating to the default fund of a central counterparty and credit valuation adjustment risk are included in counterparty credit risk.

4 Threshold RWAs reflect the proportion of significant investments and deferred tax assets that are permitted to be risk-weighted instead of deducted from common equity tier 1 (CET1) capital. Significant investments primarily arise from the investment in the Group's Insurance business.

Principal risks

The Group's principal risks are shown in the risk overview (pages 32 to 35). The Group's emerging risks are shown overleaf. Full analysis of the Group's risk categories is on pages 114 to 159.

Risk management continued

Emerging risks

The Group considers the following to be risks that have the potential to increase in significance and affect the performance of the Group. These risks are considered alongside the Group's operating plan.

Risk	Key mitigating actions
Regulatory and legal: The financial sector continues to witness an increased pace, volume and complexity of oversight and regulation from various bodies including government and regulators. Increasing regulatory rules and laws from both the UK and overseas may affect the Group's operation, placing pressure on expert resource and investment priorities. There continues to be uncertainty as to the impact of EU exit or the impact of a no deal outcome on the regulatory and legal landscape. One impact of EU exit will be that the UK loses its ability to make use of the EU Passport for provision of banking services into the EU.	– We work closely with regulatory authorities and industry bodies to ensure that the Group can identify and respond to the evolving regulatory and legal landscape. – We actively implement programmes to deliver legal, regulatory and mandatory change requirements. – We have implemented a programme to assess the legal impacts and risks of an EU exit (including a no deal outcome) and to identify appropriate mitigants, such as establishing EU entities to ensure continuity of certain business activities.
Cyber: Increases in the volume and sophistication of cyber-attacks alongside the growth in connected devices continues to heighten the potential for cyber-enabled crime. Increases in geopolitical tensions increase the indirect threat of a sophisticated attack on the Group. The capability of organised crime groups is growing rapidly, which along with the commoditisation of cyber-crime increases the likelihood that the Group or one of its suppliers will be the direct target of a sophisticated attack. This increases the risk of the Group's exposure through the supply chain.	– Continued investment and priority focus on the Group's Cyber Programme to ensure confidentiality and integrity of data and availability of systems. Key areas of focus relate to access controls, network security, disruptive technology, and denial of service capability. – Embedding of Group Cyber control framework aligned to industry recognised cyber security framework (NIST: National Institute of Standards and Technology). – Three year cyber strategy to deliver an industry-leading approach across the Group and to embed innovation in our approach to cyber. – Increased business and colleague engagement through education and awareness, phishing testing and security culture initiatives. Cyber risk is governed through all key risk committees and there are quarterly reviews of all cyber risks.
Political uncertainties including EU exit: The continued lack of clarity over the UK's eventual relationship with the EU allied to ongoing challenges in the Eurozone, including protests in France and changes in government in Italy, raise additional uncertainty for the UK economic outlook. Growing public concern over perceived income inequality has also led to a rise in political populism. There also remains the possibility of a further referendum on Scottish independence. There is a risk of a no deal EU exit outcome or a delay to EU exit, which could result in continuing business uncertainty across the whole UK banking sector.	– Internal contingency plans recalibrated and regularly reviewed for potential strategic, operational and reputational impacts. – Engagement with politicians, officials, media, trade and other bodies to reassure our commitment to Helping Britain Prosper. Specifically for the potential impacts of EU exit: – Executive forum considering and tracking developments and activity – Committed investments to establish new Group entities in the EU to ensure continuity of certain business activities, and contingency planning in relation to wider areas of impact – Group Corporate Treasury tracking market conditions closely and actively managing the Group's balance sheet – Credit applications and sector reviews include assessment of EU exit risk. Initiatives to help clients effectively identify and manage associated risks – Review of the Group's top EU suppliers to identify any impact on service provision and drive appropriate mitigating action – No deal EU exit outcome analysed to identify impacts and assess robustness of the Group's contingency plans.
Competition: Adoption of technological trends is accelerating with customer preferences increasingly shaped by tech giants and other challengers who are able to exploit their own infrastructure and are impacted by different market dynamics. Regulation is focusing on lowering barriers for new entrants, which could have an adverse impact on our market position. Operational complexity has the potential to restrict our speed of response to market trends. Inability to leverage data and innovate could lead to loss of market share as challengers capitalise on Open Banking. Timely delivery of GSR3 objectives remains key to addressing the competitive challenges facing the Group.	– The Group is transforming the business to improve customer experience by digitising customer journeys and leveraging branches for complex needs, in response to customers' evolving needs and expectations. – The Group will deepen insight into customer segments, their perception of brands and what they value. – Agility will be increased by consolidating platforms and building new architecture aligned with customer journeys. – The Group is responsive to changing customer behaviour/business models and adjusts its risk management approach as appropriate – GSR3 is designed to support the Group to strengthen its competitive position.
Data: Advancements in new technologies and new services, an increasing external threat landscape, and changing regulatory requirements increase the need for the Group to effectively govern, manage, and protect its data (or the data shared with third-party suppliers). Failure to manage data risk will impact the accuracy, access to and availability of data, ultimately leading to poor customer outcomes, loss of value to the bank and reputational damage.	– The Group's strategy is to introduce advanced data management practices, based on Group-wide standards, data-first culture and modern enterprise data platforms, supported by a simplified modern IT architecture. – The Group has implemented Open Banking and actively monitors implications for our customers, including protection from fraud. – We are making a significant investment to improve data privacy, including the security of data and oversight of third-parties.
Macroeconomic headwinds: The UK economic outlook is uncertain. Business investment is lower than historical averages with early signs of pressure in Retail and high street sectors. High levels of credit market liquidity have reduced spreads and weakened terms in some sectors, creating a potential under-pricing of risk and heightened risk of a market correction. These factors could lead to downward pressure on credit quality.	– Wide array of risks considered in setting strategic plans. – Capital and liquidity are reviewed regularly through committees, ensuring compliance with risk appetite and regulatory requirements.

Risk	Key mitigating actions
Uncertainty remains over UK monetary policy, and tightening US monetary policy is pressuring some emerging markets with potential spill over effects on growth and asset prices in other markets. Policy tightening in the US and China has weakened global growth prospects; this is likely to bring a pause to US policy normalisation and Chinese deleveraging of its high debt levels, in turn weakening crisis management tools.	– The Group has a robust through the cycle credit risk appetite, including appropriate product, sector and single name concentration parameters, robust sector appetite statements and policies, as well as affordability and indebtedness controls at origination. In addition to ongoing focused monitoring, we conduct portfolio deep dives and quarterly larger exposure reviews. We have enhanced our use of early warning indicators including sector specific indicators. – The Group is well positioned against an uncertain economic outlook and is able to withstand potential market volatility and/or downturn due to its selective and pre-emptive credit tightening, robust affordability controls and close monitoring of internal and external trends.
Geopolitical shocks: Current uncertainties could further impede the global economic recovery. Global events, as well as terrorist activity including cyber-attacks, have the potential to trigger changes in the economic outlook, market risk pricing and funding conditions.	– Risk appetite criteria limits single counterparty bank and non-bank exposures complemented by a UK-focused strategy. – The Chief Security Office develops and maintains an Emerald Response Process to respond to external crisis events. This is a rapid reaction group, incorporating Financial Stability Response where appropriate. – The Chief Security Office also maintains the operational resilience framework to embed resilience activities across the Group and limit the impact of internal or external events. – Hedging of market risk considers, inter alia, potential shocks as a result of geopolitical events.
Financial services transformation impact on customers: The risk that transformation of the financial services industry and the Group does not adequately consider vulnerable customers. As technology and innovation move at increasing pace, the more vulnerable could be at a disadvantage. The increase in execution only propositions due to digitisation may lead to increased conduct risk where customers (including vulnerable customers) choose unsuitable products. Our approach to customer segmentation will need to ensure conduct and reputational risks are well managed. Further, there is an emerging risk of unintended consequences within decision-making undertaken by machine learning which could occur on a large scale in a short period of time, creating new operational risks that affect financial and non-financial outcomes, for example credit portfolio anomalies or conduct impacts. This is relevant for the Group at present as the delivery of GSR3 utilises new technologies.	– Group vulnerability strategy and associated actions being developed throughout the transformation programme. – Digital principles are being agreed across the Group, primarily aimed at preventing material conduct residual risk and giving customers an optimal, informative and fair buying journey to mitigate the increased risks. – Technology risks, including those related to machine learning, are escalated and discussed through governance to ensure ongoing monitoring of any emerging unintended consequences. – Emerging customer risks, including those pertaining to vulnerable customers, are managed through customer segmentation strategy governance throughout the change lifecycle.
Climate change: The key risks associated with climate change are physical risks arising from climate and weather-related events, and transition risks, which are the financial risks resulting from the process of adjustment towards a lower carbon economy. Both of these risks may cause the impairment of asset values and impact the creditworthiness of our clients, which could result in currently profitable business deteriorating over the term of agreed facilities. Conversely propositions currently outside of appetite may constitute an acceptable opportunity in the future. There is increased focus on these risks by key stakeholders including businesses, clients and investors, and the regulatory landscape is evolving to reflect these risks. There is also a risk that campaign groups or other bodies could seek to take legal action (including indirect action) against the Group and/or the financial services industry for investing in or lending to organisations that they deem to be responsible for, or contributing to, climate change.	– We have embedded Sustainability in our Helping Britain Prosper Plan and Group Property Objectives. – We are taking a strategic approach to align with the UK Government's Clean Growth Strategy and have committed to adopting the approach set out by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). – We are identifying new opportunities to support customers and clients and to finance the UK's transition to a lower carbon economy. – We will embed sustainability into the way we do business and manage our own operations in a more sustainable way, identifying and managing material sustainability-related risks across the Group, and disclosing these in line with the TCFD recommendations. – We will ensure that appropriate training is provided to Relationship managers and Risk colleagues to enable them to have effective sustainability conversations with their clients.
Transition from IBORs to Alternative Risk Free Reference Rates: Widely used benchmark rates, such as the London Interbank Offered Rate ('LIBOR'), have been subject to increasing regulatory scrutiny, with regulators signalling the need to use alternative benchmark rates. As a result, existing benchmark rates may be discontinued or the basis on which they are calculated may change. There is uncertainty across the whole UK Banking sector as to the impact such discontinuation or changes may have and they may adversely affect a broad array of financial products, including any LIBOR-based securities, loans and derivatives. Any discontinuation or changes could have important implications for both the Group and our customers, for example: necessitating amendments to existing documents and contracts; changes to systems and infrastructures; and the possibility of disputes.	– The Group is working closely with the Bank of England initiated Working Group on Sterling Risk-Free Reference Rates on the transition away from LIBOR in the UK. – Maintain close engagement with the FCA on potential impacts. – Working closely with industry bodies to understand and manage the impact of benchmark transition in other geographies. – Transition project established and the appointment of an IBOR Transition Director as accountable executive. – Working with our customers to ensure they understand the risks or outcomes they might face from transition. – Establish a clear client communication strategy for all new IBOR linked products. Consider appropriate client communications for legacy contracts as the market end-state position evolves. – Implement an internal communication strategy and ensure that all relevant staff are aware and have the tools and training required.

Capital stress testing

Overview

Stress testing is recognised as a key risk management tool by the Boards, senior management, the businesses and the Risk and Finance functions of all parts of the Group and its legal entities. It is fully embedded in the planning process of the Group and its legal entities as a key activity in medium-term planning, and senior management is actively involved in stress testing activities via a strict governance process.

Scenario stress testing is used for:

Risk Identification:

- Understand key vulnerabilities of the Group and its key legal entities under adverse economic conditions.

Risk Appetite:

- Assess the results of the stress test against the risk appetite of all parts of the Group to ensure the Group and its legal entities are managed within their risk parameters.
- Inform the setting of risk appetite by assessing the underlying risks under stress conditions.

Strategic and Capital Planning:

- Allow senior management and the Boards of the Group and its applicable legal entities to adjust strategies if the plan does not meet risk appetite in a stressed scenario.
- Support the Internal Capital Adequacy Assessment Process (ICAAP) by demonstrating capital adequacy, and meet the requirements of regulatory stress tests that are used to inform the setting of the Prudential Regulation Authority (PRA) and management buffers (see capital risk on pages 139 to 147) of the Group and its separately regulated legal entities.

Risk Mitigation:

- Drive the development of potential actions and contingency plans to mitigate the impact of adverse scenarios. Stress testing also links directly to the recovery planning process of the Group and its legal entities.

Regulatory stress tests

In 2018 the Group participated in both the concurrent UK stress test run by the Bank of England (BoE) and in the European Banking Authority's (EBA) bi-annual EU-wide stress test. The EBA stress test did not contain a pass/fail threshold and as announced in November, the Group demonstrated its ability to meet applicable capital requirements under stress conditions. In the case of the BoE stress test, despite the severity of the scenario, the Group exceeded the capital and leverage hurdles after the application of management actions and as a consequence was not required to take any capital actions.

Internal stress tests

On at least an annual basis, the Group conducts macroeconomic stress tests of the operating plan, which are supplemented with higher level refreshes if necessary. The exercise aims to highlight the key vulnerabilities of the Group's and its legal entities' business plans to adverse changes in the economic environment, and to ensure that there are adequate financial resources in the event of a downturn.

Reverse stress testing

Reverse stress testing is used to explore the vulnerabilities of the Group's and its key legal entities' strategies and plans to extreme adverse events that would cause the businesses to fail, in order to facilitate contingency planning. The scenarios used are those that would cause the businesses to be unable to carry on their activities. Where reverse stress testing reveals plausible scenarios with an unacceptably high risk when considered against the Group's or its entities' risk appetite, they will adopt measures to prevent or mitigate that risk, which are then reflected in strategic plans.

Other stress testing activity

The Group's stress testing programme also involves undertaking assessments of liquidity scenarios, market risk sensitivities and scenarios, and business specific scenarios (see the primary risk categories on pages 114 to 159 for further information on risk-specific stress testing). If required, ad hoc stress testing exercises are also undertaken to assess emerging risks, as well as in response to regulatory requests. This wide ranging programme provides a comprehensive view of the potential impacts arising from the risks to which the Group is exposed and reflects the nature, scale and complexity of the Group.

Methodology

The stress tests at all levels must comply with all regulatory requirements, achieved through comprehensive construction of macroeconomic scenarios and a rigorous divisional, functional, risk and executive review and challenge process, supported by analysis and insight into impacts on customers and business drivers.

The engagement of all required business, Risk and Finance areas is built into the preparation process, so that the appropriate analysis of each risk category's impact upon the business plans is understood and documented. The methodologies and modelling approach used for stress testing ensure that a clear link is shown between the macroeconomic scenarios, the business drivers for each area and the resultant stress testing outputs. All material assumptions used in modelling are documented and justified, with a clearly communicated review and sign-off process. Modelling is supported by expert judgement and is subject to the Group Model Governance Policy.

Governance

Clear accountabilities and responsibilities for stress testing are assigned to senior management and the Risk and Finance functions throughout the Group and its key legal entities. This is formalised through the Group Business Planning and Stress Testing Policy and Procedure, which are reviewed at least annually.

The Group Financial Risk Committee (GFRC), chaired by the Chief Risk Officer and attended by the Chief Financial Officer and other senior Risk and Finance colleagues, is the committee that has primary responsibility for overseeing the development and execution of the Group's stress tests. Lloyds Bank Corporate Markets (LBCM) Risk Committee performs a similar function within the scope of LBCM.

The review and challenge of the Group's detailed stress forecasts, the key assumptions behind these, and the methodology used to translate the economic assumptions into stressed outputs conclude with the divisional Finance Directors', appropriate Risk Directors' and Managing Directors' sign-off. The outputs are then presented to GFRC and Board Risk Committee for review and challenge, before being approved by the Board. There is a similar process within LBCM for the governance of the LBCM-specific results.

How risk is managed in Lloyds Banking Group

The Group's Risk Management Framework (RMF) (see risk overview, page 30) is structured around the following components which meet and align with the industry-accepted internal control framework standards.

The RMF applies to every area of the business and covers all types of risk. It is reviewed, updated and approved by the Board at least annually to reflect any changes in the nature of our business and external regulations, law, corporate governance and industry best practice. The RMF provides the Group with an effective mechanism for developing and embedding risk policies and risk management strategies which are aligned with the risks faced by its businesses. It also seeks to facilitate effective communication on these matters across the Group.

Role of the Board and senior management

Key responsibilities of the Board and senior management include:

- setting risk appetite and approval of the RMF;
- approval of Group-wide risk principles and policies;
- the cascade of delegated authority (for example to Board sub-committees and the Group Chief Executive); and
- effective oversight of risk management consistent with risk appetite.

Risk appetite

Risk appetite is defined within the Group as 'the amount and type of risk that the Group is prepared to seek, accept or tolerate' in delivering our Group Strategy (see the Group's approach to risk page 106).

Governance frameworks

The policy framework is founded on Board-approved key principles for the overall management of risk in the organisation. These are aligned with Group strategy and risk appetite and based on a current and comprehensive risk profile that identifies all material risks to the organisation. The principles are underpinned by a hierarchy of policies which define mandatory requirements for risk management and control. These are consistently implemented across the Group.

Robust processes and controls to identify and report policy breaches are in place. These include clear materiality criteria and escalation procedures which ensure an appropriate level of visibility and prioritisation of remedial actions.

The risk committee governance framework is outlined on page 112.

Three lines of defence model

The RMF is implemented through a 'three lines of defence' model which defines clear responsibilities and accountabilities and ensures effective independent oversight and assurance activities take place covering key decisions.

Business lines (first line) have primary responsibility for risk decisions, identifying, measuring, monitoring and controlling risks within their areas of accountability. They are required to establish effective governance and control frameworks for their business to be compliant with Group policy requirements, to maintain appropriate risk management skills, mechanisms and toolkits, and to act within Group risk appetite parameters set and approved by the Board.

Risk division (second line) is a centralised function, headed by the Chief Risk Officer, providing oversight and independent constructive challenge to the effectiveness of risk decisions taken by business management, providing proactive advice and guidance, reviewing, challenging and reporting on the risk profile of the Group and ensuring that mitigating actions are appropriate.

It also has a key role in promoting the implementation of a strategic approach to risk management reflecting the risk appetite and RMF agreed by the Board that encompasses:

- oversighting embedding of effective risk management processes;
- transparent, focused risk monitoring and reporting;
- provision of expert and high quality advice and guidance to the Board, executives and management on strategic issues and horizon scanning, including pending regulatory changes; and
- a constructive dialogue with the first line through provision of advice, development of common methodologies, understanding, education, training, and development of new risk management tools.

The Chief Risk Officer is accountable for developing and leading an industry-wide recognised Risk function that adds value to the Group by:

- providing a regular comprehensive view of the Group's risk profile for both current and emerging key risks, and associated management actions;
- proposing Group risk appetite to the Board for approval (with input from the business areas and Risk division), and overseeing performance of the Group against risk appetite;
- developing an effective RMF which meets regulatory requirements for approval by the Board, and overseeing its execution and compliance; and
- challenging management on emerging risks and providing expert risk and control advice to help management maintain an effective risk and control framework.

The Risk Directors reporting to the Chief Risk Officer:

- provide independent advice, oversight and challenge to the business;
- design, develop and maintain policies, specific functional risk type frameworks and guidance to ensure alignment with business imperatives and regulatory requirements;
- establish and maintain appropriate governance structures, culture, oversight and monitoring arrangements which ensure robust and efficient compliance with relevant risk type risk appetites and policies;
- lead regulatory liaison on behalf of the Group including horizon scanning and regulatory development for their risk type; and
- recommend risk appetite and provide oversight of the associated risk profile across the Group.

The primary role of Group Internal Audit (third line) is to help the Board and executive management protect the assets, reputation and sustainability of the Group. Group Internal Audit is led by the Group Chief Internal Auditor. Group Internal Audit provides independent assurance to the Audit Committee and the Board through performing reviews and engaging with committees/executive management, providing opinion and challenge on risk and the state of the control environment. Group Internal Audit is a single independent internal audit function, reporting to the Board Audit Committee of the Group and the Board Audit Committee of the key subsidiaries.

Risk and control cycle from identification to reporting

To allow senior management to make informed risk decisions, the business follows a continuous risk management approach which includes producing appropriate, accurate and focused risk reporting. The risk and control cycle sets out how this should be approached, with the appropriate controls and processes in place. This cycle, from identification to reporting, ensures consistency and is intended to manage and mitigate the risks impacting the Group.

The process for risk identification, measurement and control is integrated into the overall framework for risk governance. Risk identification processes are forward-looking to ensure emerging risks are identified. Risks are captured and measured using robust and consistent quantification methodologies. The measurement of risks includes the application of stress testing and scenario analysis, and considers whether relevant controls are in place before risks are incurred.

Identified risks are reported on a monthly basis or as frequently as necessary to the appropriate committee. The extent of the risk is compared to the overall risk appetite as well as specific limits or triggers. When thresholds are breached, committee minutes are clear on the actions and timeframes required to resolve the breach and bring risk within given tolerances. There is a clear process for escalation of risks and risk events.

All business areas complete a Control Effectiveness Review (CER) annually, reviewing the effectiveness of their internal controls and putting in place a programme of enhancements where appropriate. The CER reports are approved at divisional risk committees or directly by the relevant member of the Group Executive Committee to confirm the accuracy of the assessment. This key process is overseen and independently challenged by Risk division, reviewed by Group Internal Audit against the findings of its assurance activities, and reported to the Board.

Risk culture

Supporting the formal frameworks of the RMF is the underlying culture, or shared behaviours and values, which sets out in clear terms what constitutes good behaviour and good practice. In order to effectively manage risk across the organisation, the functions encompassed within the three lines of defence have a clear understanding of risk appetite, business strategy and an understanding of (and commitment to) the role they play in delivering it. A number of levers are used to reinforce the risk culture, including tone from the top, clear accountabilities, effective communication and challenge and an appropriately aligned performance incentive.

Risk resources and capabilities

Appropriate mechanisms are in place to avoid over-reliance on key personnel or system/technical expertise within the Group. Adequate resources are in place to serve customers both under normal working conditions and in times of stress, and monitoring procedures are in place to ensure that the level of available resource can be increased if required. Colleagues undertake appropriate training to ensure they have the skills and knowledge necessary to enable them to deliver fair outcomes for customers.

There is ongoing investment in risk systems and models alongside the Group's investment in customer and product systems and processes. This drives improvements in risk data quality, aggregation and reporting leading to effective and efficient risk decisions.

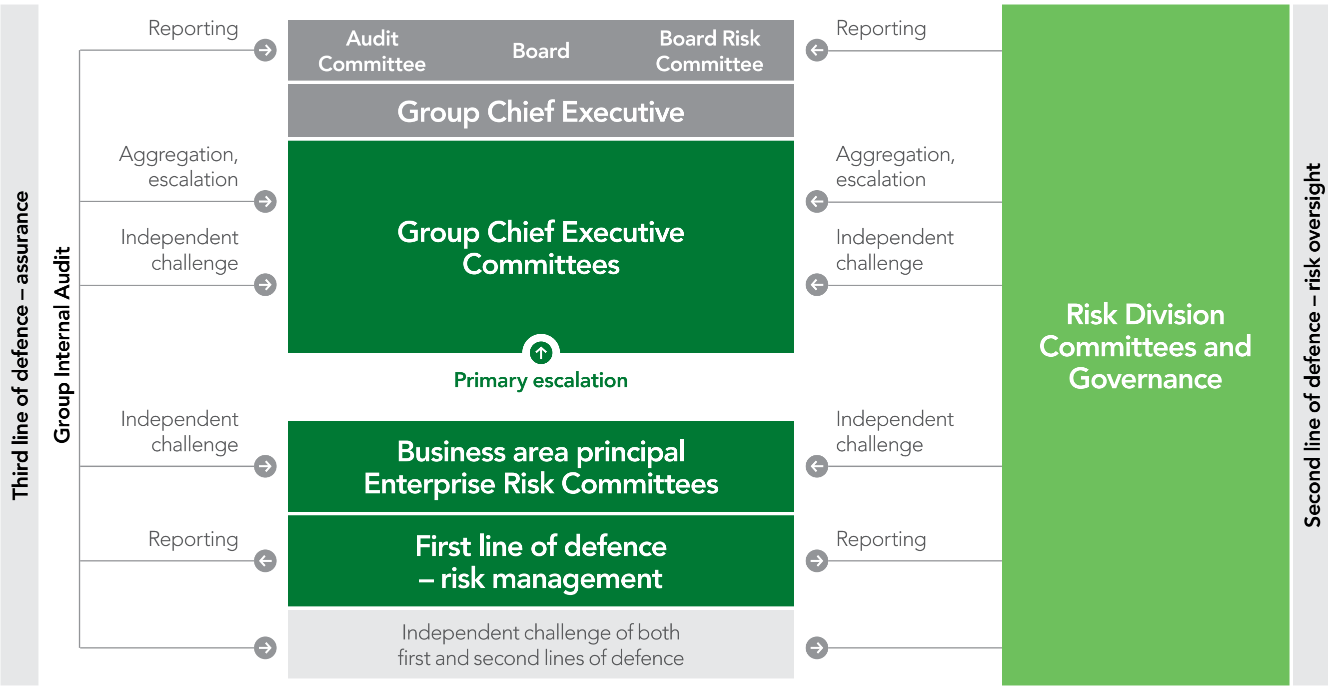
Risk management continued

Risk governance

The risk governance structure below is integral to effective risk management across the Group. Risk division is appropriately represented on key committees to ensure that risk management is discussed in these meetings. This structure outlines the flow and escalation of risk information and reporting from business areas and Risk division to Group Executive Committee and Board. Conversely, strategic direction and guidance is cascaded down from the Board and Group Executive Committee.

Company Secretariat supports senior and Board-level committees, and supports the Chairs in agenda planning. This gives a further line of escalation outside the three lines of defence.

Table 1.2: **Risk governance structure**



Group Chief Executive Committees

- Group Executive Committee (GEC)
- Group Risk Committee (GRC)
- Group Asset and Liability Committee (GALCO)
- Group Customer First Committee
- Group Cost Management Committee
- Conduct Review Committee
- Group People Committee
- Sustainability Committee
- Senior Independent Performance Adjustment and Conduct Committee
- Group Strategic Review 3 Committee

Business area principal Enterprise Risk Committees

- Commercial Banking Risk Committee
- Retail Risk Committee
- Insurance and Wealth Risk Committee
- Community Banking Risk Committee
- Group Transformation Risk Committees
- Finance Risk Committee
- People and Productivity Risk Committee
- Group Corporate Affairs Risk Committee

Risk Division Committees and Governance

Credit risk
- Executive Credit Approval Committees
- Commercial Banking Credit Risk Committees
- Retail Credit Risk Committees

Market risk
- Group Market Risk Committee

Conduct, compliance and operational risk
- Group Conduct, Compliance and Operational Risk Committee

Fraud and financial crime risk
- Group Fraud and Financial Crime Prevention Committee

Financial risk
- Group Financial Risk Committee

Capital risk
- Group Capital Risk Committee

Model risk
- Group Model Governance Committee

Insurance underwriting risk through the governance arrangements for Insurance Group (Insurance Group is a separate regulated entity with its own Board, governance structure and Chief Risk Officer)

Board, Executive and Risk Committees

The Group's risk governance structure (see table 1.2) strengthens risk evaluation and management, while also positioning the Group to manage the changing regulatory environment in an efficient and effective manner.

Assisted by the Board Risk and Audit Committees, the Board approves the Group's overall governance, risk and control frameworks and risk appetite. Refer to the Corporate Governance section on pages 56 to 78, for further information on Board committees.

The Group's Corporate Governance Framework applies across Lloyds Banking Group plc, Lloyds Bank plc, Bank of Scotland plc and HBOS plc. It is tailored where needed to meet the entity specific needs of Lloyds Bank plc and Bank of Scotland plc, and supplementary Corporate Governance Frameworks are in place to address sub-group specific requirements of the other sub-groups (LBCM, Insurance and LBG Equity Investments).

The divisional and functional risk committees review and recommend divisional and functional risk appetite and monitor local risk profile and adherence to appetite.

Table 1.3: Executive and Risk Committees

In relation to the operation of Lloyds Banking Group plc, the Group Chief Executive is supported by the following:

Committees	Risk focus
Group Executive Committee (GEC)	Assists the Group Chief Executive in exercising his authority in relation to material matters having strategic, cross-business area or Group-wide implications.
Group Risk Committee (GRC)	Responsible for the development, implementation and effectiveness of the Group's Risk Management Framework, the clear articulation of the Group's risk appetite and monitoring and reviewing of the Group's aggregate risk exposures and concentrations of risk.
Group Asset and Liability Committee (GALCO)	Responsible for the strategic direction of the Group's assets and liabilities and the profit and loss implications of balance sheet management actions. The committee reviews and determines the appropriate allocation of capital, funding and liquidity, and market risk resources and makes appropriate trade-offs between risk and reward.
Group Customer First Committee	Provides a Group-wide perspective on the progress of implementation of initiatives to enhance the delivery of customer outcomes and customer trust, and sets and promotes the appropriate tone from the top to fulfil the Group's vision.
Group Cost Management Committee	Leads and shapes the Group's approach to cost management, ensuring appropriate governance and process over Group-wide cost management activities and effective control of the Group's cost base.
Conduct Review Committee	Provides senior management oversight, challenge and accountability in connection with the Group's engagement with conduct review matters as agreed with the Group Chief Executive.
Group People Committee	Oversees the Group's colleague policy, remuneration policy and Group-wide remuneration matters, oversees compliance with Senior Manager and Certification Regime (SM&CR) and other regulatory requirements, monitors colleague engagement surveys and ensures that colleague-related issues are managed fairly, effectively and compliantly.
Sustainability Committee	Recommends and implements the strategy and plans for delivering the Group's aspiration to be viewed as a trusted responsible business as part of the objective of Helping Britain Prosper.
Senior Independent Performance Adjustment and Conduct Committee	Responsible for providing recommendations regarding performance adjustment, including the individual risk-adjustment process and risk-adjusted performance assessment, and making final decisions on behalf of the Group on the appropriate course of action relating to conduct breaches, under the formal scope of the SM&CR.
Group Strategic Review 3 Committee	Responsible for monitoring the progress of transformation across the Group, acting as a clearing house to resolve issues and facilitate resolution of issues where necessary and to drive the execution of the Group's transformation agenda as agreed by the Group Chief Executive.

The Group Risk Committee is supported through escalation and ongoing reporting by business area risk committees, cross-divisional committees addressing specific matters of Group-wide significance and the following second line of defence Risk committees which ensure effective oversight of risk management:

Credit Risk Committees	Review material credit risk, both current and emerging, and adherence to agreed risk appetite; approve, or note the delegated approval of divisional and business level credit risk policy and credit risk appetite; identify portfolio trends and risk appetite breaches and escalate to Group Risk Committee as appropriate; sanction new credit initiatives for automated and manual decisioning and collection and recoveries; oversight new business and portfolio credit risk performance, risks, opportunities, and concentrations; and oversight performance of collections and recoveries.
Group Market Risk Committee	Reviews and recommends market risk appetites. Monitors and oversights market risk exposures across the Group and adherence to Board Risk Appetite. Approves the framework and designation of books between the Trading Book and the Banking Book for regulatory purposes.
Group Conduct, Compliance and Operational Risk Committee	Acts as a Risk community forum to independently challenge and oversee the Group-wide risk and control environment, focusing on read-across of material events, key areas of regulatory focus and emerging horizon risks. Uses lessons learned and undertakes read-across from the three lines of defence to ensure that the Group-wide risk profile adapts to emerging risks, trends and themes, and the control environment is sustainable to deliver the Bank of the Future.

Risk management continued

Committees	Risk focus
Group Fraud and Financial Crime Prevention Committee	Ensures development and application of fraud and financial crime risk management complies with the Group's strategic aims, Group Corporate Responsibility, Group Risk Appetite and Group Fraud and Financial Crime Policies. Provides direction and appropriate focus on priorities to enhance the Group's fraud and financial crime risk management capabilities in line with business and customer objectives whilst aligning to the Group's target operating model.
Group Financial Risk Committee	Responsible for oversighting, reviewing, challenging and recommending to senior executives and Board committees internal and Regulatory stress tests, Internal Capital Adequacy Assessment Process, Pillar 3 Disclosures, Recovery and Resolution Plans, and other analysis as required.
Group Capital Risk Committee	Responsible for providing oversight of all relevant capital matters within the Group including the Group's latest capital position and plans, risk appetite proposals, Pillar 2 developments, and the impact from regulatory reforms and accounting developments specific to capital.
Group Model Governance Committee	Responsible for setting the model governance framework, the associated policy and related principles and procedures; reviewing and approving models, model changes, model extensions and capital post model adjustments; recommending approval to Group Risk Committee (GRC) of those models which require GRC approval; monitoring summary of model performance, approving any appropriate corrective actions; and monitoring performance against risk appetite and escalating as required.
Ring-Fenced Bank Perimeter Oversight Committee	The Committee escalates perimeter control breaches to the Ring-Fenced Banks' Board Risk Committee and Boards.

Full analysis of risk categories

The Group's risk framework covers all types of risk which affect the Group and could impact on the achievement of its strategic objectives. A detailed description of each category is provided on pages 115 to 159.

Risk categories recognised by the Group are periodically reviewed to ensure that they reflect the Group risk profile in light of internal and external factors, such as the Group Strategy and the regulatory environment in which it operates. As part of a review of the Group's risk categories, the secondary risk categories in the table below of Change, Data management and Operational resilience have been elevated to primary risk categories, and Strategic risk has been included as a new primary risk category, in the Group's Risk Management Framework. These changes will be embedded during 2019.

Primary risk categories	Secondary risk categories		
Credit risk Page 115	– Retail credit	– Commercial credit	
Regulatory and legal risk Page 135	– Regulatory compliance	– Legal	
Conduct risk Page 136	– Conduct		
Operational risk Page 136	– Business process – Change – Cyber and information security – Data management – Sourcing	– External service provision – Financial crime – Financial reporting – Fraud	– Internal service provision – IT systems – Operational resilience – Physical security/health and safety
People risk Page 138	– People		
Insurance underwriting risk Page 138	– Insurance underwriting		
Capital risk Page 139	– Capital		
Funding and liquidity risk Page 147	– Funding and liquidity		
Governance risk Page 153	– Governance		
Market risk Page 154	– Trading book – Banking book	– Pensions – Insurance	
Model risk Page 159	– Model		

The Group considers both reputational and financial impact in the course of managing all its risks and therefore does not classify reputational impact as a separate risk category.

Credit Risk

Definition

Credit risk is defined as the risk that parties with whom the Group has contracted fail to meet their financial obligations (both on and off-balance sheet).

Exposures

The principal sources of credit risk within the Group arise from loans and advances, contingent liabilities, commitments, debt securities and derivatives to customers, financial institutions and sovereigns. The credit risk exposures of the Group are set out in note 52 on page 255.

In terms of loans and advances (for example mortgages, term loans and overdrafts) and contingent liabilities (for example credit instruments such as guarantees and documentary letters of credit), credit risk arises both from amounts advanced and commitments to extend credit to a customer or bank. With respect to commitments to extend credit, the Group is potentially exposed to a loss up to an amount equal to the total unutilised commitments. However, the likely amount of loss may be less than the total unutilised commitments, as most retail and certain commercial lending commitments may be cancelled based on regular assessment of the prevailing creditworthiness of customers. Most commercial term commitments are also contingent upon customers maintaining specific credit standards.

Credit risk also arises from debt securities and derivatives. The total notional principal amount of interest rate, exchange rate, credit derivative and other contracts outstanding at 31 December 2018 is shown on page 134. The notional principal amount does not, however, represent the Group's credit risk exposure, which is limited to the current cost of replacing contracts with a positive value to the Group. Such amounts are reflected in note 52 on page 255.

Additionally, credit risk arises from leasing arrangements where the Group is the lessor. Note 2(J) on page 181 provides details on the Group's approach to the treatment of leases.

Credit risk exposures in the Insurance and Wealth division largely result from holding bond and loan assets, together with some related swaps, shareholder funds (including the annuity portfolio) and exposure to reinsurers.

The investments held in the Group's defined benefit pension schemes also expose the Group to credit risk. Note 35 on page 219 provides further information on the defined benefit pension schemes' assets and liabilities.

Loans and advances, contingent liabilities, commitments, debt securities and derivatives also expose the Group to refinance risk. Refinance risk is the possibility that an outstanding exposure cannot be repaid at its contractual maturity date. If the Group does not wish to refinance the exposure then there is refinance risk if the obligor is unable to repay by securing alternative finance. This may occur for a number of reasons which may include: the borrower is in financial difficulty, because the terms required to refinance are outside acceptable appetite at the time or the customer is unable to refinance externally due to a lack of market liquidity. Refinance risk exposures are managed in accordance with the Group's existing credit risk policies, processes and controls and are not considered to be material given the Group's prudent and through the cycle credit risk appetite. Where heightened refinance risk exists exposures are minimised through intensive account management and, where appropriate, are impaired and/or classed as forborne.

Measurement

The process for credit risk identification, measurement and control is integrated into the Board-approved framework for credit risk appetite and governance.

Credit risk is measured from different perspectives using a range of appropriate modelling and scoring techniques at a number of levels of granularity, including total balance sheet, individual portfolio, pertinent concentrations and individual customer – for both new business and existing lending. Key metrics such as total exposure, risk-weighted assets, new business quality, concentration risk and portfolio performance, are reported monthly to Risk Committees.

Measures such as expected credit loss (ECL), risk-weighted assets, observed credit performance, predicted credit quality (usually from predictive credit scoring models), collateral cover and quality and other credit drivers (such as cash flow, affordability, leverage and indebtedness) are used to enable effective risk measurement across the Group.

In addition, stress testing and scenario analysis are used to estimate impairment losses and capital demand forecasts for both regulatory and internal purposes and to assist in the formulation of credit risk appetite.

As part of the 'three lines of defence' model, Risk division is the second line of defence providing oversight and independent challenge to key risk decisions taken by business management. Risk division also tests the effectiveness of credit risk management and internal credit risk controls. This includes ensuring that the control and monitoring of higher risk and vulnerable portfolios/sectors is appropriate and confirming that appropriate loss allowances for impairment are in place. Output from these reviews help to inform credit risk appetite and credit policy.

As the third line of defence, Group Internal Audit undertakes regular risk-based reviews to assess the effectiveness of credit risk management and controls. The Group's external auditors also review adequacy at each quarter-end.

Following the introduction of IFRS 9, underlying processes and key controls have been updated with additional management information produced to assist in monitoring portfolio quality and provision coverage. Group governance and oversight of impairments remains largely unchanged.

Mitigation

The Group uses a range of approaches to mitigate credit risk.

Prudent, through the cycle credit principles, risk policies and appetite statements: the independent Risk division sets out the credit principles, credit risk policies and credit risk appetite statements. These are subject to regular review and governance, with any changes subject to an approval process. Risk teams monitor credit performance trends, review and challenge exceptions, and test the adequacy and adherence to credit risk policies and processes throughout the Group. This includes tracking portfolio performance against an agreed set of credit risk appetite tolerances.

Robust models and controls: see Model risk on page 159.

Limitations on concentration risk: there are portfolio controls on certain industries, sectors and products to reflect risk appetite as well as individual, customer and bank limit risk tolerances. Credit policies and appetite statements are aligned to the Group's risk appetite and restrict exposure to higher risk countries and potentially vulnerable sectors and asset classes. Note 18(A) on page 255 provides an analysis of loans and advances to customers by industry (for commercial customers) and product (for retail customers). Exposures are monitored to prevent both an excessive concentration of risk and single name concentrations. These concentration risk controls are not necessarily in the form of a maximum limit on exposure, but may instead require new business in concentrated sectors to fulfil additional minimum policy and/or guideline requirements. The Group's largest exposures are regularly monitored by the Board Risk Committee and reported in accordance with regulatory requirements.

Defined country risk management framework: the Board sets a broad maximum country risk appetite. Within this, the Executive Credit Approval Committee approves the Group country risk framework and sovereign limits on an annual basis. Risk based appetite for all countries is set within the independent Risk division, taking into account economic, financial, political and social factors as well as the approved business and strategic plans of the Group.

Specialist expertise: credit quality is managed and controlled by a number of specialist units within the business and Risk division, which provide for example: intensive management and control; security perfection; maintenance of customer and facility records; expertise in documentation for lending and associated products; sector specific expertise; and legal services applicable to the particular market segments and product ranges offered by the Group.

Stress testing: the Group's credit portfolios are subject to regular stress testing. In addition to the Group led, PRA, EBA and other regulatory stress tests, exercises focused on individual divisions and portfolios are also performed. For further information on stress testing process, methodology and governance see page 110.

Frequent and robust credit risk oversight and assurance: oversight and assurance of credit risk is undertaken by independent credit risk oversight functions operating within Retail credit risk and Commercial banking risk which are part of the Group's second line of defence. Their primary objective is to provide reasonable and independent oversight that credit risk is being effectively managed and to ensure that appropriate controls are in place and being adhered to. Group Internal Audit also provides assurance to the Board Audit Committee on the effectiveness of credit risk management controls across the Group's activities.

Collateral

The principal types of acceptable collateral include:

- residential and commercial properties;
- charges over business assets such as premises, inventory and accounts receivable;
- financial instruments such as debt securities;
- vehicles;
- cash; and
- guarantees received from third-parties.

The Group maintains appetite parameters on the acceptability of specific classes of collateral.

For non-mortgage retail lending to small businesses, collateral may include second charges over residential property and the assignment of life cover.

Collateral held as security for financial assets other than loans and advances is determined by the nature of the underlying exposure. Debt securities, including treasury and other bills, are generally unsecured, with the exception of asset-backed securities and similar instruments such as covered bonds, which are secured by portfolios of financial assets. Collateral is generally not held against loans and advances to financial institutions. However, securities are held as part of reverse repurchase or securities borrowing transactions or where a collateral agreement has been entered into under a master netting agreement. Derivative transactions with financial counterparties are typically collateralised under a Credit Support Annex (CSA) in conjunction with the International Swaps and Derivatives Association (ISDA) Master Agreement. Derivative transactions with non-financial customers are not usually supported by a CSA.

Commercial lending decisions must be based on an obligor's ability to repay from normal business operations rather than reliance on the disposal of any security provided. The requirement for collateral and the type to be taken at origination will be based upon the nature of the transaction and the credit quality, size and structure of the borrower. For non-retail exposures if required, the Group will often seek that any collateral include a first charge over land and buildings owned and occupied by the business, a debenture over one or more of the assets of a company or limited liability partnership, personal guarantees, limited in amount, from the directors of a company or limited liability partnership and key man insurance. The Group maintains policies setting out acceptable collateral bases for valuation, maximum loan to value (LTV) ratios and other criteria that are to be considered when reviewing an application. Other than for project finance, object finance and income producing real estate where charges over the subject assets are required, the provision of collateral will not determine the outcome of an application. Notwithstanding this, the fundamental business proposition must evidence the ability of the business to generate funds from normal business sources to repay a customer or counterparty's financial commitment.

The extent to which collateral values are actively managed will depend on the credit quality and other circumstances of the obligor and type of underlying transaction. Although lending decisions are based on expected cash flows, any collateral provided may impact the pricing and other terms of a loan or facility granted. This will have a financial impact on the amount of net interest income recognised and on internal loss given default estimates that contribute to the determination of asset quality and returns.

Collateral values are assessed at the time of loan origination. The Group requires collateral to be realistically valued by an appropriately qualified source, independent of both the credit decision process and the customer, at the time of borrowing. In certain circumstances, for Retail residential mortgages this may include the use of automated valuation models based on market data, subject to accuracy criteria and LTV limits. Where third-parties are used for collateral valuations, they are subject to regular monitoring and review. Collateral values are subject to review, which will vary according to the type of lending, collateral involved and account performance. Such reviews are undertaken to confirm that the value recorded remains appropriate and whether revaluation is required, considering for example, account performance, market conditions and any information available that may indicate that the value of the collateral has materially declined. In such instances, the Group may seek additional collateral and/or other amendments to the terms of the facility. The Group adjusts estimated market values to take account of the costs of realisation and any discount associated with the realisation of the collateral when estimating credit losses.

The Group considers risk concentrations by collateral providers and collateral type with a view to ensuring that any potential undue concentrations of risk are identified and suitably managed by changes to strategy, policy and/or business plans.

The Group seeks to avoid correlation or wrong-way risk where possible. Under the Group's repurchase (repo) policy, the issuer of the collateral and the repo counterparty should be neither the same nor connected. The same rule applies for derivatives. Risk division has the necessary discretion to extend this rule to other cases where there is significant correlation. Countries with a rating equivalent to AA- or better may be considered to have no adverse correlation between the counterparty domiciled in that country and the country of risk (issuer of securities).

Refer to note 52 on page 255 for further information on collateral.

Additional mitigation for Retail customers

The Group uses a variety of lending criteria when assessing applications for mortgages and unsecured lending. The general approval process uses credit acceptance scorecards and involves a review of an applicant's previous credit history using internal data and information held by Credit Reference Agencies (CRA).

The Group also assesses the affordability and sustainability of lending for each borrower. For secured lending this includes use of an appropriate stressed interest rate scenario. Affordability assessments for all lending are compliant with relevant regulatory and conduct guidelines. The Group takes reasonable steps to validate information used in the assessment of a customer's income and expenditure.

In addition, the Group has in place quantitative limits such as maximum limits for individual customer products, the level of borrowing to income and the ratio of borrowing to collateral. Some of these limits relate to internal approval levels and others are policy limits above which the Group will typically reject borrowing applications. The Group also applies certain criteria that are applicable to specific products for example applications for buy-to-let mortgages.

For UK mortgages, the Group's policy permits owner occupier applications with a maximum LTV of 95 per cent. Applications with an LTV above 90 per cent are subject to enhanced underwriting criteria, including higher scorecard cut-offs and loan size restrictions.

Buy-to-let mortgages within Retail are limited to a maximum loan size of £1,000,000 and 75 per cent LTV. Buy-to-let applications must pass a minimum rental cover ratio of 125 per cent under stressed interest rates, after applicable tax liabilities. Portfolio Landlords (customers with four or more mortgaged buy-to-let properties) are subject to additional controls including evaluation of overall portfolio resilience.

The Group's policy is to reject any application for a lending product where a customer is registered as bankrupt or insolvent, or has a recent County Court Judgment or financial default registered at a CRA used by the Group above de minimis thresholds. In addition, the Group typically rejects applicants where total unsecured debt, debt-to-income ratios, or other indicators of financial difficulty exceed policy limits.

Where credit acceptance scorecards are used, new models, model changes and monitoring of model effectiveness are independently reviewed and approved in accordance with the governance framework set by the Group Model Governance Committee.

Additional mitigation for Commercial customers

Individual credit assessment and independent sanction of customer and bank limits: with the exception of small exposures to SME customers where certain relationship managers have limited delegated sanctioning authority, credit risk in commercial customer portfolios is subject to sanction by the independent Risk division, which considers the strengths and weaknesses of individual transactions, the balance of risk and reward, and how credit risk aligns to the Group and Divisional risk appetite. Exposure to individual counterparties, groups of counterparties or customer risk segments is controlled through a tiered hierarchy of delegated sanctioning authorities and risk based recommended maximum limit parameters. Approval requirements for each decision are based on a number of factors including, but not limited to, the transaction amount, the customer's aggregate facilities, credit policy, risk appetite, credit risk ratings and the nature and term of the risk. The Group's credit risk appetite criteria for counterparty and customer underwriting is generally the same as that for assets intended to be held to maturity. All hard underwriting must be sanctioned by Risk division. A pre-approved credit matrix may be used for 'best efforts' underwriting.

Counterparty credit limits: limits are set against all types of exposure in a counterparty name, in accordance with an agreed methodology for each exposure type. This includes credit risk exposure on individual derivatives and securities financing transactions, which incorporates potential future exposures from market movements against agreed confidence intervals. Aggregate facility levels by counterparty are set and limit breaches are subject to escalation procedures.

Daily settlement limits: settlement risk arises in any situation where a payment in cash, securities or equities is made in the expectation of a corresponding receipt in cash, securities or equities. Daily settlement limits are established for each relevant counterparty to cover the aggregate of all settlement risk arising from the Group's market transactions on any single day.

Master netting agreements

It is credit policy that a Group approved master netting agreement must be used for all derivative and traded product transactions and must be in place prior to trading. This requirement extends to trades with clients and the counterparties used for the Bank's own hedging activities, which may also include clearing trades with Central Counterparties (CCPs). Any exceptions must be approved by the appropriate credit sanctioner. Master netting agreements do not generally result in an offset of balance sheet assets and liabilities for accounting purposes, as transactions are usually settled on a gross basis. However, within relevant jurisdictions and for appropriate counterparty types master netting agreements do reduce the credit risk to the extent that, if an event of default occurs, all trades with the counterparty may be terminated and settled on a net basis. The Group's overall exposure to credit risk on derivative instruments subject to master netting agreements can change substantially within a short period, since this is the net position of all trades under the master netting agreement.

Other credit risk transfers

The Group also undertakes asset sales, credit derivative based transactions and securitisations as a means of mitigating or reducing credit risk, taking into account the nature of assets and the prevailing market conditions.

Monitoring

In conjunction with Risk division, businesses identify and define portfolios of credit and related risk exposures and the key behaviours and characteristics by which those portfolios are managed and monitored. This entails the production and analysis of regular portfolio monitoring reports for review by senior management. Risk division in turn produces an aggregated view of credit risk across the Group, including reports on material credit exposures, concentrations, concerns and other management information, which is presented to the divisional risk committees, Group Risk Committee and the Board Risk Committee.

Models

The performance of all models used in credit risk is monitored in line with the Group's governance framework – see Model risk on page 159.

Intensive care of customers in financial difficulty

The Group operates a number of solutions to assist borrowers who are experiencing financial stress. The material elements of these solutions through which the Group has granted a concession, whether temporarily or permanently, are set out below.

Forbearance

The Group's aim in offering forbearance and other assistance to customers in financial distress is to benefit both the customer and the Group by supporting its customers and acting in their best interests by, where possible, bringing customer facilities back into a sustainable position.

The Group offers a range of tools and assistance to support customers who are encountering financial difficulties. Cases are managed on an individual basis, with the circumstances of each customer considered separately and the action taken judged as being appropriate and sustainable for both the customer and the Group.

The provision and review of such assistance is controlled through the application of an appropriate policy framework and associated controls. Regular review of the assistance offered to customers is undertaken to confirm that it remains appropriate, alongside monitoring of customers' performance and the level of payments received.

The Group classifies accounts as forborne at the time a customer in financial difficulty is granted a concession. Accounts are classified as forborne for a minimum of two or three years, dependent on whether the exposure is performing or non-performing when the concession is applied.

Forbearance measures consist of concessions towards a debtor that is experiencing or about to experience difficulties in meeting its financial commitments. This can include modification of the previous terms and conditions of a contract or a total or partial refinancing of a troubled debt contract, either of which would not have been required had the debtor not been experiencing financial difficulties.

Non-performing exposures can be reclassified as Performing Forborne after a minimum 12 month cure period, providing there are no past due amounts or concerns regarding the full repayment of the exposure. A minimum of a further 24 months must pass from the date the forborne exposure was reclassified as Performing Forborne before the account can exit forbearance. If conditions to exit forbearance are not met at the end of this probation period, the exposure shall continue to be identified as forborne until all the conditions are met.

The Group's treatment of loan renegotiations is included in the impairment policy in note 2(H) on page 180.

Customers receiving support from UK government sponsored programmes

To assist customers in financial distress, the Group participates in UK government sponsored programmes for households, including the Income Support for Mortgage Interest programme, under which the government paid all or part of the interest on the mortgage on behalf of the customer. The Income Support for Mortgage Interest programme changed from a benefit to a government loan, with effect from 6 April 2018. The Group estimates that customers representing approximately £0.4 billion (2017: £1.6 billion) of its mortgage exposures are receiving such support.

The Group credit risk portfolio in 2018

Overview

- Credit quality remains strong with no deterioration in credit risk. Flow to arrears remains stable at low levels. The Group's loan portfolios continue to be well positioned, reflecting the Group's continued prudent, through the cycle approach to credit risk and benefiting from continued low interest rates and a resilient UK economy
- The gross asset quality ratio remains stable at 28 basis points, in line with 2017 and 2016
- The net asset quality ratio increased to 21 basis points (2017: 18 basis points) and the impairment charge increased to £937 million in 2018 (2017: £795 million), driven by expected lower releases and write-backs, the inclusion of MBNA for a full year and a low impairment charge in Secured compared to one-off write-backs in 2017
- The closed mortgage book continued to run off, reducing by a further £2.4 billion during 2018
- Stage 2 loans as a proportion of total loans and advances to customers have reduced to 7.8 per cent (1 January 2018: 11.3 per cent), with Stage 2 loans and advances down by £14.3 billion to £38.3 billion, driven by the sale of the Irish mortgage portfolio, model refinements to the Stage 2 transfer approach for Secured and portfolio improvements. Coverage of Stage 2 drawn balances increased to 4.1 per cent (1 January 2018: 3.5 per cent)
- Stage 3 loans as a proportion of total loans and advances to customers have remained stable at 1.9 per cent, with Stage 3 loans and advances up £0.2 billion to £9.2 billion. Coverage of Stage 3 drawn balances increased to 24.3 per cent (1 January 2018: 24.0 per cent).

Low risk culture and prudent risk appetite

- The Group continues to take a prudent approach to credit risk, with robust credit quality and affordability controls at origination and a prudent through the cycle credit risk appetite
- Credit portfolios are well positioned against an uncertain economic outlook and potential market volatility, including that related to the UK's exit from the EU
- The Group continues to grow lending to targeted segments while maintaining a prudent risk appetite
- The Group's effective risk management ensures early identification and management of customers and counterparties who may be showing signs of distress
- Sector concentrations within the portfolios are closely monitored and controlled, with mitigating actions taken where appropriate. Sector and product caps limit exposure to certain higher risk and vulnerable sectors and asset classes.

Risk management continued

Table 1.4: **Group impairment charge**

	Loans and advances to banks and other assets £m	Loans and advances to customers £m	Financial assets at fair value through other comprehensive income £m	Undrawn balances £m	2018 Total £m	2017[1] £m
Retail[2]	–	889	–	(27)	862	711
Commercial Banking[2]	1	150	(14)	(45)	92	89
Insurance and Wealth	–	1	–	–	1	–
Central Items[2]	1	(18)	–	(1)	(18)	(5)
Total impairment charge	**2**	**1,022**	**(14)**	**(73)**	**937**	795
Asset quality ratio					0.21%	0.18%
Gross asset quality ratio					0.28%	0.28%

1 Prior period comparatives are on an IAS 39 basis.

2 Restated to include Run-off.

Table 1.5: **Group total expected credit loss allowance (statutory basis)**

	At 31 Dec 2018 £m	At 1 Jan 2018 £m	At 31 Dec 2017[1] £m
Customer related balances			
Drawn	3,150	3,223	2,201
Undrawn	193	273	30
	3,343	3,496	2,231
Other assets	19	37	26
Total ECL allowance	**3,362**	3,533	2,257

1 Prior period comparatives are on an IAS 39 basis.

Group loans and advances to customers

The following pages contain analysis of the Group's loans and advances to customers by sub-portfolio. Loans and advances to customers are categorised into the following stages:

Stage 1 assets comprise newly originated assets (unless purchased or originated credit impaired), as well as those which have not experienced a significant increase in credit risk. These assets carry an expected credit loss (ECL) allowance equivalent to the ECL that result from those default events that are possible within 12 months of the reporting date (12 month ECL).

Stage 2 assets are those which have experienced a significant increase in credit risk since origination. These assets carry an ECL equivalent to the ECL arising over the lifetime of the asset (lifetime ECL).

Stage 3 assets have either defaulted or are otherwise considered to be credit impaired. These assets carry a lifetime ECL.

Purchased or originated credit impaired assets (POCI) are those that have been originated or acquired in a credit impaired state. This includes within the definition of credit impaired the purchase of a financial asset at a deep discount that reflects impaired credit losses.

Basis of presentation

For the Group and Retail lending portfolios, the analyses which follow have been presented on two bases; the 'statutory basis' which is consistent with the presentation in the Group's accounts and the 'underlying basis' which is used for internal management purposes. Reconciliations between the two bases have been provided. For Commercial Banking there is no difference between the statutory and the underlying basis.

In the following statutory basis tables, POCI assets relate to a fixed pool of mortgages that were purchased as part of the HBOS acquisition at a deep discount to face value reflecting credit losses incurred from the point of origination to the date of acquisition totalling £1,002 million at 31 December 2018. The residual ECL allowance and resulting low coverage ratio reflects further deterioration in the creditworthiness from the date of acquisition. Over time, the POCI assets will run off as the loans redeem, pay down or losses are crystallised.

The Group uses the underlying basis to monitor the creditworthiness of the lending portfolio and related ECL allowances because it provides a better indication of the credit performance of the POCI assets. The underlying basis assumes that the lending assets acquired as part of a business combination was originated by the Group and is classified as either Stage 1, 2 or 3 according to the change in credit risk over the period since origination. Underlying ECL allowances have been calculated accordingly.

Table 1.6: **Group loans and advances to customers (statutory basis)**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m	Stage 3 as % of total %
At 31 December 2018[1]						
Retail	**341,682**	**305,160**	**18,741**	**2,390**	**15,391**	**0.7**
Commercial Banking	**101,890**	**92,002**	**6,592**	**3,296**	**–**	**3.2**
Insurance and Wealth	**865**	**804**	**6**	**55**	**–**	**6.4**
Central items	**43,571**	**43,565**	**6**	**–**	**–**	**–**
Total gross lending	**488,008**	**441,531**	**25,345**	**5,741**	**15,391**	**1.2**
ECL allowances on drawn balances	**(3,150)**	**(525)**	**(994)**	**(1,553)**	**(78)**	
Net balance sheet carrying value	**484,858**	**441,006**	**24,351**	**4,188**	**15,313**	
ECL allowance (drawn and undrawn) as a percentage of gross lending (%)[2]	**0.7**	**0.1**	**4.2**	**28.4**		
At 1 January 2018[1,3]						
Retail	341,661	296,264	25,319	2,105	17,973	0.6
Commercial Banking	100,820	90,341	7,765	2,714	–	2.7
Insurance and Wealth	819	724	67	28	–	3.4
Central items	20,939	16,552	4,094	293	–	1.4
Total gross lending	464,239	403,881	37,245	5,140	17,973	1.1
ECL allowances on drawn balances	(3,223)	(597)	(1,148)	(1,446)	(32)	
Net balance sheet carrying value	461,016	403,284	36,097	3,694	17,941	
ECL allowance (drawn and undrawn) as a percentage of gross lending (%)[2]	0.8	0.2	3.4	29.8		

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA acquisition related adjustments.

2 Total and Stage 3 expected credit loss allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Retail (31 December 2018: £250 million; 1 January 2018: £291 million).

3 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.6a: **Group loans and advances to customers (underlying basis)**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Stage 3 as % of total %
At 31 December 2018[1]					
Retail	**342,559**	**305,048**	**31,647**	**5,864**	**1.7**
Commercial Banking	**101,890**	**92,002**	**6,592**	**3,296**	**3.2**
Insurance and Wealth	**865**	**804**	**6**	**55**	**6.4**
Central items	**43,571**	**43,565**	**6**	**–**	**–**
Total gross lending	**488,885**	**441,419**	**38,251**	**9,215**	**1.9**
ECL allowances on drawn balances	**(4,236)**	**(556)**	**(1,506)**	**(2,174)**	
Net balance sheet carrying value	**484,649**	**440,863**	**36,745**	**7,041**	
ECL allowance (drawn and undrawn) as a percentage of gross lending (%)[2]	**0.9**	**0.2**	**4.1**	**24.3**	
At 1 January 2018[1,3]					
Retail	342,632	295,994	40,618	6,020	1.8
Commercial Banking	100,820	90,341	7,765	2,714	2.7
Insurance and Wealth	819	724	67	28	3.4
Central items	20,939	16,552	4,094	293	1.4
Total gross lending	465,210	403,611	52,544	9,055	1.9
ECL allowances on drawn balances	(4,464)	(626)	(1,731)	(2,107)	
Net balance sheet carrying value	460,746	402,985	50,813	6,948	
ECL allowance (drawn and undrawn) as a percentage of gross lending (%)[2]	1.0	0.2	3.5	24.0	

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA acquisition related adjustments.

2 Total and Stage 3 expected credit loss allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Retail (31 December 2018: £250 million; 1 January 2018: £291 million).

3 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Risk management continued

Table 1.6b: **Reconciliation between statutory and underlying basis of Group gross loans and advances to customers**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m
At 31 December 2018[1]					
Underlying basis	**488,885**	**441,419**	**38,251**	**9,215**	**–**
Purchased or originated credit-impaired assets	**–**	**–**	**(12,917)**	**(3,476)**	**16,393**
Pre-acquisition ECL allowances	**(877)**	**112**	**11**	**2**	**(1,002)**
	(877)	**112**	**(12,906)**	**(3,474)**	**15,391**
Statutory basis	**488,008**	**441,531**	**25,345**	**5,741**	**15,391**
At 1 January 2018[1]					
Underlying basis	465,210	403,611	52,544	9,055	–
Purchased or originated credit-impaired assets	–	–	(15,290)	(3,802)	19,092
Pre-acquisition ECL allowances	(971)	270	(9)	(113)	(1,119)
	(971)	270	(15,299)	(3,915)	17,973
Statutory basis	464,239	403,881	37,245	5,140	17,973

1 Gross lending and ECL allowances are stated on IFRS 9 basis.

Table 1.6c: **Group total expected credit loss allowances (underlying basis)**

	At 31 Dec 2018 £m	At 1 Jan 2018 £m	At 31 Dec 2017[1] £m
Customer related balances			
Drawn	**4,236**	4,464	3,442
Undrawn	**193**	273	30
	4,429	4,737	3,472
Other assets	**19**	37	26
Total ECL allowances	**4,448**	4,774	3,498

1 Prior period comparatives are on an IAS 39 basis.

Table 1.6d: **Reconciliation between statutory and underlying basis of Group expected credit loss allowances on drawn balances**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m
At 31 December 2018[1]					
Underlying basis	**4,236**	**556**	**1,506**	**2,174**	**–**
Purchased or originated credit-impaired assets	**–**	**–**	**(481)**	**(599)**	**1,080**
Pre-acquisition ECL allowance	**(1,086)**	**(31)**	**(31)**	**(22)**	**(1,002)**
	(1,086)	**(31)**	**(512)**	**(621)**	**78**
Statutory basis	**3,150**	**525**	**994**	**1,553**	**78**
At 1 January 2018[1]					
Underlying basis	4,464	626	1,731	2,107	–
Purchased or originated credit-impaired assets	–	–	(553)	(598)	1,151
Pre-acquisition ECL allowance	(1,241)	(29)	(30)	(63)	(1,119)
	(1,241)	(29)	(583)	(661)	32
Statutory basis	3,223	597	1,148	1,446	32

1 ECL allowances are stated on an IFRS 9 basis.

Table 1.7: **Group expected credit loss allowances (drawn and undrawn) as a percentage of loans and advances to customers (statutory basis)**

	Total		Stage 1		Stage 2		Stage 3		Purchased or originated credit-impaired	
	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances[1] %	£m	As % of drawn balances %
At 31 December 2018[2]										
Retail	**1,768**	**0.5**	**493**	**0.2**	**713**	**3.8**	**484**	**22.6**	**78**	**0.5**
Commercial Banking	**1,513**	**1.5**	**111**	**0.1**	**338**	**5.1**	**1,064**	**32.3**	**–**	**–**
Insurance and Wealth	**18**	**2.1**	**6**	**0.7**	**1**	**16.7**	**11**	**20.0**	**–**	**–**
Central items	**44**	**0.1**	**38**	**0.1**	**6**	**100.0**	**–**	**–**	**–**	**–**
Total	**3,343**	**0.7**	**648**	**0.1**	**1,058**	**4.2**	**1,559**	**28.4**	**78**	**0.5**
At 1 January 2018[2]										
Retail	1,685	0.5	538	0.2	716	2.8	399	22.0	32	0.2
Commercial Banking	1,521	1.5	132	0.1	432	5.6	957	35.3	–	–
Insurance and Wealth	17	2.1	6	0.8	2	3.0	9	32.1	–	–
Central items	273	1.3	67	0.4	125	3.1	81	27.6	–	–
Total	3,496	0.8	743	0.2	1,275	3.4	1,446	29.8	32	0.2

1 Total and Stage 3 ECL allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Retail (31 December 2018: £250 million; 1 January 2018: £291 million).

2 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA related acquisition adjustments.

Table 1.7a: **Group expected credit loss allowances (drawn and undrawn) as a percentage of loans and advances to customers (underlying basis)**

	Total		Stage 1		Stage 2		Stage 3	
	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances[1] %
At 31 December 2018[2]								
Retail	**2,854**	**0.8**	**524**	**0.2**	**1,225**	**3.9**	**1,105**	**19.7**
Commercial Banking	**1,513**	**1.5**	**111**	**0.1**	**338**	**5.1**	**1,064**	**32.3**
Insurance and Wealth	**18**	**2.1**	**6**	**0.7**	**1**	**16.7**	**11**	**20.0**
Central items	**44**	**0.1**	**38**	**0.1**	**6**	**100.0**	**–**	**–**
Total	**4,429**	**0.9**	**679**	**0.2**	**1,570**	**4.1**	**2,180**	**24.3**
At 1 January 2018[2]								
Retail	2,926	0.9	567	0.2	1,299	3.2	1,060	18.5
Commercial Banking	1,521	1.5	132	0.1	432	5.6	957	35.3
Insurance and Wealth	17	2.1	6	0.8	2	3.0	9	32.1
Central items	273	1.3	67	0.4	125	3.1	81	27.6
Total	4,737	1.0	772	0.2	1,858	3.5	2,107	24.0

1 Total and Stage 3 ECL allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Retail (31 December 2018: £250 million; 1 January 2018: £291 million).

2 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA related acquisition adjustments.

Risk management continued

Table 1.8: **Group Stage 2 loans and advances to customers (statutory basis)**

	Up to date			1-30 days past due			Over 30 days past due		
	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %
At 31 December 2018[1]									
Retail	**14,505**	**498**	**3.4**	**2,441**	**113**	**4.6**	**1,795**	**102**	**5.7**
Commercial Banking	**6,020**	**287**	**4.8**	**455**	**42**	**9.2**	**117**	**9**	**7.7**
Insurance and Wealth	**4**	**–**	**–**	**–**	**–**	**–**	**2**	**1**	**50.0**
Central items	**6**	**6**	**100.0**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**20,535**	**791**	**3.9**	**2,896**	**155**	**5.4**	**1,914**	**112**	**5.9**
At 1 January 2018[1,2]									
Retail	21,773	535	2.5	2,005	90	4.5	1,541	91	5.9
Commercial Banking	7,420	401	5.4	250	31	12.4	95	–	–
Insurance and Wealth	61	2	3.3	1	–	–	5	–	–
Central items	4,014	111	2.8	62	10	16.1	18	4	22.2
Total	33,268	1,049	3.2	2,318	131	5.7	1,659	95	5.7

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA acquisition related adjustments.

2 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.8a: **Group Stage 2 loans and advances to customers (underlying basis)**

	Up to date			1-30 days past due			Over 30 days past due		
	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %
At 31 December 2018[1]									
Retail	**23,025**	**769**	**3.3**	**4,472**	**182**	**4.1**	**4,150**	**274**	**6.6**
Commercial Banking	**6,020**	**287**	**4.8**	**455**	**42**	**9.2**	**117**	**9**	**7.7**
Insurance and Wealth	**4**	**–**	**–**	**–**	**–**	**–**	**2**	**1**	**50.0**
Central items	**6**	**6**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**29,055**	**1,062**	**3.7**	**4,927**	**224**	**4.5**	**4,269**	**284**	**6.7**
At 1 January 2018[1,2]									
Retail	32,113	831	2.6	4,269	174	4.1	4,236	294	6.9
Commercial Banking	7,420	401	5.4	250	31	12.4	95	–	–
Insurance and Wealth	61	2	3.3	1	–	–	5	–	–
Central items	4,014	111	2.8	62	10	16.1	18	4	22.2
Total	43,608	1,345	3.1	4,582	215	4.7	4,354	298	6.9

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA acquisition related adjustments.

2 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

The Group's assessment of a significant increase in credit risk, and resulting categorisation of Stage 2, includes customers moving into early arrears as well as a broader assessment that an up to date customer has experienced a level of deterioration in credit risk since origination. A more sophisticated assessment is required for up to date customers, which varies across divisions and product type. This assessment incorporates specific triggers such as a significant proportionate increase in probability of default relative to that at origination, recent arrears, forbearance activity, internal watch lists and external bureau flags. Up to date exposures in Stage 2 are likely to show lower levels of expected credit loss (ECL) allowance relative to those that have already moved into arrears given that an arrears status typically reflects a stronger indication of future default and greater likelihood of credit losses.

Additional information

The measurement of ECL reflects an unbiased probability-weighted range of possible future economic outcomes. The Group achieves this by selecting four economic scenarios to reflect the range of outcomes; the central scenario reflects the Group's base case assumptions used for medium term planning purposes, an upside and a downside scenario are also selected together with a severe downside scenario. The base case, upside and downside scenarios carry a 30 per cent weighting; the severe downside is weighted at 10 per cent. The table below shows the decomposition of the final probability-weighted ECL for each forward-looking economic scenario. The stage allocation for an asset is based on the overall scenario probability-weighted PD and, hence, the Stage 2 allocation is constant across all the scenarios.

The table below shows the ECL calculated under each scenario on both an underlying and a statutory basis.

	Probability-weighted £m	Upside £m	Base Case £m	Downside £m	Severe Downside £m
Underlying basis					
Secured	1,462	317	376	471	298
Other Retail	1,392	397	413	418	164
Commercial	1,513	424	442	468	179
Other	81	23	25	25	8
At 31 December 2018	**4,448**	**1,161**	**1,256**	**1,382**	**649**

	Probability-weighted £m	Upside £m	Base Case £m	Downside £m	Severe Downside £m
Statutory basis					
Secured	460	16	76	170	198
Other Retail	1,308	371	388	393	156
Commercial	1,513	424	442	468	179
Other	81	23	25	25	8
At 31 December 2018	**3,362**	**834**	**931**	**1,056**	**541**

The table below shows the Group's underlying ECL allowances for the upside and downside scenarios using a 100 per cent weighting, which means that both stage allocation and the ECL are based on the single scenario only. All non-modelled provisions, including management judgement remain unchanged.

	Upside £m	Downside £m
ECL allowances	3,861	4,659

Retail

- The credit quality of the Retail portfolios remains strong and continues to benefit from robust credit risk management, including affordability and indebtedness controls at origination and a prudent approach to risk appetite. The economic environment remains resilient with record employment rates, falling inflation, positive real wage growth and household indebtedness remaining below pre-crisis levels.
  - New business quality remains strong;
  - The flow of loans entering arrears remains at low levels;
  - Stage 3 balances are broadly flat at 1.7 per cent; and
  - Stage 2 balances have reduced to 9.2 per cent of the portfolio, largely due to model refinements to the Stage 2 transfer approach for Secured.
- Loans and advances remained flat during the period at £343 billion as of 31 December 2018.
- The impairment charge increased by £151 million (21.2 per cent) to £862 million for 2018 (2017: £711 million). The increase is attributable to the inclusion of MBNA for a full year and a low impairment charge in Secured compared to one-off write-backs in 2017.
- Expected credit loss (ECL) allowance as a percentage of drawn balances for Stage 3 increased to 19.7 per cent from 18.5 per cent relating to prudent provisioning in Secured. Coverage for Stage 2 has increased to 3.9 per cent from 3.2 per cent, largely due to model refinements to the Stage 2 transfer approach for Secured resulting in a reclassification of better quality Stage 2 assets into Stage 1.

Table 1.9: Retail impairment charge

	2018 £m	2017[1] £m	Change %
Secured	38	(15)	
Unsecured[2]	683	592	(15)
UK Motor Finance	113	111	(2)
Other[3]	28	23	(22)
Total impairment charge	**862**	711	(21)
Asset quality ratio	0.25%	0.21%	4bp

1 Prior period comparatives are on an IAS39 basis. Includes Run-off, previously reported as a separate segment.

2 Unsecured includes Credit cards, Loans and Overdrafts.

3 Other includes Business Banking, Europe and Retail run-off.

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Table 1.10: Retail loans and advances to customers (statutory basis)

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m	Stage 3 as % of total %
At 31 December 2018[1]						
Secured	**288,235**	**257,797**	**13,654**	**1,393**	**15,391**	**0.5**
Unsecured[2]	**28,115**	**24,705**	**2,707**	**703**	**–**	**2.5**
UK Motor Finance	**14,933**	**13,224**	**1,580**	**129**	**–**	**0.9**
Other[3]	**10,399**	**9,434**	**800**	**165**	**–**	**1.6**
Total gross lending	**341,682**	**305,160**	**18,741**	**2,390**	**15,391**	**0.7**
ECL allowances on drawn balances	**(1,613)**	**(389)**	**(662)**	**(484)**	**(78)**	
Net balance sheet carrying value	**340,069**	**304,771**	**18,079**	**1,906**	**15,313**	
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)[4]	**0.5**	**0.2**	**3.8**	**22.6**		
At 1 January 2018[1,5]						
Secured	291,021	251,707	20,109	1,232	17,973	0.4
Unsecured[2]	27,886	24,197	3,052	637	–	2.3
UK Motor Finance	13,738	12,176	1,456	106	–	0.8
Other[3]	9,016	8,184	702	130	–	1.4
Total gross lending	341,661	296,264	25,319	2,105	17,973	0.6
ECL allowances on drawn balances	(1,495)	(424)	(640)	(399)	(32)	
Net balance sheet carrying value	340,166	295,840	24,679	1,706	17,941	
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)	0.5	0.2	2.8	22.0		

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA acquisition related adjustments.

2 Unsecured includes Credit cards, Loans and Overdrafts.

3 Other includes Business Banking, Europe and Retail run-off.

4 Total and Stage 3 ECL allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Unsecured (31 December 2018: £233 million; 1 January 2018: £277 million) and Business Banking within Other (31 December 2018: £17 million; 1 January 2018: £14 million).

5 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.10a: Retail loans and advances to customers (underlying basis)

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Stage 3 as % of total %
At 31 December 2018[1]					
Secured	**289,237**	**257,797**	**26,571**	**4,869**	**1.7**
Unsecured[2]	**27,990**	**24,593**	**2,696**	**701**	**2.5**
UK Motor Finance	**14,933**	**13,224**	**1,580**	**129**	**0.9**
Other[3]	**10,399**	**9,434**	**800**	**165**	**1.6**
Total gross lending	**342,559**	**305,048**	**31,647**	**5,864**	**1.7**
ECL allowances on drawn balances	**(2,699)**	**(420)**	**(1,174)**	**(1,105)**	
Net balance sheet carrying value	**339,860**	**304,628**	**30,473**	**4,759**	
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)[4]	**0.8**	**0.2**	**3.9**	**19.7**	
At 1 January 2018[1,5]					
Secured	292,140	251,707	35,399	5,034	1.7
Unsecured[2]	27,738	23,927	3,061	750	2.7
UK Motor Finance	13,738	12,176	1,456	106	0.8
Other[3]	9,016	8,184	702	130	1.4
Total gross lending	342,632	295,994	40,618	6,020	1.8
ECL allowances on drawn balances	(2,736)	(453)	(1,223)	(1,060)	
Net balance sheet carrying value	339,896	295,541	39,395	4,960	
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)	0.9	0.2	3.2	18.5	

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA acquisition related adjustments.

2 Unsecured includes Credit cards, Loans and Overdrafts.

3 Other includes Business Banking, Europe and Retail run-off.

4 Total and Stage 3 ECL allowances as a percentage of drawn balances are calculated excluding loans in recoveries for Unsecured (31 December 2018: £233 million; 1 January 2018: £277 million) and Business Banking within Other (31 December 2018: £17 million; 1 January 2018: £14 million).

5 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.10b: **Reconciliation between statutory and underlying basis of Retail gross loans and advances to customers**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m
At 31 December 2018					
Underlying basis	**342,559**	**305,048**	**31,647**	**5,864**	**–**
Purchased or originated credit-impaired assets	**–**	**–**	**(12,917)**	**(3,476)**	**16,393**
Pre-acquisition ECL allowances	**(877)**	**112**	**11**	**2**	**(1,002)**
	(877)	**112**	**(12,906)**	**(3,474)**	**15,391**
Statutory basis	**341,682**	**305,160**	**18,741**	**2,390**	**15,391**
At 1 January 2018					
Underlying basis	342,632	295,994	40,618	6,020	–
Purchased or originated credit-impaired assets	–	–	(15,290)	(3,802)	19,092
Pre-acquisition ECL allowances	(971)	270	(9)	(113)	(1,119)
	(971)	270	(15,299)	(3,915)	17,973
Statutory basis	341,661	296,264	25,319	2,105	17,973

Table 1.10c: **Reconciliation between statutory and underlying basis of Retail expected credit loss allowances on drawn balances**

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Purchased or originated credit-impaired £m
At 31 December 2018					
Underlying basis	**2,699**	**420**	**1,174**	**1,105**	**–**
Purchased or originated credit-impaired assets	**–**	**–**	**(481)**	**(599)**	**1,080**
Pre-acquisition ECL allowances	**(1,086)**	**(31)**	**(31)**	**(22)**	**(1,002)**
	(1,086)	**(31)**	**(512)**	**(621)**	**78**
Statutory basis	**1,613**	**389**	**662**	**484**	**78**
At 1 January 2018					
Underlying basis	2,736	453	1,223	1,060	–
Purchased or originated credit-impaired assets	–	–	(553)	(598)	1,151
Pre-acquisition ECL allowances	(1,241)	(29)	(30)	(63)	(1,119)
	(1,241)	(29)	(583)	(661)	32
Statutory basis	1,495	424	640	399	32

Risk management continued

Table 1.11: Retail expected credit loss allowances (drawn and undrawn) as a percentage of loans and advances to customers (statutory basis)

	Total		Stage 1		Stage 2		Stage 3		Purchased or originated credit-impaired	
	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances[1] %	£m	As % of drawn balances %
At 31 December 2018[2]										
Secured	**460**	**0.2**	**38**	**–**	**226**	**1.7**	**118**	**8.5**	**78**	**0.5**
Unsecured[3]	**896**	**3.2**	**287**	**1.2**	**379**	**14.0**	**230**	**48.9**	**–**	**–**
UK Motor Finance[4]	**290**	**1.9**	**127**	**1.0**	**78**	**4.9**	**85**	**65.9**	**–**	**–**
Other[5]	**122**	**1.2**	**41**	**0.4**	**30**	**3.8**	**51**	**34.5**	**–**	**–**
Total	**1,768**	**0.5**	**493**	**0.2**	**713**	**3.8**	**484**	**22.6**	**78**	**0.5**
At 1 January 2018[2,6]										
Secured	385	0.1	31	–	236	1.2	86	7.0	32	0.2
Unsecured[3]	933	3.3	350	1.4	382	12.5	201	55.8	–	–
UK Motor Finance[4]	258	1.9	113	0.9	73	5.0	72	67.9	–	–
Other[5]	109	1.2	44	0.5	25	3.6	40	34.5	–	–
Total	1,685	0.5	538	0.2	716	2.8	399	22.0	32	0.2

1 Total and Stage 3 ECL allowance as a percentage of drawn balances are calculated excluding loans in recoveries for Unsecured (31 December 2018: £233 million; 1 January 2018: £277 million), and Business Banking within Other (31 December 2018: £17 million; 1 January 2018: £14 million).

2 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA related acquisition adjustments.

3 Unsecured includes Credit cards, Loans and Overdrafts.

4 UK Motor Finance for Stages 1 and 2 include £99 million (1 January 2018: £84 million) relating to provisions against residual values of vehicles subject to finance leasing agreements. These provisions are included within the calculation of coverage ratios.

5 Other includes Business Banking, Europe and Retail run-off.

6 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.11a: Retail expected credit loss allowances (drawn and undrawn) as a percentage of loans and advances to customers (underlying basis)

	Total		Stage 1		Stage 2		Stage 3	
	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances[1] %
At 31 December 2018[2]								
Secured	**1,462**	**0.5**	**38**	**–**	**707**	**2.7**	**717**	**14.7**
Unsecured[3]	**980**	**3.5**	**318**	**1.3**	**410**	**15.2**	**252**	**53.8**
UK Motor Finance[4]	**290**	**1.9**	**127**	**1.0**	**78**	**4.9**	**85**	**65.9**
Other[5]	**122**	**1.2**	**41**	**0.4**	**30**	**3.8**	**51**	**34.5**
Total	**2,854**	**0.8**	**524**	**0.2**	**1,225**	**3.9**	**1,105**	**19.7**
At 1 January 2018[2,6]								
Secured	1,504	0.5	31	–	789	2.2	684	13.6
Unsecured[3]	1,055	3.8	379	1.6	412	13.5	264	55.8
UK Motor Finance[4]	258	1.9	113	0.9	73	5.0	72	67.9
Other[5]	109	1.2	44	0.5	25	3.6	40	34.5
Total	2,926	0.9	567	0.2	1,299	3.2	1,060	18.5

1 Total and Stage 3 ECL allowance as a percentage of drawn balances are calculated excluding loans in recoveries for Unsecured (31 December 2018: £233 million; 1 January 2018: £277 million), and Business Banking within Other (31 December 2018: £17 million; 1 January 2018: £14 million).

2 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA related acquisition adjustments.

3 Unsecured includes Credit cards, Loans and Overdrafts.

4 UK Motor Finance for Stages 1 and 2 include £99 million (1 January 2018: £84 million) relating to provisions against residual values of vehicles subject to finance leasing agreements. These provisions are included within the calculation of coverage ratios.

5 Other includes Business Banking, Europe and Retail run-off.

6 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.12: **Retail Stage 2 loans and advances to customers (statutory basis)**

	Up to date			1-30 days past due			Over 30 days past due		
	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %
At 31 December 2018[1]									
Secured	**10,118**	**139**	**1.4**	**1,955**	**30**	**1.5**	**1,581**	**57**	**3.6**
Unsecured[2]	**2,355**	**293**	**12.4**	**258**	**53**	**20.5**	**94**	**33**	**35.1**
UK Motor Finance	**1,403**	**47**	**3.3**	**146**	**23**	**15.8**	**31**	**8**	**25.8**
Other[3]	**629**	**19**	**3.0**	**82**	**7**	**8.5**	**89**	**4**	**4.5**
Total	**14,505**	**498**	**3.4**	**2,441**	**113**	**4.6**	**1,795**	**102**	**5.7**
At 1 January 2018[1,4]									
Secured[5]	17,264	172	1.0	1,506	20	1.3	1,339	44	3.3
Unsecured[2]	2,678	303	11.3	253	43	17.0	121	36	29.8
UK Motor Finance	1,279	45	3.5	137	21	15.3	40	7	17.5
Other[3]	552	15	2.7	109	6	5.5	41	4	9.8
Total	21,773	535	2.5	2,005	90	4.5	1,541	91	5.9

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances include the impact of the HBOS and MBNA related acquisition adjustments.

2 Unsecured includes Credit cards, Loans and Overdrafts.

3 Other includes Business Banking, Europe and Retail run-off.

4 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

5 Secured days past due segmentation restated to align with IFRS 9 classifications.

Table 1.12a: **Retail Stage 2 loans and advances to customers (underlying basis)**

	Up to date			1-30 days past due			Over 30 days past due		
	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %
At 31 December 2018[1]									
Secured	**18,647**	**383**	**2.1**	**3,987**	**97**	**2.4**	**3,937**	**227**	**5.8**
Unsecured[2]	**2,346**	**320**	**13.6**	**257**	**55**	**21.4**	**93**	**35**	**37.6**
UK Motor Finance	**1,403**	**47**	**3.3**	**146**	**23**	**15.8**	**31**	**8**	**25.8**
Other[3]	**629**	**19**	**3.0**	**82**	**7**	**8.5**	**89**	**4**	**4.5**
Total	**23,025**	**769**	**3.3**	**4,472**	**182**	**4.1**	**4,150**	**274**	**6.6**
At 1 January 2018[1,4]									
Secured[5]	27,596	441	1.6	3,769	102	2.7	4,034	246	6.1
Unsecured[2]	2,686	330	12.3	254	45	17.7	121	37	30.6
UK Motor Finance	1,279	45	3.5	137	21	15.3	40	7	17.5
Other[3]	552	15	2.7	109	6	5.5	41	4	9.8
Total	32,113	831	2.6	4,269	174	4.1	4,236	294	6.9

1 Gross lending and ECL allowances on drawn balances are stated on an IFRS 9 basis; the balances exclude the impact of the HBOS and MBNA related acquisition adjustments.

2 Unsecured includes Credit cards, Loans and Overdrafts.

3 Other includes Business Banking, Europe and Retail run-off.

4 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

5 Secured days past due segmentation restated to align with IFRS 9 classifications.

Portfolios

- Secured credit quality remained strong, with flow to arrears stable at low levels. The average indexed loan to value (LTV) remained stable at 44.1 per cent (1 January 2018: 43.6 per cent) and the proportion of balances with an LTV of greater than 90 per cent remained low at 2.9 per cent (1 January 2018: 2.5 per cent). The average LTV of new business improved to 62.5 per cent (31 December 2017: 63.0 per cent). The closed Specialist mortgage portfolio continued to run off, reducing by a further £1.7 billion (11.0 per cent). Total Secured loans and advances decreased by £2.9 billion (1.0 per cent) to £289 billion (1 January 2018: £292 billion), due to reductions in the Buy-to-let and closed Specialist portfolios. The impairment charge was £38 million compared to a release of £15 million in 2017 arising from one-off write-backs. Total expected credit loss allowance as a percentage of loans and advances (coverage) remained flat.
- Unsecured loans and advances were broadly flat for the year ending 31 December 2018. The impairment charge increased by £91 million to £683 million (2017: £592 million), mainly due to the inclusion of MBNA for a full year. Coverage decreased slightly to 3.5 per cent at 31 December 2018 (1 January 2018: 3.8 per cent), with model refinements in Stage 2 offset by those in Stage 3.
- The UK Motor Finance portfolio continued to grow, with loans and advances increasing by 8.7 per cent to £14.9 billion at 31 December 2018 (1 January 2018: £13.7 billion). Increases in Stage 2 and Stage 3 balances reflect growth in the retail portfolio. The impairment charge in the period was broadly flat at £113 million (2017: £111 million). The portfolio continues to benefit from a conservative approach to residual values at origination and through the loan lifecycle, with prudent residual value provisions accounting for £99 million of Stage 1 and Stage 2 expected credit loss allowance at 31 December 2018. Coverage for the portfolio was flat at 1.9 per cent.
- Other loans and advances increased by £1.4 billion to £10.4 billion driven by a transfer of largely Stage 1 assets from SME into Business Banking. The impairment charge increased by £5 million to £28 million in the year due to the non-repeat of one-off write-backs in 2017 relating to a closed portfolio. Coverage remained flat at 1.2 per cent.

Table 1.13: Retail secured loans and advances to customers (statutory basis)

	At 31 Dec 2018[1] £m	At 1 Jan 2018[1] £m
Mainstream	223,230	222,814
Buy-to-let	51,322	52,834
Specialist	13,683	15,373
Total	**288,235**	**291,021**

1 The balances include the impact of HBOS related acquisition adjustments.

Table 1.14: Mortgages greater than three months in arrears (excluding repossessions) (underlying basis)

	Number of cases		Total mortgage accounts		Value of loans[1]		Total mortgage balances	
At 31 December	2018 Cases	2017 Cases	2018 %	2017 %	2018 £m	2017 £m	2018 %	2017 %
Mainstream	30,106	32,383	1.5	1.6	3,262	3,502	1.5	1.6
Buy-to-let	4,544	4,710	1.0	1.0	576	581	1.1	1.1
Specialist	7,966	8,313	7.8	7.3	1,282	1,354	9.3	8.7
Total	42,616	45,406	1.7	1.7	5,120	5,437	1.8	1.9

1 Value of loans represents total gross book value of mortgages more than three months in arrears; the balances exclude the impact of HBOS related acquisition adjustments.

The stock of repossessions decreased to 763 cases at 31 December 2018 compared to 777 cases at 31 December 2017.

Table 1.15: **Period end and average LTVs across the Retail mortgage portfolios (underlying basis)**

	Mainstream %	Buy-to-let %	Specialist %	Total %
At 31 December 2018				
Less than 60%	**54.2**	**55.7**	**59.7**	**54.7**
60% to 70%	**16.0**	**22.8**	**16.5**	**17.3**
70% to 80%	**15.9**	**15.7**	**12.0**	**15.7**
80% to 90%	**10.7**	**4.6**	**6.6**	**9.4**
90% to 100%	**2.8**	**0.7**	**2.0**	**2.4**
Greater than 100%	**0.4**	**0.5**	**3.2**	**0.5**
Total	**100.0**	**100.0**	**100.0**	**100.0**
Average loan to value[1]:				
Stock of residential mortgages	**42.5**	**52.1**	**45.8**	**44.1**
New residential lending	**63.1**	**58.6**	**n/a**	**62.5**

	Mainstream %	Buy-to-let %	Specialist %	Total %
At 31 December 2017				
Less than 60%	57.1	53.9	57.6	56.4
60% to 70%	16.9	25.0	18.4	18.5
70% to 80%	14.5	15.7	12.8	14.6
80% to 90%	9.0	4.1	6.4	8.0
90% to 100%	2.1	0.7	1.6	1.9
Greater than 100%	0.4	0.6	3.2	0.6
Total	100.0	100.0	100.0	100.0
Average loan to value[1]:				
Stock of residential mortgages	41.7	53.0	47.4	43.6
New residential lending	63.7	59.1	n/a	63.0

1 Average loan to value is calculated as total loans and advances as a percentage of the total indexed collateral of these loans and advances; the balances exclude the impact of HBOS related acquisition adjustments.

Interest only mortgages

The Group provides interest only mortgages to owner occupier mortgage customers whereby only payments of interest are made for the term of the mortgage with the customer responsible for repaying the principal outstanding at the end of the loan term. At 31 December 2018, owner occupier interest only balances as a proportion of total owner occupier balances had reduced to 26.7 per cent (31 December 2017: 29.0 per cent). The average indexed loan to value improved to 41.3 per cent (31 December 2017: 41.7 per cent).

For existing interest only mortgages, a contact strategy is in place throughout the term of the mortgage to ensure that customers are aware of their obligations to repay the principal upon maturity of the loan.

Treatment strategies are in place to help customers anticipate and plan for repayment of capital at maturity and support those who may have difficulty in repaying the principal amount. A dedicated specialist team supports customers who have passed their contractual maturity date and are unable to fully repay the principal. A range of treatments are offered such as full (or part) conversion to capital repayment and extension of term to match the maturity dates of any associated repayment vehicles.

Table 1.16: Analysis of owner occupier interest only mortgages (statutory basis)

	At 31 Dec 2018[1] Total	At 1 Jan 2018[1] Total
Interest only balances (£m)	**63,138**	69,129
Stage 1 (%)	**79.1**	75.4
Stage 2 (%)	**6.6**	9.5
Stage 3 (%)	**1.0**	0.8
Purchased or originated credit impaired (%)	**13.3**	14.3
Average loan to value (%)	**41.3**	41.7
Maturity profile (£m)		
Due	**1,144**	1,043
1 year	**2,405**	2,612
2-5 years	**10,229**	10,158
6-10 years	**18,562**	17,913
>11 years	**30,798**	37,403
Past term interest only balances (£m)[2]	**1,635**	1,474
Stage 1 (%)	**2.8**	2.9
Stage 2 (%)	**16.8**	15.3
Stage 3 (%)	**17.9**	15.6
Purchased or originated credit impaired (%)	**62.5**	66.2
Average loan to value (%)	**35.2**	33.4
Negative equity (%)	**2.8**	2.1

1 Balances are stated on an IFRS 9 basis and include the impact of HBOS acquisition related adjustments.

2 Balances where all interest only elements have moved past term. Some may subsequently have had a term extension, so are no longer classed as due.

Retail forbearance

The basis of disclosure for forbearance has changed compared to previous years to be aligned to definitions used in the European Banking Authority's FINREP reporting. The change leads to an increase in disclosed forbearance of £5.6 billion, with the main drivers being longer probation periods before a customer can return to order and the inclusion of Past Term Interest Only for Secured.

The main customer treatments included are: repair, where arrears are written on to the loan balance and the arrears position cancelled; instances where there are suspensions of interest and/or capital repayments; Past Term Interest Only mortgages; and refinance personal loans.

Total forbearance for the major retail portfolios has improved by £578 million to £7.0 billion driven by customers exiting probation and returning to order on the Secured portfolio. As a percentage of loans and advances, forbearance loans improved to 2.2 per cent at 31 December 2018 (1 January 2018: 2.4 per cent). 98.1 per cent of forbearance loans are captured in Stage 2 or Stage 3 for IFRS 9 and hold provision on a lifetime basis. Total expected credit losses (ECL) as a proportion of loans and advances which are forborne has increased to 9.4 per cent (1 January 2018: 8.6 per cent) due to prudent provisioning on the Secured portfolio.

The Group measures the success of a forbearance scheme for Retail Secured customers based upon the proportion of customers performing (less than or equal to three months in arrears) over the 24 months following the exit from a forbearance treatment. For temporary treatments, 80.4 per cent of UK Secured customers accepting reduced payment arrangements are performing. For permanent treatments, 83.2 per cent of UK Secured customers who have accepted capitalisations of arrears and 84.4 per cent of customers who have accepted term extensions are performing.

Table 1.17: Retail forborne loans and advances (statutory basis) (audited)

	Total £m	Of which Stage 2 £m	Of which Stage 3 £m	Of which purchased or originated credit-impaired £m	Expected credit losses as a % of total loans and advances which are forborne[1] %
At 31 December 2018[2]					
Secured	**6,089**	**1,136**	**642**	**4,241**	**1.6**
Unsecured[3]	**435**	**173**	**200**	**–**	**27.8**
UK Motor Finance (Retail)	**56**	**30**	**25**	**–**	**34.8**
Total	**6,580**	**1,339**	**867**	**4,241**	**3.6**
At 1 January 2018[2]					
Secured	6,676	1,367	562	4,693	1.1
Unsecured[3]	422	130	230	–	32.7
UK Motor Finance (Retail)	51	26	24	–	36.1
Total	7,149	1,523	816	4,693	3.2

1 ECL as a percentage of total loans and advances which are forborne are calculated excluding loans in recoveries for Unsecured (31 December 2018: £107 million; 1 January 2018: £147 million).

2 The balances include the impact of HBOS related acquisition adjustments.

3 Excludes MBNA.

Table 1.17a: **Retail forborne loans and advances (underlying basis)**

	Total £m	Of which Stage 2 £m	Of which Stage 3 £m	Expected credit losses as a % of total loans and advances which are forborne[1] %
At 31 December 2018[2]				
Secured	**6,506**	**3,838**	**2,598**	**8.0**
Unsecured[3]	**435**	**173**	**200**	**27.8**
UK Motor Finance (Retail)	**56**	**30**	**25**	**34.8**
Total	**6,997**	**4,041**	**2,823**	**9.4**
At 1 January 2018[2]				
Secured	7,102	4,379	2,667	7.0
Unsecured[3]	422	130	230	32.7
UK Motor Finance (Retail)	51	26	24	36.1
Total	7,575	4,535	2,921	8.6

1 ECL as a percentage of total loans and advances which are forborne are calculated excluding loans in recoveries for Unsecured (31 December 2018: £107 million; 1 January 2018: £147 million).

2 The balances exclude the impact of HBOS related acquisition adjustments.

3 Excludes MBNA.

Commercial Banking

- The overall credit quality of the portfolio and new business remains good with the portfolio benefiting from effective risk management, a through the cycle approach to risk appetite and continued low interest rates. Notwithstanding the current competitive market conditions, the Group is maintaining its prudent risk appetite.
- Uncertainty persists around the UK and global economic outlook, including the outcome of EU exit negotiations, the sustainability of global economic growth, trade wars and geopolitical risks. Allied to this are headwinds in a number of sectors including construction, support services and consumer-related sectors, such as retail. However, the portfolios remain well positioned and the Group's through the cycle risk appetite approach is unchanged. Monitoring indicates no material deterioration in the credit quality of the portfolio.
- Internal and external key performance indicators are monitored closely to help identify early signs of any deterioration. Portfolios remain subject to ongoing risk mitigation actions as appropriate.
- Planning for any EU exit outcome is well advanced and continues to evolve in Commercial Banking to ensure portfolio quality is maintained whilst supporting the Group's Helping Britain Prosper strategy.
- Net impairment charge for 2018 of £92 million compared with a net charge of £89 million in 2017.
- Stage 3 gross charges included the impact of IFRS 9 model refinements and were broadly flat year on year. Stage 3 net charges increased, driven by lower impairment releases and write-backs.
- Net impairment releases in Stage 1 and 2 were weighted towards non-SME portfolios and reflect a number of factors including transfers between stages (including to and from Stage 3), refinements to the IFRS 9 model methodology as well as adjustments to Multiple Economic Scenario impacts to reflect any changes to the underlying economic outlook.
- The size and nature of the commercial portfolio results in some volatility as cases move between stages. Stage 3 loans as a proportion of total loans and advances to customers has increased to 3.2 per cent (1 January 2018: 2.7 per cent). Stage 3 expected credit loss (ECL) allowance as a percentage of Stage 3 drawn balances has reduced to 32.3 per cent (1 January 2018: 35.3 per cent) largely as a result of a transfer in of assets to impaired status on which lower ECL allowances are assessed.
- Stage 2 loans as a proportion of total loans and advances to customers reduced to 6.5 per cent (1 January 2018: 7.7 per cent) as a result of transfers to Stage 1 and Stage 3. The proportion of Stage 1 loans increased to 90.3 per cent (1 January 2018: 89.6 per cent). Stage 2 ECL allowances as a percentage of Stage 2 drawn balances were lower at 5.1 per cent (1 January 2018: 5.6 per cent) due to changes in the mix of assets classified as Stage 2 and revisions to model assumptions.
- Notwithstanding the current stable performance of the portfolio, impairments are likely to increase from their current levels, driven mainly by lower levels of releases and write-backs and an element of credit normalisation.

Risk management continued

Table 1.18: Commercial Banking impairment charge

	2018 £m	2017[1] £m	Change %
SME	63	7	
Other	29	82	
Total impairment charge	92	89	(3)
Asset quality ratio	0.09%	0.10%	(1)bp

1 Prior period comparatives are on an IAS 39 basis. Includes Run-off, previously reported as a separate segment.

Table 1.19: Commercial Banking loans and advances to customers

	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Stage 3 as % of total %
At 31 December 2018					
SME	30,296	26,099	3,484	713	2.4
Other	71,594	65,903	3,108	2,583	3.6
Total gross lending	101,890	92,002	6,592	3,296	3.2
ECL allowance on drawn balances	(1,476)	(93)	(325)	(1,058)	–
Net balance sheet carrying value	100,414	91,909	6,267	2,238	–
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)	1.5	0.1	5.1	32.3	
At 1 January 2018[1]					
SME	30,510	26,397	3,262	851	2.8
Other	70,310	63,944	4,503	1,863	2.6
Total gross lending	100,820	90,341	7,765	2,714	2.7
ECL allowance on drawn balances	(1,440)	(101)	(382)	(957)	
Net balance sheet carrying value	99,380	90,240	7,383	1,757	
ECL allowances (drawn and undrawn) as a percentage of gross lending (%)	1.5	0.1	5.6	35.3	

1 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.20: Commercial Banking expected credit loss allowances (drawn and undrawn) as a percentage of loans and advances to customers

	Total		Stage 1		Stage 2		Stage 3	
	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %	£m	As % of drawn balances %
At 31 December 2018								
SME	384	1.3	40	0.2	231	6.6	113	15.8
Other	1,129	1.6	71	0.1	107	3.4	951	36.8
Total	1,513	1.5	111	0.1	338	5.1	1,064	32.3
At 1 January 2018[1]								
SME	375	1.2	51	0.2	206	6.3	118	13.9
Other	1,146	1.6	81	0.1	226	5.0	839	45.0
Total	1,521	1.5	132	0.1	432	5.6	957	35.3

1 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Table 1.21: **Commercial Banking Stage 2 loans and advances to customers**

	Up to date			1-30 days past due			Over 30 days past due		
	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %	Gross lending £m	Expected credit loss £m	As % of gross lending %
At 31 December 2018									
SME	**3,037**	**181**	**6.0**	**383**	**41**	**10.7**	**64**	**9**	**14.1**
Other	**2,983**	**106**	**3.5**	**72**	**1**	**1.4**	**53**	**–**	**–**
Total	**6,020**	**287**	**4.8**	**455**	**42**	**9.2**	**117**	**9**	**7.7**
At 1 January 2018[1]									
SME	2,969	180	6.1	227	26	11.5	66	–	–
Other	4,451	221	5.0	23	5	21.7	29	–	–
Total	7,420	401	5.4	250	31	12.4	95	–	–

1 Certain balances have been reallocated between segments. This includes the incorporation of International Wealth into Commercial Banking and the allocation of Run-off across Retail and Commercial Banking.

Portfolios

- The SME and Mid Markets portfolios are domestically focused and reflect both our prudent credit risk appetite and the underlying performance of the UK economy. Whilst certain sectors of the market are showing some emerging signs of stress, the overall credit quality of the portfolios has remained broadly stable with levels of impairment remaining low.
- The Global Corporates business continues to have a predominance of multi-national investment grade clients who are primarily UK-based. The portfolio remains of good quality and is well positioned for the current economic outlook.
- Through clearly defined sector strategies, Financial Institutions serves predominantly investment grade counterparties with whom relationships are either client driven or held to support the Group's funding, liquidity or general hedging requirements.
- The commercial real estate business within the Group's Mid Markets and Global Corporates portfolio is focused on clients operating in the UK commercial property market ranging in size from medium-sized private real estate entities up to publicly listed property companies. Credit quality remains good with minimal impairments/stressed loans. Recognising this is a cyclical sector, appropriate caps are in place to control exposure and business propositions continue to be written in line with a prudent, through the cycle risk appetite with conservative LTVs, strong quality of income and proven management teams.

Commercial Banking UK Direct Real Estate LTV analysis

- The Group classifies Direct Real Estate as exposure which is directly supported by cash flows from property activities (as opposed to trading activities, such as hotels, care homes and housebuilders). Exposures to social housing providers are also excluded.
- Focus remains on the UK market, on good quality customers, with a proven track record in Real Estate and where cash flows are robust.
- Commercial Banking UK Direct Real Estate gross lending stood at £17.2 billion at 31 December 2018 (excludes exposures subject to protection through Significant Risk Transfer securitisations). The Group has a further £0.54 billion of UK Direct Real Estate exposure in Business Banking within Retail.
- Approximately 70 per cent of loans and advances to UK Direct Real Estate relate to commercial real estate with the remainder related to residential real estate. The portfolio continues to be heavily weighted towards investment real estate (c. 90 per cent) over development.
- The LTV profile of the UK Direct Real Estate portfolio in Commercial Banking continues to improve.
- Development lending is subject to specific credit risk appetite criteria, including maximum loan to gross development value and maximum loan to cost, with funding typically only released against completed works as confirmed by the Group's monitoring quantity surveyor.

Table 1.22: **LTV – Commercial Banking UK Direct Real Estate**

	At 31 December 2018[1,2]				At 31 December 2017[1,2,3]			
	Stage 1/2 £m	Stage 3 £m	Total £m	%	Unimpaired £m	Impaired £m	Total £m	%
Investment Exposures > £1m								
Less than 60%	**8,838**	**101**	**8,939**	**79.8**	8,392	169	8,561	78.8
60% to 70%	**1,190**	**7**	**1,197**	**10.7**	1,012	20	1,032	9.5
70% to 80%	**267**	**41**	**308**	**2.7**	236	44	280	2.6
80% to 100%	**79**	**11**	**90**	**0.8**	74	42	116	1.1
100% to 120%	**27**	**25**	**52**	**0.5**	103	2	105	1.0
120% to 140%	**–**	**1**	**1**	**0.0**	61	2	63	0.6
Greater than 140%	**18**	**46**	**64**	**0.6**	22	49	71	0.7
Unsecured[4]	**520**	**31**	**551**	**4.9**	586	51	637	5.9
Total Investment >£1m	**10,939**	**263**	**11,202**		10,486	379	10,865	
Investment <£1m[5]	**3,679**	**105**	**3,784**		4,988	133	5,121	
Total Investment	**14,618**	**368**	**14,986**		15,474	512	15,986	
Development	**1,698**	**111**	**1,809**		1,655	147	1,802	
Total	**16,316**	**479**	**16,795**		17,129	659	17,788	

1 Excludes Commercial Banking UK Direct Real Estate exposures subject to protection through Significant Risk Transfer transactions.
2 Excludes Islands Commercial UK Direct Real Estate of £0.45 billion (31 December 2017: £0.45bn).
3 Prior period comparatives are on an IAS 39 basis. Includes run-off, previously excluded.
4 Predominantly Investment grade lending where the Group is relying on the corporate covenant.
5 December 2018 investment exposures <£1m have an LTV profile broadly similar to the investment exposures >£1m.

Risk management continued

Commercial Banking forbearance

Table 1.23: Commercial Banking forborne loans and advances (audited)

	Total £m	Of which Stage 3 £m
At 31 December 2018		
Type of forbearance		
Refinancing	38	29
Modification	3,834	2,949
Total	3,872	2,978
At 31 December 2017		
Type of forbearance		
Refinancing	27	
Modification	3,644	
Total	3,671	

Table 1.24: Derivative credit risk exposures

	2018	2018 Traded over the counter			2017	2017 Traded over the counter		
	Traded on recognised exchanges £m	Settled by central counterparties £m	Not settled by central counterparties £m	Total £m	Traded on recognised exchanges £m	Settled by central counterparties £m	Not settled by central counterparties £m	Total £m
Notional balances								
Foreign exchange	–	45	385,680	385,725	–	19	278,833	278,852
Interest rate	128,221	4,950,912	689,882	5,769,015	109,492	2,903,481	324,834	3,337,807
Equity and other	9,247	–	5,898	15,145	15,455	–	9,695	25,150
Credit	–	–	13,757	13,757	–	–	4,568	4,568
Total	137,468	4,950,957	1,095,217	6,183,642	124,947	2,903,500	617,930	3,646,377
Fair values								
Assets		144	23,448			280	25,155	
Liabilities		(150)	(21,222)			(592)	(25,454)	
Net asset		(6)	2,226			(312)	(299)	

The total notional principal amount of interest rate, exchange rate, credit derivative and equity and other contracts outstanding at 31 December 2018 and 31 December 2017 is shown in the table above. The notional principal amount does not, however, represent the Group's credit risk exposure, which is limited to the current cost of replacing contracts with a positive value to the Group. Such amounts are reflected in note 52 on page 255.

Eurozone exposures

The Group manages its exposures to individual countries, both within and without the Eurozone, through authorised country limits which take into account economic, financial, political and social factors. In addition, the Group manages its direct risks to the selected Eurozone countries Ireland, Spain, Italy and Greece by establishing and monitoring risk limits for individual banks, financial institutions, corporates and individuals.

Identified indirect exposure information, where available, is also taken into account when setting limits and determining credit risk appetite for individual counterparties. This forms part of the Group's credit analysis undertaken at least annually for counterparty and sector reviews, with interim updates performed as necessary. Interim updates would usually be triggered by specific credit events such as rating downgrades, sovereign events or other developments such as spread widening. Examples of indirect risk which have been identified, where information is available, are: European banking groups with lending and other exposures to certain Eurozone countries; corporate customers with operations or significant trade in certain European jurisdictions; major travel operators known to operate in certain Eurozone countries; and international banks with custodian operations based in certain European locations.

The Chief Security Office monitors developments within the Eurozone, carries out stress testing through detailed scenario analysis and completes appropriate due diligence on the Group's exposures. The Group has pre-determined action plans that would be executed in certain scenarios which set out governance requirements and responsibilities for the key actions which would be carried out and cover risk areas such as payments, liquidity and capital, communications, suppliers and systems, legal, credit, delivery channels and products, employees and the impact on customers.

Excluding reverse repurchase exposure to Institutional funds secured by UK gilts, the Group continues to have minimal exposure, in aggregate, which could be considered to be direct recourse to the sovereign risk of the selected countries Ireland, Spain, Portugal, Italy and Greece and following the £4 billion sale of the Irish residential mortgage portfolio during the year, exposures to the selected countries are significantly reduced.

Environmental risk management

The Group ensures appropriate management of the environmental impact, including climate change, of its lending activities. The Group-wide credit risk principles require all credit risk to be incurred with due regard to environmental legislation and the Group's code of responsibility.

The Group's business areas and sub-groups are each exposed to different types and levels of climate-related risk in their operations. For example, the general insurance function regularly uses weather, climate and environmental models and data to assess its insurance risk from covered perils such as windstorm and flood. A team of specialist scientists are employed within underwriting to do this work and they also regularly monitor the state of climate science to assess the need to include its potential impacts within pricing and solvency.

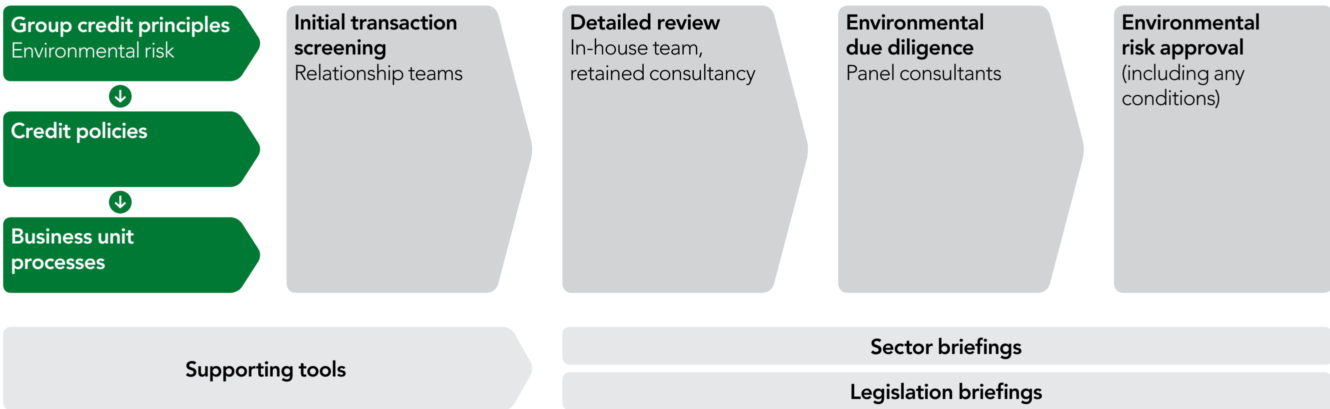
In 2018 we developed an implementation plan to address key recommendations of the Task Force on Climate-related Financial Disclosure (TCFD). Further detail on planned activities is provided in the Sustainability Strategy and Task Force on Climate-related Financial Disclosure Statement (see pages 24 to 25).

The Group has been a signatory to the Equator Principles since 2008 and has adopted and applied the expanded scope of Equator Principles III. The Equator Principles support the Group's approach to assessing and managing environmental and social issues in Project Finance, Project-Related Corporate loans and Bridge loans. The Group has also been a signatory to the UN Principles for Responsible Investment (UNPRI) since 2012, which incorporate ESG (environmental, social and governance risk) considerations in asset management. Scottish Widows is responsible for the annual UNPRI reporting process.

Within Commercial Banking, an electronic Environmental Risk Screening Tool is the primary mechanism for assessing environmental risk for lending transactions. This system provides screening of location specific and sector based risks that may be present in a transaction. Where a risk is identified, the transaction is referred to the Group's expert in-house environmental risk team for further review and assessment. Where required, the Group's panel of environmental consultants provide additional expert support.

We provide colleague training on environmental risk management as part of the standard suite of Commercial Banking credit risk courses. To support this training, a range of online resource is available to colleagues and includes environmental risk theory, procedural guidance, and information on environmental legislation and sector-specific environmental impacts.

Table 1.25: **Environmental risk management approach**



Regulatory and legal risk

Definition

Regulatory and legal risk is defined as the risk that the Group is exposed to financial loss, fines, censure, or legal or enforcement action; or to civil or criminal proceedings in the courts (or equivalent) and/or the Group is unable to enforce its rights due to failing to comply with applicable laws (including codes of practice which could have legal implications), regulations, codes of conduct, legal obligations, or a failure to adequately manage actual or threatened litigation, including criminal proceedings.

Exposures

Whilst the Group has a zero risk appetite for material regulatory breaches or material legal incidents, the Group remains exposed to them, driven by significant ongoing and new legislation, regulation and court proceedings in the UK and overseas which in each case needs to be interpreted, implemented and embedded into day-to-day operational and business practices across the Group.

Measurement

Regulatory and legal risks are measured against a defined risk appetite metric, which is an assessment of material regulatory breaches and material legal incidents.

Mitigation

The Group undertakes a range of key mitigating actions to manage regulatory and legal risk. These include the following:

- The Board establishes a Group-wide risk appetite and metric for regulatory and legal risk.
- Group policies and procedures set out the principles and key controls that should apply across the business which are aligned to the Group risk appetite. Mandated policies and processes require appropriate control frameworks, management information, standards and colleague training to be implemented to identify and manage regulatory and legal risk.
- Business units identify, assess and implement policy and regulatory requirements and establish local controls, processes, procedures and resources to ensure appropriate governance and compliance.
- Business units regularly produce management information to assist in the identification of issues and test management controls are working effectively.
- Risk and Legal provide oversight, proactive support and constructive challenge to the business in identifying and managing regulatory and legal issues.
- Risk conducts thematic reviews of regulatory compliance and provides oversight of regulatory compliance assessments across businesses and divisions where appropriate.
- Business units, with the support of divisional and Group-level bodies, conduct ongoing horizon scanning to identify changes in regulatory and legal requirements.
- The Group engages with regulatory authorities and industry bodies on forthcoming regulatory changes, market reviews and investigations, ensuring programmes are established to deliver new regulation and legislation.

Monitoring

Material risks are managed through the relevant divisional level committees, with review and escalation through Group level committees where appropriate, including the escalation of any material regulatory breaches or material legal incidents.

Conduct risk

Definition

The risk of customer detriment due to poor design, distribution and execution of products and services or other activities which could undermine the integrity of the market or distort competition, leading to unfair customer outcomes, regulatory censure and financial and reputational loss.

Exposures

The Group faces significant conduct risks, which affect all aspects of the Group's operations and all types of customers.

Conduct risks can impact directly or indirectly on our customers and can materialise from a number of areas across the Group, including: business and strategic planning that does not sufficiently consider customer needs; ineffective management and monitoring of products and their distribution (including the sales process); unclear, unfair, misleading or untimely customer communications; a culture that is not sufficiently customer-centric; poor governance of colleagues' incentives and rewards and approval of schemes which drive unfair customer outcomes; ineffective management and oversight of legacy conduct issues; ineffective management of customers' complaints or claims; and outsourcing of customer service and product delivery via third-parties that do not have the same level of control, oversight and culture as the Group. The Group is also exposed to the risk of engaging in or failing to manage conduct which could constitute market abuse, undermine the integrity of a market in which it is active, distort competition or create conflicts of interest.

There is a high level of scrutiny regarding financial institutions' treatment of customers, including those in vulnerable circumstances, from regulatory bodies, the media, politicians and consumer groups.

There continues to be a significant focus on market misconduct, resulting from previous issues relating to London Inter-bank Offered Rate (LIBOR) and foreign exchange (FX).

Due to the level of enhanced focus relating to conduct, there is a risk that certain aspects of the Group's current or legacy business may be determined by the Financial Conduct Authority, other regulatory bodies or the courts as not being conducted in accordance with applicable laws or regulations, or in a manner that fails to deliver fair and reasonable customer treatment.

Measurement

To articulate its conduct risk appetite, the Group has sought more granularity through the use of suitable Conduct Risk Appetite Metrics (CRAMs) and tolerances that indicate where it may be operating outside its conduct risk appetite. These include Board-level conduct risk metrics covering an assessment of overall CRAMs performance, out of appetite CRAMs, Financial Ombudsman Service (FoS) change rates and complaints.

CRAMs have been designed for services and product families offered by the Group and are measured by a consistent set of common metrics. These contain a range of product design, sales and process metrics to provide a more holistic view of conduct risks; some products also have a suite of additional bespoke metrics.

Each of the tolerances for the metrics are agreed for the individual product or service and are regularly tracked. At a consolidated level these metrics are part of the Board risk appetite. The Group continues to evolve its approach to measurements supporting customer vulnerability, process delivery and customer journeys.

Mitigation

The Group takes a range of mitigating actions with respect to conduct risk. The Group's ongoing commitment to good customer outcomes sets the tone from the top and supports the development of the right customer-centric culture – strengthening links between actions to support conduct, culture and customer and enabling more effective control management. Actions to enable good conduct include:

- Conduct risk appetite established at Group and business area level, with metrics included in the Group risk appetite to ensure ongoing focus.
- Conduct policies and procedures in place to ensure appropriate controls and processes that deliver fair customer outcomes.
- Customer needs explicitly considered within business and product level planning and strategy, through divisional customer plans, with integral conduct lens, reviewed and challenged by Group Customer First Committee (GCFC).
- Cultural transformation, supported by strong direction and tone from senior executives and the Board. This is underpinned by the Group's values, behaviours and code of responsibility, to deliver the best bank for customers.
- Continued embedding of the customer vulnerability framework. The Customer Vulnerability Cross Divisional Committee continues to operate at a senior level to prioritise change, drive implementation and ensure consistency across the Group. Significant partnership with Macmillan to support customers with cancer continues, alongside ongoing activities to support all vulnerable customers, including those experiencing financial and domestic abuse.
- Continued embedding and evolving of the Group's customer journey strategy and framework to support our focus on conduct from an end-to-end customer perspective.
- Enhanced product governance framework to ensure products continue to offer customers fair value, and consistently meet their needs throughout their product life cycle; reviewed and challenged by Group Product Governance Committee (GPGC).
- Enhanced complaints management through effectively responding to, and learning from, root causes of complaint volumes and FoS change rates.
- Review and oversight of thematic conduct agenda items at GPGC, ensuring holistic consideration of key Group-wide conduct risks.
- Enhanced recruitment and training, with a focus on how the Group manages colleagues' performance with clearer customer accountabilities.
- Ongoing engagement with third-parties involved in serving the Group's customers to ensure consistent delivery.
- Monitoring and testing of customer outcomes to ensure the Group delivers fair outcomes for customers whilst making continuous improvements to products, services and processes.
- Continued focus on market conduct through training and enhancements of procedures and controls, governed by the Market Steering Committee which also provides read-across for the Group on industry issues.
- Implementation of enhanced change delivery methodology to enable prioritisation and delivery of initiatives to address conduct challenges.
- Focus on proactive identification and mitigation of conduct risk in the Group Strategic Review 3.
- Active engagement with regulatory bodies and other stakeholders to develop understanding of concerns related to customer treatment, effective competition and market integrity, to ensure that the Group's strategic conduct focus continues to meet evolving stakeholder expectations.

Monitoring

Monitoring and reporting is undertaken at Board, Group and business area committees. As part of the reporting of CRAMs, a robust outcomes testing regime is in place to determine whether the Group is delivering fair outcomes for customers.

GCFC acts as the guardian of customer experience and has responsibility for monitoring and reviewing plans and actions to improve it, including challenging divisions to make changes based on key learnings to support the delivery of the Group's vision and foster a customer-centric culture.

Operational risk

Definition

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, which can lead to adverse customer impact, reputational damage or financial loss.

Exposures

The principal operational risks to the Group which could result in customer detriment, unfair customer outcomes, financial loss, disruption and/or reputational damage are:

- A cyber-attack;
- Change and execution risk in delivering the Group's change agenda;
- Failure in IT systems, due to volume of change, and/or aged infrastructure;
- Failure to protect and manage the Group's and customers' data;

- Internal and/or external fraud or financial crime;
- Failure to ensure compliance with increasingly complex and detailed regulation including anti-money laundering, anti-bribery, counter-terrorist financing, and financial sanctions and prohibitions laws and regulations; and
- Operational resilience and damage to physical assets including: terrorist acts, other acts of war or hostility, geopolitical, pandemic or other such events.

A number of these risks could increase where there is a reliance on third-party suppliers to provide services to the Group or its customers.

Measurement

Operational risk is managed across the Group through an operational risk framework and operational risk policies. The operational risk framework includes a risk and control self-assessment process, risk impact likelihood matrix, key risk and control indicators, risk appetite, a robust operational event management and escalation process, scenario analysis and an operational losses process.

Table 1.26 below shows high level loss and event trends for the Group using Basel II categories. Based on data captured on the Group's Operational Risk System, in 2018 the highest frequency of events occurred in external fraud (59.83 per cent) and execution, delivery and process management (25.52 per cent). Clients, products and business practices accounted for 63.18 per cent of losses by value, driven by legacy issues where impacts materialised in 2018 (excluding PPI).

Table 1.26: **Operational risk events by risk category (losses greater than or equal to £10,000), excluding PPI**[1]

	% of total volume		% of total losses	
	2018	2017	**2018**	2017
Business disruption and system failures	**1.10**	1.43	**2.80**	1.31
Clients, products and business practices	**11.61**	10.84	**63.18**	86.23
Damage to physical assets	**1.47**	1.78	**0.20**	0.17
Employee practices and workplace safety	**–**	0.05	**–**	0.06
Execution, delivery and process management	**25.52**	24.26	**30.03**	8.91
External fraud	**59.83**	61.29	**3.68**	3.38
Internal fraud	**0.47**	0.35	**0.11**	(0.06)
Total	**100.00**	100.00	**100.00**	100.00

1 2017 breakdowns have been restated to reflect a number of events that have been reclassified following an internal review.

Operational risk losses and scenario analysis is used to inform the Internal Capital Adequacy Assessment Process (ICAAP). The Group calculates its minimum (Pillar I) operational risk capital requirements using The Standardised Approach (TSA). Pillar II is calculated using internal and external loss data and extreme but plausible scenarios that may occur in the next 12 months.

Mitigation

The Group's strategic review considers the changing risk management requirements, adapting the change delivery model to be more agile and develop the people skills and capabilities needed to be a 'Bank of the Future'. The Group continues to review and invest in its control environment to ensure it addresses the inherent risks faced. Risks are reported and discussed at local governance forums and escalated to executive management and Board as appropriate to ensure the correct level of visibility and engagement. The Group employs a range of risk management strategies, including: avoidance, mitigation, transfer (including insurance) and acceptance. Where there is a reliance on third-party suppliers to provide services, the Group's sourcing policy ensures that outsourcing initiatives follow a defined process including due diligence, risk evaluation and ongoing assurance.

Mitigating actions to the principal operational risks are:

- The threat landscape associated with cyber risk continues to evolve and there is significant regulatory attention on this subject. The Board has defined a cyber risk appetite and continues to invest heavily to protect the Group from malicious cyber-attacks. Most recent investment has focused on improving the Group's approach to identity and access management, improving capability to detect and respond to cyber-attacks and improved ability to manage vulnerabilities across the estate.
- The Group acknowledges the challenges faced with delivering new strategic initiatives and programmes alongside the extensive agenda of regulatory and legal changes whilst enhancing systems and controls. To address this, impacts of change are assessed in terms of the ability of the business to execute effectively and the potential impact on its risk profile. Key elements are monitored, including identifying resources and skills required to deliver change, critical dependencies and change readiness, while controls are also put in place to manage change activity and are monitored in line with the Group Change Policy. Execution and change risks and controls are reported through Group Transformation governance up to Board Risk Committee, and are recorded on key risk systems to allow for consolidation and aggregation. To supplement this, the Group takes a risk based approach to change oversight across the three lines of defence, encompassing delivery assurance, risk oversight and audit reviews focused on a combination of specific change activity and broad overarching themes.
- The Group continues to optimise its approach to IT and operational resilience by investing in technology improvements and enhancing the resilience of systems that support the Group's critical business processes, primarily through the Technology Resilience Programme, with independent verification of progress on an annual basis. The Board recognises the role that resilient technology plays in achieving the Group's strategy of becoming the best bank for customers and in maintaining banking services across the wider industry. As such, the Board dedicates considerable time and focus to this subject at both the Board and the Board Risk Committee, and continues to sponsor key investment programmes that enhance resilience.
- The Group is making a significant investment to improve data, including the security of data and oversight of third-parties. The Group's strategy is to introduce advanced data management practices, based on Group-wide standards, data-first culture and modern enterprise data platforms, supported by a simplified modern IT architecture.
- The Group adopts a risk based approach to mitigate the internal and external fraud risks it faces, reflecting the current and emerging fraud risks within the market. Fraud risk appetite metrics have been defined, holistically covering the impacts of fraud in terms of losses to the Group, costs of fraud systems and operations, and customer experience of actual and attempted fraud. Oversight of the appropriateness and performance of these metrics is undertaken regularly through business area and Group-level committees. This approach drives a continual programme of prioritised enhancements to the Group's technology, process and people related controls, with an emphasis on preventative controls supported by real time detective controls wherever feasible. Group-wide policies and operational control frameworks are maintained and designed to provide customer confidence, protect the Group's commercial interests and reputation, comply with legal requirements and meet regulatory expectations. The Group's fraud awareness programme remains a key component of its fraud control environment, and awareness of fraud risk is supported by mandatory training for all colleagues. The Group also plays an active role with other financial institutions, industry bodies, and enforcement agencies in identifying and combatting fraud.
- The Group has adopted policies and procedures designed to detect and prevent the use of its banking network for money laundering, terrorist financing, bribery, tax evasion, human trafficking, and modern-day slavery, and activities prohibited by legal and regulatory sanctions. Against a background of increasingly complex and detailed laws and regulations, and of increased criminal and terrorist activity, the Group regularly reviews and assesses its policies, procedures and organisational

arrangements to keep them current, effective and consistent across markets and jurisdictions. The Group requires mandatory training on these topics for all employees. Specifically, the anti-money laundering procedures include 'know-your-customer' requirements, transaction monitoring technologies, reporting of suspicions of money laundering or terrorist financing to the applicable regulatory authorities, and interaction between the Group's Financial Intelligence Unit and external agencies and other financial institutions. The Anti-Bribery Policy prohibits the payment, offer, acceptance or request of a bribe, including 'facilitation payments' by any employee or agent and provides a confidential reporting service for anonymous reporting of suspected or actual bribery activity. The Sanctions and the Related Prohibitions Policy sets out a framework of controls for compliance with legal and regulatory sanctions.

- The Group has increased its focus on operational resilience and has updated its operational resilience strategy to reflect changing priorities of both customers and regulators. At the core of its approach to operational resilience are the Group's Critical business processes which drive all activity, including further mapping of the processes to identify any additional resilience requirements such as impact tolerances in the event of a service outage. The Group continues to develop playbooks that address a range of interruptions from internal and external threats and tests these through scenario based testing and exercising.

Monitoring

Monitoring and reporting of operational risk is undertaken at Board, Group and divisional risk committees. Each committee monitors key risks, control effectiveness, key risk and control indicators, events, operational losses, risk appetite metrics and the results of independent testing conducted by Risk and/or Internal Audit.

The Group maintains a formal approach to operational risk event escalation, whereby material events are identified, captured and escalated. Root causes of events are determined, where possible, and action plans put in place to ensure an optimum level of control to keep customers and the business safe, reduce costs, and improve efficiency.

The insurance programme is monitored and reviewed regularly, with recommendations being made to the Group's senior management annually prior to each renewal. Insurers are monitored on an ongoing basis, to ensure counterparty risk is minimised. A process is in place to manage any insurer rating changes or insolvencies.

People risk

Definition

The risk that the Group fails to provide an appropriate colleague and customer-centric culture, supported by robust reward and wellbeing policies and processes; effective leadership to manage colleague resources; effective talent and succession management; and robust control to ensure all colleague-related requirements are met.

Exposures

The Group's management of material people risks is critical to its capacity to deliver against its strategic objectives and to be the best bank for customers. The Group is exposed to the following key people risks:

- Maintaining organisational skills, capability, resilience and capacity levels in response to increasing volumes of organisational, political and external market change;
- Senior Managers and Certification Regime (SM&CR) and additional regulatory constraints on remuneration structures may impact the Group's ability to attract and retain talent;
- The increasing digitisation of the business is changing the capability mix required and may impact our ability to attract and retain talent;
- The increasing demands on colleagues and consequential impact colleague wellbeing may impact on the Group's ability to enhance colleague skills to achieve capability uplift for a digital era; and
- Colleague engagement may continue to be challenged by ongoing media attention on banking sector culture, conduct and ethical considerations.

Measurement

People risk is measured through a series of quantitative and qualitative indicators, aligned to key sources of people risk for the Group such as succession, retention, colleague engagement, wellbeing and performance management. In addition to risk appetite measures and limits, people risks and controls are monitored on a monthly basis via the Group's risk governance framework and reporting structures.

Mitigation

The Group takes many mitigating actions with respect to people risk. Key areas of focus include:

- Focusing on leadership and colleague engagement, through delivery of strategies to attract, retain and develop high calibre people together with implementation of rigorous succession planning;
- Continued focus on the Group's culture by developing and delivering initiatives that reinforce the appropriate behaviours which generate the best possible long-term outcomes for customers and colleagues;
- Managing organisational capability and capacity through divisional people strategies to ensure there are the right skills and resources to meet our customers' needs and deliver our strategic plan;
- Maintain effective remuneration arrangements to ensure they promote an appropriate culture and colleague behaviours that meet customer needs and regulatory expectations;
- Ensuring colleague wellbeing strategies and support are in place to meet colleague needs, and that the skills and capability growth required to build a workforce for the 'Bank of the Future' are achieved;
- Ensuring compliance with legal and regulatory requirements related to SM&CR, embedding compliant and appropriate colleague behaviours in line with Group policies, values and its people risk priorities; and
- Ongoing consultation with the Group's recognised unions on changes which impact their members.

Monitoring

People risks from across the Group are monitored and reported through Board and Group Governance Committees in accordance with the Group's Risk Management Framework. Risk exposures are discussed monthly via the Group People Risk Committee with upwards reporting to Group Risk and Executive Committees. In addition, oversight, challenge and reporting are completed at Risk division level to assess the effectiveness of controls, recommending follow up remedial action if required. All material people risk events are escalated in accordance with the formal Group Operational Risk Policy and People Policies to the respective divisional Managing Directors and the Group Director, Conduct, Compliance and Operational Risk.

Insurance underwriting risk

Definition

Insurance underwriting risk is defined as the risk of adverse developments in longevity, mortality, persistency, General Insurance underwriting and policyholder behaviour, leading to reductions in earnings and/or value.

Exposures

The major source of insurance underwriting risk within the Group is the Insurance business.

Longevity and persistency are key risks within the life and pensions business. Longevity risk arises from the annuity portfolios where policyholders' future cash flows are guaranteed at retirement and increases in life expectancy, beyond current assumptions, will increase the cost of annuities. Longevity risk exposures are expected to increase with the Insurance business growth in the annuity market. Persistency assumptions are set to give a best estimate; however customer behaviour may result in increased cancellations or cessation of contributions.

Property insurance risk is a key risk within the General Insurance business, through Home Insurance. Exposures can arise, for example, in extreme weather conditions such as flooding, when property damage claims are higher than expected.

The Group's defined benefit pension schemes also expose the Group to longevity risk. For further information please refer to the defined benefit pension schemes component of the market risk section and note 35 to the financial statements.

Measurement

Insurance underwriting risks are measured using a variety of techniques including stress, reverse stress and scenario testing, as well as stochastic modelling. Current and potential future insurance underwriting risk exposures are assessed and aggregated on a range of stresses including risk measures based on 1-in-200 year stresses for Insurance's regulatory capital assessments and other supporting measures where appropriate, including those set out in note 32 to the financial statements.

Mitigation

Insurance underwriting risk in the Insurance business is mitigated in a number of ways:

- Strategic decisions made consider the maintenance of the current well-diversified portfolio of insurance risks;
- Processes for underwriting, claims management, pricing and product design seek to control exposure. Experts in demographic risk (for example longevity) support the propositions;
- General Insurance exposure to accumulations of risk and possible catastrophes is mitigated by reinsurance arrangements broadly spread over different reinsurers. Detailed modelling, including that of the potential losses under various catastrophe scenarios, supports the choice of reinsurance arrangements;
- Longevity risk transfer and hedging solutions are considered on a regular basis and since 2017 Insurance has reinsured £2.7 billion of annuitant longevity; and
- Exposure limits by risk type are assessed through the business planning process and used as a control mechanism to ensure risks are taken within risk appetite.

Monitoring

Insurance underwriting risks in the Insurance business are monitored by Insurance senior executive committees and ultimately the Insurance Board. Significant risks from the Insurance business and the defined benefit pension schemes are reviewed by the Group Executive and Group Risk Committees and/or Board.

Insurance underwriting risk exposures within the Insurance business are monitored against risk appetite. The Insurance business monitors experiences against expectations, for example business volumes and mix, claims and persistency experience. The effectiveness of controls put in place to manage insurance underwriting risk is evaluated and significant divergences from experience or movements in risk exposures are investigated and remedial action taken.

Capital risk

Definition

Capital risk is defined as the risk that the Group has a sub-optimal quantity or quality of capital or that capital is inefficiently deployed across the Group.

Exposures

A capital risk exposure arises when the Group has insufficient capital resources to support its strategic objectives and plans, and to meet external stakeholder requirements and expectations. This could arise due to a depletion of the Group's capital resources as a result of the crystallisation of any of the risks to which it is exposed. Alternatively a shortage of capital could arise from an increase in the amount of capital that needs to be held either at Group level or at regulated entity or sub-group levels under the Group's post ring-fence structure. The Group's capital management approach is focused on maintaining sufficient capital resources to prevent such exposures while optimising value for shareholders.

Measurement

The Group measures the amount of capital it requires and holds through applying the regulatory framework defined by the Capital Requirements Directive and Regulation (CRD IV) as implemented in the UK by the Prudential Regulation Authority (PRA) and supplemented through additional regulation under the PRA Rulebook. Further details of the Group's regulatory capital and leverage frameworks, including the means by which its capital and leverage requirements and capital resources are calculated, will be provided in the Group's Pillar 3 Report.

The minimum amount of total capital, under Pillar 1 of the regulatory framework, is set at 8 per cent of total risk-weighted assets. At least 4.5 per cent of risk-weighted assets are required to be covered by common equity tier 1 (CET1) capital and at least 6 per cent of risk-weighted assets are required to be covered by tier 1 capital. These minimum Pillar 1 requirements are supplemented by additional minimum requirements under Pillar 2A of the regulatory framework, the aggregate of which is referred to as the Group's Total Capital Requirement (TCR), and a number of regulatory capital buffers as described below.

Additional minimum requirements under Pillar 2A are set by the PRA as a firm-specific Individual Capital Requirement (ICR) reflecting a point in time estimate, which may change over time, of the minimum amount of capital that is needed by the Group to cover risks that are not fully covered by Pillar 1, such as credit concentration and operational risk, and those risks not covered at all by Pillar 1, such as pensions and interest rate risk in the banking book (IRRBB).

The Group is also required to maintain a number of regulatory capital buffers, which are required to be met with CET1 capital.

Systemic buffers are designed to hold systemically important banks to higher capital standards, so that they can withstand a greater level of stress before requiring resolution.

- Although the Group is not currently classified as a global systemically important institution (G-SII) under the Capital Requirements Directive, it has been classified as an 'other' systemically important institution (O-SII) by the PRA. The O-SII buffer is set to zero in the UK.
- The systemic risk buffer (SRB) will come into force for UK ring-fenced banks during 2019, with the PRA expected to announce both the SRB rate and date of application for the Group's Ring-Fenced Bank (RFB) sub-group in the first half of 2019. The size of buffer applied to the RFB sub-group will be dependent upon its total assets. Although the SRB will apply to the RFB sub-group, the PRA has indicated that they will include in the Group's PRA Buffer an amount equivalent to the RFB sub-group's SRB. As a percentage of risk-weighted assets, the amount included in the Group's PRA Buffer is expected to be lower reflecting the risk-weighted assets of the Group that are not held in the RFB sub-group and for which the SRB will not apply.

The capital conservation buffer (CCB) is a standard buffer of 2.5 per cent of risk-weighted assets designed to provide for losses in the event of stress. The CCB has been phased in over a number of years – during 2018 it was 1.875 per cent and it increased to the full 2.5 per cent on 1 January 2019.

The countercyclical capital buffer (CCYB) is time-varying and is designed to require banks to hold additional capital to remove or reduce the build-up of systemic risk in times of credit boom, providing additional loss absorbing capacity and acting as an incentive for banks to constrain further credit growth. The amount of the buffer is determined by reference to buffer rates set by the FPC for the individual countries where the Group has relevant credit exposures. The CCYB rate for the UK is currently set at 1.0 per cent. The FPC regularly considers the adequacy of the UK CCYB rate in light of the evolution of the overall risk environment. As at 31 December 2018 non-zero buffer rates also currently apply for Norway, Sweden, Hong Kong, Iceland, Slovakia, Czech Republic, and Lithuania. During 2019 France, Bulgaria, Denmark and Ireland will implement non-zero buffer rates. The Group's overall countercyclical capital buffer at 31 December 2018 was 0.9 per cent of risk-weighted assets, having increased significantly during the year (from 0.002 per cent at 31 December 2017) as a result of the increase in the UK rate from nil to 1.0 per cent, the Group's relevant credit exposures being predominantly UK based.

As part of the capital planning process, forecast capital positions are subjected to extensive internal stress testing to determine the adequacy of the Group's capital resources against the minimum requirements, including the ICR. The PRA considers outputs from both the Group's internal stress tests and the annual Bank of England stress test, in conjunction with the Group's other regulatory capital buffers, as part of the process for informing the setting of a bank-specific capital buffer for the Group, known as the PRA Buffer. The PRA requires this buffer to remain confidential between the Group and the PRA.

All buffers are required to be met with CET1 capital. A breach of the PRA buffer would trigger a dialogue between the Group and the PRA to agree what action is required whereas a breach of the CRD IV combined buffer (all other regulatory buffers) would give rise to mandatory restrictions upon any discretionary capital distributions by the Group.

In addition to the risk-based capital framework outlined above, the Group is also subject to minimum capital requirements under the UK Leverage Ratio Framework. The leverage ratio is calculated by dividing fully loaded tier 1 capital resources by a defined measure of on-balance sheet assets and off-balance sheet items.

The minimum leverage ratio requirement under the UK Leverage Ratio Framework is 3.25 per cent. This is supplemented by a time-varying countercyclical leverage buffer (CCLB) which is determined by multiplying the leverage exposure measure by 35 per cent of the countercyclical capital buffer (CCYB) rate. As at 31 December 2018 the CCLB was 0.3 per cent (31 December 2017: nil). An additional leverage ratio buffer (ALRB) will apply from 2019 to the Group's ring-fenced bank (RFB) sub-group, to be determined by multiplying the RFB leverage exposure measure by 35 per cent of the SRB. An equivalent amount of capital, referred to as the Leverage Ratio Group Add-on, will be required to be held at Group level under the UK framework to cover the RFB's ALRB.

At least 75 per cent of the 3.25 per cent minimum leverage ratio requirement and all regulatory buffers must be met by CET1 capital.

The leverage ratio framework does not currently give rise to higher capital requirements for the Group than the risk-based capital framework.

Mitigation

The Group has a capital management framework including policies and procedures that are designed to ensure that it operates within its risk appetite, uses its capital resources efficiently and continues to comply with regulatory requirements.

The Group is able to accumulate additional capital through the retention of profits over time, which can be enhanced through reducing or cancelling dividend payments and share buybacks, by raising new equity via, for example, a rights issue or debt exchange and by raising additional tier 1 or tier 2 capital securities. The cost and availability of additional capital is dependent upon market conditions and perceptions at the time. The Group is also able to manage the demand for capital through management actions including adjusting its lending strategy, risk hedging strategies and through business disposals.

Monitoring

Capital is actively managed and monitoring capital ratios is a key factor in the Group's planning processes and stress testing, which separately cover the RFB sub-group and key individual banking entities. Multi-year forecasts of the Group's capital position, based upon the Group's operating plan, are produced at least annually to inform the Group's capital plan whilst shorter term forecasts are more frequently undertaken to understand and respond to variations of the Group's actual performance against the plan. The capital plans are tested for capital adequacy using a range of stress scenarios covering adverse economic conditions as well as other adverse factors that could impact the Group and the Group maintains a recovery plan which sets out a range of potential mitigating actions that could be taken in response to a stress.

The capital plans also consider the impact of IFRS 9 which has the potential to increase bank capital volatility. Under stress this is primarily a result of provisioning for assets that are not in default at an earlier stage than would have been the case under IAS 39. In addition it currently remains unclear as to how the IFRS 9 requirement to reflect the outcome of multiple future economic scenarios within the calculation of the expected credit losses (ECL) allowance should be reflected in capital stress tests.

The Group notes that the UK regulatory authorities have previously announced, via the Financial Policy Committee (FPC) of the Bank of England, that the change in accounting standard will not change the cumulative losses banks incur during any given stress period (the losses will however be provided for at an earlier point in the stress) and that the FPC will take steps to ensure that the interaction of IFRS 9 accounting with its annual stress test does not result in de facto increases in capital requirements. In the short term the IFRS 9 transitional arrangements for capital, which the Group has adopted, will provide some stability in capital requirements against the increased provisioning, measurement uncertainty and volatility introduced by IFRS 9.

Regular reporting of actual and projected ratios for Group, the RFB sub-group and key legal entities, including those in stressed scenarios, is undertaken, including submissions to the Group Capital Risk Committee (GCRC), Group Financial Risk Committee (GFRC), Group Asset and Liability Committee (GALCO), Group Risk Committee (GRC), Board Risk Committee (BRC) and the Board. Capital policies and procedures are well established and subject to independent oversight.

The regulatory framework within which the Group operates continues to evolve and further detail on this will be provided in the Group's Pillar 3 report. The Group continues to monitor these developments very closely, analysing the potential capital impacts to ensure that, through organic capital generation, the Group continues to maintain a strong capital position that exceeds both minimum regulatory requirements and the Group's risk appetite and is consistent with market expectations.

Target capital ratios

The Board's view of the current level of CET1 capital required remains at around 13 per cent plus a management buffer of around 1 per cent to provide capacity for growth, meet regulatory requirements and cover uncertainties.

This takes into account, amongst other things:

- the minimum Pillar 1 CET1 capital requirement of 4.5 per cent of risk-weighted assets.
- the Group's Pillar 2A ICR set by the PRA. During the year the PRA reduced the Group's ICR from 5.4 per cent to 4.6 per cent of risk-weighted assets at 31 December 2018, of which 2.6 per cent must be met by CET1 capital. The requirement has increased to 4.7 per cent of risk-weighted assets, of which 2.7 per cent must be met by CET1 capital, from 1 January 2019 to reflect the commencement of the UK's ring-fencing regime.
- the capital conservation buffer (CCB) requirement of 1.875 per cent of risk-weighted assets, increasing to 2.5 per cent of risk-weighted assets from 1 January 2019.
- the Group's current countercyclical capital buffer (CCYB) requirement of 0.9 per cent of risk-weighted assets.
- the introduction of the SRB during 2019 for the RFB sub-group, which will require the Group to hold an equivalent monetary amount of capital.
- the Group's PRA stress buffer, which the PRA sets after taking account of the results of the PRA stress tests and other information, as well as outputs from the Group's internal stress tests. The PRA requires the PRA Buffer itself to remain confidential between the Group and the PRA.

Dividend policy

The Group has established an ordinary dividend policy that is both progressive and sustainable, based on growing the ordinary dividend per share over time. The rate of growth of the ordinary dividend will be decided by the Board in light of the circumstances at the time.

The Board also gives due consideration to the return of surplus capital through the use of special dividends or share buybacks. Surplus capital represents capital over and above the amount management wish to retain to grow the business, meet regulatory requirements and cover uncertainties. The amount of required capital may vary from time to time depending on circumstances and by its nature there can be no guarantee that any return of surplus capital will be appropriate in future years.

The ability of the Group to pay a dividend is also subject to constraints including the availability of distributable reserves, legal and regulatory restrictions and the Group's financial and operating performance.

Distributable reserves are determined as required by the Companies Act 2006 by reference to a company's individual financial statements. At 31 December 2018 Lloyds Banking Group plc ('the Company') had accumulated distributable reserves of approximately £8.5 billion. Substantially all of the Company's merger reserve is available for distribution under UK company law as a result of transactions undertaken to recapitalise the Company in 2009.

Lloyds Banking Group plc acts as a holding company which also issues capital and other securities to capitalise and fund the activities of the Group. The profitability of the holding company, and consequently its ability to sustain dividend payments, is therefore dependent upon the continued receipt of dividends from its main operating subsidiaries, including Lloyds Bank plc (the ring-fenced bank), Lloyds Bank Corporate Markets plc (the non-ring-fenced bank), LBG Equity Investments Limited (the non-ring-fenced investments business) and Scottish Widows Group Limited (the insurance business). A number of Group subsidiaries, principally those with banking and insurance activities, are subject to regulatory capital requirements which require minimum amounts of capital to be maintained relative to their size and risk. The principal operating subsidiary is Lloyds Bank plc which, at 31 December 2018, had a consolidated CET1 capital ratio of 14.9 per cent (31 December 2017: 15.8 per cent). The Group actively manages the capital of its subsidiaries, which includes monitoring the regulatory capital ratios for its banking and insurance subsidiaries and, on a consolidated basis, the RFB sub-group against approved risk appetite. The Group operates a formal capital management policy which requires all subsidiary entities to remit surplus capital to their parent companies.

Minimum requirement for own funds and eligible liabilities (MREL)

The purpose of the minimum requirement for own funds and eligible liabilities (MREL) is to require firms to maintain sufficient equity and liabilities that are capable of credibly bearing losses in resolution. MREL can be satisfied by a combination of regulatory capital and certain unsecured liabilities (which must be subordinate to a firm's operating liabilities).

In November 2016 the Bank of England published a statement of policy on its approach for setting MREL in line with EU requirements.

Applying the Bank of England's MREL policy to minimum capital requirements from 1 January 2019, the Group's indicative MREL requirement, excluding regulatory capital buffers, is as follows:

- From 2020, 2 times Pillar 1 plus Pillar 2A, equivalent to 20.7 per cent of risk-weighted assets
- From 2022, 2 times Pillar 1 plus 2 times Pillar 2A, equivalent to 25.4 per cent of risk-weighted assets

The Bank of England will review the calibration of MREL in 2020 before setting final end-state requirements to be met from 2022. This review will take into consideration any changes to the capital framework, including the finalisation of Basel III.

During 2018, the Group issued £8.8 billion (sterling equivalent) of senior unsecured securities from Lloyds Banking Group plc which, while not included in total capital, are eligible to meet MREL. Combined with previous issuances made over the last two years the Group remains comfortably positioned to meet MREL requirements from 2020 and, as at 31 December 2018, had a transitional MREL ratio of 32.4 per cent of risk-weighted assets.

Analysis of capital position

The Group's CET1 capital ratio increased by 2.10 per cent on a pro forma basis before ordinary dividends and the share buyback, primarily as a result of:

- Strong underlying capital build, net of remediation costs, of 1.95 per cent, largely driven by underlying profits
- Dividends paid by the Insurance business in July 2018 and in February 2019, in relation to 2018 earnings generating an increase of 0.25 per cent
- The completion of the sale of the Irish mortgage portfolio in the second half of the year which resulted in a 0.25 per cent increase
- Other movements, resulting in a net increase of 0.03 per cent, included the impact of structural changes arising from transfers between Insurance and the ring-fenced bank, risk-weighted asset reductions, market movements and additional pension contributions

Offset by a reduction of 0.38 per cent relating to PPI charges

The implementation of IFRS 9 on 1 January 2018 resulted in an initial reduction in CET1 capital of 0.30 per cent which, following the application of transitional relief, reduced to 0.01 per cent. No additional relief has been recognised at 31 December 2018 as Stage 1 and Stage 2 expected credit losses (ECLs), net of regulatory expected losses, have not increased beyond the position at 1 January 2018.

Overall the Group's CET1 ratio has strengthened to 16.0 per cent on a pro forma basis before ordinary dividends and the share buyback. After ordinary dividends the Group's CET1 ratio reduces to 14.8 per cent on a pro forma basis. In addition the Board intends to implement a share buyback programme of up to £1.75 billion, equivalent to 2.46 pence per share. The buyback will impact the Group's capital position in 2019 and is expected to reduce CET1 capital by c. 0.9 per cent. Allowing for this at 31 December 2018 the pro forma CET1 ratio would be 13.9 per cent after ordinary dividends (31 December 2017: 13.9 per cent pro forma, after ordinary dividends and the share buyback).

Excluding the Insurance dividend paid in February 2019 the Group's CET1 ratio has strengthened to 15.8 per cent before ordinary dividends and the share buyback and 14.6 per cent after ordinary dividends (31 December 2017: 14.1 per cent).

The accrual for foreseeable dividends reflects the recommended final ordinary dividend of 2.14 pence per share.

The transitional total capital ratio, after ordinary dividends, increased by 1.7 per cent to 22.9 per cent, largely reflecting the issuance of new AT1 and dated subordinated debt instruments, foreign exchange movements on subordinated debt instruments, the reduction in the significant investments deduction from tier 2 capital, the increase in CET1 capital and the reduction in risk-weighted assets, partially offset by the amortisation of dated tier 2 instruments and the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.

Total capital requirement

The Group's total capital requirement (TCR) as at 31 December 2018, being the aggregate of the Group's Pillar 1 and current Pillar 2A capital requirements, was £26,124 million (31 December 2017: £28,180 million).

Capital resources

An analysis of the Group's capital position as at 31 December 2018 is presented in the following section on both a CRD IV transitional arrangements basis and a CRD IV fully loaded basis. In addition the Group's capital position reflects the application of the transitional arrangements for IFRS 9.

Risk management continued

Table 1.27: Capital resources (audited)

The table below summarises the consolidated capital position of the Group. The Group's Pillar 3 Report will provide a comprehensive analysis of the own funds of the Group.

	Transitional		Fully loaded	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Common equity tier 1				
Shareholders' equity per balance sheet	**43,434**	43,551	**43,434**	43,551
Adjustment to retained earnings for foreseeable dividends	**(1,523)**	(1,475)	**(1,523)**	(1,475)
Deconsolidation adjustments[1]	**2,273**	1,301	**2,273**	1,301
Adjustment for own credit	**(280)**	109	**(280)**	109
Cash flow hedging reserve	**(1,051)**	(1,405)	**(1,051)**	(1,405)
Other adjustments	**(19)**	(177)	**(19)**	(177)
	42,834	41,904	**42,834**	41,904
less: deductions from common equity tier 1				
Goodwill and other intangible assets	**(3,667)**	(2,966)	**(3,667)**	(2,966)
Prudent valuation adjustment	**(529)**	(556)	**(529)**	(556)
Excess of expected losses over impairment provisions and value adjustments	**(27)**	(498)	**(27)**	(498)
Removal of defined benefit pension surplus	**(994)**	(541)	**(994)**	(541)
Securitisation deductions	**(191)**	(191)	**(191)**	(191)
Significant investments[1]	**(4,222)**	(4,250)	**(4,222)**	(4,250)
Deferred tax assets	**(3,037)**	(3,255)	**(3,037)**	(3,255)
Common equity tier 1 capital	**30,167**	29,647	**30,167**	29,647
Additional tier 1				
Other equity instruments	**6,466**	5,330	**6,466**	5,330
Preference shares and preferred securities[2]	**4,008**	4,503	**–**	–
Transitional limit and other adjustments	**(1,804)**	(1,748)	**–**	–
	8,670	8,085	**6,466**	5,330
less: deductions from tier 1				
Significant investments[1]	**(1,298)**	(1,403)	**–**	–
Total tier 1 capital	**37,539**	36,329	**36,633**	34,977
Tier 2				
Other subordinated liabilities[2]	**13,648**	13,419	**13,648**	13,419
Deconsolidation of instruments issued by insurance entities[1]	**(1,767)**	(1,786)	**(1,767)**	(1,786)
Adjustments for transitional limit and non-eligible instruments	**1,504**	1,617	**(1,266)**	(1,252)
Amortisation and other adjustments	**(2,717)**	(3,524)	**(2,717)**	(3,565)
Eligible provisions	**–**	120	**–**	120
	10,668	9,846	**7,898**	6,936
less: deductions from tier 2				
Significant investments[1]	**(973)**	(1,516)	**(2,271)**	(2,919)
Total capital resources	**47,234**	44,659	**42,260**	38,994
Risk-weighted assets (unaudited)	**206,366**	210,919	**206,366**	210,919
Common equity tier 1 capital ratio[3]	**14.6%**	14.1%	**14.6%**	14.1%
Tier 1 capital ratio	**18.2%**	17.2%	**17.8%**	16.6%
Total capital ratio	**22.9%**	21.2%	**20.5%**	18.5%

1 For regulatory capital purposes, the Group's Insurance business is deconsolidated and replaced by the amount of the Group's investment in the business. A part of this amount is deducted from capital (shown as 'significant investments' in the table above) and the remaining amount is risk-weighted, forming part of threshold risk-weighted assets.

2 Preference shares, preferred securities and other subordinated liabilities are categorised as subordinated liabilities in the balance sheet.

3 The Group's common equity tier 1 ratio is 14.8 per cent reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings. The post share buyback common equity tier 1 ratio is 13.9 per cent on a pro forma basis (31 December 2017: 13.9 per cent).

Movements in capital resources

The key difference between the transitional capital calculation as at 31 December 2018 and the fully loaded equivalent is primarily related to capital securities that previously qualified as tier 1 or tier 2 capital, but that do not fully qualify under CRD IV, which can be included in additional tier 1 (AT1) or tier 2 capital (as applicable) up to specified limits which reduce by 10 per cent per annum until 2022. The key movements on a transitional basis are set out in the table below.

Table 1.28: **Movements in capital resources**

	Common Equity tier 1 £m	Additional Tier 1 £m	Tier 2 £m	Total capital £m
At 31 December 2017	29,647	6,682	8,330	44,659
Banking profit attributable to ordinary shareholders[1]	**3,759**	**–**	**–**	**3,759**
Movement in foreseeable dividends[2]	**(48)**	**–**	**–**	**(48)**
Dividends paid out on ordinary shares during the year	**(2,240)**	**–**	**–**	**(2,240)**
Dividends received from the Insurance business[1]	**750**	**–**	**–**	**750**
Share buyback completed	**(1,005)**	**–**	**–**	**(1,005)**
Restatement of retained earnings on adoption of IFRS 9	**(929)**	**–**	**–**	**(929)**
IFRS 9 transitional adjustment to retained earnings	**478**	**–**	**–**	**478**
Movement in treasury shares and employee share schemes	**300**	**–**	**–**	**300**
Pension movements:				
Removal of defined benefit pension surplus	**(453)**	**–**	**–**	**(453)**
Movement through other comprehensive income	**90**	**–**	**–**	**90**
Fair value through other comprehensive income reserve	**(401)**	**–**	**–**	**(401)**
Prudent valuation adjustment	**27**	**–**	**–**	**27**
Deferred tax asset	**218**	**–**	**–**	**218**
Goodwill and other intangible assets	**(701)**	**–**	**–**	**(701)**
Excess of expected losses over impairment provisions and value adjustments	**471**	**–**	**–**	**471**
Significant investments	**28**	**105**	**543**	**676**
Eligible provisions[3]	**–**	**–**	**(120)**	**(120)**
Movements in subordinated debt:				
Repurchases, redemptions and other	**–**	**(551)**	**(824)**	**(1,375)**
Issuances	**–**	**1,136**	**1,766**	**2,902**
Other movements	**176**	**–**	**–**	**176**
At 31 December 2018	**30,167**	**7,372**	**9,695**	**47,234**

1 Under the regulatory framework, profits made by Insurance are removed from CET1 capital. However, when dividends are paid to the Group by Insurance these are recognised through CET1 capital. The £750 million of dividends received from Insurance during the year include £600 million in respect of their 2017 full year ordinary dividend and £150 million in respect of their 2018 interim ordinary dividend.

2 Includes the accrual for the 2018 full year ordinary dividend and the reversal of the accrual for the 2017 full year ordinary dividend which was paid during the year.

3 The movement in eligible provisions reflects the adjustment made in respect of the application of the IFRS 9 transitional arrangements.

CET1 capital resources have increased by £520 million over the year, primarily reflecting:

- profit generation during the year
- receipt of the dividends paid by the Insurance business in February 2018 and July 2018
- movements in treasury shares and the employee share schemes
- a reduction in the deferred tax asset deduction
- a reduction in excess expected losses resulting from the partial absorption of the increase in impairment provisions following the adoption of IFRS 9 on 1 January 2018 (remaining expected losses deducted from capital relate specifically to equity exposures), offset by the impact on retained earnings (net of transitional relief)
- largely offset by the interim dividend paid in September 2018, the accrual for the 2018 full year ordinary dividend, the completion of the share buyback programme during the year, the increase in the defined benefit pension scheme surplus deduction, movements through the fair value through other comprehensive income (FVOCI) reserve and an increase in intangible assets which are deducted from capital

AT1 capital resources have increased by £690 million in the period, primarily reflecting the issuance of a new AT1 capital instrument during the year, partially offset by the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.

Tier 2 capital resources have increased by £1,365 million in the period largely reflecting the issuance of new dated subordinated debt instruments, foreign exchange movements and a reduction in the significant investments deduction following the redemption by Scottish Widows of a subordinated debt instrument issued to the Group, partially offset by the amortisation of dated instruments.

Risk management continued

Table 1.29: Minimum requirement for own funds and eligible liabilities

An analysis of the Group's current transitional MREL position is provided below.

	Transitional	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Total capital resources (transitional basis)	47,234	44,659
Ineligible AT1 and tier 2 instruments[1]	(613)	(1,350)
Senior unsecured securities issued by Lloyds Banking Group plc	20,213	10,815
Total MREL[2]	66,834	54,124
Risk-weighted assets	206,366	210,919
MREL ratio[3]	32.4%	25.7%

1 Instruments with less than one year to maturity or governed under non-EEA law without a contractual bail-in clause.

2 Until 2022, externally issued regulatory capital in operating entities can count towards the Group's MREL to the extent that such capital would count towards the Group's consolidated capital resources.

3 The MREL ratio is 32.6 per cent on a pro forma basis reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 26.0 per cent pro forma).

Table 1.30: Risk-weighted assets

	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Foundation Internal Ratings Based (IRB) Approach	60,555	60,207
Retail IRB Approach	59,522	61,588
Other IRB Approach	15,666	17,191
IRB Approach	135,743	138,986
Standardised (STA) Approach	25,757	25,503
Credit risk	161,500	164,489
Counterparty credit risk	5,718	6,055
Contributions to the default funds of central counterparties	830	428
Credit valuation adjustment risk	702	1,402
Operational risk	25,505	25,326
Market risk	2,085	3,051
Underlying risk-weighted assets	196,340	200,751
Threshold risk-weighted assets[1]	10,026	10,168
Total risk-weighted assets	206,366	210,919

1 Threshold risk-weighted assets reflect the element of significant investments and deferred tax assets that are permitted to be risk-weighted instead of being deducted from CET1 capital. Significant investments primarily arise from investment in the Group's Insurance business.

Table 1.31: Risk-weighted assets movement by key driver

	Credit risk IRB £m	Credit risk STA £m	Credit risk total[2] £m	Counterparty credit risk[3] £m	Market risk £m	Operational risk £m	Total £m
Total risk-weighted assets as at 31 December 2017							210,919
Less threshold risk-weighted assets[1]							10,168
Risk-weighted assets as at 31 December 2017	138,986	25,503	164,489	7,885	3,051	25,326	200,751
Asset size	(271)	591	320	75	–	–	395
Asset quality	759	354	1,113	(348)	–	–	765
Model updates	1,472	–	1,472	–	(708)	–	764
Methodology and policy	(1,002)	182	(820)	(136)	–	–	(956)
Acquisitions and disposals	(4,892)	(984)	(5,876)	–	–	–	(5,876)
Movements in risk levels (market risk only)	–	–	–	–	(901)	–	(901)
Foreign exchange movements	639	(21)	618	(220)	–	–	398
Other	52	132	184	(6)	643	179	1,000
Risk-weighted assets as at 31 December 2018	135,743	25,757	161,500	7,250	2,085	25,505	196,340
Threshold risk-weighted assets[1]							10,026
Total risk-weighted assets as at 31 December 2018							206,366

1 Threshold risk-weighted assets reflect the element of significant investments and deferred tax assets that are permitted to be risk-weighted instead of being deducted from CET1 capital. Significant investments primarily arise from investments in the Group's Insurance business.

2 Credit risk includes securitisation risk-weighted assets.

3 Counterparty credit risk includes movements in contributions to the default funds of central counterparties and movements in credit valuation adjustment risk.

The risk-weighted assets movement table provides analysis of the movement in risk-weighted assets in the period by risk type and an insight into the key drivers of the movements. The key driver analysis is compiled on a monthly basis through the identification and categorisation of risk-weighted asset movements and is subject to management judgment.

Credit risk, risk-weighted assets:

- Asset size net increase of £0.3 billion includes targeted growth in some key customer segments
- Asset quality increase of £1.1 billion captures movements due to changes in borrower risk, including moves in and out of default, and changes in the economic environment
- Model update increases of £1.5 billion were driven by model refinements, principally within Retail portfolios
- Methodology and policy reductions of £0.8 billion were driven by further capital efficient securitisation activity
- Acquisitions and disposals reduction of £5.9 billion reflects the sale of the Irish mortgage portfolio and certain strategic equity holdings
- Sterling foreign exchange movements, principally with Euro and US Dollar, contributed to an increase of £0.6 billion in credit risk-weighted assets

Counterparty credit risk, risk-weighted assets reduction of £0.6 billion was mainly driven by lower CVA risk-weighted assets, foreign exchange movements and yield movement.

Market risk, risk-weighted assets reductions of £1.0 billion were largely due to a reduction in underlying positions and refinements to internal models, partly offset by migrations to Lloyds Bank Corporate Markets.

Operational risk, risk-weighted assets increased following the annual update of the income based Standardised Approach operational risk calculation.

Leverage ratio

Analysis of leverage movements

The Group's fully loaded UK leverage ratio increased to 5.5 per cent reflecting the increase in tier 1 capital, partially offset by the £6.0 billion increase in the exposure measure. The latter largely reflects increases in both the derivatives exposure measure and securities financing transactions (SFT) exposure measure, offset in part by the reduction in financial assets at fair value through other comprehensive income and the reduction in off-balance sheet items.

On a pro forma basis the UK leverage ratio increased to 5.6 per cent from 5.4 per cent pro forma at 31 December 2017, reflecting the increase in the pro forma fully loaded tier 1 capital position, partially offset by the increase in the exposure measure.

The derivatives exposure measure, representing derivative financial instruments per the balance sheet net of deconsolidation and derivatives adjustment, increased by £5.0 billion during the period, predominantly reflecting a reduction in the regulatory netting benefit and a higher volume of trades through central counterparties, including longer dated trades, which has contributed to the increase in the regulatory potential future exposure. The movements in part reflect the impact of the separation of derivative portfolios between the ring-fenced and non-ring-fenced banks and the establishment of the latter through Lloyds Bank Corporate Markets.

The SFT exposure measure, representing SFT assets per the balance sheet net of deconsolidation and other SFT adjustments, increased by £21.8 billion during the period, largely reflecting a continued increase in customer volumes, partially offset by a small reduction in trading volumes.

Off-balance sheet items reduced by £2.0 billion during the period, primarily reflecting a net reduction in securitisation financing facility commitments, including drawdowns, and a small reduction in new residential mortgage offers placed.

The average UK leverage ratio of 5.5 per cent over the quarter, compared to 5.3 per cent at the start of the quarter, primarily reflected the issuance of a new AT1 capital instrument in October 2018, partially offset by a marginally higher average exposure measure over the quarter when compared to the position at the end of the quarter.

Risk management continued

The table below summarises the component parts of the Group's leverage ratio. Further analysis will be provided in the Group's Pillar 3 Report.

Table 1.32: Leverage ratio

	Fully loaded	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Total tier 1 capital for leverage ratio		
Common equity tier 1 capital	30,167	29,647
Additional tier 1 capital	6,466	5,330
Total tier 1 capital	36,633	34,977
Exposure measure		
Statutory balance sheet assets		
Derivative financial instruments	23,595	25,834
Securities financing transactions	69,301	49,193
Loans and advances and other assets	704,702	737,082
Total assets	797,598	812,109
Qualifying central bank claims	(50,105)	(53,842)
Deconsolidation adjustments[1]		
Derivative financial instruments	(1,376)	(2,043)
Securities financing transactions	(487)	(85)
Loans and advances and other assets	(130,048)	(140,387)
Total deconsolidation adjustments	(131,911)	(142,515)
Derivatives adjustments		
Adjustments for regulatory netting	(8,828)	(13,031)
Adjustments for cash collateral	(10,536)	(7,380)
Net written credit protection	539	881
Regulatory potential future exposure	18,250	12,335
Total derivatives adjustments	(575)	(7,195)
Securities financing transactions adjustments	40	(2,022)
Off-balance sheet items	56,393	58,357
Regulatory deductions and other adjustments	(8,163)	(7,658)
Total exposure measure[2]	663,277	657,234
Average exposure measure[3]	669,896	
UK Leverage ratio[2,5]	5.5%	5.3%
Average UK leverage ratio[3]	5.5%	
CRD IV exposure measure[4]	713,382	711,076
CRD IV leverage ratio[4]	5.1%	4.9%

1 Deconsolidation adjustments relate to the deconsolidation of certain Group entities that fall outside the scope of the Group's regulatory capital consolidation, being primarily the Group's Insurance business.

2 Calculated in accordance with the UK Leverage Ratio Framework which requires qualifying central bank claims to be excluded from the leverage exposure measure.

3 The average UK leverage ratio is based on the average of the month end tier 1 capital position and average exposure measure over the quarter (1 October 2018 to 31 December 2018). The average of 5.5 per cent compares to 5.3 per cent at the start and 5.5 per cent at the end of the quarter.

4 Calculated in accordance with CRD IV rules which include central bank claims within the leverage exposure measure.

5 The UK leverage ratio is 5.6 per cent on a pro forma basis reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 5.4 per cent pro forma).

Table 1.33 : Application of IFRS 9 on a full impact basis for capital and leverage

	IFRS 9 full impact		
	At 31 Dec 2018	At 1 Jan 2018	At 31 Dec 2017
Common equity tier 1 (£m)	29,592	29,060	29,647
Transitional tier 1 (£m)	36,964	35,742	36,329
Transitional total capital (£m)	47,195	44,636	44,659
Total risk-weighted assets (£m)	206,614	211,200	210,919
Common equity tier 1 ratio (%)	14.3%	13.8%	14.1%
Transitional tier 1 ratio (%)	17.9%	16.9%	17.2%
Transitional total capital ratio (%)	22.8%	21.1%	21.2%
UK leverage ratio exposure measure (£m)	663,182	656,886	657,234
UK leverage ratio (%)	5.4%	5.2%	5.3%

Further details on the Group's adoption of the transitional arrangements for IFRS 9 can be found in the Group publication entitled IFRS 9 Financial Instruments Transition, published in March 2018 and located on the Group's website at http://www.lloydsbankinggroup.com/investors/financial-performance/.

The Group has opted to apply paragraph 4 of CRR Article 473a (the transitional rules) which allows for additional capital relief in respect of any post 1 January 2018 increase in Stage 1 and Stage 2 IFRS 9 expected credit loss provisions (net of regulatory expected losses) during the transition period. As at 31 December 2018 no additional capital relief has been recognised.

Stress testing

The Group undertakes a wide ranging programme of stress testing providing a comprehensive view of the potential impacts arising from the risks to which the Group and its key legal entities are exposed. One of the most important uses of stress testing is to assess the resilience of the operational and strategic plans of the Group and its legal entities to adverse economic conditions and other key vulnerabilities. As part of this programme the Group conducts macroeconomic stress tests of the operating plans.

In 2018 the Group participated in both the concurrent UK stress test run by the Bank of England (BoE) and in the European Banking Authority's (EBA) bi-annual EU-wide stress test. The EBA stress test did not contain a pass/fail threshold and as announced in November, the Group demonstrated its ability to meet applicable capital requirements under stressed conditions. In the case of the BoE stress test, despite the severity of the scenario, the Group exceeded the capital and leverage hurdles after the application of management actions, and as a consequence was not required to take any capital actions.

G-SIB indicators

Although the Group is not currently classified as a Global Systemically Important Bank (G-SIB), by virtue of the Group's leverage exposure measure exceeding €200 billion the Group is required to report G-SIB indicator metrics to the PRA. The Group's indicator metrics used within the 2018 Basel G-SIBs annual exercise will be disclosed from April 2019 and the results are expected to be made available by the Basel Committee later this year.

Insurance businesses

The business transacted by the insurance companies within the Group comprises both life insurance business and General Insurance business. Life insurance business comprises unit-linked business, non-profit business and with-profits business.

Scottish Widows Limited (SW Ltd) holds the only with-profit funds managed by the Group. Each insurance company within the Group is regulated by the PRA.

The Solvency II regime for insurers and insurance groups came into force from 1 January 2016. The insurance businesses are required to calculate solvency capital requirements and available capital on a risk-based approach. The Insurance business of the Group calculates regulatory capital on the basis of an internal model, which was approved by the PRA on 5 December 2015, with the latest major change to the model approved in November 2018.

The minimum required capital must be maintained at all times throughout the year. These capital requirements and the capital available to meet them are regularly estimated in order to ensure that capital maintenance requirements are being met.

All minimum regulatory requirements of the insurance companies have been met during the year.

Funding and liquidity risk

Definition

Funding risk is defined as the risk that the Group does not have sufficiently stable and diverse sources of funding. Liquidity risk is defined as the risk that the Group has insufficient financial resources to meet its commitments as they fall due.

Exposure

Liquidity exposure represents the potential stressed outflows in any future period less expected inflows. The Group considers liquidity exposure from both an internal and a regulatory perspective.

Measurement

Liquidity risk is managed through a series of measures, tests and reports that are primarily based on contractual maturities with behavioural overlays as appropriate. Note 52 on page 255 sets out an analysis of assets and liabilities by relevant maturity grouping. The Group undertakes quantitative and qualitative analysis of the behavioural aspects of its assets and liabilities in order to reflect their expected behaviour.

Mitigation

The Group manages and monitors liquidity risks and ensures that liquidity risk management systems and arrangements are adequate with regard to the internal risk appetite, Group strategy and regulatory requirements. Liquidity policies and procedures are subject to independent internal oversight by Risk. Overseas branches and subsidiaries of the Group may also be required to meet the liquidity requirements of the entity's domestic country. Management of liquidity requirements is performed by the overseas branch or subsidiary in line with Group Policy. Liquidity risk of the Insurance business is actively managed and monitored within the Insurance business. The Group plans funding requirements over the life of the funding plan, combining business as usual and stressed conditions. The Group manages its liquidity position with regard to its internal risk appetite and the Liquidity Coverage Ratio (LCR) required by the PRA and Capital Requirements Directive and Regulation (CRD IV) liquidity requirements.

The Group's funding and liquidity position is underpinned by its significant customer deposit base, and is supported by strong relationships across customer segments. The Group has consistently observed that in aggregate the retail deposit base provides a stable source of funding. Funding concentration by counterparty, currency and tenor is monitored on an ongoing basis and where concentrations do exist, these are managed as part of the planning process and limited by internal risk appetite, with analysis regularly provided to senior management.

To assist in managing the balance sheet, the Group operates a Liquidity Transfer Pricing (LTP) process which: allocates relevant interest expenses from the centre to the Group's banking businesses within the internal management accounts; helps drive the correct inputs to customer pricing; and is consistent with regulatory requirements. LTP makes extensive use of behavioural maturity profiles, taking account of expected customer loan prepayments and stability of customer deposits, modelled on historic data.

The Group can monetise liquid assets quickly, either through the repurchase agreements (repo) market or through outright sale. In addition, the Group has pre-positioned a substantial amount of assets at the Bank of England's Discount Window Facility which can be used to access additional liquidity in a time of stress. The Group considers diversification across geography, currency, markets and tenor when assessing appropriate holdings of liquid assets. The Group's liquid asset buffer is available for deployment at immediate notice, subject to complying with regulatory requirements.

Liquidity risk within the Insurance business may result from: the inability to sell financial assets quickly at their fair values; an insurance liability falling due for payment earlier than expected; the inability to generate cash inflows as anticipated; an unexpected large operational event; or from a general insurance catastrophe e.g. a significant weather event. Liquidity risk is actively managed and monitored within the Insurance business to ensure that it remains within approved risk appetite, so that even under stress conditions, there is sufficient liquidity to meet obligations.

Monitoring

Daily monitoring and control processes are in place to address internal and regulatory liquidity requirements. In order to meet ring-fencing requirements from 1 January 2019, the shape and scale of liquidity reporting has increased with additional monitoring and reporting requirements for the Ring-Fenced Bank (RFB) sub-group and non-ring-fenced banking entities. The Group monitors a range of market and internal early warning indicators on a daily basis for early signs of liquidity risk in the market or specific to the Group. This captures regulatory metrics as well as metrics the Group considers relevant for its liquidity profile. These are a mixture of quantitative and qualitative measures, including: daily variation of customer balances; changes in maturity profiles; funding concentrations; changes in LCR outflows; credit default swap (CDS) spreads; and basis risks.

The Group carries out internal stress testing of its liquidity and potential cash flow mismatch position over both short (up to one month) and longer-term horizons against a range of scenarios forming an important part of the internal risk appetite. The scenarios and assumptions are reviewed at least annually to ensure that they continue to be relevant to the nature of the business including reflecting emerging horizon risks to the Group, such as a further sovereign downgrade. For further information on the Group's 2018 liquidity stress testing results refer to page 151.

The Group maintains a Contingency Funding Plan which is designed to identify emerging liquidity concerns at an early stage, so that mitigating actions can be taken to avoid a more serious crisis developing. Contingency Funding Plan invocation and escalation processes are based on analysis of five major quantitative and qualitative components, comprising assessment of: early warning indicators; prudential and regulatory liquidity risk limits and triggers; stress testing results; event and systemic indicators; and market intelligence.

Funding and liquidity management in 2018

The Group has maintained its strong funding and liquidity position with a stable loan to deposit ratio of 107 per cent.

During the year, the Group took advantage of favourable funding markets to raise £21.4 billion of new term wholesale funding in order to refinance maturities in the year including the Bank of England's Funding for Lending Scheme (FLS) and increase liquidity buffers. As a result wholesale funding increased from £101.1 billion to £123.3 billion.

During 2018, the Group repaid £12 billion of its FLS drawings, which has reduced the amount outstanding to £13.1 billion at 31 December 2018. The balance of Term Funding Scheme drawings remains at £19.9 billion as at 31 December 2018.

The Group's liquidity position remains strong and in excess of the regulatory minimum and internal risk appetite, with a LCR of 130 per cent as at 31 December 2018 based on the EU Delegated Act. Total LCR eligible liquid assets as at 31 December 2018 were £129.4 billion, up £8.5 billion in the year.

The Group's strong ratings continue to reflect its robust balance sheet, improved profitability and bail-in capital position. During 2018, S&P upgraded Lloyds Bank plc's long-term rating by one notch to 'A+' and S&P, Moody's and Fitch assigned definitive ratings to Lloyds Bank Corporate Markets (LBCM) of A/A1/A respectively.

Table 1.34: **Group funding position**

	At 31 Dec 2018 £bn	At 1 Jan 2018 (adjusted)[1] £bn	Change %	At 31 Dec 2017 (reported) £bn	Change %
Funding requirement					
Loans and advances to customers[2]	**444.4**	444.2	–	455.7	(2)
Loans and advances to banks[3]	**5.9**	1.7		4.1	44
Debt securities at amortised cost	**4.0**	3.3	21	3.6	11
Reverse repurchase agreements	**–**	0.7		0.7	
Financial assets at fair value through other comprehensive income – non-LCR eligible[4]	**0.8**	1.7	(53)		
Available-for-sale financial assets – non-LCR eligible[4]				0.9	
Cash and balances at central bank – non-LCR eligible[5]	**5.8**	4.8	21	4.8	21
Funded assets	**460.9**	456.4	1	469.8	(2)
Other assets[6]	**212.9**	247.2	(14)	234.7	(9)
	673.8	703.6	(4)	704.5	(4)
On balance sheet LCR eligible liquid assets					
Reverse repurchase agreements	**40.9**	16.9		16.9	
Cash and balances at central banks[5]	**48.9**	53.7	(9)	53.7	(9)
Debt securities at amortised cost	**1.2**	–			
Financial assets at fair value through other comprehensive income	**24.0**	41.2	(42)		
Available-for-sale financial assets				41.2	
Trading and fair value through profit and loss	**11.9**	1.7		1.7	
Repurchase agreements	**(3.1)**	(5.9)	(47)	(5.9)	(47)
	123.8	107.6	15	107.6	15
Total Group assets	**797.6**	811.2	(2)	812.1	(2)
Less: other liabilities[6]	**(187.9)**	(226.8)	(17)	(226.5)	(17)
Funding requirement	**609.7**	584.4	4	585.6	4
Funded by					
Customer deposits[7]	**416.3**	415.5	–	415.5	–
Wholesale funding[8]	**123.3**	101.1	22	101.1	22
	539.6	516.6	4	516.6	4
Term funding scheme	**19.9**	19.9	–	19.9	–
Total equity	**50.2**	47.9	5	49.1	2
Total funding	**609.7**	584.4	4	585.6	4

1 Adjusted to reflect the implementation of IFRS 9 and IFRS 15.

2 Excludes reverse repos of £40.5 billion (1 January 2018: £16.8 billion; 31 December 2017: £16.8 billion).

3 Excludes nil (31 December 2017: £1.7 billion) of loans and advances to banks within the Insurance business and £0.4 billion (1 January 2018: £0.8 billion; 31 December 2017: £0.8 billion) of reverse repurchase agreements.

4 Non-LCR eligible liquid assets comprise a diversified pool of highly rated unencumbered collateral (including retained issuance).

5 Cash and balances at central banks are combined in the Group's balance sheet.

6 Other assets and other liabilities primarily include balances in the Group's Insurance business and the fair value of derivative assets and liabilities.

7 Excludes repos of £1.8 billion (1 January 2018: £2.6 billion; 31 December 2017: £2.6 billion).

8 The Group's definition of wholesale funding aligns with that used by other international market participants; including interbank deposits, debt securities in issue and subordinated liabilities.

Risk management continued

Table 1.35: Reconciliation of Group funding to the balance sheet (audited)

	Included in funding analysis £bn	Repos and cash collateral received by Insurance £bn	Fair value and other accounting methods £bn	Balance sheet £bn
At 31 December 2018				
Deposits from banks	**8.3**	**22.1**	**(0.1)**	**30.3**
Debt securities in issue	**97.1**	**–**	**(5.9)**	**91.2**
Subordinated liabilities	**17.9**	**–**	**(0.2)**	**17.7**
Total wholesale funding	**123.3**	**22.1**		
Customer deposits	**416.3**	**1.8**	**–**	**418.1**
Total	**539.6**	**23.9**		
At 31 December 2017				
Deposits from banks	5.1	24.1	0.6	29.8
Debt securities in issue	78.1	–	(5.6)	72.5
Subordinated liabilities	17.9	–	–	17.9
Total wholesale funding	101.1	24.1		
Customer deposits	415.5	2.6	–	418.1
Total	516.6	26.7		

Table 1.36: Analysis of 2018 total wholesale funding by residual maturity

	Less than one month £bn	One to three months £bn	Three to six months £bn	Six to nine months £bn	Nine months to one year £bn	One to two years £bn	Two to five years £bn	More than five years £bn	Total at 31 Dec 2018 £bn	Total at 31 Dec 2017 £bn
Deposit from banks	**5.3**	**0.9**	**0.7**	**0.1**	**0.1**	**0.5**	**0.7**	**–**	**8.3**	5.1
Debt securities in issue:										
Certificates of deposit	**1.7**	**2.4**	**4.1**	**1.3**	**1.3**	**1.2**	**–**	**–**	**12.0**	10.0
Commercial paper	**1.1**	**2.7**	**3.8**	**0.3**	**0.1**	**–**	**–**	**–**	**8.0**	3.2
Medium-term notes	**0.5**	**–**	**0.1**	**2.2**	**0.3**	**4.5**	**16.0**	**21.8**	**45.4**	37.4
Covered bonds	**0.7**	**–**	**1.1**	**1.0**	**–**	**5.5**	**12.6**	**6.2**	**27.1**	24.7
Securitisation	**–**	**0.6**	**–**	**0.1**	**–**	**2.8**	**–**	**1.1**	**4.6**	2.8
	4.0	**5.7**	**9.1**	**4.9**	**1.7**	**14.0**	**28.6**	**29.1**	**97.1**	78.1
Subordinated liabilities	**0.1**	**0.1**	**–**	**0.3**	**0.1**	**2.4**	**2.7**	**12.2**	**17.9**	17.9
Total wholesale funding[1]	**9.4**	**6.7**	**9.8**	**5.3**	**1.9**	**16.9**	**32.0**	**41.3**	**123.3**	101.1
Of which issued by Lloyds Banking Group plc[2]	**–**	**–**	**–**	**–**	**–**	**–**	**9.9**	**10.4**	**20.3**	15.4

1 The Group's definition of wholesale funding aligns with that used by other international market participants; including interbank deposits, debt securities and subordinated liabilities.

2 Consists of medium-term notes only.

Table 1.37: Total wholesale funding by currency (audited)

	Sterling £bn	US Dollar £bn	Euro £bn	Other currencies £bn	Total £bn
At 31 December 2018	**25.8**	**45.2**	**42.8**	**9.5**	**123.3**
At 31 December 2017	25.8	32.1	37.0	6.2	101.1

Table 1.38: Analysis of 2018 term issuance (audited)

	Sterling £bn	US Dollar £bn	Euro £bn	Other currencies £bn	Total £bn
Securitisation	**0.8**	**1.5**	**–**	**–**	**2.3**
Medium-term notes	**–**	**6.2**	**1.3**	**3.0**	**10.5**
Covered bonds	**3.0**	**0.6**	**0.9**	**–**	**4.5**
Private placements[1]	**0.1**	**0.7**	**0.1**	**0.2**	**1.1**
Subordinated liabilities	**–**	**2.3**	**0.7**	**–**	**3.0**
Total issuance	**3.9**	**11.3**	**3.0**	**3.2**	**21.4**
Of which issued by Lloyds Banking Group plc[2]	**–**	**4.9**	**1.3**	**2.6**	**8.8**

1 Private placements include structured bonds and term repurchase agreements (repos).

2 Consists of medium-term notes only.

The Group continues to access wholesale funding markets across a wide range of products, currencies and investors to maintain a stable and diverse source of funds. In 2019, the Group will continue with this approach to funding, including capital and funding from the holding company, Lloyds Banking Group plc, as needed to transition towards final UK Minimum Requirements for Own Funds and Eligible Liabilities (MREL). The Group will continue to issue funding trades from Lloyds Bank plc, operating company, across senior unsecured, covered bonds, ABS and RMBS. Over the course of 2019, the Group expects to launch an operating company funding programme for LBCM. The maturity of the Funding for Lending and Term Funding Schemes are fully factored into the Group's funding plans, and in the expected 'steady state' wholesale funding requirements of £15-20 billion per annum.

Liquidity Portfolio

At 31 December 2018, the banking business had £129.4 billion of highly liquid unencumbered LCR eligible assets (31 December 2017: £120.9 billion), of which £128.6 billion is LCR level 1 eligible (31 December 2017: £120.2 billion) and £0.8 billion is LCR level 2 eligible (31 December 2017: £0.7 billion). These assets are available to meet cash and collateral outflows and PRA regulatory requirements. The Insurance business manages a separate liquidity portfolio to mitigate insurance liquidity risk. Total LCR eligible liquid assets represent just under 6.2 times the Group's money market funding less than one year to maturity (excluding derivative collateral margins and settlement accounts) and exceed total wholesale funding, and thus provide a substantial buffer in the event of market dislocation.

Table 1.39: **LCR eligible assets**

	At 31 Dec 2018 £bn	At 31 Dec 2017 £bn	Change %	Average 2018 £bn	Average 2017 £bn
Level 1					
Cash and central bank reserves	**48.9**	53.7	(9)	**58.1**	51.0
High quality government/MDB/agency bonds[1]	**78.7**	65.8	20	**66.2**	72.0
High quality covered bonds	**1.0**	0.7	43	**0.8**	1.1
Total	**128.6**	120.2	7	**125.1**	124.1
Level 2[2]	**0.8**	0.7	14	**0.8**	0.6
Total LCR eligible assets	**129.4**	120.9	7	**125.9**	124.7

1 Designated multilateral development bank (MDB).

2 Includes Level 2A and Level 2B.

Table 1.40: **LCR eligible assets by currency**

	Sterling £bn	US Dollar £bn	Euro £bn	Other currencies £bn	Total £bn
At 31 December 2018					
Level 1	**98.2**	**19.8**	**10.6**	**–**	**128.6**
Level 2	**0.4**	**0.4**	**–**	**–**	**0.8**
Total	**98.6**	**20.2**	**10.6**	**–**	**129.4**
At 31 December 2017					
Level 1	90.8	16.3	13.1	–	120.2
Level 2	0.2	0.5	–	–	0.7
Total	91.0	16.8	13.1	–	120.9

The banking business also has a significant amount of non-LCR eligible liquid assets which are eligible for use in a range of central bank or similar facilities. Future use of such facilities will be based on prudent liquidity management and economic considerations, having regard for external market conditions.

Stress testing results

Internal liquidity stress testing results at 31 December 2018 showed that the banking business had liquidity resources representing 167 per cent of modelled outflows from all wholesale funding sources, retail and corporate deposits, intraday requirements and rating dependent contracts under the Group's most severe liquidity stress scenario.

The above scenario considers a two notch downgrade of the Group's current long-term debt rating and accompanying one notch short-term downgrade implemented instantaneously by all major rating agencies, which could result in a contractual outflow of £1.3 billion of cash over a period of up to one year, £2.2 billion of collateral posting related to customer financial contracts and £6.1 billion of collateral posting associated with secured funding.

Encumbered assets

This disclosure provides further detail on the availability of assets that could be used to support potential future funding requirements of the Group. The disclosure is not designed to identify assets that would be available in the event of a resolution or bankruptcy.

The Board and the Group Asset and Liability Committee (GALCO) monitor and manage total balance sheet encumbrance using a number of risk appetite metrics. At 31 December 2018, the Group had £53.4 billion (31 December 2017: £64.6 billion) of externally encumbered on-balance sheet assets with counterparties other than central banks. The decrease in encumbered assets was primarily driven by a decrease in repo encumbrance. The Group also had £584.3 billion (31 December 2017: £587.5 billion) of unencumbered on-balance sheet assets, and £159.8 billion (31 December 2017: £160.1 billion) of pre-positioned and encumbered assets held with central banks. Primarily, the Group encumbers mortgages, unsecured lending and credit card receivables through the issuance programmes and tradable securities through securities financing activity. The Group mainly positions mortgage assets at central banks.

Risk management continued

Table 1.41: **On balance sheet encumbered and unencumbered assets**

	Encumbered with counterparties other than central banks				Pre-positioned and encumbered assets held with central banks	Unencumbered assets not pre-positioned with central banks				
	Securitisations £m	Covered bond £m	Other £m	Total £m	£m	Readily realisable[1] £m	Other realisable assets[2] £m	Cannot be used[3] £m	Total £m	Total £m
At 31 December 2018										
Cash and balances at central banks	–	–	–	–	–	49,645	–	5,018	54,663	54,663
Financial assets at fair value through profit or loss	54	–	2,646	2,700	–	5,190	–	150,639	155,829	158,529
Derivative financial instruments	–	–	–	–	–	–	–	23,595	23,595	23,595
Financial assets at amortised cost:										
Loans and advances to banks	–	–	12	12	–	1,223	2,555	2,493	6,271	6,283
Loans and advances to customers	5,774	29,041	6,012	40,827	159,822	12,098	155,278	116,833	284,209	484,858
Debt securities	–	–	2,627	2,627	–	2,581	4	26	2,611	5,238
	5,774	29,041	8,651	43,466	159,822	15,902	157,837	119,352	293,091	496,379
Financial assets at fair value through other comprehensive income	–	–	7,278	7,278	–	17,114	–	423	17,537	24,815
Other[4]	–	–	–	–	–	56	612	38,949	39,617	39,617
Total assets	**5,828**	**29,041**	**18,575**	**53,444**	**159,822**	**87,907**	**158,449**	**337,976**	**584,332**	**797,598**
At 31 December 2017										
Cash and balances at central banks	–	–	–	–	–	53,887	–	4,634	58,521	58,521
Trading and other financial assets at fair value through profit or loss	–	–	4,642	4,642	–	7,378	–	150,858	158,236	162,878
Derivative financial instruments	–	–	–	–	–	–	–	25,834	25,834	25,834
Loans and receivables:										
Loans and advances to banks	–	–	–	–	–	213	1,417	4,981	6,611	6,611
Loans and advances to customers	5,023	26,414	6,610	38,047	160,060	13,927	170,771	89,693	274,391	472,498
Debt securities	–	–	2,374	2,374	–	919	4	346	1,269	3,643
	5,023	26,414	8,984	40,421	160,060	15,059	172,192	95,020	282,271	482,752
Available-for-sale financial assets	–	–	19,526	19,526	–	21,514	–	1,058	22,572	42,098
Other[4]	–	–	–	–	–	16	1,175	38,835	40,026	40,026
Total assets	**5,023**	**26,414**	**33,152**	**64,589**	**160,060**	**97,854**	**173,367**	**316,239**	**587,460**	**812,109**

1 Assets regarded by the Group to be readily realisable in the normal course of business, to secure funding, meet collateral needs, or be sold to reduce potential future funding requirements, and are not subject to any restrictions on their use for these purposes.

2 Assets where there are no restrictions on their use to secure funding, meet collateral needs, or be sold to reduce potential future funding requirements, but are not readily realisable in the normal course of business in their current form.

3 The following assets are classified as unencumbered – cannot be used: assets held within the Group's Insurance businesses which are generally held to either back liabilities to policyholders or to support the solvency of the Insurance subsidiaries; assets held within consolidated limited liability partnerships which provide security for the Group's obligations to its pension schemes; assets segregated in order to meet the Financial Resilience requirements of the PRA's Supervisory Statement 9/16 'Operational Continuity in Resolution'; assets pledged to facilitate the use of intra-day payment and settlement systems; and reverse repos and derivatives balance sheet ledger items.

4 Other comprises: items in the course of collection from banks; investment properties; goodwill; value in-force business; other intangible assets; tangible fixed assets; current tax recoverable; deferred tax assets; retirement benefit assets and other assets.

The above table sets out the carrying value of the Group's encumbered and unencumbered assets, separately identifying those that are available to support the Group's funding needs. The table does not include collateral received by the Group (i.e. from reverse repos) that is not recognised on its balance sheet, the vast majority of which the Group is permitted to repledge.

Governance risk

Definition

Governance risk is defined as the risk that the Group's organisational infrastructure fails to provide robust oversight of decision-making and the control mechanisms to ensure strategies and management instructions are implemented effectively.

Exposures

The internal and corporate governance arrangements of major financial institutions continue to be subject to a high level of regulatory and public scrutiny. The Group's exposure to governance risk is also reflective of the significant volume of existing and proposed legislation and regulation, both within the UK and across the multiple jurisdictions within which it operates, with which it must comply.

Measurement

The Group's governance arrangements are assessed against new or proposed legislation and regulation and best practice among peer organisations in order to identify any areas of enhancement required.

Mitigation

The Group's Risk Management Framework (RMF) establishes robust arrangements for risk governance, in particular by:

- Defining individual and collective accountabilities for risk management, risk oversight and risk assurance through a three lines of defence model which supports the discharge of responsibilities to customers, shareholders and regulators;
- Outlining governance arrangements which articulate the enterprise-wide approach to risk management; and
- Supporting a consistent approach to Group-wide behaviour and risk decision-making through a Group policy framework which helps everyone understand their responsibilities by clearly articulating and communicating rules, standards, boundaries and risk appetite measures which can be controlled, enforced and monitored.

Under the banner of the RMF, training modules are in place to support all colleagues in understanding and fulfilling their risk responsibilities.

The Group's code of responsibility embodies its values and reflect its commitment to operating responsibly and ethically both at a business and an individual level. All colleagues are required to adhere to the code in all aspects of their roles.

Effective implementation of the RMF mutually reinforces and is reinforced by the Group's risk culture, which is embedded in its approach to recruitment, selection, training, performance management and reward.

Monitoring

A review of the Group's RMF, which includes the status of the Group's principles and policy framework, and the design and operational effectiveness of key governance committees, is undertaken on an annual basis and the findings are reported to the Group Risk Committee, Board Risk Committee and the Board.

For further information on Corporate Governance see pages 56 to 78.

Market risk

Definition

Market risk is defined as the risk that unfavourable market moves (including changes in and increased volatility of interest rates, market-implied inflation rates, credit spreads and prices for bonds, foreign exchange rates, equity, property and commodity prices and other instruments) lead to reductions in earnings and/or value.

Balance sheet linkages

The information provided in table 1.42 aims to facilitate the understanding of linkages between banking, trading, and insurance balance sheet items and the positions disclosed in the Group's market risk disclosures.

Table 1.42: **Market risk linkage to the balance sheet**

		Banking			
2018	Total £m	Trading book only £m	Non-trading £m	Insurance £m	Primary market risk factor
Assets					
Cash and balances at central banks	54,663	–	54,663	–	Interest rate
Financial assets at fair value through profit or loss	158,529	35,246	6,380	116,903	Interest rate, foreign exchange, credit spread
Derivative financial instruments	23,595	14,734	6,898	1,963	Interest rate, foreign exchange, credit spread
Financial assets at amortised cost					
Loans and advances to banks	6,283	–	6,242	41	Interest rate
Loans and advances to customers	484,858	–	484,818	40	Interest rate
Debt securities	5,238	–	5,238	–	Interest rate, credit spread
	496,379	–	496,298	81	
Financial assets at fair value through other comprehensive income	24,815	–	24,815	–	Interest rate, foreign exchange, credit spread
Value of in-force business	4,762	–	–	4,762	Equity
Other assets	34,855	–	19,641	15,214	Interest rate
Total assets	797,598	49,980	608,695	138,923	
Liabilities					
Deposit from banks	30,320	–	30,320	–	Interest rate
Customer deposits	418,066	–	418,066	–	Interest rate
Financial liabilities at fair value through profit or loss	30,547	23,451	7,085	11	Interest rate, foreign exchange
Derivative financial instruments	21,373	10,827	8,406	2,140	Interest rate, foreign exchange, credit spread
Debt securities in issue	91,168	–	91,168	–	Interest rate, credit spread
Liabilities arising from insurance and investment contracts	112,727	–	–	112,727	Credit spread
Subordinated liabilities	17,656	–	15,889	1,767	Interest rate, foreign exchange
Other liabilities	25,542	–	9,605	15,937	Interest rate
Total liabilities	747,399	34,278	580,539	132,582	

The defined benefit pension schemes' assets and liabilities are included under Other assets and Other liabilities in this table and note 35 on page 219 provides further information.

The Group's trading book assets and liabilities are originated within the Commercial Banking division. Within the Group's balance sheet these fall under the trading assets and liabilities and derivative financial instruments. The assets and liabilities are classified as trading books if they meet the requirements as set out in the Capital Requirements Regulation, article 104. Further information on these activities can be found under the Trading portfolios section on page 158.

Derivative assets and liabilities are held by the Group for three main purposes; to provide risk management solutions for clients, to manage portfolio risks arising from client business and to manage and hedge the Group's own risks. Insurance business assets and liabilities relate to policyholder funds, as well as shareholder invested assets, including annuity funds. The Group recognises the value of in-force business in respect of Insurance's long-term life assurance contracts as an asset in the balance sheet (see note 24, page 210).

The Group ensures that it has adequate cash and balances at central banks and stocks of high quality liquid assets (e.g. gilts or US Treasury securities) that can be converted easily into cash to meet liquidity requirements. The majority of these assets are held as financial assets at fair value through other comprehensive income with the remainder held as financial assets at fair value through profit and loss. Further information on these balances can be found under Funding and liquidity risk on page 149. Interest rate risk in the asset portfolios is swapped into a floating rate.

The majority of debt issuance originates from the issuance, capital vehicles and medium-term notes desks and the interest rate risk of the debt issued is hedged by swapping them into a floating rate.

The non-trading book primarily consists of customer on-balance sheet activities and the Group's capital and funding activities, which expose it to the risk of adverse movements in market prices, predominantly interest rates, credit spreads, exchange rates and equity prices, as described in further detail within the Banking activities section (page 155).

Table 1.43 (below) shows the key material market risks for the Group's banking, defined benefit pension schemes, insurance and trading activities.

Table 1.43: Key material market risks for the Group by individual business activity (profit before tax impact measured against Group single stress scenarios)

	Risk Type					
2018	**Interest rate**	**Basis risk**	**FX**	**Credit spread**	**Equity**	**Inflation**
Banking activities[1]	●	◍	–	○	○	–
Defined benefit pension schemes[1]	◍	–	–	□	–	–
Insurance portfolios[1]	▦	–	–	●	◍	▦
Trading portfolios[2]	–	–	–	–	–	–

Profit before tax	**Loss**	**Gain**
> £500m	●	■
£250m – £500m	○	□
£50m – £250m	◍	▦
Immaterial/zero	–	–

1 Banking activities, Pensions and Insurance stresses; Interest rate -100 bps, Basis Risk 3 month London Interbank Offered Rate (LIBOR) +100bps / bank base rate -25bps, Foreign Exchange (FX) -15 per cent GBP, Credit Spread +100 per cent, Equity -30 per cent, Inflation +50 bps

2 Trading Portfolios; Interest rate -70bps, FX -5 per cent GBP, Credit Spread +20 per cent, Inflation +50bps.

Measurement

In addition to measuring single factors, Group risk appetite is calibrated primarily to five multi-risk Group economic scenarios, and is supplemented with sensitivity based measures. The scenarios assess the impact of unlikely, but plausible, adverse stresses on income with the worst case for banking activities, defined benefit pensions, insurance and trading portfolios reported against independently, and across the Group as a whole.

The Group risk appetite is cascaded first to the Group Asset and Liability Committee (GALCO), chaired by the Chief Financial Officer, where risk appetite is approved and monitored by risk type, and then to Group Market Risk Committee (GMRC) where risk appetite is sub-allocated by division. These metrics are reviewed regularly by senior management to inform effective decision-making.

Mitigation

GALCO is responsible for approving and monitoring group market risks, management techniques, market risk measures, behavioural assumptions, and the market risk policy. Various mitigation activities are assessed and undertaken across the Group to manage portfolios and seek to ensure they remain within approved limits. The mitigation actions will vary dependent on exposure but will, in general, look to reduce risk in a cost effective manner by offsetting balance sheet exposures and externalising through to the financial markets dependent on market liquidity. The market risk policy is owned by Group Corporate Treasury (GCT) and refreshed annually. The policy is underpinned by supplementary market risk procedures, which define specific market risk management and oversight requirements.

Monitoring

GALCO and the GMRC regularly review high level market risk exposure as part of the wider risk management framework. They also make recommendations to the Board concerning overall market risk appetite and Group Market Risk Policy. Exposures at lower levels of delegation are monitored at various intervals according to their volatility, from daily in the case of trading portfolios to monthly or quarterly in the case of less volatile portfolios. Levels of exposures compared to approved limits and triggers are monitored by Risk and where appropriate, escalation procedures are in place.

How market risks arise and are managed across the Group's activities is considered in more detail below.

Banking activities

Exposures

The Group's banking activities expose it to the risk of adverse movements in market prices, predominantly interest rates, credit spreads, exchange rates and equity prices. The volatility of market values can be affected by both the transparency of prices and the amount of liquidity in the market for the relevant asset, liability or instrument.

Interest rate risk

Yield curve risk in the Group's divisional portfolios, and in the Group's capital and funding activities arises from the different repricing characteristics of the Group's non-trading assets, liabilities (see loans and advances to customers and customer deposits in table 1.42) and off-balance sheet positions.

Basis risk arises from the possible changes in spreads, for example where the bank lends with reference to a central bank rate but funds with reference to LIBOR, and the spread between these two rates widens or tightens.

Optionality risk arises predominantly from embedded optionality within assets, liabilities or off-balance sheet items where either the Group or the customer can affect the size or timing of cash flows. One example of this is mortgage prepayment risk where the customer owns an option allowing them to prepay when it is economical to do so. This can result in customer balances amortising more quickly or slowly than anticipated due to customers' response to changes in economic conditions.

Foreign exchange risk

Economic foreign exchange exposure arises from the Group's investment in its overseas operations (net investment exposures are disclosed in note 52 on page 255). In addition, the Group incurs foreign exchange risk through non-functional currency flows from services provided by customer-facing divisions and the Group's debt and capital management programmes.

Equity risk

Equity risk arises primarily from three different sources; (i) the Group's strategic equity holdings e.g. Visa Europe, now held in the Equities sub-group; (ii) exposure to Lloyds Banking Group share price through deferred shares and deferred options granted to employees as part of their benefits package; and (iii) the Group's private equity investments held by Lloyds Development Capital within the Equities sub-group.

Credit spread risk

Credit spread risk arises largely from (i) the liquid asset portfolio held in the management of Group liquidity, comprising of government supranational and other eligible assets; (ii) the Credit Valuation Adjustment (CVA) and Debit Valuation Adjustment (DVA) sensitivity to credit spreads; and (iii) a number of the Group's structured medium-term notes where we have elected to fair value the notes through the profit and loss account.

Measurement

Interest rate risk exposure is monitored monthly using, primarily:

(i) Market value sensitivity: this methodology considers all repricing mismatches (behaviourally adjusted where appropriate) in the current balance sheet and calculates the change in market value that would result from an instantaneous 25, 100 and 200 basis points parallel rise or fall in the yield curve (subject to an appropriate floor). The market value sensitivities are calculated on a static balance sheet using principal cash flows excluding interest, commercial margins and other spread components and are therefore discounted at the risk free zero-coupon rate.

(ii) Interest income sensitivity: this measures the 12 month impact on future net interest income arising from various economic scenarios. These include instantaneous 25, 100 and 200 basis point parallel shifts in all yield curves and the five Group economic scenarios (subject to an appropriate floor). These scenarios are reviewed every year and are designed to replicate severe but plausible economic events, capturing risks that would not be evident through the use of parallel shocks alone such as basis risk and steepening or flattening of the yield curve. An additional negative rates scenario is also used for information purposes where all floors are removed; however this is not measured against the limit framework.

Unlike the market value sensitivities, the interest income sensitivities incorporate additional behavioural assumptions as to how and when individual products would reprice in response to changing rates. In addition a dynamic balance sheet is used which includes the run-off of current assets and liabilities and the addition of planned new business.

Reported sensitivities are not necessarily predictive of future performance as they do not capture additional management actions that would likely be taken in response to an immediate, large, movement in interest rates. These actions could reduce the net interest income sensitivity, help mitigate any adverse impacts or they may result in changes to total income that are not captured in the net interest income.

(iii) Structural hedge limits: the structural hedging programme managing interest rate risk in the banking book relies on a number of assumptions made around customer behaviour. A material mismatch between assumptions and reality could lead to a deterioration in earnings. In order to monitor this risk a number of metrics are in place to enhance understanding of risks within this portfolio.

The Group has an integrated Asset and Liability Management (ALM) system which supports non-traded asset and liability management of the Group. This provides a single consolidated tool to measure and manage interest rate repricing profiles (including behavioural assumptions), perform stress testing and produce forecast outputs. The Group is aware that any assumptions based model is open to challenge. A full behavioural review is performed annually, or in response to changing market conditions, to ensure the assumptions remain appropriate and the model itself is subject to annual re-validation, as required under the Group Model Governance Policy. The key behavioural assumptions are (i) embedded optionality within products; (ii) the duration of balances that are contractually repayable on demand, such as current accounts and overdrafts, together with net free reserves of the Group; and (iii) the re-pricing behaviour of managed rate liabilities namely variable rate savings.

Table 1.44 below shows, split by material currency, the Group's market value sensitivities to an instantaneous parallel up and down 25 and 100 basis points change to all interest rates.

Table 1.44: **Group Banking activities: market value sensitivity**

	2018				2017			
	Up 25bps £m	Down 25bps £m	Up 100bps £m	Down 100bps £m	Up 25bps £m	Down 25bps £m	Up 100bps £m	Down 100bps £m
Sterling	29.1	(29.5)	113.7	(122.4)	(9.9)	10.1	(38.7)	22.1
US Dollar	(7.8)	7.8	(30.6)	31.9	(3.6)	3.7	(14.2)	15.3
Euro	(3.0)	1.7	(11.2)	7.2	2.2	(0.7)	8.9	0.9
Other	(0.1)	0.1	(0.4)	0.5	(0.1)	0.2	(0.5)	0.6
Total	18.2	(19.9)	71.5	(82.8)	(11.4)	13.3	(44.5)	38.9

This is a risk based disclosure and the amounts shown would be amortised in the income statement over the duration of the portfolio.

The market value sensitivity is driven by temporary customer flow positions not yet hedged plus other positions occasionally held, within limits, by the Group's wholesale funding desks in order to minimise overall funding and hedging costs. The level of risk is low relative to the size of the total balance sheet.

Table 1.45 below shows supplementary value sensitivity to a steepening and flattening (c.100 basis points around the 3 year point) in the yield curve. This ensures there are no unintended consequences to managing risk to parallel shifts in rates.

Table 1.45: **Group Banking activities: market value sensitivity to a steepening and flattening of the yield curve**

	2018		2017	
	Steepener £m	Flattener £m	Steepener £m	Flattener £m
Sterling	38.3	(36.5)	(1.1)	(16.5)
US Dollar	6.5	(5.7)	7.1	(8.9)
Euro	(6.8)	3.6	(3.8)	7.9
Other	(0.1)	0.1	(0.2)	0.2
Total	37.9	(38.5)	2.0	(17.3)

The table below shows the banking book income sensitivity to an instantaneous parallel up and down 25 and 100 basis points change to all interest rates.

Table 1.46: **Group Banking activities: net interest income sensitivity**

	2018				2017			
	Up 25bps £m	Down 25bps £m	Up 100bps £m	Down 100bps £m	Up 25bps £m	Down 25bps £m	Up 100bps £m	Down 100bps £m
Client facing activity and associated hedges	76.2	(125.4)	341.6	(538.6)	86.1	(54.0)	370.5	(186.9)

Income sensitivity is measured over a rolling 12 month basis.

The increase in the net interest income sensitivity to a down 100bps shock reflects the additional margin compression risk within retail savings as bank base rate has risen.

Basis risk, foreign exchange, equity, and credit spread risks are measured primarily through scenario analysis by assessing the impact on profit before tax over a 12 month horizon arising from a change in market rates, and reported within the Board risk appetite on a monthly basis. Supplementary measures such as sensitivity and exposure limits are applied where they provide greater insight into risk positions. Frequency of reporting supplementary measures varies from daily to quarterly appropriate to each risk type.

Mitigation

The Group's policy is to optimise reward whilst managing its market risk exposures within the risk appetite defined by the Board. The Group Market Risk Policy and procedures outlines the hedging process, and the centralisation of risk from divisions into GCT, e.g. via the transfer pricing framework. GCT is responsible for managing the centralised risk and does this through natural offsets of matching assets and liabilities, and appropriate hedging activity of the residual exposures, subject to the authorisation and mandate of GALCO within the Board risk appetite. The hedges are externalised to the market by derivative desks within GCT and Commercial Banking Markets. The Group has hedge accounting solutions in place, which reduce the accounting volatility arising from the Group's economic hedging activities by utilising both LIBOR and bank base rate assets.

The largest residual risk exposure arises from balances that are deemed to be insensitive to changes in market rates (including current accounts, a portion of variable rate deposits and investable equity), and is managed through the Group's structural hedge. Consistent with the Group's strategy to deliver stable returns, GALCO seeks to minimise large reinvestment risk, and to smooth earnings over a range of investment tenors. The structural hedge consists of longer-term fixed rate assets or interest rate swaps and the amount and duration of the hedging activity is reviewed regularly by GALCO.

Whilst the bank faces margin compression in low rate environments, its exposure to pipeline and prepayment risk are not considered material, and are hedged in line with expected customer behaviour. These are appropriately monitored and controlled through divisional Asset and Liability Committees (ALCOs).

Net investment foreign exchange exposures are managed centrally by GCT, by hedging non-sterling asset values with currency borrowing. Economic foreign exchange exposures arising from non-functional currency flows are identified by divisions and transferred and managed centrally. The Group also has a policy of forward hedging its forecasted currency profit and loss to year end.

Monitoring

The appropriate limits and triggers are monitored by senior executive committees within the banking divisions. Banking assets, liabilities and associated hedging are actively monitored and if necessary rebalanced to be within agreed tolerances.

Defined benefit pension schemes

Exposures

The Group's defined benefit pension schemes are exposed to significant risks from their assets and liabilities. The liability discount rate provides exposure to interest rate risk and credit spread risk, which are partially offset by fixed interest assets (such as gilts and corporate bonds) and swaps. Equity and alternative asset risk arises from direct asset holdings. Scheme membership provides exposure to longevity risk.

For further information on defined benefit pension scheme assets and liabilities please refer to note 35 on page 219.

Measurement

Management of the schemes' assets is the responsibility of the Trustees of the schemes who are responsible for setting the investment strategy and for agreeing funding requirements with the Group. The Group is liable for meeting the funding deficit, and as part of a triennial valuation process will agree with the Trustees a funding strategy to eliminate the deficit over an appropriate period.

Longevity risk is measured using both 1-in-20 year stresses (risk appetite) and 1-in-200 year stresses (regulatory capital).

Mitigation

The Group takes an active involvement in agreeing mitigation strategies with the schemes' Trustees. An interest rate and inflation hedging programme is in place to reduce liability risk. The schemes have also reduced equity allocation and invested the proceeds in credit assets as part of a programme to de-risk the portfolio. The merits of longevity risk transfer and hedging solutions are regularly reviewed.

Monitoring

In addition to the wider risk management framework, governance of the schemes includes two specialist pensions committees.

The surplus or deficit in the schemes is tracked on a monthly basis along with various single factor and scenario stresses which consider the assets and liabilities holistically. Key metrics are monitored monthly including the Group's capital resources of the scheme, the performance against risk appetite triggers, and the performance of the hedged asset and liability matching positions.

Insurance portfolios

Exposures

The main elements of market risk to which the Group is exposed through the Insurance business are equity, credit spread, interest rate and inflation.

- Equity risk arises indirectly through the value of future management charges on policyholder funds. These management charges form part of the value of in-force business (see note 24 on page 210). Equity risk also arises in the with-profits funds but is less material.
- Credit spread risk mainly arises from annuities where policyholders' future cash flows are guaranteed at retirement. Exposure arises if the market value of the assets which are held to back these liabilities, mainly corporate bonds and loans, do not perform in line with expectations.
- Interest rate risk arises through holding credit and interest assets mainly in the annuity book and also to cover general insurance liabilities, capital requirements and risk appetite.
- Inflation exposure arises from a combination of inflation linked policyholder benefits and inflation assumptions used to project future expenses.

Measurement

Current and potential future market risk exposures within Insurance are assessed using a range of techniques including stress, reverse stress and scenario testing, as well as stochastic modelling.

Risk measures include 1-in-200 year stresses used for regulatory capital assessments and single factor stresses for profit before tax.

Table 1.47 demonstrates the impact of the Group's UK Recession scenario on Insurance's portfolio (with no diversification benefit, but after the impact of Group consolidation on interest rate and credits spreads). For Insurance, this impact of this scenario is identical to the Eurozone Credit Crunch so no restatement of 2017 figures is required. The amounts include movements in assets, liabilities and the value of in-force business in respect of Insurance contracts and participating investment contracts. The impact of equity movements at 2018 has been mitigated by hedging actions in the year. The impact of interest rate and credit spread movements at 2018 has been impacted by the adoption of IFRS9.

Table 1.47: **Insurance business: profit before tax sensitivities**

	Increase (reduction) in profit before tax	
	2018 £m	2017 £m
Interest rates – decrease 100 basis points	**297**	(202)
Inflation – increase 50 basis points	**93**	24
Credit spreads – 100% widening	**(823)**	140
Equity – 30% fall	**(38)**	(1,001)
Property – 25% fall	**(50)**	(67)
Total	**(521)**	(1,106)

Further stresses that show the effect of reasonably possible changes in key assumptions, including the risk-free rate, equity investment volatility, widening of credit default spreads on corporate bonds and an increase in illiquidity premia, as applied to profit before tax are set out in note 32, page 218.

One of the consequences of preparations for the formation of the Ring-Fenced Bank was to reduce the impact of some stresses within the Insurance business, though Group exposures may not have materially changed. Examples of this include centralisation of defined benefit pension schemes, and the transfer of specific hedging programmes from the corporate centre to the business unit where the exposure emanated.

Mitigation

Equity and credit spread risks are closely monitored and, where appropriate, asset liability matching is undertaken to mitigate risk. Hedging strategies are in place to reduce exposure from unit-linked funds and the with-profit funds.

Interest rate risk in the annuity book is mitigated by investing in assets whose cash flows closely match those on the projected future liabilities. It is not possible to eliminate risk completely as the timing of insured events is uncertain and bonds are not available at all of the required maturities. As a result, the cash flows cannot be precisely matched and so sensitivity tests are used to test the extent of the mismatch.

Other market risks (e.g. interest rate exposure outside the annuity book and inflation) are also closely monitored and where considered appropriate, hedges are put in place to reduce exposure.

Monitoring

Market risks in the Insurance business are monitored by Insurance senior executive committees and ultimately the Insurance Board. Monitoring includes the progression of market risk capital against risk appetite limits, as well as the sensitivity of profit before tax to combined market risk stress scenarios and in year market movements. Asset and liability matching positions and hedges in place are actively monitored and if necessary rebalanced to be within agreed tolerances. In addition market risk is controlled via approved investment policies and mandates.

Trading portfolios

Exposures

The Group's trading activity is small relative to its peers and does not engage in any proprietary trading activities. The Group's trading activity is undertaken solely to meet the financial requirements of commercial and retail customers for foreign exchange, credit and interest rate products. These activities support customer flow and market making activities.

All trading activities are performed within the Commercial Banking division. While the trading positions taken are generally small, any extreme moves in the main risk factors and other related risk factors could cause significant losses in the trading book depending on the positions at the time. The average 95 per cent 1-day trading VaR (Value at Risk; diversified across risk factors) was £0.8 million for 31 December 2018 compared to £0.6 million for 31 December 2017.

Trading market risk measures are applied to all of the Group's regulatory trading books and they include daily VaR (table 1.48), sensitivity based measures, and stress testing calculations.

Measurement

The Group internally uses VaR as the primary risk measure for all trading book positions.

Table 1.48 shows some relevant statistics for the Group's 1-day 95 per cent confidence level VaR that are based on 300 historical consecutive business days to year end 2018 and year end 2017.

The risk of loss measured by the VaR model is the minimum expected loss in earnings given the 95 per cent confidence. The total and average trading VaR numbers reported below have been obtained after the application of the diversification benefits across the five risk types, but does not reflect any diversification between Lloyds Bank Corporate Markets and any other entities. The maximum and minimum VaR reported for each risk category did not necessarily occur on the same day as the maximum and minimum VaR reported at Group level.

Table 1.48: **Trading portfolios: VaR (1-day 95 per cent confidence level) (audited)**

	At 31 December 2018				At 31 December 2017			
	Close £m	Average £m	Maximum £m	Minimum £m	Close £m	Average £m	Maximum £m	Minimum £m
Interest rate risk	**0.6**	**0.7**	**1.8**	**0.4**	0.5	0.6	2.1	0.2
Foreign exchange risk	**0.1**	**0.1**	**2.1**	**–**	0.1	0.1	0.4	0.0
Equity risk	**–**	**–**	**–**	**–**	–	–	–	–
Credit spread risk	**0.2**	**0.2**	**0.7**	**0.1**	0.3	0.3	0.5	0.2
Inflation risk	**0.3**	**0.3**	**0.7**	**0.2**	0.2	0.3	0.9	0.2
All risk factors before diversification	**1.2**	**1.3**	**3.0**	**0.9**	1.1	1.3	2.9	0.9
Portfolio diversification	**(0.4)**	**(0.5)**			(0.4)	(0.7)		
Total VaR	**0.8**	**0.8**	**2.1**	**0.4**	0.7	0.6	2.2	0.3

The market risk for the trading book continues to be low with respect to the size of the Group and compared to our peers. This reflects the fact that the Group's trading operations are customer-centric and focused on hedging and recycling client risks.

Although it is an important market standard measure of risk, VaR has limitations. One of them is the use of limited historical data sample which influences the output by the implicit assumption that future market behaviour will not differ greatly from the historically observed period. Another known limitation is the use of defined holding periods which assumes that the risk can be liquidated or hedged within that holding period. Also calculating the VaR at the chosen confidence interval does not give enough information about potential losses which may occur if this level is exceeded. The Group fully recognises these limitations and supplements the use of VaR with a variety of other measurements which reflect the nature of the business activity. These include detailed sensitivity analysis, position reporting and a stress testing programme.

Trading book VaR (1-day 99 per cent) is compared daily against both hypothetical and actual profit and loss. The 1-day 99 per cent VaR chart for Lloyds Banking Group can be found in the Group's Pillar 3 Report

Mitigation

The level of exposure is controlled by establishing and communicating the approved risk limits and controls through policies and procedures that define the responsibility and authority for risk taking. Market risk limits are clearly and consistently communicated to the business. Any new or emerging risks are brought within risk reporting and defined limits.

Monitoring

Trading risk appetite is monitored daily with 1-day 95 per cent VaR and stress testing limits. These limits are complemented with position level action triggers and profit and loss referrals. Risk and position limits are set and managed at both desk and overall trading book levels. They are reviewed at least annually and can be changed as required within the overall Group risk appetite framework.

Model risk

Definition

Model risk is defined as the risk of financial loss, regulatory censure, reputational damage or customer detriment, as a result of deficiencies in the development, application or ongoing operation of models and rating systems.

Models are defined as quantitative methods that process input data into quantitative outputs, or qualitative outputs (including ordinal letter output) which have a quantitative measure associated with them. Model Governance Policy is restricted to specific categories of application of models, principally financial risk, treasury and valuation, with certain exclusions, such as prescribed calculations and project appraisal calculations.

Exposures

There are over 300 models in the Group performing a variety of functions including:

- capital calculation;
- credit decisioning, including fraud;
- pricing models;
- impairment calculation;
- stress testing and forecasting; and
- market risk measurement.

As a result of the wide scope and breadth of coverage, there is exposure to model risk across a number of the Group's primary risk categories.

Measurement

The Group risk appetite framework is the key component for measuring the Group's model risk. Reported monthly to the Group Risk Committee and Board, focus is placed on the performance of the Group's most material models.

Mitigation

The model risk management framework, established by and with continued oversight from an independent team in the Risk division, provides the foundation for managing and mitigating model risk within the Group. Accountability is cascaded from the Board and senior management via the Group Risk Management Framework.

This provides the basis for the Group Model Governance Policy, which defines the mandatory requirements for models across the Group, including:

- the scope of models covered by the policy;
- model materiality;
- roles and responsibilities, including ownership, independent oversight and approval; and
- key principles and controls regarding data integrity, development, validation, implementation, ongoing maintenance and revalidation, monitoring, and the process for non-compliance.

The model owner takes responsibility for ensuring the fitness for purpose of the models and rating systems, supported and challenged by the independent specialist Group function.

The above ensures all models in scope of policy, including those involved in regulatory capital calculation, are developed consistently and are of sufficient quality to support business decisions and meet regulatory requirements.

Monitoring

The Group Model Governance Committee is the primary body for overseeing model risk. Policy requires that Key Performance Indicators are monitored for every model to ensure they remain fit for purpose and all issues are escalated appropriately. Material model issues are reported to Group and Board Risk Committees monthly with more detailed papers as necessary to focus on key issues.