

RBC EUROPE LIMITED
PILLAR 3 DISCLOSURE
FOR THE YEAR ENDED 31 OCTOBER 2017

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1.0 Overview

1.1 Business Profile

RBC Europe Limited (the Company) is a wholly owned subsidiary of Royal Bank of Canada (RBC), a leading provider of financial services globally. Operating since 1869, RBC is Canada's largest bank and is amongst the top 20 largest banks globally based on market capitalisation. RBC has amongst the highest credit ratings for financial institutions (Moody's A1 and Standard & Poor's AA-) and continues to be well capitalised with Common Equity Tier 1 Capital Ratio 10.9% as at 31 October 2017 (2016: 10.8%).

The Company is a UK authorised bank and provides investment banking, capital markets and wealth management services to a wide range of clients including financial institutions, corporations, governments and High-Net-Worth clients around the world. The Company works with its clients to help raise capital, access markets, mitigate risk and acquire or divest assets. The vast majority of business is focused on Fixed Income and other securities-related businesses.

The Company obtained the Standard & Poor's rating since October 2014. The Company's long- and short-term counterparty credit rating assigned by Standard & Poor's are AA-/A-1+ as at 31 October 2017 (2016: AA-/A-1+).

As at 31 October 2017, the Company does not have any subsidiaries or any investment in associates (2016: nil).

1.2 Basis and Frequency of Disclosures

Basel III is a global regulatory standard on bank capital adequacy, stress testing and market liquidity risk. It intended to strengthen global capital and liquidity rules with the goal of improving the banking sector's ability to absorb shocks arising from the financial and economic stress, thus reducing the risk of spillover from the financial sector to the real economy.

The EU implemented the Basel III framework through the new Capital Requirements Directive and Regulation (CRD IV package). Further UK implementation is by way of the PRA's Rulebook effective from 1 January 2014.

Basel III capital adequacy framework comprises three complementary pillars:

- Pillar 1 establishes rules for the calculation of minimum capital for Credit, Market, Operational Risk and Leverage (capital adequacy requirements).
- Pillar 2 is an internal discipline to evaluate the adequacy of the regulatory capital requirement under Pillar 1 and other non-Pillar 1 risks. This pillar requires the PRA to undertake a supervisory review to assess the robustness of the regulated entity's internal assessment (risk management and supervision).
- Pillar 3 complements the other pillars and affects market discipline through public disclosure. Expanded disclosure about capital and risk enables interested parties to better understand the risk profile of individual banks and companies and to make comparisons (market discipline).

The aim of Pillar 3 is to publish a set of disclosures which allow market participants to assess key information on the capital condition, risk exposures and risk assessment process.

The information disclosed is prepared in accordance with the disclosure requirements set out in Part Eight of the Capital Requirement Regulation (CRR). The disclosures may differ from similar information in the Company's financial statements for the year ended 31 October 2017, which are prepared in accordance with International Financial Reporting Standards (IFRS). Therefore, the information in these disclosures may not be directly comparable with that information.

The Company updates these disclosures on an annually basis as at its financial year end of 31 October. The Company will assess the need to publish some or all disclosures more frequently than annually in the light of the criteria specified in Article 433 of the CRR and in accordance with European Banking Authority's Guidelines on materiality, proprietary and confidentiality and on disclosure frequency.

In preparing these disclosures, management has adjusted certain prior year amounts to conform to current year presentation. These adjustments do not have any impact on the Company's capital condition and risk exposures, unless stated otherwise.

1.3 Location and Verification

These disclosures have been reviewed and approved by the Company's Audit Committee and Board. A copy of these disclosures is also available on RBC Group's corporate website at <http://www.rbc.com/aboutus/rbccl-index.html>.

1.4 Risk Governance

The Company has a clear and robust corporate and risk governance framework in order to manage, control and provide assurance on risk on behalf of both internal and external stakeholders. The governance structure determines the relationships between the Company's Board of Directors (the Board), Management, RBC Group and other stakeholders. It also defines the framework in which values are established and the context in which corporate strategies and objectives are set.

The Company considers its risk and control framework to be appropriate for the effective management of its risks and is committed to ensuring that these remain relevant and effective in a changing business environment. The Company has a well-embedded Risk Appetite Framework articulating its appetite for the type and quantum of risk through clearly defined metrics. As at 31 October 2017, all measures were within the Company's Board limits and tolerances.

1.5 Regulatory Developments

The Company monitors regulatory and legislative developments on an on-going basis to ensure it is prepared for forthcoming regulatory change. With the Capital Requirements Directive (CRD IV) package already in effect the focus is now shifting onto the proposals to amend CRD IV. The amending legislation is usually referred to as CRD V or CRR 2. The Company is participating in advocacy efforts and peer discussions to ensure that the organisation is fully aware of and prepared for the new requirements. The Company expects the proposals to start phasing in from January 2019. Specific implementation dates for various aspects are set out below. The Company is continuing its work on quantifying the impact of the proposed changes.

The proposals also include the introduction of the Fundamental Review of the Trading Book (FRTB) rules, the Standardised Approach for Counterparty Credit Risk (SA-CCR) and application of a minimum leverage ratio requirement of 3%. SA-CCR and the minimum leverage ratio are expected to apply from 2021. The new FRTB rules are not expected to apply until 2023 at the earliest.

The FRTB rules will represent a substantial change in market risk capital calculations. Under FRTB, standardised calculations using risk sensitivities as inputs will replace the current general risk and specific risk calculations. The FRTB implementation project is integrated with the wider RBC Group project. The same approach will be taken for SA-CCR implementation. SA-CCR is a much more complex calculation than the current Standardised Method for Counterparty Credit Risk and in particular much better reflects the effects of margining derivative trades. SA-CCR will also change the inputs into the Company's large exposure calculations.

The CRR 2 package also includes a proposal that EU banking sub-groups that are subsidiaries of non-EU banking groups establish an intermediate holding company (IHC) to cover all EU activities

undertaken by their EU banks. Given the uncertainty surrounding the UK's future relationship with the European Union and the extent to which EU legislation will apply in the UK it is currently too early for the Company to develop contingency plans for the various possible outcomes. Furthermore, the timeframe for introduction of the IHC requirement has been pushed back and it is not now expected to become a requirement until 2024.

The TLAC requirements will not apply to the Company as it does not meet the thresholds to be considered a 'material subsidiary' of the RBC Group.

The CRR 2 package will also implement the Basel Committee on Banking Supervision (BCBS) standards on management of Interest Rate Risk in the Banking Book (IRRBB). The new IRRBB standards strengthen management responsibilities.

The European Parliament passed a Regulation on the prudential implications of the expected loss approach mandated by IFRS 9 in December 2017. Given the significant impact that expected loss provisioning could have on banks the Regulation allows for a five year transitional period during which the requirements will gradually increase until they apply fully in 2024. The Company's IFRS 9 project is integrated with the wider RBC Group implementation project. The IFRS 9 requirements and related Regulation took effect from 1 January 2018.

The Company continues to monitor all international and domestic developments that could impact its regulatory requirements. This includes the BCBS December 2017 publication of final standards on credit risk, operational risk and calculation of the leverage ratio. The Company will monitor any proposals from UK and European authorities on transposing these new standards into banking legislation.

1.6 Regulatory Capital Management

As at 31 October 2017, the Company continued to be well capitalised with a Common Equity Tier 1 and Tier 1 capital ratio of 14.4% (2016: 17.0%) and Total Capital Requirement ratio of 12.1% (including Pillar 2A add on).

Table 1: Distribution of Risk-weighted amount

<i>£'000</i>	2017	2016
Risk-weighted exposure amounts for credit and counterparty credit		
Banking book credit risk	2,656,757	2,346,499
Counterparty credit risk	1,553,140	1,116,527
Risk exposure amount for contributions to the default fund of a CCP	56,896	52,616
	4,266,793	3,515,642
Risk-weighted exposure amount settlement/delivery risk in the Trading book	59	136
Risk-weighted exposure amount for position, foreign exchange and commodities risks		
Interest rate	2,036,620	1,336,751
Equity	42,469	1,387
Foreign exchange risk	89,433	32,133
Commodities	19,098	121,100
	2,187,620	1,491,371
Risk-weighted exposure amount for operational risk	695,680	587,427
Risk-weighted exposure amount for credit valuation adjustment	6,840	15,171
Total	7,156,992	5,609,747

2.0 Risk Governance

2.1 Accountability Structure

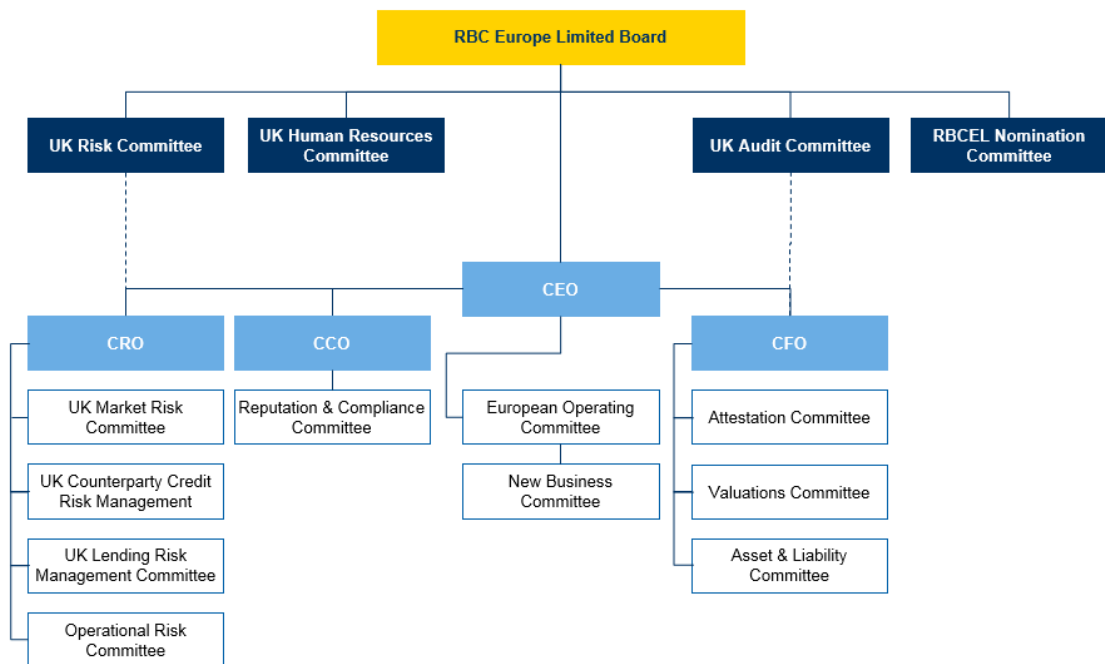
The Company has a clear and robust corporate and risk management framework and its governance structure determines the relationships between the Board of Directors, management, RBC and other stakeholders. The governance structure determines the relationships between the Board of Directors, management, RBC and other stakeholders. It also defines the framework in which values are established and the context in which corporate strategies and objectives are set.

The strength of the Company's governance starts at the top with an independent Chairman and experienced Executive and Non-Executive Directors, who give priority to strategic planning and risk oversight, ensure that standards exist to promote appropriate behaviour throughout the organisation and drive continuous improvement in governance practices.

The Board is ultimately responsible for the running of the firm but has delegated day-to-day decision making to the Chief Executive Officer. A number of Board and management committees have been established to ensure that appropriate controls and procedures are embedded to support the Company's operations. Each has formal Terms of Reference (ToR) establishing the membership, responsibilities, as well as how each committee sits within the Company's governance structure.

The mandate and membership of all committees are reviewed on a regular basis to ensure that these committees are effective and continue to be relevant to meet business and risk management needs. This allows the Board to be confident that the governance structure remains appropriate and fit for purpose. Cross-membership of various management committees also ensures that senior management have a clear picture of issues impacting the Company.

The figure below depicts the current the Company's management committee structure:



2.1.1 Board of Directors

Ultimate responsibility for managing risk within the business resides with the Board. It is tasked with ensuring that an effective systems and controls framework is in place for business, risk and capital management. Through its governance structures and controls, the Board has a line-of-sight on key risks and operational controls across the firm. The Board also monitors and assesses effectiveness of controls against changing regulatory expectations.

The Board is responsible for setting the strategic risk direction and risk appetite for the Company. This includes:

- Clearly articulating the risk appetite for the firm and establishing mechanisms to ensure that the level of risk within the firm remains within the specified risk appetite;
- Maintaining a direct line-of-sight over key current and emerging risks across the firm;
- Ensuring that an effective systems and controls framework is in place for business, risk and capital management;
- Reviewing and approving the recovery strategies outlined in the RBC UK Recovery Plan applicable to the Company;
- Ensuring that the financial objectives are aligned with risk appetite and objectives; and
- Monitoring and assessing the effectiveness of controls against changing regulatory expectations.

As at 31 October 2017, the Board consists of three Independent Non-Executive Directors (INEDs), including the Chairman, two Non-Executive Director (NEDs) representing the shareholder (RBC), and four Executive Directors.

Recruitment Policy for Board Members

Appointments to the Board follow a formal procedure. As the Company is a wholly owned subsidiary within RBC Group, the nomination and selection of board members is undertaken in accordance with internal corporate governance practices, stated within RBC's Policy on the Legal Governance of Subsidiaries (SGO Policy). The Board has two types of directors, (i) Executive Directors (ED), and (ii) Non-Executive Directors (NED), with three directors meeting the UK Corporate Governance Code's definition of 'independent' (INED).

In 2015, the Company established a Nomination Committee as part of its enhanced Corporate Governance Framework. The Nomination Committee is responsible for:

- The identification, nomination and recommendation of INED candidates to the Board, for its consideration and approval. The nomination process follows a formal and rigorous approach, with candidates selected and assessed against established selection criteria. The Nomination Committee is governed by its Terms of Reference, under the umbrella of the SGO Policy, subject to local rules and regulations.
- The Recruitment Criteria/Process. Director selection is based on local applicable laws, regulations and rules, taking into consideration the skills, diversity, geographies and areas of expertise already represented on the Board. In addition to this, successful candidates undergo a robust background check, including inter alia, criminal, financial, regulatory checks and competency validation.

In relation to EDs, candidates are identified in accordance with the SGO Policy. Following consultation with the Board Chair by the Company Secretary, and positive advice and counsel from the RBC Subsidiary Governance Office, the ED candidate is proposed to the Board for its consideration, and if deemed appropriate, approval.

All Board appointments reflect RBC's core values, in particular, "Diversity & Inclusion", which is an important factor in the assessment and nomination of all proposed director appointments. In addition, in December 2016 the Board approved a Board Diversity Policy.

The relevant background and professional experience of the Directors of the Board are provided in Appendix 1.

2.1.2 Chief Risk Officer, Europe

Decision-making relating to management of risk is delegated by the Board to the Chief Risk Officer (CRO), supported by the Chief Executive Officer (CEO). The CRO then delegates risk decision-making to specific individuals, such as the Risk Management functions, in consultation with supporting committees as appropriate.

The CRO, supported by the Heads of Risk, is responsible for:

- Developing and embedding a company-wide Risk Framework for approval by the Risk Committee (RC);
- Recommending the Company's Risk Appetite Framework to the RC for subsequent approval by the Board;
- Ensuring that risks falling outside of the approved Risk Appetite are identified and escalated to Business Heads, Senior Management, RC, and the Board; and
- Ensuring that the risks generated by the businesses are measured, monitored, controlled and reported on an on-going basis.

2.1.3 Risk Committee

The RC is a Board committee, chaired by an INED to ensure independence and robustness of review and challenge. The RC reviews risk issues, gives advice and makes recommendations to the Board or other parties as appropriate as well as making decisions on risk issues within its sphere of responsibility.

RC holds the following primary responsibilities:

- Develop a risk appetite for the Company and recommend it to the Board;
- Implement an effective risk management framework, including directing and approving risk policies;
- Monitor all material risk exposures, review and approve any risk exceptions and ensure that any breaches of risk appetite are remediated and/or escalated;
- Review and challenge the findings from the annual Company Internal Capital Adequacy Assessment Process and Internal Liquidity Adequacy Assessment Process and recommend these to the Board for approval;
- Review, challenge and recommend for approval to the Board the recovery strategies outlined in the RBC UK Recovery Plan; and
- Review emerging risks and changes in legal, regulatory and accounting requirements and their implications on risk management within the Company.

2.1.4 Audit Committee

The Audit Committee (AC) is a Board committee, chaired by an INED and includes two additional INEDs. It is responsible for providing independent assurance to management and the Board of Directors on the effectiveness of risk management practices. AC is responsible for:

- Monitoring the integrity of the Company's financial statements and reviewing and, where appropriate, making recommendations to the Board on business risks, internal controls and compliance; and
- The performance of the internal audit function and making recommendations to the Board on the appointment and performance of external auditors.

2.1.5 UK Human Resources Committee

The UK Human Resources Committee (HRC) is a Board committee, chaired by an INED and includes two additional INEDs. It is responsible for ensuring that the Company's compensation programs align with prudent risk management principles, regulatory guidance and sound compensation practices. The Company has an established process in place to assist the HRC in the determination of whether any performance adjustments to compensation are required.

2.1.6 Nomination Committee

The RBCEL Nomination Committee is a Board committee, chaired by an INED and includes two additional INEDs. It is a key board governance committee established to lead the process for Independent Non-Executive Director succession planning and appointments to the RBCEL Board and to its associated Board Committees. Main responsibilities include:

- Review regularly the structure, size, and composition of the Board and make recommendations with regard to changes in legislative and/or regulatory requirements;
- Give full consideration to succession planning for INEDs, taking into account the challenges and opportunities facing the Boards;
- Review annually the time required from INEDs; and
- Review and approve the Terms of Reference of the Committee to ensure they remain appropriate and fit for purpose and to recommend to the Board any changes considered necessary or desirable.

2.1.7 Asset and Liability Committee

The Assets and Liabilities Committee (ALCO) is a management committee chaired by the CFO, comprised of senior management from the business, Risk, Finance, and Corporate Treasury. ALCO is responsible for all matters relating to the Company's financial resources including the management of balance sheet, capital position, funding and liquidity, and structural banking book interest rate risk. Specifically, ALCO's responsibilities in relation to these matters include:

- Review of the current and projected positions relative to regulatory, Board and management limits;
- Oversight of the preparation and production of the annual Internal Capital Adequacy Assessment Process and Internal Liquidity Adequacy Assessment documents for the Company; and
- Ensuring business and operational strategies are consistent with appetite, in the context of balance sheet and funding.

2.1.8 European Operating Committee

The European Operating Committee (EOC) is chaired by the CEO. It is a management committee established to enable oversight of business strategies and performance, as well as the determination of new business initiatives and local human resourcing policies. It also facilitates cross-business and cross-functional discussion around key decisions and material developments in the Company. Main responsibilities include:

- Review the Monthly RBC Europe financial performance report;

- Review updates from the local business heads;
- Review updates from the local control functions including key risk issues;
- Review and considering PRA regulatory developments;
- Review and considering monthly Human Resources reports;
- Review Personal Account Dealing and Corporate Gifts & Entertainment reports; and
- Escalate issues to the Board, AC, RBC Capital Markets Operating Committee and the appropriate RBC governance forums.

2.1.9 UK Counterparty Credit Risk Management Committee

The UK Counterparty Credit Risk Management Committee (UKCCRMC) is a monthly management committee responsible for actively managing the Counterparty Credit Risk of RBC Capital Markets UK. Responsibilities include:

- Review the status of the counterparty credit risk portfolio, which comprises trading inventory, debt and equity underwritings, counterparty credit risk, mainly arising from securities financing and derivatives;
- Consider credit risk exposures booked in RBCLB and RBCEL;
- Review the limit policy and the relevant limit exceptions at least annually;
- Consider all counterparty credit risk situations with significant risk impact as well as the implications of the evolving market and risk environment on trading initiatives and exposures;
- Serve as a forum for communication of compliance issues and initiatives related to trading credit risk activities;
- Maintain and review a Watch List of counterparty credit risk exposures that it deems to represent high risk, consider the exposures should cut back and/or hedged; and
- Review the relevant credit risk policies (with positive advice and counsel from RBC Group as appropriate).

2.1.10 UK Market Risk Management Committee

The UK Market Risk Management Committee (UKMRC) meets on a monthly basis and is a key management forum to manage and oversee market and counterparty credit risks across RBC CM and RBC ITS activities in the UK booked in RBCEL, RBCLB and ISTUB.

Responsibilities include:

- Review all excesses to operational and tactical market and counterparty credit limits;
- Review all operational limits set by the local MD-Head of Market Risk;
- Review and recommend RBCEL Tactical VaR and Stress Limits to the UK Risk Committee;
- Bring all significant market and counterparty credit risk issues to the attention of the UK Risk Committee;
- Review and recommend trading risk policies (with positive advice and counsel from Royal Bank of Canada as appropriate); and
- Review the market and trading credit risk elements of the RBCEL ICAAP prior to submission to the UK Risk Committee and the RBCEL, RBCLB and ISTLB Asset and Liability Committee.

2.1.11 UK Lending Risk Management Committee

The UK Lending Risk Management Committee (UKLRMC) is a management committee established to review all new and increased loan transactions, taking into account the advice and counsel of Group

Risk Management and to monitor the existing portfolio at its monthly meetings. Main responsibilities include:

- Review all lending situations with a significant risk impact as well as the impact of the evolving risk environment on lending strategies and exposures;
- Review emerging credit risk issues and activities, assess operational risk events arising from financing activities and make recommendations to avoid future similar operational risk events;
- Review the Watch list of loan facilities, consider the recoverability of exposure and review and recommend the level of general and specific provisions; and
- Act as a forum for compliance issues related to lending activities and ensure that all outstanding or pending legal, regulatory and audit issues are addressed properly and in a timely fashion.

2.1.12 UK Operational Risk Management Committee

The UK Operational Risk Committee (ORC) is a management committee responsible for actively managing the Operational risk of RBCEL, RBCLB, ISTLB (together “RBC UK”) in the Capital Markets, Investor & Treasury Services, and Wealth Management International businesses undertaken in the UK. The Committee is responsible for regulatory Operational Risk requirements from both the FCA and PRA. The ORC holds meetings with all key desks and relevant functions to capture and review detailed operational issues and risks, operational risk appetite and associated actions. Key responsibilities include:

- Ensure that Operational risks arising from RBC UK business activities are effectively identified and managed consistent with the RBCEL Operational Risk Framework;
- Review and challenge business led presentations on their perceived operational risk profile based on appropriate data and Key Risk Indicators (KRI);
- Review and challenge business and function led presentations on future initiatives impacting their perceived operational risk profile versus the operational risk appetite;
- Review adequacy of supervisory arrangements and demonstration thereof;
- Review operational risk relevant compliance data;
- Consider relevant Operational Risk regulations and changes thereto;
- Approve and recommend Operational Risk policies and procedures;
- Consider impact of PRA expectations and operational risk developments on RBC UK; and
- Review future risks and issues that require managing now and escalate where appropriate.

2.1.13 Attestation Committee

The Attestation Committee (AC) is a management committee established to review the monthly general ledger attestation process. Key responsibilities include:

- Review the results of the monthly attestation process and issues arising;
- Review the results of the monthly standards of documentation process, specifically the monthly scorecards, aged breaks, and aging of receivables and payables;
- Review the results of the monthly and quarterly BRAG (Blue Red Amber Green) reconciliation self-assessment process;
- Approve local policies and procedures in relation to the general ledger attestation process;
- Ensure adequate resources are available to address issues arising;
- Ensure all disciplines are working together to achieve the attestation monthly process;
- Present the monthly reports and escalate unresolved issues to the Global Attestation Committee for review and direction; and

- Review all Operational Risk Events and assess potential impacts to the Global Attestation process.

2.1.14 Valuations Committee

The Valuation Committee (VC) is a management committee responsible for reviewing and approving all valuation methodologies, material valuation adjustments, Independent Pricing Valuation methodologies and valuation controls applicable to RBCEL and RBCLB. Responsibilities include:

- Act in conjunction with internal and external auditors as well as regulators to ensure consistency of application, comprehensiveness of cover and adherence to market best practice; and
- Regularly review material movements in all valuation adjustments and report highlights and other valuation risks and issues to UKMRC and UK Audit Committee.

2.1.15 New Business Committee

The New Business Committee (NBC) is responsible for reviewing and evaluating and making recommendations on all new capital markets business. It occurs monthly and as required. Main responsibilities include:

- Assess the level of materiality for new business initiatives;
- Ensure that risk issues are identified prior to business commencing;
- Ensure that all requisite approvals are obtained prior to the commencement of a new initiative;
- Ensure timely documentation of policy, including Standing Orders, in accordance with bank standards; and
- Reviewing specific transactions that are outside of bank policy and ensuring that risks are identified and requisite approvals obtained.

Decision making authority within the NBC rests solely with the Committee Chairman. The remainder of the Committee serves in an advisory capacity.

2.1.16 Reputation and Compliance Committee

The Reputation and Compliance Committee (RACC) is a key management forum to manage conflicts of interest and key compliance, reputational, regulatory and financial crime issues across RBC Capital Markets Europe (“RBCCM”). The RACC is responsible for considering, evaluating and opining on matters brought to its attention by the Business that may involve reputational risks or conflicts of interest, and as appropriate will be escalated to the Reputation Risk Oversight Committee (RROC), RBCEL Board, or RBC European Operating Committee. Main responsibilities include:

- to consider, evaluate and opine on the conflicts that are presented to it by the Business, and determine an appropriate course of action to manage the situation that is consistent with RBC’s policies and guidance;
- to escalate to the appropriate UK management forum, such as the RBC EL and RBC London Branch Risk Committee or RROC, those conflicts and other relevant matters that potentially expose RBC to significant reputational, legal and regulatory risk;
- to consider, evaluate and opine on relevant matters, such as Treating Customers Fairly reports, that are presented for discussion;
- to consider, evaluate and opine on relevant possible regulatory risk issues locally escalated by the European Equity Commitment Committee (EECC), the Sponsor and Nomad Committee (SANC) or the London Opinion Review Committee (LORC), including any activities that may impair RBC EL’s ability to effectively perform its role as Sponsor;

- to consider, evaluate and opine on client or transaction matters that are presented for discussion, including those displaying high risk attributes from an anti-money laundering / financial crime perspective; and
- to approve Above The Wall list amendments

2.1.17 Prudential Regulatory Policy and Interpretation Committee

The Committee's function is to provide a governance forum to oversee and agree key regulatory policies and interpretations underpinning prudential capital and liquidity reporting performed by the Regulatory Reporting team in Finance and the Liquidity Measurement team in Corporate Treasury. The committee meets on a quarterly basis or as required, and its key responsibilities include:

- Approve relevant RBCEL policies owned by Regulatory Reporting (Finance);
- Approve relevant RBCEL policies owned by Liquidity Measurement (Corporate Treasury);
- Approve papers to UK Risk Committee on topics where Risk policies may not be aligned to regulatory requirements pertaining to regulatory reporting (including COREP reporting);
- In relation to Interpretations of regulatory requirements as they pertain to risk-weight calculations, leverage ratio and COREP reporting, to approve Prudential Interpretations where impact is greater than 5% of financial resources, interpretations are different to the interpretations taken at a global RBC level, interpretations are seen by their owner as creating significant regulatory risk;
- In relation to mandatory prudential change programmes, at the discretion of the Committee, it may function as oversight Committee for prudential regulatory implementation programmes, such as the forthcoming CRR2 and CRDV projects and the leverage ratio;
- Receive regular updates of significant proposed regulatory changes impacting reporting requirements;
- Recommend policies and interpretations for approval to the CFO; and
- Provide regular reporting to the CFO.

2.1.18 Common Reporting Data Attestation Committee

The RBCEL Common Reporting (COREP) Data Attestation Committee is a key management forum to review at the senior management level the quarterly COREP data (CD) attestation process, to present the attestation results related to own funds, large exposures and leverage, to assist the CFO in ensuring that local regulatory responsibilities are met and to provide assurance to regional senior management and the UK Audit Committee that the data used for regulatory returns is properly stated. It occurs quarterly and the main responsibilities of the committee include:

- Review the results of the quarterly attestation process;
- Be responsible for approving local policies and procedures in relation to the data attestation process;
- Ensure adequate resources are available to address issues arising;
- Ensure all disciplines are working together to achieve the quarterly attestation process;
- Present the quarterly report and highlight issues to be discussed and resolved;
- Ensure issues are resolved in a timely manner;
- Execute responsibilities as per the COREP Data Attestation Policy; and
- Resolve any disputes that may arise in relation to the data attestation roles and responsibilities and review results of work paper reviews.

Information on frequency of committee meetings is included in Appendix 2.

2.2 Risk Management Framework

Taking risks in a measured and controlled manner is an integral part of RBCEL’s approach to business and is, therefore, an intrinsic part of strategy setting and business and capital planning processes. The RBCEL Enterprise Risk Management Framework (the “Framework”) sets out the high level arrangements for risk management, control and assurance. The Framework is designed to provide a structured approach for risk identification and assessment, risk measurement and control, and risk monitoring and reporting.

The Framework helps to ensure that risk is managed and controlled on behalf of internal and external stakeholders, including shareholders, customers, employees and regulators. Effective and efficient risk governance and oversight provide Management with assurance that RBCEL’s business activities will not be excessively impacted by risks that could have been reasonably foreseen. This, in turn, reduces the uncertainty of achieving RBCEL’s strategic objectives.

RBCEL respects and complies with laws and regulations that govern its businesses in the jurisdictions in which it operates. The Framework recognises that RBCEL is required to comply with a range of external risk governance requirements, including but not limited to:

- Prudential Regulatory Authority (PRA) rules;
- Financial Conduct Authority (FCA) rules; and
- Office of the Superintendent of Financial Institutions (OSFI) requirements as a subsidiary of a Canadian banking group.

2.2.1 Risk Principles

The Company applies the following general principles for its management of risk:

Table 2: Risk Management Principles

Principle	Description
Effectively balancing risk and reward is essential for success	<p>The Company is in the business of managing risk. Avoiding it entirely is neither possible nor profitable. Instead of avoiding risk, the Company finds ways to balance it with potential rewards through:</p> <ul style="list-style-type: none"> ▪ Aligning business strategy with risk appetite; ▪ Diversifying the risks in relationships and portfolio management; ▪ Pricing appropriately for the risk; ▪ Mitigating the risk through preventive and detective controls; and ▪ Transferring risk to third parties through insurance, hedging, etc.
Responsibility for risk management is shared	<p>Employees at all levels of RBCEL are responsible for managing the day-to-day risks that arise in the context of their roles. RBCEL follows the “Three Lines of Defence” risk governance model discussed in detail in this section. This helps RBCEL define how we work together and the risk management objectives we strive to achieve collectively as “one RBC”. Working together to assess and measure risk so we can capitalise on the right opportunities while also analysing and mitigating risk so we can protect RBCEL’s business, capital position, competitive position and reputation, and then create long term value for our clients, employees, and investors.</p>
Business decisions	Employees are expected to:

Principle	Description
must be based on an understanding of risk	<ul style="list-style-type: none"> ▪ Be rigorous in assessing the risks of relationships, products, transactions and other business activities; ▪ Be transparent when discussing the risk dimensions with GRM and senior management decision-makers; ▪ Continuously seek to improve the Company’s risk management processes and tools in response to best risk management practices in order to enable effective decision-making; and ▪ Generate ideas that will reduce operational processes without increasing risk.
Avoid activities that are not consistent with the Company’s Purpose, Vision, Values, Code of Conduct or policies	<p>Employees are expected to:</p> <ul style="list-style-type: none"> ▪ Embody our Vision “to be among the world’s most trusted and successful financial institutions”; ▪ Be guided by our modernised Values, follow the Code of Conduct at all times; ▪ Never compromise quality for growth; ▪ Avoid unethical clients; ▪ Comply with all regulatory requirements; and ▪ Support transactions and relationships with proper and complete documentation to avoid litigation.
Proper focus on the client reduces the Company’s risks	<p>‘Knowing Your Client’ at the start of, and throughout, the relationship is a key risk management principle in the financial industry. Employees are expected to:</p> <ul style="list-style-type: none"> ▪ Make sure all products and transactions are suitable for, and understood by, the client; ▪ Maintain focus on the client even in difficult situations. Expedient and appropriate problem resolution also helps minimise risk; ▪ Use “Know Your Client” assessments to determine the client’s financial situation, capacity for loss, risk tolerance, and financial objectives; ▪ Develop and maintain a sound understanding of the Company’s product offerings to ensure that proposed plans, strategies and product selection and design products that meet the clients’ needs; and ▪ Build relationship with its clients on a clear understanding of the terms of the working relationship, with mutual commitments for full and accurate disclosure of relevant financial information.
Use judgment and common sense	<p>Since policy and procedure cannot cover all circumstances, RBCEL employees are expected to apply judgement and common sense and, when in doubt, escalate; and also to hire the right people for the right jobs and provide proper training and support.</p>
Be operationally prepared for a potential crisis	<p>The Company employees are required to maintain effective protocols and escalation strategies, and to respond to all risks that the entity faces, including regulatory, macroeconomic, market and other stakeholder developments.</p> <p>This includes maintaining operational readiness to effectively operate in,</p>

Principle	Description
	through and following a financial crisis. It is also critical to maintain agility and readiness to respond to potential disruptors to the financial industry.

2.2.2 Three Lines of Defence Model

The Company has implemented a robust system of monitoring, reporting and control based on the Three Lines of Defence model. This details responsibility for risk management, control and assurance, and clarifies the segregation of duties between those who take on risk, those who control risk and those who provide assurance.

First Line of Defence - This is provided by the business and support functions embedded in the business. The First Line of Defence has the ownership and accountability for:

- Risk identification, assessment, mitigation, monitoring and reporting in accordance with established the Company's risk policies;
- Ensuring appropriate and adequate capabilities to manage risks relevant to the business; and
- Alignment of business and operational strategies with risk conduct and culture and risk appetite.

Second Line of Defence - This is provided by areas with independent oversight accountabilities residing in functions such as GRM, Group Compliance, and other areas within Control and Group Functions (Other Control and Group Functions include Finance, Corporate Treasury, Law and HR). The Second Line of Defence is accountable for:

- Establishing the Company-level risk management frameworks, and provides risk guidance;
- Providing oversight for the effectiveness of First Line risk management practices; and
- Monitoring and independently reporting on the level of risk against the established appetite.

Third Line of Defence - This is provided through Internal Audit Services and the Audit Committee. The Third Line provides independent objective assurance on the effectiveness of risk management policies, processes and practices in all areas of the Company. Further assurance is provided by the firm's external auditor, PricewaterhouseCoopers LLP, in the form of a quarterly report to the Audit Committee.

2.2.3 Risk Appetite

Risk Appetite is defined as the amount and type of risk that the Company is willing to accept in the pursuit of its business objectives.

The overall objective of the Company's Risk Appetite Framework is to protect the Company from unacceptable levels of risk while supporting and enabling the firm's overall business strategy and goals. The Framework is defined in the context of the RBC Enterprise Risk Appetite Framework and has been customised to cater for local requirements. It provides details on the Company's risk appetite principles, constraints and metrics and is approved annually by the Board.

2.2.4 Risk Policy Management

The Company has implemented RBC policies and processes in the context of the Company's Risk Policy Management Requirements to support the assessment and management of risks. The Company regularly reviews policies and controls to ensure continued effectiveness and alignment with relevant laws and regulations. To ensure it is operating with integrity, the Company adheres to a number of other principles, codes and policies including the RBC Code of Conduct, which governs the behaviour of its employees and informs how the Company conducts its business operations.

Where necessary, the Company adapts the RBC Enterprise wide policies to ensure compliance with local legal and regulatory requirements and expectations. The CRO, Europe has the responsibility of ensuring these policies are consistent with:

- Regulatory requirements;
- Relevant RBC policies; and
- Higher and lower level policy documents within the risk policy architecture.

The Company's Risk Policy Management Requirements document adopts the following three-tier hierarchy for approving frameworks, policies, standing orders, standards and procedures (collectively referred to as policy documents):

- **Level 1** policy documents include overarching frameworks and policies that outline the Company's regulatory requirements and risk governance. These are approved by RC or ALCO.
- **Level 2** policy documents include risk-specific frameworks and policies that lay the foundations for how each risk (and any sub-risk) is managed. These are approved by Management Committees.
- **Level 3** policy documents include those that are put in place to support Level 2 policy documents. These are approved by either Management Committees or Heads of Risk.

The Board delegates responsibility to the RC to ensure that all the Company's risk and capital policies meet the minimum governance standards defined within the Risk Policy Management Requirements.

2.2.5 Capital Planning

The Company undertakes an annual Internal Capital Adequacy Assessment Process (ICAAP) to ensure that the business strategy and planning translate into adequate capital levels over internal and external capital minima, and identifies period where capital buffers become tight so corrective action can be undertaken in advance. This also includes reviewing the capital levels against risk appetite to ensure that the business strategy and planned capital levels remain in line with the Company's risk appetite.

The capital plan is derived from the Company's base case business plan and takes into account changes to business forecasts, market conditions and other developments, such as accounting or regulatory changes that may impact capital requirements.

The base case capital plan also forms the basis for stress testing analysis. Stressing the capital plans, enables the Company to test the strength of its capital base and also to consider mitigating actions in advance in order to maintain overall financial adequacy in periods of stress.

The capital plan is updated on a periodic basis to reflect actual operating results, updated Profit and Loss forecasts and any changes in business strategies.

The ICAAP is an annual process managed by the Enterprise Risk Management (ERM), UK function within Group Risk Management (GRM).

The ERM UK Steering Committee, which consists of the CRO Europe & APAC, CFO Europe, senior management representatives from ERM, Finance, GRM and Corporate Treasury, oversee all aspects involved in the development of the ICAAP, including accurate documentation of key findings from the assessment. Following the ERM Steering Committee review, the ICAAP report is submitted to the Risk Committee (RC) for review, challenge and recommendation for approval to the Board.

3.0 Own Funds

3.1 Overview of Own Funds

As at 31 October 2017, the Company had total own funds of £1,241 million (2016: £1,236 million), which comprises of Tier 1 Capital of £1,030 million (2016: £954 million) and Tier 2 Capital of £211 million (2016: £283 million) under the transitional provisions. A full reconciliation of own funds items to audited financial statements are shown in the table below.

Table 3: Full reconciliation of own funds items to audited financial statements

Per Audited Statement of changes in equity	31 October 2017
£'000	
Common shares	497,996
Other components of equity:	
<i>Capital reserves</i>	36,619
<i>Share premium</i>	803
<i>Remeasurement of pension assets and liabilities</i>	(5,874)
<i>Available-for-sale reserve</i>	33,713
Total other components of equity	65,261
Retained earnings	
<i>Opening</i>	413,640
<i>Net profit</i>	80,072
Audited retained earnings at 31 October	493,712
Total equity	1,056,969
Adjustments to CET1 due to prudential filters	
<i>Value adjustments due to the requirements for prudent valuation</i>	(10,868)
Deductions of CET1 Capital	
<i>Other intangible assets</i>	(74)
<i>Deferred tax liabilities associated to other intangible assets</i>	18
<i>Deferred tax assets that rely on future profitability and do not arise from temporary differences net of associated tax liabilities</i>	0
<i>Defined benefit pension assets</i>	(600)
<i>Deferred tax liabilities associated to defined benefit pension assets</i>	144
<i>Deduction of holdings Common Equity Tier 1 instruments where an institution does not have a significant investment in a financial sector entity</i>	(15,229)
Total CET1 deductions	(15,741)
Total Fully Loaded Tier 1 Capital	1,030,359
Tier 2 Capital	
Subordinated loans	248,105
<i>Deduction of holdings Tier 2 instruments where an institution does not have a significant investment in a financial sector entity</i>	(36,860)
Total Tier 2 deductions	(36,860)
Total Fully Loaded Tier 2 Capital	211,245
Fully Loaded Own Funds	1,241,604

Per Audited Statement of changes in equity	31 October 2016
£'000	
Common shares	497,996
Other components of equity:	
<i>Capital reserves</i>	36,619
<i>Share premium</i>	803
<i>Remeasurement of pension assets and liabilities</i>	(6,614)
<i>Available-for-sale reserve</i>	20,485
Total other components of equity	51,293
Retained earnings	
<i>Opening</i>	361,089
<i>Net profit</i>	52,551
Audited retained earnings at 31 October	<u>413,640</u>
Total equity	<u>962,929</u>
Adjustments to CET1 due to prudential filters	
<i>Value adjustments due to the requirements for prudent valuation</i>	(6,467)
Deductions of CET1 Capital	
<i>Other intangible assets</i>	(242)
<i>Deferred tax liabilities associated to other intangible assets</i>	58
<i>Deduction of holdings Common Equity Tier 1 instruments where an institution does not have a significant investment in a financial sector entity</i>	(2,715)
Total CET1 deductions	<u>(2,899)</u>
Total Fully Loaded Tier 1 Capital	<u>953,563</u>
Tier 2 Capital	
Subordinated loans	285,927
Collective provision gross of tax	3,814
<i>Deduction of holdings Tier 2 instruments where an institution does not have a significant investment in a financial sector entity</i>	(7,016)
Total Tier 2 deductions	<u>(7,016)</u>
Total Fully Loaded Tier 2 Capital	<u>282,725</u>
Fully Loaded Own Funds	<u><u>1,236,288</u></u>

Table 4: Transitional own funds disclosure

Common Equity Tier 1 capital: instruments and reserves	31 October 2017 £'000	Prescribed residual amount	Final CRD IV
Capital instruments and the related share premium accounts	498,799	-	498,799
of which: Common shares	497,996	-	497,996
Retained earnings	493,712	-	493,712
Accumulated other comprehensive income (and any other reserves)	64,458	-	64,458
Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,056,969	-	1,056,969
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
Additional value adjustments	(10,868)	-	(10,868)
Goodwill and Other intangible assets (net of related tax liability)	(56)	-	(56)
Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	(15,229)	-	(15,229)
Total regulatory adjustments to Common Equity Tier 1 (CET1)	(26,610)	-	(26,610)
Common Equity Tier 1 (CET1) capital	1,030,359	-	1,030,359
Additional Tier 1 (AT1) capital	-	-	-
Tier 1 capital (T1 = CET1 + AT1)	1,030,359	-	1,030,359
Tier 2 (T2) capital: instruments and provisions			
Subordinated loans	248,105	-	248,105
Credit risk adjustments	-	-	-
Tier 2 (T2) capital before regulatory adjustment	248,105	-	248,105
Tier 2 (T2) capital: regulatory adjustments			
Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount)	(36,860)	-	(36,860)
Of which new holdings not subject to transitional arrangements	(36,860)	-	(36,860)
Total regulatory adjustments to Tier 2 (T2) capital	(36,860)	-	(36,860)
Tier 2 (T2) capital	211,245	-	211,245
Total capital (TC = T1 + T2)	1,241,604	-	1,241,604
Total risk-weighted exposures	7,156,992		
Capital ratios and buffers			
Common Equity Tier 1 ratio	14.4%		
Tier 1 ratio	14.4%		
Total capital ratio	17.3%		
Institution specific buffer requirement	45,508		
of which: capital conservation buffer requirement	44,731		
of which: countercyclical buffer requirement	777		
of which: systemic risk buffer requirement	-		
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-		
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.4%		
Amounts below the thresholds for deduction (before risk-weighting)			
Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-		
Direct and indirect holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-		
Deferred tax assets arising from temporary difference	26,610		
Applicable caps on the inclusion of provisions in Tier 2			
Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-		
Cap on inclusion of credit risk adjustments in T2 under standardised approach	-		
Credit risk adjustments included in T2 in respect of exposures subject to internal rating-based approach (prior to the application of the cap)	-		
Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	-		
Capital instruments subject to phase-out arrangements (applicable between 1 Jan 2014 and 1 Jan 2022)			
- Current cap on CET1 instruments subject to phase-out arrangements	-		
- Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-		
- Current cap on AT1 instruments subject to phase-out arrangements	-		
- Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-		
- Current cap on T2 instruments subject to phase-out arrangements	-		
- Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-		

Common Equity Tier 1 capital: instruments and reserves	31 October 2016 £'000	Prescribed residual amount	Final CRD IV
Capital instruments and the related share premium accounts	498,799	-	498,799
of which: Common shares	497,996	-	497,996
Retained earnings	413,640	-	413,640
Accumulated other comprehensive income (and any other reserves)	50,490	-	50,490
Common Equity Tier 1 (CET1) capital before regulatory adjustments	962,929	-	962,929
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
Additional value adjustments	(6,467)	-	(6,467)
Goodwill and Other intangible assets (net of related tax liability)	(184)	-	(184)
Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	(2,715)	-	(2,715)
Total regulatory adjustments to Common Equity Tier 1 (CET1)	(9,366)	-	(9,366)
Common Equity Tier 1 (CET1) capital	953,563	-	953,563
Additional Tier 1 (AT1) capital	-	-	-
Tier 1 capital (T1 = CET1 + AT1)	953,563	-	953,563
Tier 2 (T2) capital: instruments and provisions			
Subordinated loans	285,927	-	285,927
Credit risk adjustments	3,814	-	3,814
Tier 2 (T2) capital before regulatory adjustment	289,741	-	289,741
Tier 2 (T2) capital: regulatory adjustments			
Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount)	(7,016)	-	(7,016)
Of which new holdings not subject to transitional arrangements	(7,016)	-	(7,016)
Total regulatory adjustments to Tier 2 (T2) capital	(7,016)	-	(7,016)
Tier 2 (T2) capital	282,725	-	282,725
Total capital (TC = T1 + T2)	1,236,288	-	1,236,288
Total risk-weighted exposures	5,609,747		
Capital ratios and buffers			
Common Equity Tier 1 ratio	17.0%		
Tier 1 ratio	17.0%		
Total capital ratio	22.0%		
Institution specific buffer requirement	35,313		
of which: capital conservation buffer requirement	35,061		
of which: countercyclical buffer requirement	252		
of which: systemic risk buffer requirement	-		
of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-		
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	11.0%		
Amounts below the thresholds for deduction (before risk-weighting)			
Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-		
Direct and indirect holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	-		
Deferred tax assets arising from temporary difference	15,306		
Applicable caps on the inclusion of provisions in Tier 2			
Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-		
Cap on inclusion of credit risk adjustments in T2 under standardised approach	-		
Credit risk adjustments included in T2 in respect of exposures subject to internal rating-based approach (prior to the application of the cap)	-		
Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	-		
Capital instruments subject to phase-out arrangements (applicable between 1 Jan 2014 and 1 Jan 2022)			
- Current cap on CET1 instruments subject to phase-out arrangements	-		
- Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-		
- Current cap on AT1 instruments subject to phase-out arrangements	-		
- Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-		
- Current cap on T2 instruments subject to phase-out arrangements	-		
- Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-		

Table 5: Capital instruments main features table

As at 31 October 2017

Capital instruments' main features template ⁽¹⁾	Common shares	Common shares	Subordinated loan due 2019	Subordinated loan due 2024	Subordinated loan due 2026
Issuer	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited
Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A	N/A	N/A	N/A	N/A
Governing law(s) of the instrument	English	English	English	English	English
<i>Regulatory treatment</i>					
Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Tier 2	Tier 2
Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo	Solo	Solo	Solo	Solo
Instrument type (types to be specified by each jurisdiction)	Common Equity Tier 1 as published in Regulation (EU) No 575/2013 Article 28	Common Equity Tier 1 as published in Regulation (EU) No 575/2013 Article 28	Tier 2 as published in Regulation (EU) No 575/2013 Article 63	Tier 2 as published in Regulation (EU) No 575/2013 Article 63	Tier 2 as published in Regulation (EU) No 575/2013 Article 63
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	GBP 21m	GBP 477m	GBP 22m	GBP 151m	GBP 75m
Nominal amount of instrument	GBP 25m	GBP 477m	USD 100m	USD 200m	USD 100m
Issue price	84 per cent	100 per cent	100 per cent	100 per cent	100 per cent
Redemption price	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount
Accounting classification	Equity	Equity	Liability - amortised cost	Liability - amortised cost	Liability - amortised cost
Original date of issuance	20 December 1970	20 December 1970	18 April 2012	28 May 2014	28 May 2014
Perpetual or dated	Perpetual	Perpetual	Dated	Dated	Dated
Original maturity date	No maturity	No maturity	18 April 2019	28 May 2024	28 May 2026
Issuer call subject to prior supervisory approval	No	No	Yes	Yes	Yes
Optional call date, contingent call dates, and redemption amount	N/A	N/A	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 18/Apr/2017 In addition Tax/Regulatory call	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 28/May/2019 In addition Tax/Regulatory call	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 28/May/2021 In addition Tax/Regulatory call
Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A
<i>Coupons / dividends</i>					
Fixed or floating dividend/coupon	N/A	N/A	Floating	Floating	Floating
Coupon rate and any related index	N/A	N/A	Reuters page LIBOR01 +2.40 per cent per annum	Reuters page LIBOR01 +1.82 per cent per annum	Reuters page LIBOR01 +1.92 per cent per annum
Existence of a dividend stopper	N/A	N/A	No	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No	No	No	No
Noncumulative or cumulative	Non cumulative	Non cumulative	Non cumulative	Non cumulative	Non cumulative
Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A	N/A	N/A	N/A
If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
Write-down features	No	No	Yes	Yes	Yes
If write-down, write-down trigger (s)	N/A	N/A	N/A	N/A	N/A
If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	N/A	N/A	N/A	N/A	N/A
Non-compliant transitioned features	No	No	No	No	No
If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

(1) 'N/A' inserted if the question is not applicable

As at 31 October 2016

Capital instruments' main features template ⁽¹⁾	Common shares	Common shares	Subordinated loan due 2019	Subordinated loan due 2024	Subordinated loan due 2026
Issuer	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited	RBC Europe Limited
Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	N/A	N/A	N/A	N/A	N/A
Governing law(s) of the instrument	English	English	English	English	English
Regulatory treatment					
Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Tier 2	Tier 2
Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Tier 2	Tier 2	Tier 2
Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo	Solo	Solo	Solo	Solo
Instrument type (types to be specified by each jurisdiction)	Common Equity Tier 1 as published in Regulation (EU) No 575/2013 Article 28	Common Equity Tier 1 as published in Regulation (EU) No 575/2013 Article 28	Tier 2 as published in Regulation (EU) No 575/2013 Article 63	Tier 2 as published in Regulation (EU) No 575/2013 Article 63	Tier 2 as published in Regulation (EU) No 575/2013 Article 63
Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	GBP 21m	GBP 477m	GBP 40m	GBP 164m	GBP 82m
Nominal amount of instrument	GBP 25m	GBP 477m	USD 100m	USD 200m	USD 100m
Issue price	84 per cent	100 per cent	100 per cent	100 per cent	100 per cent
Redemption price	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount	100 per cent of Nominal amount
Accounting classification	Equity	Equity	Liability - amortised cost	Liability - amortised cost	Liability - amortised cost
Original date of issuance	20 December 1970	20 December 1970	18 April 2012	28 May 2014	28 May 2014
Perpetual or dated	Perpetual	Perpetual	Dated	Dated	Dated
Original maturity date	No maturity	No maturity	18 April 2019	28 May 2024	28 May 2026
Issuer call subject to prior supervisory approval	No	No	Yes	Yes	Yes
Optional call date, contingent call dates, and redemption amount	N/A	N/A	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 18/Apr/2017 In addition Tax/Regulatory call	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 28/May/2019 In addition Tax/Regulatory call	Redemption at the Option of the Issuer 100 per cent of Nominal amount First call date: 28/May/2021 In addition Tax/Regulatory call
Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A
Coupons / dividends					
Fixed or floating dividend/coupon	N/A	N/A	Floating	Floating	Floating
Coupon rate and any related index	N/A	N/A	Reuters page LIBOR01 +2.40 per cent per annum	Reuters page LIBOR01 +1.82 per cent per annum	Reuters page LIBOR01 +1.92 per cent per annum
Existence of a dividend stopper	N/A	N/A	No	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No	No	No	No
Noncumulative or cumulative	Non cumulative	Non cumulative	Non cumulative	Non cumulative	Non cumulative
Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
If convertible, conversion trigger (s)	N/A	N/A	N/A	N/A	N/A
If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
Write-down features	No	No	Yes	Yes	Yes
If write-down, write-down trigger (s)	N/A	N/A	N/A	N/A	N/A
If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	N/A	N/A	N/A	N/A	N/A
Non-compliant transitioned features	No	No	No	No	No
If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

(1) N/A inserted if the question is not applicable

3.2 Countercyclical Capital Buffer

The UK implementation of CRD IV requires institutions to maintain an institution-specific countercyclical capital buffer based on regulatory determined buffer rates. This requirement follows closely the international approach of Basel III which introduced the countercyclical capital buffer to be implemented by national jurisdictions when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk in each country the Company is exposed to.

As at 31 October 2017, the Company's specific countercyclical capital buffer rate is 0.0109% (2016: 0.0045%) and the capital requirement is £0.8 million (2016: £0.3 million).

Detailed disclosure on the geographical distribution of credit exposure and the Company's specific countercyclical buffer requirements is included in Appendix 4.

3.3 Unencumbered Assets

The Company defines the following assets as encumbered assets:

- Assets which have been pledged as collateral; or
- Assets which the Company believes it was restricted from using to secure funding, for legal or other reasons.

Unencumbered assets are the difference between total and encumbered assets from both on- and off-balance sheet sources.

The European Banking Authority (EBA) and PRA have finalised 'Guidelines on disclosure of encumbered and unencumbered assets' on 27 June 2014. The Company is required to disclose information on encumbered and unencumbered assets from 2015 onwards on an annual basis.

Asset encumbrance is an integral part of the Company's liquidity, funding and collateral management processes. The majority of the Company's encumbrance is driven by secured financing activities, which include transactions in collateral swaps and repo, including shorts facilitation as part of its trading activities. These activities are carried out under industry standard contractual agreements (mostly Global Master Repurchase Agreements (GMRAs)). Where securities are borrowed or lent between the Company and RBC Group companies, this is done with arm's length terms.

The level of over-collateralisation is dependent on specific trade details. The Company's ratio of encumbered assets is relatively low with a high turnover of assets available for encumbrance.

A significant proportion (over 85%) of the assets included in other unencumbered assets of £27.5bn (2016: £20.9bn) relates to reverse repurchase transactions and the Company has rehypothecation rights over these securities.

Encumbrance will vary depending on the composition of the balance sheet, and there are no notable trends during the disclosure period.

Table 6: Encumbered and unencumbered assets**For the year ended at 31 October 2017**

<i>£'000</i>	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	2,113,580		35,726,501	
Equity instruments	0	-	27,962	27,962
Debt securities	1,651,291	1,651,291	1,332,819	1,332,819
Other assets	411,533		27,544,072	
		Matching liabilities, contingent liabilities or securities lent		Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	14,232,163		14,232,163	

For the year ended at 31 October 2016

<i>£'000</i>	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	1,838,184		28,558,369	
Equity instruments	-	-	137,843	137,843
Debt securities	1,593,851	1,593,851	1,444,903	1,444,903
Other assets	254,608		20,922,257	
		Matching liabilities, contingent liabilities or securities lent		Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	12,771,206		12,771,206	

The above information is prepared using median values of monthly data on a rolling basis over the previous twelve months as expected by PRA.

3.4 Leverage Ratio

The leverage ratio was introduced into the Basel III framework as a simple, transparent, non-risk based supplementary measure to the risk-based capital requirements. The primary objectives are to restrict the build-up of excessive leverage in the banking sector and to reinforce the risk-based requirements with a simple, non-risk “backstop” measure.

Basel III provides for a transitional period for the introduction of the leverage ratio, comprising a supervisory monitoring period that started in 2011 and a parallel run period from 1 January 2013 to 1 January 2017. The Basel Committee have tested a minimum requirement of 3% for the leverage during the parallel run period. In April 2016 the Basel Committee proposed a 3% minimum leverage requirement along with adjustments to the calculation of the exposure measure and these have been incorporated into CRD 5. The 3% minimum leverage requirement in CRD 5 was originally proposed to apply from 1 January 2019. However, the European Council have proposed delaying this by two years to 2021. The Company continues to closely monitor legislative developments in this area in order to ensure that it can comply with any new requirements well in advance of them coming into effect.

The EU implementation of the Basel III leverage ratio calculation is provided in Article 429 of the CRR, which mirrors the Basel III framework from December 2010. In October 2014, the European Commission issued a Delegated Act to align the definition of the CRR leverage exposure with the final Basel III leverage ratio framework published in January 2014.

Leverage ratio is reported to and monitored by ALCO on a monthly basis since July 2013 as one of its risk appetite metrics. GRM has established internal threshold for each business line in accordance with the Company's risk appetite as approved by the Company's Board. Regulatory Reporting team monitors the leverage usage against the internal threshold on a daily basis. As at 31 October 2017, the Company's leverage ratio is 2.38% (2016: 2.48%).

Table 7: Leverage ratio disclosure

As at 31 October 2017	£'000
Summary reconciliation of accounting assets and leverage ratio exposures	
	Applicable Amounts
Total assets as per published financial statements	40,034,945
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	-
Adjustments for derivative financial instruments	(923,785)
Adjustments for securities financing transactions "SFTs"	1,480,486
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	3,335,682
(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-
(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 14) of Regulation (EU) No 575/2013)	-
Other adjustments	(598,833)
Total leverage ratio exposure	43,328,495
Leverage ratio common disclosure	
	CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	16,627,981
(Asset amounts deducted in determining Tier 1 capital)	(12,936)
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	16,615,045
Derivative exposures	
Replacement cost associated with <i>all</i> derivatives transactions (ie net of eligible cash variation margin)	312,827
Add-on amounts for PFE associated with <i>all</i> derivatives transactions (mark-to-market method)	951,018
Exposure determined under Original Exposure Method	-
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-
(Exempted CCP leg of client-cleared trade exposures)	-
Adjusted effective notional amount of written credit derivatives	306,212
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(271,573)
Total derivative exposures	1,298,484
Securities financing transaction exposures	
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	21,825,298
(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,072,823)
Counterparty credit risk exposure for SFT assets	1,327,687
Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-
Agent transaction exposures	-
(Exempted CCP leg of client-cleared SFT exposure)	-
Total securities financing transaction exposures	22,080,162
Other off-balance sheet exposures	
Off-balance sheet exposures at gross notional amount	6,617,357
(Adjustments for conversion to credit equivalent amounts)	(3,282,553)
Other off-balance sheet exposures	3,334,804
Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)	
(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
Capital and total exposures	
Tier 1 capital	1,030,359
Total leverage ratio exposures	43,328,495
Leverage ratio	2.38%
Choice on transitional arrangements and amount of derecognised fiduciary items	
Choice on transitional arrangements for the definition of the capital measure	-
Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	-

Description of the processes used to manage the risk of excessive leverage	Leverage ratio is reported to and monitored by ALCO on a monthly basis. Internal limits have been set up for each business line in accordance with the Company's risk appetite. Finance monitors the leverage usage against the limits on a daily basis.
Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers	As at 31 October 2017, the leverage exposure is mainly driven by securities financing transactions (51%), cash (12%), loans and advances (11%), trading securities (8%) and settlement balances (6%)

As at 31 October 2016

£'000

Summary reconciliation of accounting assets and leverage ratio exposures

	Applicable Amounts
Total assets as per published financial statements	34,426,634
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	-
Adjustments for derivative financial instruments	(373,260)
Adjustments for securities financing transactions "SFTs"	815,882
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	2,609,783
(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-
(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	-
Other adjustments	1,023,634
Total leverage ratio exposure	38,502,673

Leverage ratio common disclosure

	CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	13,970,331
(Asset amounts deducted in determining Tier 1 capital)	(7,580)
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	13,962,751
Derivative exposures	
Replacement cost associated with <i>all</i> derivatives transactions (ie net of eligible cash variation margin)	347,046
Add-on amounts for PFE associated with <i>all</i> derivatives transactions (mark-to-market method)	869,974
Exposure determined under Original Exposure Method	-
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-
(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-
(Exempted CCP leg of client-cleared trade exposures)	-
Adjusted effective notional amount of written credit derivatives	68,203
(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(39,596)
Total derivative exposures	1,245,627
Securities financing transaction exposures	
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	20,342,595
(Netted amounts of cash payables and cash receivables of gross SFT assets)	(410,166)
Counterparty credit risk exposure for SFT assets	646,129
Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	-
Agent transaction exposures	-
(Exempted CCP leg of client-cleared SFT exposure)	-
Total securities financing transaction exposures	20,578,558
Other off-balance sheet exposures	
Off-balance sheet exposures at gross notional amount	5,386,124
(Adjustments for conversion to credit equivalent amounts)	(2,670,387)
Other off-balance sheet exposures	2,715,737
Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)	
(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	-
Capital and total exposures	
Tier 1 capital	953,563
Total leverage ratio exposures	38,502,673
Leverage ratio	2.48%
Choice on transitional arrangements and amount of derecognised fiduciary items	
Choice on transitional arrangements for the definition of the capital measure	-
Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	-

Description of the processes used to manage the risk of excessive leverage	Leverage ratio is reported to and monitored by ALCO on a monthly basis. Internal limits have been set up for each business line in accordance with the Company's risk appetite. GRM monitors the leverage usage against the limits on a weekly basis.
Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers	As at 31 October 2016, the leverage exposure is mainly driven by securities financing transactions (53%), loans and advances (9%), settlement balances (9%), cash (8%) and trading securities (6%).

4.0 Capital Requirements

Capital adequacy and capital ratios measured are monitored daily against internal thresholds by the Regulatory Reporting team in the Finance department. Any breaches would be escalated immediately. In addition ALCO receives monthly reports detailing capital requirements, while the Board and the RC are updated on a quarterly basis.

Analysis, monitoring and reporting of risk profiles and performance against risk appetite limits and tolerances are conducted by the relevant risk functions. Results are reported to the RC at least quarterly, with management committees updated on a more regular basis.

As at 31 October 2017, the Company's minimum capital requirements are illustrated below, expressed in terms of risk-weighted exposure, as calculated by the approaches adopted by the Company to calculate the minimum capital resources requirements. Exposure classes not mentioned below were immaterial and are not shown separately.

Table 8: Risk exposure amount by risk type and calculation approach adopted

As at 31 October 2017	Risk-weighted Exposure	CET1 Capital requirement @ 4.5%	Tier 1 Capital requirement @ 6%	Total Capital requirement @8%
<i>£'000</i>				
Risk-weighted exposure amounts for credit and counterparty credit				
<u>Calculated under the Standardised Approach</u>				
Central governments or central banks	45,599	2,052	2,736	3,648
Public sector entities	74,988	3,374	4,499	5,999
Multilateral Development Banks	-	-	-	-
Institutions	714,601	32,157	42,876	57,168
Corporates	3,045,028	137,026	182,702	243,602
Secured by mortgages on immovable property	286,888	12,910	17,213	22,951
Equity	18,848	848	1,131	1,508
Other items	23,945	1,078	1,437	1,916
	<u>4,209,897</u>	<u>189,445</u>	<u>252,594</u>	<u>336,792</u>
Risk exposure amount for contributions to the default fund of a CCP	56,896	2,560	3,414	4,552
	<u>4,266,793</u>	<u>192,006</u>	<u>256,008</u>	<u>341,343</u>
Risk-weighted exposure amount settlement/delivery risk in the Trading book	59	3	4	5
Risk-weighted exposure amount for position, foreign exchange and commodities risks				
<u>Calculated under the Standardised Approach</u>				
Interest Rate	2,036,620	91,648	122,197	162,930
Equity	42,469	1,911	2,548	3,398
Foreign Exchange	89,433	4,024	5,366	7,155
Commodities	19,098	859	1,146	1,528
	<u>2,187,620</u>	<u>98,443</u>	<u>131,257</u>	<u>175,010</u>
Risk-weighted exposure amount for operational risk				
<u>Calculated under the Basic Indicator Approach</u>				
	695,680	31,306	41,741	55,654
Risk-weighted exposure amount for credit valuation adjustment				
<u>Calculated under the Standardised Method</u>				
	6,840	308	410	547
Total	7,156,992	322,065	429,419	572,559
Surplus CET1 Capital over the minimum requirement		708,295		
Surplus Tier1 Capital over the minimum requirement			600,940	
Surplus Total Capital over the minimum requirement				669,045

As at 31 October 2016

	Risk-weighted Exposure	CET1 Capital requirement @ 4.5%	Tier 1 Capital requirement @ 6%	Total Capital requirement @8%
<i>£'000</i>				
Risk-weighted exposure amounts for credit and counterparty credit				
<i>Calculated under the Standardised Approach</i>				
Central governments or central banks	44,097	1,984	2,646	3,528
Public sector entities	245	11	15	20
Institutions	390,852	17,588	23,451	31,268
Corporates	2,657,386	119,582	159,443	212,591
Secured by mortgages on immovable property	339,380	15,272	20,363	27,150
Equity	25,316	1,139	1,519	2,025
Other items	5,751	259	345	460
	<u>3,463,026</u>	<u>155,836</u>	<u>207,782</u>	<u>277,042</u>
Risk exposure amount for contributions to the default fund of a CCP	52,616	2,368	3,157	4,209
	<u>3,515,642</u>	<u>158,204</u>	<u>210,939</u>	<u>281,251</u>
Risk-weighted exposure amount settlement/delivery risk in the Trading book	136	6	8	11
Risk-weighted exposure amount for position, foreign exchange and commodities risks				
<i>Calculated under the Standardised Approach</i>				
Interest Rate	1,336,751	60,154	80,205	106,940
Equity	1,387	62	83	111
Foreign Exchange	32,133	1,446	1,928	2,571
Commodities	121,100	5,450	7,266	9,688
	<u>1,491,371</u>	<u>67,112</u>	<u>89,482</u>	<u>119,310</u>
Risk-weighted exposure amount for operational risk				
<i>Calculated under the Basic Indicator Approach</i>				
	587,427	26,434	35,246	46,994
Risk-weighted exposure amount for credit valuation adjustment				
<i>Calculated under the Standardised Method</i>				
	15,171	683	910	1,214
Total	5,609,747	252,439	336,585	448,780
Surplus CET1 Capital over the minimum requirement		701,124		
Surplus Tier1 Capital over the minimum requirement			616,978	
Surplus Total Capital over the minimum requirement				787,508

Calculation methods for the capital requirements above are listed in Appendix 3.

5.0 Credit Risk

5.1 Definition of Credit Risk

The Company defines credit risk as the risk of loss associated with counterparty's potential inability or unwillingness to fulfil its on- and off-balance sheet payment obligations. Credit risk may arise directly from the risk of default of a primary obligor (e.g., issuer, debtor, borrower or policyholder), or indirectly from a secondary obligor (e.g., guarantor, reinsurance) and/or through off-balance sheet exposures, contingent credit risk and/or transactional risk. Credit risk includes counterparty credit risk from both trading and non-trading activities. Exposure to credit risk occurs any time funds are extended, committed or invested through actual or implied contractual agreement.

5.2 Governance and Framework

Credit risk exposures across all lending and trading activities are aggregated and reported to the RC on a quarterly basis.

Individually, credit risk is controlled and reported as follows:

Banking Book Credit Risk

The loan credit risk profile is managed through the RC and more specifically the UKLMC and Wealth Management International Risk and Compliance Committee (WMI-RACC). The monitoring of Credit risk is a continual process. All borrowers are subject to a risk assessment and an exposure/limit review at least annually, with risk managed proactively on an ongoing basis. Borrowers that experience a material deterioration in credit quality and/or that may breach their covenant are added to a watch list which is monitored by the UKLMC, the WMI-RACC and senior management.

Risk appetite is managed and controlled through exposure limits defined across single names, country, industry sector and ratings. Single Name exposures across the Banking Book are limited to the lower of any RBC group limits and the Company's Single Name Framework.

Ongoing monitoring and review processes undertaken by Group Risk Management Credit include:

- Borrower Risk Rating (BRR) Regular Reviews – BRRs (measures probability of borrower default) are reviewed quarterly;
- Continuous Risk Assessment – The impact of new information on borrowers is assessed on an ongoing basis to adjust BRR if appropriate;
- Borrower Classification Code (BCC) – Considers the probability of recovery of all monies due to the Company, and is based on an assessment of the borrower's current repayment capacity, including structure and collateral; and
- Limit monitoring – Exposures are monitored against single name limits.

Lending credit risk is mitigated through guarantees, collateral and/or the use of credit default swaps (CDS) where commercially feasible. As at 31 October 2017, none of the loans within the Company's loan portfolio carried any CDS as the credit worthiness of the borrowers remains within the Company's risk appetite (2016: nil).

Risk appetite is managed and controlled through exposure limits across single names, country, industry sector and ratings. Loan transactions are signed off by the Regulatory Reporting team for compliance with Regulatory Large Exposure Limits.

Trading Credit Risk

Each trading credit risk type is managed both separately as part of the RBC Group framework, and as part of a combined exposure metric specific to the Company, with exposure and limit usage reported daily to front office and senior management by GRM Trading Credit Risk.

The Company's Single Name Limit Framework is the primary constraint on the Trading Credit Exposure. The limits defined as part of this framework are directly related to the Company's Risk Appetite Framework (RAF). This Framework is approved by the Board annually. The Managing Director of Credit Risk has the authority to approve temporary excesses. All operational limit excesses are reported to the UKMRC. Monthly exposure data is also reviewed by the UKCCRC, UKMRC, and RC.

The Regulatory Reporting team also reports the overall capital requirement, including capital requirement on the credit risk, to the Company's senior management on a daily basis.

Assigning Internal Capital and Credit Limits

The Company assigns credit risk ratings to its borrowers to reflect its assessment of the specific credit risk of each borrower over a 3-year horizon (or full credit cycle as appropriate) starting from the time of risk assessment or revision or confirmation. The 3-year time horizon is consistent with the term of the majority of the credit risk exposures. The Company extends the term of the rating horizon in the case of specific portfolios where the nature of the business predominantly exposes the bank to longer term exposures. On the other hand, the ratings of very weak borrowers are assigned to primarily reflect their riskiness based on current conditions and short-term expectations.

The rating is determined through an assessment of factors, specific to the industry and/or product, that differentiate the riskiness of the borrowers and reflects the probability of default of the borrower over the time horizon of the rating. The currency of the rating is maintained through a process of continuous monitoring and periodic review. This internal rating will be used to determine capital allocation.

5.3 Credit Risk Profile

The Company's credit risk is derived from its banking and trading activities. The table below indicates the risk-weighted exposure amounts of credit and counterparty credit risk from these two activities.

Table 9: Risk exposure amounts by banking and trading activities

As at 31 October 2017 £'000	Banking	Trading	Total
Risk-weighted exposure amounts for credit and counterparty credit			
<i>Calculated under the Standardised Approach</i>			
Central governments or central banks	34,183	11,416	45,599
Public sector entities	71,484	3,504	74,988
Institutions	86,829	627,772	714,601
Corporates	2,134,580	910,448	3,045,028
Secured by mortgages on immovable property	286,888	-	286,888
Equity	18,848	-	18,848
Other items	23,945	-	23,945
	<u>2,656,757</u>	<u>1,553,140</u>	<u>4,209,897</u>
Risk exposure amount for contributions to the default fund of a CCP	-	56,896	56,896
	<u>2,656,757</u>	<u>1,610,036</u>	<u>4,266,793</u>
Risk-weighted exposure amount settlement/delivery risk in the Trading book	<u>-</u>	<u>59</u>	<u>59</u>
Total	<u>2,656,757</u>	<u>1,610,095</u>	<u>4,266,851</u>

As at 31 October 2016

£'000

	Banking	Trading	Total
Risk-weighted exposure amounts for credit and counterparty credit			
<i>Calculated under the Standardised Approach</i>			
Central governments or central banks	20,477	23,620	44,097
Public sector entities	-	245	245
Institutions	14,557	376,295	390,852
Corporates	1,941,019	716,367	2,657,386
Secured by mortgages on immovable property	339,380	-	339,380
Equity	25,316	-	25,316
Other items	5,751	-	5,751
	<u>2,346,499</u>	<u>1,116,527</u>	<u>3,463,026</u>
Risk exposure amount for contributions to the default fund of a CCP	-	52,616	52,616
	<u>2,346,499</u>	<u>1,169,144</u>	<u>3,515,642</u>
Risk-weighted exposure amount settlement/delivery risk in the Trading book	<u>-</u>	<u>136</u>	<u>136</u>
Total	<u>2,346,499</u>	<u>1,169,279</u>	<u>3,515,778</u>

5.3.1 Banking Book Credit Risk

The Capital Markets Banking Book credit profile is managed through monthly review of the UKLMC, with the Wealth Management lending portfolio monitored at the quarterly WMI-RACC. The combined banking book credit risk profile for the Company is reported to the RC on a quarterly basis. All borrowers are subject to a risk assessment at least annually, with risk managed proactively on an ongoing basis. Borrowers with material deterioration in credit quality which may breach their covenant are added to a watch list for monitoring, and action is taken as appropriate.

Credit risk is mitigated through guarantees and collateral where considered appropriate and commercially feasible.

As at 31 October 2017, the Company had total gross credit exposures¹ of £16.4 billion (2016: £11.7 billion), and the average gross credit exposure is £13.5 billion over the year (2016: £9.5 billion). Detailed exposures by exposure class, residual maturity and geographic distribution are shown in the tables below.

¹ Gross credit risk exposure is after accounting offsets, but without taking into account the effects of the credit risk mitigation. Final exposure is after the accounting offsets and the credit risk mitigation.

Table 10: Gross credit exposures within the banking book

As at 31 October 2017

£'000

Exposure amounts for credit risk in the banking book

	Gross Exposure	Final Exposure	Risk- weighted Exposure
<u>On balance sheet exposures</u>			
Central governments or central banks	5,357,321	5,357,321	34,183
Public sector entities	142,969	142,969	71,484
Institutions	43,596	43,596	34,657
Corporates	3,550,517	1,554,664	1,249,851
Secured by mortgages on immovable property	671,763	652,466	278,258
Equity	18,848	18,848	18,848
Other items	23,945	23,945	23,945
	<u>9,808,959</u>	<u>7,793,809</u>	<u>1,711,226</u>
<u>Off balance sheet exposures</u>			
Central governments or central banks	106,184	53,092	-
Public sector entities			
Multilateral Development Banks	-	-	-
Institutions	90,286	58,397	52,172
Corporates	6,379,867	1,154,519	884,729
Secured by mortgages on immovable property	41,020	17,840	8,630
Equity	-	-	-
Other items	-	-	-
	<u>6,617,357</u>	<u>1,283,848</u>	<u>945,531</u>
Total	<u>16,426,315</u>	<u>9,077,656</u>	<u>2,656,757</u>
Small and medium enterprises included in Corporates	-	-	-

As at 31 October 2016

£'000

Exposure amounts for credit risk in the banking book

	Gross Exposure	Final Exposure	Risk- weighted Exposure
<u>On balance sheet exposures</u>			
Central governments or central banks	2,919,053	2,919,053	20,477
Institutions	35,487	35,487	7,107
Corporates	2,491,329	1,049,735	1,051,396
Secured by mortgages on immovable property	872,785	850,917	333,389
Equity	25,316	25,316	25,316
Other items	5,751	5,751	5,751
	<u>6,349,721</u>	<u>4,886,259</u>	<u>1,443,436</u>
<u>Off balance sheet exposures</u>			
Central governments or central banks	74,037	37,019	-
Institutions	59,065	37,246	7,449
Corporates	5,216,325	1,150,823	889,623
Secured by mortgages on immovable property	36,698	16,744	5,991
	<u>5,386,124</u>	<u>1,241,832</u>	<u>903,062</u>
Total	<u>11,735,846</u>	<u>6,128,091</u>	<u>2,346,499</u>
Small and medium enterprises included in Corporates	91,648	69,908	60,852

Table 11: Average gross credit exposures within the banking book

As at 31 October 2017

£'000

	Gross Exposure	Final Exposure	Risk-weighted Exposure
<u>On balance sheet exposures</u>			
Central governments or central banks	3,426,906	3,426,906	18,842
Institutions	57,539	158,263	31,850
Corporates	3,172,801	1,464,343	1,338,788
Secured by mortgages on immovable property	762,138	733,077	302,330
Equity	23,131	23,131	23,131
Other items	145,326	145,326	8,821
	7,587,841	5,951,046	1,723,762
<u>Off balance sheet exposures</u>			
Central governments or central banks	134,411	35,200	-
Institutions	59,542	32,000	6,408
Corporates	5,728,746	1,082,287	811,419
Secured by mortgages on immovable property	32,973	10,415	3,759
Equity	-	-	-
Other items	-	-	-
	5,955,672	1,159,902	821,586
Total	13,543,513	7,110,948	2,545,348
Small and medium enterprises, included in Corporates	8,910	6,091	5,239

As at 31 October 2016

£'000

	Gross Exposure	Final Exposure	Risk-weighted Exposure
<u>On balance sheet exposures</u>			
Central governments or central banks	2,032,091	2,032,091	17,517
Institutions	66,029	75,678	15,136
Corporates	2,204,636	850,716	850,417
Secured by mortgages on immovable property	858,079	839,210	346,921
Equity	24,292	24,292	24,292
Other items	5,682	5,682	5,680
	5,190,809	3,827,669	1,259,962
<u>Off balance sheet exposures</u>			
Central governments or central banks	66,042	32,200	-
Institutions	177,428	127,063	50,072
Corporates	4,045,421	981,614	780,159
Secured by mortgages on immovable property	33,349	19,493	6,822
	4,322,240	1,160,369	837,053
Total	9,513,049	4,988,038	2,097,015
Small and medium enterprises, included in Corporates	107,731	88,321	81,787

Table 12: Gross credit exposure by residual maturity

As at 31 October 2017

£'000

Gross exposure amounts for credit risk in the banking book	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
<u>On balance sheet exposures</u>						
Central governments or central banks	5,357,321	-	-	-	-	5,357,321
Public sector entities	-	-	-	142,969	-	142,969
Institutions	43,596	-	-	-	-	43,596
Corporates	17,134	85,276	453,595	2,626,262	368,251	3,550,517
Secured by mortgages on immovable property	27,107	84,883	191,260	368,513	-	671,763
Equity	-	-	-	-	18,848	18,848
Other items	23,945	-	-	-	-	23,945
	5,469,102	170,159	644,855	3,137,744	387,098	9,808,959
<u>Off balance sheet exposures</u>						
Central governments or central banks	-	-	-	106,184	-	106,184
Institutions	26,508	-	-	63,778	-	90,286
Corporates	26,047	6,102	567,693	5,410,573	369,453	6,379,867
Secured by mortgages on immovable property	96	2,217	24,772	13,934	-	41,020
Equity	-	-	-	-	-	-
Other items	-	-	-	-	-	-
	52,650	8,319	592,466	5,594,469	369,453	6,617,357
Total	5,521,753	178,478	1,237,321	8,732,213	756,551	16,426,315

As at 31 October 2016

£'000

Gross exposure amounts for credit risk in the banking book	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
<u>On balance sheet exposures</u>						
Central governments or central banks	2,919,053	-	-	-	-	2,919,053
Institutions	35,487	-	-	-	-	35,487
Corporates	58,285	37,354	129,027	2,193,625	73,038	2,491,329
Secured by mortgages on immovable property	53,686	42,666	206,103	570,330	-	872,785
Equity	-	-	-	-	25,316	25,316
Other items	5,751	-	-	-	-	5,751
	3,072,262	80,020	335,130	2,763,955	98,354	6,349,721
<u>Off balance sheet exposures</u>						
Central governments or central banks	-	-	74,037	-	-	74,037
Institutions	9,568	-	5,859	43,637	-	59,065
Corporates	65,987	13,237	443,434	4,600,806	92,860	5,216,325
Secured by mortgages on immovable property	-	-	5,319	31,379	-	36,698
	75,556	13,237	528,649	4,675,822	92,860	5,386,124
Total	3,147,817	93,258	863,779	7,439,778	191,214	11,735,846

Table 13: Final credit exposure by residual maturity

As at 31 October 2017

£'000

Final exposure amounts for credit risk in the banking book	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
<u>On balance sheet exposures</u>						
Central governments or central banks	5,357,321	-	-	-	-	5,357,321
Public sector entities	-	-	-	142,969	-	142,969
Institutions	43,596	-	-	-	-	43,596
Corporates	13,855	33,683	224,260	929,514	353,353	1,554,664
Secured by mortgages on immovable property	26,857	83,131	184,611	357,868	-	652,466
Equity	-	-	-	-	18,848	18,848
Other items	23,945	-	-	-	-	23,945
	5,465,574	116,813	408,871	1,430,350	372,200	7,793,809
<u>Off balance sheet exposures</u>						
Central governments or central banks	-	-	-	53,092	-	53,092
Institutions	26,508	-	-	31,889	-	58,397
Corporates	6,965	1,989	128,484	1,004,308	12,773	1,154,519
Secured by mortgages on immovable property	48	14	12,366	5,412	-	17,840
Equity	-	-	-	-	-	-
Other items	-	-	-	-	-	-
	33,521	2,003	140,850	1,094,701	12,773	1,283,848
Total	5,499,094	118,816	549,721	2,525,052	384,974	9,077,656

As at 31 October 2016

£'000

Final exposure amounts for credit risk in the banking book	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
<u>On balance sheet exposures</u>						
Central governments or central banks	2,919,053	-	-	-	-	2,919,053
Institutions	35,487	-	-	-	-	35,487
Corporates	58,098	26,860	99,401	792,338	73,038	1,049,735
Secured by mortgages on immovable property	52,228	42,305	193,464	562,921	-	850,917
Equity	-	-	-	-	25,316	25,316
Other items	5,751	-	-	-	-	5,751
	3,070,617	69,165	292,865	1,355,259	98,354	4,886,259
<u>Off balance sheet exposures</u>						
Central governments or central banks	-	-	37,019	-	-	37,019
Institutions	9,568	-	5,859	21,819	-	37,246
Corporates	42,288	2,564	62,386	1,028,262	15,323	1,150,823
Secured by mortgages on immovable property	-	-	1,834	14,910	-	16,744
	51,857	2,564	107,098	1,064,991	15,323	1,241,832
Total	3,122,474	71,729	399,963	2,420,249	113,677	6,128,091

Table 14: Credit conversion factor for off balance sheet credit exposures

As at 31 October 2017

£'000

Exposure amounts for credit risk in the banking book

	Conversion Factors	Gross Exposure	Final Exposure	Risk- weighted Exposure
<u>Off balance sheet exposures</u>				
Central governments or central banks	50%	106,184	53,092	-
Institutions	50%	63,778	31,889	46,870
	100%	26,508	26,508	5,302
Corporates	0%	19	-	-
	50%	6,354,087	1,147,854	878,064
	100%	25,762	6,665	6,665
Secured by mortgages on immovable property	50%	41,020	17,840	8,630
Total		<u>6,617,357</u>	<u>1,283,848</u>	<u>945,531</u>
		6,617,357	1,283,848	945,531

As at 31 October 2016

£'000

Exposure amounts for credit risk in the banking book

	Conversion Factors	Gross Exposure	Final Exposure	Risk- weighted Exposure
<u>Off balance sheet exposures</u>				
Central governments or central banks	50%	74,037	37,019	-
Institutions	50%	43,637	21,819	4,364
	100%	15,428	15,428	3,086
Corporates	0%	25	-	-
	20%	35,897	7,179	7,179
	50%	5,128,924	1,115,032	853,832
	100%	51,479	28,611	28,611
Secured by mortgages on immovable property	50%	36,698	16,744	5,991
Total		<u>5,386,124</u>	<u>1,241,832</u>	<u>903,062</u>

Table 15: Gross credit exposure by geographic distribution

As at 31 October 2017

£'000

Gross exposure amounts for credit risk in the banking book	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
<u>On balance sheet exposures</u>								
Central governments or central banks	-	-	5,207,154	-	-	150,167	-	5,357,321
Public sector entities	-	-	-	142,969	-	-	-	142,969
Institutions	87	-	13,877	3,636	2	25,974	20	43,596
Corporates	119,310	7,132	3,161,777	191,889	5,928	58,770	5,711	3,550,517
Secured by mortgages on immovable property	1,410	4,038	515,407	20,966	43,508	81,869	4,565	671,763
Equity	-	-	18,848	-	-	-	-	18,848
Other items	-	-	23,945	-	-	-	-	23,945
	120,807	11,170	8,941,008	359,460	49,438	316,780	10,296	9,808,959
<u>Off balance sheet exposures</u>								
Central governments or central banks	-	-	106,184	-	-	-	-	106,184
Institutions	-	-	90,286	-	-	-	-	90,286
Corporates	52,934	107,132	5,293,014	206,055	452,114	200,782	67,836	6,379,867
Secured by mortgages on immovable property	-	-	28,585	5,190	7,245	-	-	41,020
Equity	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
	52,934	107,132	5,518,068	211,245	459,359	200,782	67,836	6,617,357
Total	173,741	118,302	14,459,076	570,705	508,797	517,562	78,133	16,426,315

As at 31 October 2016

£'000

Gross exposure amounts for credit risk in the banking book	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
<u>On balance sheet exposures</u>								
Central governments or central banks	-	-	2,919,053	-	-	-	-	2,919,053
Institutions	47	-	14,802	926	2	19,687	22	35,487
Corporates	10,134	1,628	2,118,377	116,408	162,469	73,706	8,607	2,491,329
Secured by mortgages on immovable property	11,188	4,338	648,900	41,696	54,410	107,687	4,566	872,785
Equity	-	-	25,316	-	-	-	-	25,316
Other items	-	-	5,751	-	-	-	-	5,751
	21,369	5,966	5,732,199	159,029	216,881	201,080	13,196	6,349,721
<u>Off balance sheet exposures</u>								
Central governments or central banks	-	-	74,037	-	-	-	-	74,037
Institutions	-	-	59,065	-	-	-	-	59,065
Corporates	40,422	134,737	4,253,314	228,003	332,788	171,716	55,345	5,216,325
Secured by mortgages on immovable property	-	-	25,201	1,518	9,978	-	-	36,698
Equity	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
	40,422	134,737	4,411,617	229,521	342,766	171,716	55,345	5,386,124
Total	61,791	140,703	10,143,816	388,550	559,647	372,797	68,541	11,735,846

Table 16: Final credit exposure by geographic distribution

As at 31 October 2017

£'000

Final exposure amounts for credit risk in the banking book

	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
<u>On balance sheet exposures</u>								
Central governments or central banks	-	-	5,207,154	-	-	150,167	-	5,357,321
Public sector entities	-	-	-	142,969	-	-	-	142,969
Institutions	87	-	13,877	3,636	2	25,974	20	43,596
Corporates	119,310	7,132	1,324,722	70,240	3,792	24,419	5,050	1,554,664
Secured by mortgages on immovable property	1,410	4,010	502,656	20,474	39,631	79,914	4,370	652,466
Equity	-	-	18,848	-	-	-	-	18,848
Other items	-	-	23,945	-	-	-	-	23,945
	120,807	11,142	7,091,202	237,318	43,425	280,474	9,440	7,793,809
<u>Off balance sheet exposures</u>								
Central governments or central banks	-	-	53,092	-	-	-	-	53,092
Institutions	-	-	58,397	-	-	-	-	58,397
Corporates	23,674	53,557	868,687	83,573	52,747	58,865	13,417	1,154,519
Secured by mortgages on immovable property	-	-	14,217	-	3,623	-	-	17,840
Equity	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
	23,674	53,557	994,393	83,573	56,369	58,865	13,417	1,283,848
Total	144,482	64,699	8,085,595	320,891	99,795	339,339	22,857	9,077,656

As at 31 October 2016

£'000

Final exposure amounts for credit risk in the banking book

	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
<u>On balance sheet exposures</u>								
Central governments or central banks	-	-	2,919,053	-	-	-	-	2,919,053
Institutions	47	-	14,802	926	2	19,687	22	35,487
Corporates	10,134	1,628	923,941	52,258	11,560	41,606	8,607	1,049,735
Secured by mortgages on immovable property	11,053	4,290	638,477	33,390	53,133	106,224	4,350	850,917
Equity	-	-	25,316	-	-	-	-	25,316
Other items	-	-	5,751	-	-	-	-	5,751
	21,234	5,918	4,527,341	86,575	64,694	167,518	12,980	4,886,259
<u>Off balance sheet exposures</u>								
Central governments or central banks	-	-	37,019	-	-	-	-	37,019
Institutions	-	-	37,246	-	-	-	-	37,246
Corporates	20,422	76,526	832,576	91,652	77,088	41,252	11,308	1,150,823
Secured by mortgages on immovable property	-	-	11,483	272	4,989	-	-	16,744
Equity	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-
	20,422	76,526	918,324	91,924	82,077	41,252	11,308	1,241,832
Total	41,656	82,444	5,445,665	178,499	146,771	208,769	24,287	6,128,091

Further details on geographic distribution in relation to the EEA member states are shown below.

Table 17: Gross credit exposure by geographic distribution within the EEA

As at 31 October 2017

£'000

Gross exposure in relation to the EEA member states	United Kingdom	France	Spain	Germany	Luxembourg	Ireland	Netherlands	Others	Total
On balance sheet exposures									
Central governments or central banks	1,557,988	3,649,166	-	-	-	-	-	-	5,207,154
Institutions	13,725	-	-	9	-	72	-	72	13,877
Corporates	1,201,192	80,484	78,475	643,551	588,812	134,325	146,828	288,109	3,161,777
Secured by mortgages on immovable property	503,493	8,857	-	1,556	-	-	-	1,501	515,407
Equity	18,848	-	-	-	-	-	-	-	18,848
Other items	23,945	-	-	-	-	-	-	-	23,945
	3,319,191	3,738,507	78,475	645,116	588,812	134,397	146,828	289,681	8,941,008
Off balance sheet exposures									
Central governments or central banks	-	106,184	-	-	-	-	-	-	106,184
Institutions	63,778	-	-	-	-	-	26,508	-	90,286
Corporates	461,086	3,593,499	332,131	209,110	82,166	71,499	75,788	467,735	5,293,014
Secured by mortgages on immovable property	28,585	-	-	-	-	-	-	-	28,585
Equity	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-
	553,449	3,699,682	332,131	209,110	82,166	71,499	102,296	467,735	5,518,068
Total	3,872,640	7,438,190	410,606	854,226	670,978	205,896	249,124	757,417	14,459,076

As at 31 October 2016

£'000

Gross exposure in relation to the EEA member states	United Kingdom	France	Spain	Germany	Luxembourg	Ireland	Netherlands	Others	Total
On balance sheet exposures									
Central governments or central banks	535,498	2,383,555	-	-	-	-	-	-	2,919,053
Institutions	14,647	-	119	1	-	-	-	36	14,802
Corporates	731,229	42,851	103,071	218,735	435,213	255,358	89,639	242,281	2,118,377
Secured by mortgages on immovable property	636,004	9,837	-	1,557	-	-	-	1,502	648,900
Equity	25,316	-	-	-	-	-	-	-	25,316
Other items	5,751	-	-	-	-	-	-	-	5,751
	1,948,445	2,436,243	103,190	220,293	435,213	255,358	89,639	243,818	5,732,199
Off balance sheet exposures									
Central governments or central banks	-	74,037	-	-	-	-	-	-	74,037
Institutions	43,637	-	-	-	-	-	15,428	-	59,065
Corporates	405,076	3,076,296	326,293	110,987	107,948	-	103,394	123,318	4,253,314
Secured by mortgages on immovable property	25,201	-	-	-	-	-	-	-	25,201
Equity	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-
	473,915	3,150,334	326,293	110,987	107,948	-	118,822	123,318	4,411,617
Total	2,422,360	5,586,577	429,483	331,280	543,161	255,358	208,461	367,137	10,143,816

Table 18: Final credit exposure by geographic distribution within the EEA

As at 31 October 2017

£'000

Final exposure in relation to the EEA member states	United Kingdom	France	Spain	Germany	Luxembourg	Ireland	Netherlands	Others	Total
<u>On balance sheet exposures</u>									
Central governments or central banks	1,557,988	3,649,166	-	-	-	-	-	-	5,207,154
Institutions	13,725	-	-	9	-	72	-	72	13,877
Corporates	803,774	33,505	32,892	108,827	113,834	57,126	90,385	84,379	1,324,722
Secured by mortgages on immovable property	490,850	8,748	-	1,556	-	-	-	1,501	502,656
Equity	18,848	-	-	-	-	-	-	-	18,848
Other items	23,945	-	-	-	-	-	-	-	23,945
	2,909,130	3,691,420	32,892	110,392	113,834	57,198	90,385	85,951	7,091,202
<u>Off balance sheet exposures</u>									
Central governments or central banks	-	53,092	-	-	-	-	-	-	53,092
Institutions	31,889	-	-	-	-	-	26,508	-	58,397
Corporates	160,936	415,581	78,874	73,614	32,518	35,102	19,246	52,816	868,687
Secured by mortgages on immovable property	14,217	-	-	-	-	-	-	-	14,217
Equity	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-
	207,042	468,673	78,874	73,614	32,518	35,102	45,754	52,816	994,393
Total	3,116,172	4,160,093	111,766	184,006	146,352	92,300	136,138	138,767	8,085,595

As at 31 October 2016

£'000

Final exposure in relation to the EEA member states	United Kingdom	France	Spain	Germany	Luxembourg	Ireland	Netherlands	Others	Total
<u>On balance sheet exposures</u>									
Central governments or central banks	535,498	2,383,555	-	-	-	-	-	-	2,919,053
Institutions	14,647	-	119	1	-	-	-	36	14,802
Corporates	471,022	19,125	27,935	88,135	98,392	101,131	32,693	85,508	923,941
Secured by mortgages on immovable property	625,679	9,739	-	1,557	-	-	-	1,502	638,477
Equity	25,316	-	-	-	-	-	-	-	25,316
Other items	5,751	-	-	-	-	-	-	-	5,751
	1,677,913	2,412,419	28,054	89,693	98,392	101,131	32,693	87,045	4,527,341
<u>Off balance sheet exposures</u>									
Central governments or central banks	-	37,019	-	-	-	-	-	-	37,019
Institutions	21,819	-	-	-	-	-	15,428	-	37,246
Corporates	155,997	438,658	79,919	45,467	29,660	-	34,322	48,552	832,576
Secured by mortgages on immovable property	11,483	-	-	-	-	-	-	-	11,483
Equity	-	-	-	-	-	-	-	-	-
Other items	-	-	-	-	-	-	-	-	-
	189,299	475,677	79,919	45,467	29,660	-	49,750	48,552	918,324
Total	1,867,213	2,888,095	107,973	135,160	128,052	101,131	82,443	135,598	5,445,665

5.3.2 Credit Risk Adjustments

The Company defines a credit risk adjustment as the amount of specific loan provision for credit losses that has been recognised in its financial statements in accordance with the International Financial Reporting Standards (IFRS).

Under IFRS a provision for credit losses is established if there is objective evidence that the Company will not be able to collect all amounts due on its loans portfolio according to the original contractual terms or the equivalent value. This portfolio includes on-balance sheet exposures, such as loans and acceptances, and off-balance sheet items such as letters of credit, guarantees and unfunded commitments.

The provision is increased by the impairment losses recognised and decreased by the amount of write-offs, net of recoveries. The provision for credit losses for on-balance sheet items is included as a reduction to assets, and the provision relating to off-balance sheet items is included in Other liabilities, disclosed in the Company's financial statements.

The Company assesses whether objective evidence of impairment exists individually for loans that are individually significant and collectively for loans that are not individually significant. If it is determined that no objective evidence of impairment exists for an individually assessed loan, whether significant or not, the loan is included in a group of loans with similar credit risk characteristics and collectively assessed for impairment. Loans that are individually assessed for impairment and for which an impairment loss is recognised are not included in a collective assessment of impairment.

Provision for credit losses represent management's best estimates of losses incurred in the Company's loan portfolio at the balance sheet date. Management's judgement is required in making assumptions and estimations when calculating loan impairment provisions on both individually and collectively assessed loans. Any changes in the underlying assumptions and estimates used for both individually and collectively assessed loans can change from period to period and can significantly affect the results of operations.

Individually assessed loans

Loans which are individually significant are assessed individually for objective indicators of impairment. A loan is considered impaired when management determines that it will not be able to collect all amounts due according to the original contractual terms or the equivalent value.

Credit exposures of individually significant loans are evaluated based on factors including the borrower's overall financial condition, resources and payment record, and where applicable, the realisable value of any collateral. If there is evidence of impairment leading to an impairment loss, then the amount of the loss is recognised in income and is determined as the difference between the carrying amount of the loan, including accrued interest, and the estimated recoverable amount. The estimated recoverable amount is measured as the present value of expected future cash flows discounted at the loan's original effective interest rate, including cash flows that may result from the realisation of collateral less costs to sell. Individually-assessed impairment losses reduce the carrying amount of the loan through the use of a provision account and the amount of the loss is recognised in Provision for credit losses in the Statement of Income. Following impairment, interest income is recognised on the unwinding of the discount from the initial recognition of impairment.

Significant judgement is required in assessing evidence of impairment and estimation of the amount and timing of future cash flows when determining the impairment loss. When assessing objective evidence of impairment, the Company primarily considers specific factors such as the financial condition of the borrower, borrower's default or delinquency in interest or principal payments, local economic conditions and other observable data. In determining the estimated recoverable amount the Company considers discounted expected future cash flows at the effective interest rate inherent in the loan using a number of assumptions and inputs. Management judgement is involved when choosing these inputs and assumptions used such as the expected amount of the loan that will not be recovered and the cost of time delays in collecting principal and/or interest, and when estimating the value of any collateral held for which there may not be a readily accessible market. Changes in the amount expected to be recovered would have a direct impact on the Provision for credit losses.

Collectively assessed loans

Loans which are not individually significant, or which are individually assessed and not determined to be impaired, are collectively assessed for impairment. For the purposes of a collective evaluation of impairment, loans are grouped on the basis of similar risk characteristics, taking into account loan type, industry, geographic location, collateral type, past due status and other relevant factors.

The collective impairment allowance is determined by reviewing factors including: (i) historical loss experience, which takes into consideration historical probabilities of default, loss given default and exposure at default, in portfolios of similar credit risk characteristics, and (ii) management's judgment on the level of impairment losses based on historical experience relative to the actual level as reported at the balance sheet date, taking into consideration the current portfolio credit quality trends, business and economic and credit conditions, the impact of policy and process changes, and other supporting factors. Future cash flows for a group of loans are collectively evaluated for impairment on the basis of the contractual cash flows of the loans in the group and historical loss experience for loans with credit risk characteristics similar to those in the group. Historical loss experience is adjusted based on current

observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not currently exist. The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience. Collectively-assessed impairment losses reduce the carrying amount of the aggregated loan position through an allowance account and the amount of the loss is recognized in Provision for credit losses. The methodology and assumptions used to calculate collective impairment allowances are subject to uncertainty, in part because it is not practicable to identify losses on an individual loan basis due to the large number of individually insignificant loans in the portfolio. Significant judgment is required in assessing historical loss experience, the loss identification period and its relationship to current portfolios including delinquency, and loan balances; and current business, economic and credit conditions including industry specific performance, unemployment and country risks. Changes in these assumptions would have a direct impact on the Provision for credit losses and may result in changes in the related Allowance for credit losses.

Past due

The Company consider a loan being past due when the contractual payment of either principal or interest is not received by the Company in accordance with the payment schedule agreed. The past due loan is assessed for impairment purposes.

As at 31 October 2017, the Company does not have any specific credit risk adjustments (2016: nil). Detailed analysis on general provisions is included in the relevant disclosure below.

Table 19: Reconciliation of provision for credit losses

<u>Collectively assessed</u>	31 October 2017	31 October 2016
	£'000	£'000
Provisions brought forward	3,814	-
Provisions raised during the year	88	3,814
Provisions as at year end	3,902	3,814

No specific adjustments were proposed as at 31 October 2017 (2016: nil).

5.3.3 Counterparty Credit Risk

Trading book counterparty risk arises from exposure to the following:

- Securities finance transactions (SFT), as part of Capital Market's Fixed Income, Central Funding Group and Equity Finance businesses.
- Derivatives, primarily through Capital Market's Exchange traded derivatives (ETD) and over-the-counter (OTC) derivatives.

Table 20: Trading credit risk

As at 31 October 2017

£'000

Counterparty credit risk exposure by products	Gross Exposure	Final Exposure	Risk-weighted Exposure
<i>Calculated under the Standardised Approach</i>			
Exchange traded derivatives	1,341,192	1,077,345	194,293
OTC derivatives	289,021	29,422	6,289
SFTs	<u>2,760,542</u>	<u>2,760,542</u>	<u>1,352,642</u>
Total	<u>4,390,754</u>	<u>3,867,309</u>	<u>1,553,140</u>

As at 31 October 2016

£'000

Counterparty credit risk exposure by products	Original Exposure	Final Exposure	Risk-weighted Exposure
<i>Calculated under the Standardised Approach</i>			
Exchange traded derivatives	1,316,325	1,101,208	157,293
OTC derivatives	250,268	46,572	16,576
SFTs	<u>2,162,397</u>	<u>2,162,397</u>	<u>942,659</u>
Total	<u>3,728,990</u>	<u>3,310,176</u>	<u>1,116,527</u>

Each trading credit risk type is managed both separately as part of the RBC Group framework, and as part of a combined exposure metric specific to the Company, with exposure and limit usage reported daily to senior management by GRM Trading Credit Risk.

The Company's Single Name Limit Framework is the primary constraint of the Company's trading credit exposure. The limits defined as part of this framework are directly related to the Company's risk appetite.

The Company's counterparty credit risk profile is largely made up of equity securities finance / stock lending and fixed income repurchase transactions (repo). Counterparty credit risk is managed through increasing over-collateralisation margins on riskier counterparties with margins being actively managed and exchanged daily. Cash margins are introduced once the market value of collateral is insufficient to cover the underlying amount of the repurchase agreement or securities borrowed or loaned. Collateral is an important mitigation of credit risk. The Company holds collateral mainly in the form of debt securities and equities and has the ability to use CDSs in order to enhance credit protection.

Credit counterparty risk from derivatives is mitigated where possible through netting agreements whereby derivative assets and liabilities with the same counterparty can be offset. The Company requires all netting arrangement to be legally enforceable. Collateral and cash margins are also obtained as an important mitigation of credit risk.

The Company ensures that any collateral held is sufficiently liquid, legally effective, enforceable and regularly reassessed. Any collateral taken is generally subject to a valuation adjustment with a

percentage applicable to each type of collateral, which will be largely based on liquidity and price volatility of the underlying security.

As at 31 October 2017, the Company had total gross credit exposures of £4.3 billion (2016: £3.7 billion), and the average gross credit exposure is £4.4 billion over the year (2016: £3.7 billion). Detailed exposures by products, exposure class, residual maturity and geographic distribution are shown in the tables below.

Table 21: Counterparty credit risk by exposure class

As at 31 October 2017

£'000

Exposure amounts for counterparty credit risk in trading book	Gross Exposure	Final Exposure	Risk-weighted Exposure
<i><u>Calculated under the Standardised Approach</u></i>			
Central governments or central banks	210,058	210,058	11,416
Public sector entities	4,864	4,864	3,504
Institutions	3,083,913	2,580,677	627,772
Corporates	1,091,919	1,071,709	910,448
Total	<u>4,390,754</u>	<u>3,867,309</u>	<u>1,553,140</u>
Small and medium enterprises, included in Corporates	-	-	-

As at 31 October 2016

£'000

Exposure amounts for counterparty credit risk in trading book	Gross Exposure	Final Exposure	Risk-weighted Exposure
<i><u>Calculated under the Standardised Approach</u></i>			
Central governments or central banks	350,219	350,219	23,620
Public sector entities	1,225	1,225	245
Institutions	2,491,354	2,131,942	376,295
Corporates	886,193	826,791	716,367
Total	<u>3,728,990</u>	<u>3,310,176</u>	<u>1,116,527</u>
Small and medium enterprises, included in Corporates	-	-	-

Table 22: Average counterparty credit risk exposure

For the year ended 31 October 2017

£'000

Exposure amounts for counterparty credit risk in trading book	Gross Exposure	Final Exposure	Risk-weighted Exposure
<i>Calculated under the Standardised Approach</i>			
Central governments or central banks	277,091	277,091	8,487
Public sector entities	5,116	5,116	1,294
Institutions	3,006,402	2,582,575	597,727
Corporates	1,172,044	1,140,269	930,301
Total	4,460,653	4,005,051	1,537,808
Small and medium enterprises, included in Corporates	-	-	-

For the year ended 31 October 2016

£'000

Exposure amounts for counterparty credit risk in trading book	Gross Exposure	Final Exposure	Risk-weighted Exposure
<i>Calculated under the Standardised Approach</i>			
Central governments or central banks	277,322	277,322	7,106
Public sector entities	927	927	185
Institutions	2,600,858	2,047,803	321,512
Corporates	808,540	775,390	645,113
Total	3,687,649	3,101,443	973,916
Small and medium enterprises, included in Corporates	-	-	-

Table 23: Gross counterparty credit exposure by residual maturity

As at 31 October 2017

£'000

Gross exposure amounts for counterparty credit risk	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
Central governments or central banks	208,994	1,064	-	-	-	210,058
Public sector entities	2,984	1,880	-	-	-	4,864
Institutions	1,597,214	564,310	531,703	375,409	15,277	3,083,913
Corporates	739,091	241,388	94,391	17,050	-	1,091,919
Total	2,548,283	808,642	626,094	392,458	15,277	4,390,754

As at 31 October 2016

£'000

Gross exposure amounts for counterparty credit risk	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
Central governments or central banks	90,472	255,533	4,214	-	-	350,219
Public sector entities	-	1,225	-	-	-	1,225
Institutions	1,198,865	385,122	555,413	330,719	21,235	2,491,354
Corporates	514,594	208,350	135,083	19,637	8,529	886,193
Total	1,803,931	850,230	694,709	350,356	29,764	3,728,990

Table 24: Final counterparty credit exposure by residual maturity

As at 31 October 2017
£'000

Final exposure amounts for counterparty credit risk	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
Central governments or central banks	208,994	1,064	-	-	-	210,058
Public sector entities	2,984	1,880	-	-	-	4,864
Institutions	1,544,383	347,982	505,849	182,463	-	2,580,677
Corporates	735,098	230,729	88,936	16,947	-	1,071,709
Total	2,491,459	581,655	594,785	199,410	-	3,867,309

As at 31 October 2016
£'000

Final exposure amounts for counterparty credit risk	Less than 1 month	1 to 3 months	3 to 12 months	1 to 5 years	Greater than 5 years	Total
Central governments or central banks	90,472	255,533	4,214	-	-	350,219
Public sector entities	-	1,225	-	-	-	1,225
Institutions	1,155,905	293,964	525,743	156,330	-	2,131,942
Corporates	513,138	157,003	129,061	19,061	8,529	826,791
Total	1,759,514	707,725	659,017	175,391	8,529	3,310,176

Table 25: Gross counterparty credit exposure by geographic distribution

As at 31 October 2017
£'000

Gross exposure amounts for counterparty credit risk	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
Central governments or central banks	58,173	-	7,688	-	144,197	-	-	210,058
Public sector entities	3,163	-	-	-	-	1,701	-	4,864
Institutions	513,151	-	1,739,874	138,087	2	686,854	5,944	3,083,913
Corporates	101,560	102,792	654,603	69,957	-	163,009	-	1,091,919
Total	676,047	102,792	2,402,165	208,044	144,200	851,564	5,944	4,390,754

As at 31 October 2016
£'000

Gross exposure amounts for counterparty credit risk	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
Central governments or central banks	13,755	-	271,219	-	11,517	53,728	-	350,219
Public sector entities	-	-	-	-	-	1,225	-	1,225
Institutions	192,245	-	1,594,461	119,430	33	585,013	173	2,491,354
Corporates	457	71,630	602,951	85,670	-	125,485	-	886,193
Total	206,456	71,630	2,468,631	205,100	11,550	765,451	173	3,728,990

Table 26: Final counterparty credit exposure by geographic distribution

As at 31 October 2017
£'000

Final exposure amounts for counterparty credit risk	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
Central governments or central banks	58,173	-	7,688	-	144,197	-	-	210,058
Public sector entities	3,163	-	-	-	-	1,701	-	4,864
Institutions	512,360	-	1,693,140	138,087	2	232,188	4,900	2,580,677
Corporates	101,560	102,735	650,743	56,537	-	160,134	-	1,071,709
Total	675,256	102,735	2,351,571	194,624	144,200	394,023	4,900	3,867,309

As at 31 October 2016
£'000

Final exposure amounts for counterparty credit risk	Asia-Pacific	Caribbean	EEA	Europe Other	Middle East	North America	Others	Total
Central governments or central banks	13,755	-	271,219	-	11,517	53,728	-	350,219
Public sector entities	-	-	-	-	-	1,225	-	1,225
Institutions	191,603	-	1,593,724	119,430	33	226,980	173	2,131,942
Corporates	457	71,630	558,782	84,708	-	111,214	-	826,791
Total	205,815	71,630	2,423,724	204,138	11,550	393,147	173	3,310,176

Further details on geographic distribution in relation to the EEA member states and North America are shown below.

Table 27: Gross credit exposure by geographic distribution within the EEA and North America

As at 31 October 2017
£'000

Gross exposure in relation to the EEA member states

	United Kingdom	France	Netherlands	Germany	Belgium	Sweden	Finland	Spain	Others	Total
Central governments or central banks	7,688	-	-	-	-	-	-	-	-	7,688
Institutions	1,590,039	16,926	30,092	77,567	1,426	-	-	197	23,627	1,739,874
Corporates	398,043	6,012	25,806	4,605	-	5,536	10,684	-	203,918	654,603
Total	1,995,770	22,938	55,898	82,171	1,426	5,536	10,684	197	227,544	2,402,165

As at 31 October 2017
£'000

Gross exposure in relation to North America

	Canada	United States	Bermuda	Total
Central governments or central banks	-	-	-	-
Public sector entities	-	1,701	-	1,701
Institutions	418,361	268,493	-	686,854
Corporates	7,864	134,342	20,803	163,009
Total	426,225	404,536	20,803	851,564

As at 31 October 2016
£'000

Gross exposure in relation to the EEA member states

	United Kingdom	France	Netherlands	Germany	Belgium	Sweden	Finland	Ireland	Others	Total
Central governments or central banks	268,977	-	-	-	-	2,241	-	-	-	271,219
Institutions	1,500,247	9,040	13,822	6,862	40,647	-	-	9,507	14,335	1,594,461
Corporates	306,961	2,783	14,429	29	1	248	594	257,714	20,191	602,951
Total	2,076,185	11,823	28,251	6,891	40,648	2,490	594	267,221	34,527	2,468,631

As at 31 October 2016
£'000

Gross exposure in relation to North America

	Canada	United States	Bermuda	Total
Central governments or central banks	-	53,728	-	53,728
Public sector entities	-	1,225	-	1,225
Institutions	356,964	228,050	-	585,013
Corporates	6,679	116,058	2,748	125,485
Total	363,642	399,061	2,748	765,451

Table 28: Final credit exposure by geographic distribution within the EEA and North America

As at 31 October 2017
£'000

Final exposure in relation to the EEA member states

	United Kingdom	France	Netherlands	Germany	Belgium	Sweden	Finland	Spain	Others	Total
Central governments or central banks	7,688	-	-	-	-	-	-	-	-	7,688
Institutions	1,543,305	16,926	30,092	77,567	1,426	-	-	197	23,627	1,693,140
Corporates	397,496	4,254	25,806	4,605	-	5,536	10,684	-	202,363	650,743
Total	1,948,489	21,180	55,898	82,171	1,426	5,536	10,684	197	225,989	2,351,571

As at 31 October 2017
£'000

Final exposure in relation to North America

	Canada	United States	Bermuda	Total
Central governments or central banks	-	-	-	-
Public sector entities	-	1,701	-	1,701
Institutions	19,122	213,066	-	232,188
Corporates	7,864	133,750	18,521	160,134
Total	26,986	348,517	18,521	394,023

As at 31 October 2016

£'000

Final exposure in relation to the EEA member states	United Kingdom	France	Netherlands	Germany	Belgium	Sweden	Finland	Ireland	Others	Total
Central governments or central banks	268,977	-	-	-	-	2,241	-	-	-	271,219
Institutions	1,499,510	9,040	13,822	6,862	40,647	-	-	9,507	14,335	1,593,724
Corporates	306,961	2,481	14,429	29	1	248	594	213,847	20,191	558,782
Total	2,075,448	11,521	28,251	6,891	40,648	2,490	594	223,354	34,527	2,423,724

As at 31 October 2016

£'000

Final exposure in relation to North America	Canada	United States	Bermuda	Total
Central governments or central banks	-	53,728	-	53,728
Public sector entities	-	1,225	-	1,225
Institutions	50,216	176,764	-	226,980
Corporates	6,679	101,787	2,748	111,214
Total	56,894	333,504	2,748	393,147

5.3.4 Wrong-Way Risk Exposures

The Company has detailed policies and procedures in place to ensure that the wrong-way risk is closely monitored. General wrong-way risk exists when there is a positive correlation between the probability of default of counterparties to general market risk factors. GRM-Enterprise Market Risk monitors general wrong-way risk using a variety of counterparty risk metrics including geographically centred hypothetical and historical stress events and single risk factor stresses and sensitivities.

For securities financing transactions, specific wrong-way risk counterparty exposure is incurred when the Company enters into a securities financing transaction with a counterparty where the underlying collateral held by the Company includes securities issued by the counterparty or any affiliate of that counterparty. Collateral value will be deemed to be zero for any such security included in a counterparty collateral pool. Where the risk to the collateral and the risk of default by the counterparty are potentially correlated, GRM will evaluate and perform ad hoc wrong-way risk analyses against potential scenarios, as appropriate.

For derivative transactions, specific wrong-way risk exists when the exposure to a particular counterparty is positively and highly correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty. Specific guidelines have been established to calculate the exposure as well as the internal approval process to be used. GRM-Market Risk and GRM-Trading Credit Risk are responsible for the monitoring of the wrong-way risk in derivative transactions.

5.3.5 Counterparty Credit Risk Arising from Derivative Transactions

As at 31 October 2017, the final exposure arising from derivative transactions amounted to £741.7 million (2016: £818.5 million), excluding £365.1 million relating to the margin receivables (2016: £329.3 million). Refer to the previous section for detailed disclosure on exposures by product type.

Table 29: Counterparty credit risk for derivative transactions

As at 31 October 2017	Gross Positive Fair Value	Gross PFCE*	Netting Benefits	Initial Exposure	Collateral Allocated**	Final Exposure** *	Gross Notional
<i>£'000</i>							
<i>Calculated under the Mark to Market Method</i>							
<u><i>Exchanged Traded Derivatives</i></u>							
Commodities	236,320	587,888	(322,990)	501,218	(128,336)	372,882	5,820,379
Equities	64,323	405,191	(178,739)	290,775	(101,729)	189,046	6,333,299
Interest Rate	75,319	198,709	(88,459)	185,569	(35,216)	150,353	121,251,740
	<u>375,961</u>	<u>1,191,787</u>	<u>(590,187)</u>	<u>977,561</u>	<u>(265,281)</u>	<u>712,281</u>	<u>133,405,418</u>
<u><i>Over-The-Counter Derivatives</i></u>							
Commodities	41,841	3,804	(1,014)	44,631	(19,170)	25,461	38,038
Credit Default Swaps	12,408	68,089	(48,346)	32,151	(32,151)	-	727,062
Equities	2	-	(2)	-	-	-	-
Foreign Exchange and Gold	124,588	281,726	(230,986)	175,328	(175,328)	-	18,271,046
Interest Rate	514,881	53,283	(531,253)	36,911	(32,949)	3,962	15,309,476
	<u>693,720</u>	<u>406,902</u>	<u>(811,601)</u>	<u>289,021</u>	<u>(259,598)</u>	<u>29,422</u>	<u>34,345,622</u>
Total	<u>1,069,682</u>	<u>1,598,689</u>	<u>(1,401,788)</u>	<u>1,266,582</u>	<u>(524,879)</u>	<u>741,703</u>	<u>167,751,040</u>

*PFCE stands for potential future credit exposure.

**Collateral allocated amount is the collateral mark to market value after appropriate volatility adjustments.

***The final exposure does not include margin receivable of £365.1million (2016: £329.3 million).

As at 31 October 2016	Gross Positive Fair Value	Gross PFCE*	Netting Benefits	Initial Exposure	Collateral Allocated**	Final Exposure** *	Gross Notional
<i>£'000</i>							
<i>Calculated under the Mark to Market Method</i>							
<u><i>Exchanged Traded Derivatives</i></u>							
Commodities	349,297	637,997	(396,875)	590,419	(33,763)	556,656	6,286,233
Equities	42,069	294,554	(94,483)	242,140	(111,479)	130,661	4,486,928
Interest Rate	61,516	137,513	(55,691)	143,338	(58,730)	84,608	152,651,897
	<u>452,883</u>	<u>1,070,064</u>	<u>(547,049)</u>	<u>975,897</u>	<u>(203,972)</u>	<u>771,925</u>	<u>163,425,058</u>
<u><i>Over-The-Counter Derivatives</i></u>							
Commodities	35,620	2,859	-	38,479	(19,561)	18,918	28,592
Credit Default Swaps	2,309	12,762	(9,960)	5,111	(5,111)	-	205,884
Equities	8,832	38,015	(31,641)	15,206	-	15,206	827,939
Foreign Exchange and Gold	70,098	384,917	(300,547)	154,468	(154,468)	-	14,540,006
Interest Rate	533,128	52,939	(552,548)	33,519	(21,072)	12,447	17,351,842
	<u>649,987</u>	<u>491,492</u>	<u>(894,696)</u>	<u>246,784</u>	<u>(200,212)</u>	<u>46,572</u>	<u>32,954,262</u>
Total	<u>1,102,870</u>	<u>1,561,556</u>	<u>(1,441,745)</u>	<u>1,222,681</u>	<u>(404,184)</u>	<u>818,497</u>	<u>196,379,320</u>

*PFCE stands for potential future credit exposure.

**Collateral allocated amount is the collateral mark to market value after appropriate volatility adjustments.

***The final exposure does not include margin receivable of £329.3million (2015: £266.1 million).

The Company uses (CDS) to manage the traded credit risk arising from its trading activities. The table below indicates the notional amounts of CDS sold and purchased at year end.

Table 30: Notional of CDS

Notional £'000	2017	2016
<i>Own credit portfolio</i>		
Buy	420,851	146,655
Sell	<u>306,212</u>	<u>59,229</u>
Total	<u>727,062</u>	<u>205,884</u>

As at 31 October 2017, the Company received total collateral of £288.4 million for derivative transactions (2016: £368.8 million). The Company also pledges collateral for its OTC derivative transactions. As at the year end, if RBC's credit rating had been downgraded by three notches, it would be required to pledge additional collateral of £19.1 million to its OTC derivative counterparties (2016:

£53 million). The Company maintains a sufficient level of high quality liquid assets to satisfy any additional collateral requirements triggered by the downgrade of its credit rating.

5.3.6 Use of Credit Risk Mitigation Techniques

The Company uses the following credit risk mitigation techniques to actively manage its credit risks within its banking and trading portfolios:

- Netting and set-off,
- Collateral, and
- Risk transfers.

The Company has detailed policies in place to ensure that credit mitigation is appropriately recognised and captured for regulatory capital purposes. In order to recognise the credit risk mitigation, the Company takes into account the following factors:

- Effectiveness and enforceability of the legal arrangements in place;
- Correlation between the value of collateral and the credit quality of the obligor;
- Eligibility and quality of the collateral received.

The Company will often seek to enter into standard master netting agreements with counterparties for derivative and SFT transactions. These master netting agreements enable the Company to apply on/off balance sheet netting to reduce net credit exposure.

Collateral received from derivative and SFT transactions are mainly government and other high quality securities. All financial collateral is subject to daily revaluation and the Company also performs a revaluation on all properties held as collateral every three years. The valuation is then reviewed by a Credit Specialist and GRM. Credit Management is responsible for ensuring that the revaluation is executed in a timely manner.

The Company has established the following principles for collateral management:

- Collateral must be liquid i.e. actively traded in secondary markets.
- Collateral must be of high credit quality.
- Collateral must be readily settled at an authorized clearing agency.
- Collateral should be exchanged on a regular basis.
- GRM risk capture and reporting must be in place.
- Collateral must be able to be independently valued.
- Collateral should be held so that it is available and protected in the event of a counterparty's default.
- Securities issued by a counterparty or its related entities are not eligible as collateral, (excludes specified equity derivative transactions).
- Collateral should be diversified and not concentrated by issuer type or issue.

Guarantees and funded/unfunded risk participation arrangements have been sought mainly from other financial institutions by the Company to transfer its credit exposure to a counterparty which is more credit worthy than the original counterparty to reduce the overall credit risk.

The market risk and credit concentrations within the credit mitigation taken are monitored by the Regulatory Reporting team through its daily capital requirements and large exposure reporting process.

5.3.7 Use of External Credit Assessment Institutions

The Company uses the following external credit assessment institutions (ECAIs) for banking book credit risk and counterparty credit risk calculations purposes throughout the reporting period:

- Standard & Poor's, and
- Moody's.

As at 31 October 2017, the gross exposure amount subject to the use of the ECAIs was £6.4 billion (2016: £5.8 billion), which accounts for 30.9% of the total gross exposure² at year end (2016: 37.4%).

² Total gross exposure amounts exclude the exposure amount for contributions to the default fund of a CCP.

Table 31: Exposures amounts subjected to the use of the ECAIs

As at 31 October 2017

<i>£'000</i>	Gross Exposure	Final Exposure	Risk- weighted Exposures
Exposure amounts subject to the use of the ECAIs			
Central governments or central banks	264,038	210,946	-
Public sector entities	142,969	142,969	71,484
Multilateral Development Banks	-	-	-
Institutions	1,079,902	643,659	276,129
Corporates	4,958,532	1,302,404	726,055
Total	<u>6,445,441</u>	<u>2,299,979</u>	<u>1,073,668</u>

As at 31 October 2016

<i>£'000</i>	Gross Exposure	Final Exposure	Risk- weighted Exposures
Exposure amounts subject to the use of the ECAIs			
Central governments or central banks	402,853	365,835	2,218
Public sector entities	-	-	-
Institutions	1,026,143	718,426	200,866
Corporates	4,353,539	913,708	639,472
Total	<u>5,782,535</u>	<u>1,997,969</u>	<u>842,555</u>

As at 31 October 2017, majority of the Company's credit exposures subject to the use of ECAIs are to those counterparties with Credit Quality Step (CQS) 1 and 2³ (2017: 78.03%; 2016: 73.56%). Exposures amounts by CQS are shown below.

Table 32: Exposures amounts by CQS

<i>£'000</i>	2017			2016		
	Gross Exposure	Final Exposure	Risk- weighted Exposures	Gross Exposure	Final Exposure	Risk- weighted Exposures
CQS						
1	1,217,871	694,607	96,732	1,787,948	896,399	65,514
2	3,811,404	1,254,861	626,668	2,465,787	651,213	322,245
3	1,234,791	313,560	311,665	1,190,226	333,734	333,735
4	137,498	33,659	33,667	269,877	107,744	107,744
5	43,878	3,291	4,936	68,696	8,879	13,318
6	-	-	-	-	-	-
Total	<u>6,445,441</u>	<u>2,299,979</u>	<u>1,073,668</u>	<u>5,782,535</u>	<u>1,997,969</u>	<u>842,555</u>

³ CQS 1-3 represent investment grades (e.g. S&P: AAA+ to BBB-).

6.0 Market Risk

6.1 Definition of Market Risk

The Company defines the market risk as the risk of loss resulting from changes in market factors and the volatility of these factors. Market risk can be exacerbated by thinly-traded or illiquid markets.

The Company considered market risk to fall into the following categories:

- *Credit Spread Risk⁴*: The risk of loss due to the change in credit spreads on all financial instruments whose accounting fair value depends on credit spreads. This includes securities, credit derivatives and fair value liabilities.
- *Interest Rate Risk*: The risk of loss resulting from changes in interest rates and/or the volatility of interest rates.
- *Foreign Exchange Risk*: The risk of loss resulting from changes in exchange rates and/or the volatility of exchange rates.
- *Equity Risk*: The risk of loss resulting from changes in equity prices, indices and/or equity implied volatility.
- *Commodity Risk*: The risk of loss resulting from changes in commodity prices and/or the volatility of commodity prices.
- *Underwriting Risk*: The risk of loss resulting from (i) the failure to place or sell a particular security or bond concurrent with a negative market or credit risk event; and (ii) inadequate due diligence in connection with a securities offering.

6.2 Governance and Framework

Market Risk is managed through the Company's Market Risk Framework which is governed and overseen by the Head of Market Risk in London. The Company is also subject to the RBC Group policies laid out in the RBC Group Market Risk Framework and standing orders.

The market risk management function produces daily reports for the business and senior management detailing the Company's exposure against limits, as well as monthly summary reports for the UKMRMC and quarterly for the RC.

The Company's market risk appetite is set and reviewed by the Board. The Company has a range of limits in place covering the risk measurement metrics noted above. All limits set by the Company are consistent with the stated risk appetite. In addition to the Board approved limits, exposures are also limited by the RBC Group limit structure.

The Company uses a two tier market risk limit structure:

- *Tactical limits* are set and approved by the Board and are constrained by economic capital limits. Tactical limits are designed so risk taken cannot exceed available financial resources. All tactical limit excesses and limit changes are reported to the UKMRMC and the RC; and
- *Operational limits* are approved by the Managing Director of GRM-Market Risk and reviewed as required by the UKMRMC. Operational limits must always remain lower than tactical limits. All operational limit excesses and limit changes are reported to the UKMRMC.

⁴ CRR considers the credit spread risk in the trading book is part of specific interest rate risk.

The Regulatory Reporting team also reports the overall capital requirement, including capital requirement on market risk, to the Company's senior management on a daily basis.

Additional information is provided in the Company's Annual Accounts and Financial Statements.

6.3 Risk Profile

As at 31 October 2017, the Company's capital requirement in relation to the market risk is £175 million (2016: £119.3 million).

Table 33: Market risk by risk type

As at 31 October 2017	Risk-weighted Exposure	Capital Requirement
<i>£'000</i>		
Interest rate risk	2,036,620	162,930
<i>of which: Securitisation position risk</i>	<i>9,620</i>	<i>770</i>
Equity risk	42,469	3,398
Foreign-exchange risk	89,433	7,155
Settlement risk	-	-
Commodities risk	19,098	1,528
	<u>2,187,620</u>	<u>175,010</u>
As at 31 October 2016	Risk-weighted Exposure	Capital Requirement
<i>£'000</i>		
Interest rate risk	1,336,751	106,940
<i>of which: Securitisation position risk</i>	<i>27,360</i>	<i>2,189</i>
Equity risk	1,387	111
Foreign-exchange risk	32,133	2,571
Settlement risk	-	-
Commodities risk	121,100	9,688
	<u>1,491,371</u>	<u>119,310</u>

The Company had £42.4 million (2016 Nil) CIU trading book exposures (included in equity risk) as at the financial year-end.

The Company had no Underwriting risk as at the financial year-end.

6.4 Securitisations

6.4.1 Definitions

The Company defines securitisation as a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranching, having both of the following characteristics:

- a) payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; and
- b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

Re-securitisation means securitisation where the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation position.

A securitisation position can be either classified as:

- *Traditional securitisation*: a securitisation involving the economic transfer of the exposures being securitised.
- *Synthetic securitisation*: a securitisation where the transfer of risk is achieved by the use of credit derivatives or guarantees, and the exposures being securitised remain exposures of the originator institution.

6.4.2 Objectives of Securitisation Activities

The Company trades a range of European securitised products in the secondary market. These transactions are included in the Company's trading book. The Company is not engaged in any securitisation of its own originated assets or the securitisation of third party assets via special purpose vehicles.

The Company monitors the market and credit risks arising from its securitisation positions in the similar manner as those of non-securitisation trading positions. Refer to the Company's risk governance and control framework discussion in the previous sections.

In addition, the Company adopts RBC's Trading Book Securitisation Framework, which requires:

- a comprehensive understanding of the risk characteristics of its individual securitisation exposures as well as the risk characteristics of the pools underlying its securitisation exposures;
- access performance information on the underlying pools on an on-going basis in a timely manner, including exposure type, percentage of loans past due, default rate, prepayment rates, loans in foreclosure, property type, occupancy, average credit score or other measures of creditworthiness, average loan-to-value ratio and industry and geographic diversifications;
- a thorough understanding of all structural features of a securitisation transaction that would materially impact the performance of the Company's exposures to the transactions, such as the contractual waterfall and waterfall-related triggers, credit enhancement, liquidity enhancements, market value triggers, and deal-specific definitions of default.

6.4.3 Summary of Relevant Accounting Policies

Recognition and measurement of financial instruments

Financial instruments, including securitisation positions, are classified at inception, based on management's intention, as at fair value through profit or loss (FVTPL) or available-for-sale (AFS). Certain debt securities with fixed or determinable payments and which are not quoted in an active market may be classified as loans and advances.

Trading securities include securities purchased for sale in the near term which are classified as FVTPL by nature and securities which are designated as FVTPL under the fair value option and are reported at fair value. Obligations to deliver trading securities sold short are recorded as liabilities and carried at fair value. Realised and unrealised gains and losses on these securities are recorded as Net trading income. Dividend and interest income accruing on trading securities are recorded in Interest income. Interest and dividends accrued on interest-bearing and equity securities sold short are recorded in Interest expense.

AFS securities include: (i) securities which may be sold to meet liquidity needs, in response to or in anticipation of changes in interest rates and resulting prepayment risk, changes in foreign currency risk, changes in funding sources or terms; and (ii) loan substitute securities which are client financings that have been structured as after-tax investments rather than conventional loans in order to provide the clients with a borrowing rate advantage. AFS securities are measured at fair value. Unrealised gains and losses arising from changes in fair value are included in Other components of equity. Changes in

foreign exchange rates for AFS equity securities are recognised in Other components of equity, while changes in foreign exchange rates for AFS debt securities are recognised in Net trading income. When the security is sold, the cumulative gain or loss recorded in Other components of equity is included as net gain (loss) on AFS securities in Net trading income. Purchase premiums or discounts on AFS debt securities are amortised over the life of the security using the effective interest method and are recognised in Net interest income. Dividend and interest income accruing on AFS securities are recorded in Net interest income.

At each reporting date, and more frequently when conditions warrant, the Company evaluates AFS securities to determine whether there is any objective evidence of impairment. Such evidence includes: for debt instruments, when an adverse effect on future cash flows from the asset or group of assets can be reliably estimated; for equity securities, when there is a significant or prolonged decline in the fair value of the investment below its cost.

When assessing impairment for debt instruments the Company primarily considers counterparty ratings and security-specific factors, including subordination, external ratings, and the value of any collateral held, for which there may not be a readily accessible market. Significant judgement is required in assessing impairment as management is required to consider all available evidence in determining whether objective evidence of impairment exists and whether the principal and interest on the AFS debt security can be fully recovered.

In assessing whether there is any objective evidence that suggests that equity securities are impaired, the Company considers factors which include the length of time and extent the fair value has been below cost, along with management's assessment of the financial condition, business and other risks of the issuer. Management weighs all these factors to determine the impairment but to the extent that management judgement may differ from the actual experience of the timing and amount of the recovery of the fair value, the estimate for impairment could change from period to period based upon future events that may or may not occur, the conclusion for the impairment of the equity securities may differ.

If an AFS security is impaired, the cumulative unrealised loss previously recognised in Other components of equity is removed from equity and recognised under Net trading income. This amount is determined as the difference between the cost/amortised cost and current fair value of the security less any impairment loss previously recognised. Subsequent to impairment, further declines in fair value are recorded in Net trading income, while increases in fair value are recognised in Other components of equity until sold. For AFS debt securities, reversal of previously recognised impairment losses is recognised in Statement of Income if the recovery is objectively related to a specific event occurring after recognition of the impairment loss.

Derecognition of financial assets

Financial assets are derecognised from the Balance Sheet when the contractual rights to the cash flows from the assets have expired, when the Company retains the rights to receive the cash flows of the assets but assume an obligation to pay those cash flows to a third party subject to certain pass-through requirements or when the contractual rights to receive the cash flows and substantially all of the risk and rewards of the assets have been transferred. When the Company retains substantially all of the risks and rewards of the transferred assets, the transferred assets are not derecognised from the Balance Sheet and are accounted for as secured financing transactions. When the Company neither retains nor transfers substantially all risks and rewards of ownership of the assets, the Company derecognises the assets if control over the assets is relinquished. If the Company retains control over the transferred assets, the Company continues to recognise the transferred assets to the extent of its continuing involvement.

6.4.4 Risk Profile

As at 31 October 2017, the Company had a total exposure of £6.5 million (2015: £26 million) in relation to the securitisation positions, resulting in own funds requirement of £0.7 million (2016: £2.1million) using the Standardised calculation. Detailed analysis on the securitisation positions is included in the tables below.

Table 34: Exposures by underlying exposure type

As at 31 October 2017

£'000

Exposure Type	Exposure	Risk-weighted Exposure	Capital Requirement
<i>Traditional securitisation</i>			
Residential mortgages	-	-	-
Credit card receivables	4,408	882	71
Consumer loans	2,106	8,732	699
Other assets	30	6	.5
	6,543	9,620	770

As at 31 October 2016

£'000

Exposure Type	Exposure	Risk-weighted Exposure	Capital Requirement
<i>Traditional securitisation</i>			
Residential mortgages	23,404	4,681	374
Credit card receivables	100	20	2
Consumer loans	-	-	-
Other assets	2,538	22,659	1,813
	26,042	27,360	2,189

Table 35: Securitisation exposures by seniority

As at 31 October 2017

£'000

Tranche	Exposure	Risk-weighted Exposure	Capital Requirement
Senior	5,867	1,173	94
Mezzanine	-	-	-
First loss	676	8,446	676
	6,543	9,620	770

As at 31 October 2016

£'000

Tranche	Exposure	Risk-weighted Exposure	Capital Requirement
Senior	26,042	27,360	2,189
Mezzanine	-	-	-
First loss	-	-	-
	26,042	27,360	2,189

Table 36: Securitisation exposures by risk weighting

As at 31 October 2017

£'000

Risk Weighting	Exposure	Risk-weighted Exposure	Capital Requirement
<i>Exposures rated by ECAIs</i>			
20%	5,867	1,173	94
50%	-	-	-
100%	-	-	-
350%	-	-	-
1250%	-	-	-
	<u>5,867</u>	<u>1,173</u>	<u>94</u>
<i>Exposures not rated by ECAIs</i>			
1250%	676	8,446	676
Total	<u>6,543</u>	<u>9,620</u>	<u>770</u>

As at 31 October 2016

£'000

Risk Weighting	Exposure	Risk-weighted Exposure	Capital Requirement
<i>Exposures rated by ECAIs</i>			
20%	24,241	4,848	388
50%	-	-	-
100%	-	-	-
350%	-	-	-
1250%	-	-	-
	<u>24,241</u>	<u>4,848</u>	<u>388</u>
<i>Exposures not rated by ECAIs</i>			
1250%	1,801	22,512	1,801
Total	<u>26,042</u>	<u>27,360</u>	<u>2,189</u>

The Company uses the following three ECAIs in assigning the appropriate risk weights for the securitisation positions held:

- Standard & Poor's,
- Moody's, and
- Fitch Ratings.

7.0 Operational Risk

The Company defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, and includes legal risk. The Company assesses its operational risk profile through a combination of qualitative and quantitative methods.

A variety of risk and control criteria are used to assess different business lines within the Company. The information is used to generate the risk profiles for each business area. These quantitative profiles are analysed at an aggregate level to provide a view of the risk profile of the business and the local platform as a whole. These profiles are reported to various committees for discussion and action. Specific risks and issues as well as overall themes are discussed.

The Operational Risk Appetite Framework is a formally articulated structure comprised of an operational risk appetite, operational risk tolerance and operational risk profile. The Company's Operational Risk Appetite definition is: 'The level of operational risk the Company is willing to accept on a risk-reward basis. The operational risk tolerance is defined as the operational risk level beyond

which the entity/ platform/ business line should not go, regardless of what the entity/ platform/ business is comfortable with’.

An operational risk report is presented to each of the committees and captures both Capital Markets and Wealth Management activities within the Company.

The Company has adopted the Basic Indicator Approach to calculate the own funds requirement for operational risk. As at 31 October 2017, the own funds requirement for operational risk is £55.7 million (2016: £47.0 million).

8.0 Non-trading Book Equity Exposures

The Company holds a small equity portfolio within its non-trading book in order to maintain its memberships with a number of clearing houses and exchanges in Europe. The Company has no intention of actively trading these equities for short term profit making purposes.

This equity portfolio has been disclosed as AFS securities in the Company’s audited financial statements in according to IFRS. The Company measures its AFS securities at fair value. Unrealised gains and losses arising from changes in fair value are included in Other components of equity. Changes in foreign exchange rates for AFS equity securities are recognised in Other components of equity, while changes in foreign exchange rates for AFS debt securities are recognised in Net trading income. When the security is sold, the cumulative gain or loss recorded in Other components of equity is included as net gain (loss) on AFS securities in Net trading income. Dividend and interest income accruing on AFS securities are recorded in Net interest income.

At each reporting date, and more frequently when conditions warrant, the Company evaluates AFS securities to determine whether there is any objective evidence of impairment (e.g. a significant or prolonged decline in the fair value of the investment below its cost). If an AFS security is impaired, the cumulative unrealised loss previously recognised in Other components of equity is removed from equity and recognised under Net trading income. This amount is determined as the difference between the cost and current fair value of the security less any impairment loss previously recognised. Subsequent to impairment, further declines in fair value are recorded in Net trading income, while increases in fair value are recognised in Other components of equity until sold.

As at 31 October 2017, the Company had a total AFS reserve of £33.6 million (2016: £20.5 million) arising from the non-trading book equity exposures. This AFS reserve has been fully included in the Company’s CET1 Capital since 1 January 2015.

Table 37: Non-trading book equity exposures

	2017	2016
<i>£'000</i>	Unlisted	Unlisted
<u>As at 1 November</u>		
Cost	925	925
Accumulated unrealised gains	27,106	20,955
	<u>28,031</u>	<u>21,880</u>
Realised gains/(losses)	-	-
Unrealised gains/(losses)	17,426	6,151
As at 31 October	<u>45,457</u>	<u>28,031</u>
Accumulated unrealised gains	44,532	27,106
Less: Deferred tax	(10,878)	(6,621)
AFS reserve	<u>33,654</u>	<u>20,485</u>

9.0 Interest Rate Risk in the Banking Book

Interest Rate Risk in the Banking Book (IRRBB) arises from interest rate basis and duration mismatches between assets and liabilities.

RBCEL's IRRBB is governed by Royal Bank of Canada's interest rate risk policies which define the acceptable limits within which risks to Economic Value of Equity (EVE) and Net Interest Income (NII) over a 12-month time horizon are to be contained.

RBCEL's limit framework is maintained by Corporate Treasury which sets maximum NII and EVE sensitivity on a business segment level basis.

RBCEL's has limited tolerance for risks arising from Interest Rate Risk in the Banking Book (IRRBB). The majority of transactions are priced relative to short term interbank rates (resetting either monthly or quarterly). This can lead to some interest rate gaps in the very short end of the curve (1m v 3m) however RBCEL's IRRBB risk remains negligible.

10.0 Liquidity Risk

10.1 Definition of Liquidity Risk

Liquidity risk is the risk that the Company is unable to generate or obtain sufficient liquidity in a cost-effective manner to meet contractual and contingent commitments as they fall due. Liquidity management activities are designed to safeguard RBC against stresses, and to ensure the safety and soundness of the organisation.

Liquidity risk arises from mismatches in the timing and/or the value of on-balance sheet and off-balance sheet positions. Timing mismatches between the effective maturity of the Company's assets and liabilities, or unexpected draws from on and off-balance sheet commitments, create liquidity, or cash flow gaps. Differences in values of assets in comparison to repayment obligations can also create cash flow gaps. If the sources of cash (liquid assets / funding) are not available to meet these cash flow requirements, there is potential for a liquidity event to adversely impact the Company.

External or internal stress events have the potential to amplify liquidity mismatches and create adverse liquidity outcomes. For example, losses from credit, market, or operational risk events that negatively impact the Company's capital base can have an impact on the real or perceived credit quality of the Company, which can result in a loss of funding. Thus, liquidity risk is considered a "consequential" risk and must be managed in an integrated manner with credit, market, operational and other relevant risks.

10.2 Governance and Framework

Ultimate responsibility for managing liquidity risk resides with the Company's Board. The Board is tasked with ensuring that an effective systems and controls framework is in place for business activity, risk management and capital and liquidity risk management.

The Board ensures that effective governance arrangement and control frameworks are in place for liquidity risk, enabling it to be adequately overseen, assessed and managed. The role of the Board for liquidity risk, alongside monitoring and oversight of the liquidity position of the Company, includes approval of:

- Liquidity Risk Framework;
- Risk Appetite Statement and Metrics;

- Recovery and Resolution Plans; and
- the annual Internal Liquidity Adequacy Assessment Process (ILAAP).

Responsibility for the detailed management and oversight of liquidity risk is delegated to the RC and ALCO.

Within the Company, the risk tolerance statement is articulated through a series of limits, covering both internal and regulatory metrics. The Company's risk appetite takes direction from RBC (the parent) and includes additional aspects designed to capture locally specific risks. At the lowest level the Company employs desk limits to govern individual business, markets, products or transactions.

Key risks for the Company include a withdrawal of intragroup funding and an inability to monetise high quality liquid assets in the secured funding markets. These risks are mitigated somewhat by the regular review and extension of term intragroup funding arrangements and maintaining large GBP and Euro cash deposits at central banks.

Corporate Treasury is responsible for all liquidity reporting, including ensuring completeness and accuracy of data. The Company primarily uses RBC Group strategic platforms for liquidity risk measurement and monitoring.

Reports produced by the Corporate Treasury-Liquidity Measurement Team include, but are not limited to, LCR, NSFR, Asset Encumbrance, FSA 047 + FSA 048, ALMM and several internally defined reports designed to complement the regulatory requirements.

On a monthly basis an overview of management information is presented to the ALCO, this is also presented to the RC on a quarterly basis.

10.3 Risk Profile

The Company is comfortable with the level of liquidity risk within the entity and RBC enterprise. Throughout the financial year the Company remained within both internal risk appetite and regulatory limits.

The Company has in place a robust governance model with individuals empowered to make decisions that benefit the organisation without creating unnecessary risk.

At all times The Company maintains sufficient levels of short and long term funding and holds substantial high quality securities that are diverse in nature, prudently valued and regularly turned over as part of its trading activities.

Minimum liquid asset buffer requirements are defined internally through use of the Net Cash Flow Metric, an internally-defined metric that estimates net liquidity surpluses (or gaps) over specific short time horizons (7, 30, 60 days) for on-balance sheet and off-balance sheet transactions.

The metric measures the amount of potential liquidity and funding risk being taken after liquidity sources such as liquid assets have been factored in.

10.4 Individual Liquidity Adequacy Assessment Process

The ILAAP is the Company's internal attestation of the management and measurement of liquidity risk within the organisation, under both stressed and business as usual conditions. The ILAAP is a comprehensive document covering all aspects of liquidity risk. It is prepared annually, and approved by the Board.

Conclusions drawn from the ILAAP contribute to the risk management framework within the organisation.

11.0 Remuneration

Remuneration disclosures are made in line with the Company's application of the qualitative and quantitative remuneration disclosures requirement under the Pillar 3 framework and the requirements of Article 450 of the Capital Requirements Regulation (CRR). For enhanced disclosure on RBC's enterprise-wide compensation practices, please refer to RBC's proxy circular (last published on March 8, 2018⁵).

A separate Pillar 3 disclosure is made in relation to RBC Holdings (UK) Limited.

11.1 Constitution and Activities of the UKHRC

The Company has a Human Resources Committee (UKHRC) which is responsible for the application of the compensation principles, practices and processes within all of RBC's operations on the UK mainland, except in relation to BlueBay Asset Management Ltd (which is managed separately and publishes a separate Pillar 3 report). The UKHRC reviews and approves our compensation policies which support the business objectives determined by the Board of Directors and/or senior management and take into appropriate account sound risk management practices, including long-term and short-term risk.

Within the authority delegated by the Board, the UKHRC is responsible for approving compensation policy and, in doing so, takes into account the pay and benefits across our Company. This includes the terms of bonus plans, other incentive plans and the individual compensation packages of Executive Directors and Senior Managers, as well as oversight of compensation for other Material Risk Takers (MRTs).

Members (fiscal year)	Meeting Attendance (4 meetings in total)
▪ Nicola Mumford (Chair)	4 meetings
▪ Dr John Roberts (Resigned 16 March 2017)	1 meeting
▪ Janice Fukakusa (Resigned 15 December 2016)	1 meeting
▪ Jim Pettigrew	4 meetings
▪ Polly Williams (Appointed 3 April 2017)	3 meetings (2 as a Member)

All of the members of the UKHRC are independent of day to day management under the standards set out by the Board. Ms Mumford, Dr Roberts, Mr Pettigrew and Ms Williams are all independent Non-Executive Directors. No individual is involved in decisions relating to his or her own compensation.

During the year, the UKHRC received advice from the Company's Head of Human Resources, Head of Compliance, Chief Financial Officer and Chief Risk Officer, who provided advice to the UKHRC on the implications of the compensation policy on risk and risk management, and on the adjustments that should be made to levels of variable compensation payable to staff, at both a group and individual level, to take into account all relevant current and future risks.

In June 2017, the UKHRC completed its annual review of the Company's policies standards and protocols relating to compensation. Changes included introducing 5 and 7 year deferral periods for some MRTs to take account of the application to the Company of new UK deferral regulations, and incorporating a metric reflecting client satisfaction and loyalty in some bonus plans to enhance the

⁵ <http://www.rbc.com/investorrelations/pdf/2018englishproxy.pdf>

Company's use of non-financial performance metrics in line with UK regulatory expectations. Remuneration for the relevant categories of MRT is now paid in accordance with these new deferral requirements and the increased focus on non-financial performance

External Consultants

The UKHRC did not receive independent advice on compensation issues in 2017.

Role of the Relevant Stakeholders

The UKHRC takes full account of the Company's strategic goals in setting compensation policy and is mindful of its duties to shareholders and other stakeholders. The UKHRC seeks to preserve shareholder value by ensuring alignment of variable compensation payouts with risk and economic performance as well as the successful retention, recruitment and motivation of employees.

11.2 Criteria for the Identification of Material Risk Takers

The following criteria were applied to identify MRTs for the purposes of CRD IV, in line with the Regulatory Technical Standards set out in Commission Delegated Regulation (EU) No 604/2014 (RTS):

Employees captured by qualitative criteria include but are not limited to:

- Board of Directors
- Senior management including individuals registered with the UK regulators as holding a Senior Manager Function (an SMF) such as heads of business areas
- Senior control function management including risk, compliance and internal audit and heads of human resources, information technology, legal and tax
- Staff who have authority either individually or as members of a Committee to approve or veto new products or decisions that result in market or credit risk exposures that exceed specified thresholds as provided for in the RTS.

In addition, the Company has identified Material Risk Takers on the basis of its assessment of risks beyond those specifically identified in the RTS, taking into account prudential, operational, market, credit, conduct and reputational risks.

Employees captured by quantitative criteria

- Employees awarded total compensation of €500,000 or more in the preceding financial year
- Employees within the 0.3% of the number of staff who have been awarded the highest total compensation in the preceding year
- Employees awarded compensation in the preceding financial year which was equal to or greater than the lowest total compensation awarded to those meeting specified qualitative criteria
- In accordance with the RTS, employees identified under the quantitative criteria were then assessed to determine if the professional activities of the employee had the potential to have a material impact on the risk profile of the Company. As required under the RTS, all regulatory notification and approval requirements on the outcomes of this assessment were completed in respect of 2017.

11.3 Design and Structure of Compensation for Material Risk Takers

Our approach to compensation, including executive compensation, is based on five guiding principles:

1. Compensation aligns with shareholder interests

- Awards vary based on absolute and relative performance of RBC.
- Mid and long-term incentives vest and pay out over time, encouraging a longer-term view of increasing shareholder value.

2. Compensation aligns with sound risk management principles

- Our risk management culture is reflected in our approach to compensation. Our compensation practices appropriately balance risk and reward, and align with shareholder interests.
- Performance of individuals, lines of business and RBC overall is assessed on a number of measures, including adherence to risk management policies and guidelines.

3. Compensation rewards performance

- Our pay-for-performance approach rewards contributions of employees to individual, business segment and enterprise results relative to objectives that support our business strategies for sustainable growth over short, medium and long-term horizons, which are aligned with the risk appetite of RBC.

4. Compensation enables the Company to attract, engage and retain talent

- Talented and motivated employees are essential to building a sustainable future for RBC. We offer compensation that is competitive within the markets where we operate and compete for talent.
- Compensation programs reward employees for high performance and their potential for future contribution.

5. Compensation rewards behaviours that align with RBC values and drive exceptional client experiences.

- RBC values, embedded in our Code of Conduct, form the foundation of our culture and underpin our ongoing commitment to put the needs of our clients first and deliver value to all of our stakeholders.
- Risk conduct and compliance with policies and procedures are considered in determining performance-based compensation.

All the Company's compensation policies and plans align with these principles and are approved by the UKHRC. The Company's remuneration policies apply in the same way to all the branches of RBC Europe Limited.

Elements of compensation

a) Fixed Remuneration

All Material Risk Takers receive fixed remuneration that reflects their market value, responsibility and contribution to the Company.

b) Variable Remuneration

All Material Risk Takers, other than the Independent Non-Executive Directors and overseas Board Directors, are eligible to participate in discretionary performance-based incentive schemes.

Performance-based annual discretionary incentives may be awarded based on the performance of the Company, the business, and the individual as detailed below. Annual incentives may consist of a mix of cash and share-linked instruments. Annual incentives for Material Risk Takers are subject to review by the Chief Risk Officer Europe to ensure they adequately reflect risk and performance, and are subject to review by the UKHRC.

The amount of variable compensation to be awarded to employees is appropriately adjusted for risk in accordance with the Company's UK Compensation Risk and Performance Adjustment Process. Key risk considerations that are taken into account in the risk adjustment process include financial measures such as financial metrics, economic profit, areas of management judgment; and non-financial risk factors such as credit, market and operational risk exposure against risk appetite. Upon completion of the review, adjustments for risk will be recommended for consideration in the approval of final variable compensation.

RBC Europe Limited has obtained the necessary approvals to operate a maximum level of the ratio between the fixed and variable components of remuneration that does not exceed 200% of the fixed component of the total remuneration for each individual as required under the UK remuneration rules and Article 91(1)(g) of CRD IV

All compensation plans contain minimum compensation deferral requirements for Material Risk Takers in line with the UK remuneration rules, as well as compensation risk and performance adjustment processes. Deferral requirements vary by plan and arrangements are typically based on the size of bonus, type of compensation plan and the individual's role. Deferral requirements are summarised below:

All MRTs regardless of bonus plan	Minimum 40% deferral*	Minimum 60% deferral if total variable compensation is £500,000 or more
RBC Capital Markets Compensation Plan	The Plan contains a grid of deferral requirements starting at 30% when the bonus exceeds £75,000 and rising to 65% if the bonus is £3mm or more.	
RBC Investor and Treasury Services Incentive Programme	The Programme contains a grid of deferral requirements starting at 25% when the bonus is £50,000 and rising to 55% if the bonus is £1.5mm or more.	
RBC Discretionary Plans	These Plans award short-term incentives (STI) and mid-term incentives (MTI) which are equity-linked. The ratio of STI and MTI varies from individual to individual and is typically based on position level.	
RBC Wealth Management Incentive Compensation Plan (British Isles)	For Executives and Senior Leaders, the Plan's deferral requirements are in line with overall deferral requirements for Bank Executives (ranging from 40% at the VP level to 50% at the EVP level).	
RBC Wealth Management UK Sales & Relationship Management Compensation Plan	The Plan contains a grid of deferral requirements starting at 25% when the bonus is £100,000 and rising to 35% if the bonus is greater than £450,000.	

* unless the de minimis exemption criteria apply as permitted by parameters described in remuneration rules.

At least 50% of variable compensation is delivered in equity-linked awards which are subject to retention periods of 6 months post vesting, in line with the UK remuneration rules. The Company confirmed with the UK Prudential Regulation Authority in February 2017 that it would need to apply a 12 month retention period in line with the European Banking Authority's Guidelines on sound remuneration policies from the performance year 2017/2018 onwards.

Depending on the compensation plan, deferred compensation will vest as follows, in line with UK remuneration rules:

	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>
MRTs who perform a PRA senior management function	20%	20%	20%	20%	20%
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
MRTs whose meet the criteria of 'Risk Managers' as defined by the PRA for deferral purposes	20%	20%	20%	20%	20%
Other MRTs – Capital Markets or Investor & Treasury Services	25%	25%	50%	-	-
Other MRTs – Other Business Platforms	-	-	100%	-	-

Variable compensation for RBC Europe Limited is awarded through the following plans:

- **RBC Capital Markets Compensation Plan:** This Plan provides bonuses comprised of two parts (annual cash bonus and an equity-linked deferred bonus, if applicable under the deferral requirements outlined above). For MRTs, the non-deferred bonus is delivered 50% in cash and 50% in RBC share units and the deferred bonus has a minimum of 50% in RBC share units.
- **RBC Investor and Treasury Services Incentive Programme:** This Programme provides incentive awards comprised of two parts (annual cash bonus and an equity-linked deferred bonus, if applicable under the deferral requirements outlined above). For MRTs, the non-deferred bonus is delivered 50% in cash and 50% in RBC share units and the deferred bonus has a minimum of 50% in RBC share units.
- **RBC Discretionary Plans:** These plans provide incentive awards which are comprised of either one or two parts (an annual short-term incentive in cash (STI) and a mid-term incentive (MTI) which is equity-linked). For MRTs, the non-deferred variable compensation is delivered 50% in cash and 50% in RBC share units and the deferred component has a minimum of 50% in RBC share units.
- **RBC Wealth Management Incentive Compensation Plan (British Isles):** This Plan provides incentive awards comprised of two parts (annual cash component and a deferred incentive that is equity-linked). For MRTs, the non-deferred variable compensation is delivered 50% in cash and 50% in RBC share units and the deferred component is 50% equity-linked and 50% in deferred cash.
- **RBC Wealth Management UK Sales & Relationship Management Compensation Plan:** This Plan provides incentive awards comprised of two parts (annual cash component and an equity-linked deferred award, if applicable under the deferral requirements outlined above). For MRTs, the non-deferred award is delivered 50% in cash and 50% in RBC share units and the deferred component has a minimum of 50% in RBC share units.

Remuneration of control functions

RBC's enterprise Policy on Compensation Risk Management states that performance measures for senior employees responsible for financial and risk control activities will be based on the achievements and objectives of the functions, and their compensation will be determined independently from the performance of the specific business areas they support, therefore avoiding any potential conflicts of interest. Employees who fall under this arrangement include senior employees in Compliance, CFO Group, Group Risk Management, Internal Audit and Human Resources. Function Heads and/or the Function Operating Committee Members will continue to review and approve the individual performance of these employees against established objectives, which are independent of the performance of the business areas that they oversee. Remuneration for employees engaged in control functions is reviewed regularly for market alignment to ensure that remuneration levels are competitive.

11.4 The Link between Pay and Performance for Material Risk Takers

Variable compensation plans reward employees on the basis of several factors, including individual, business segment and enterprise results relative to established performance objectives that are aligned with the risk appetite of RBC. A significant portion of performance-based pay is deferred in the form of equity incentive awards (linked to RBC's share price) in order to align compensation with the risk time horizon and motivate employees to generate longer-term value for shareholders and remain accountable for decisions with longer risk-tails. To create a clear relationship between pay and performance, employees have an opportunity to earn higher compensation for outstanding performance, and conversely, earn less compensation when RBC, a business segment and/or individual results fall below expectations.

Incentive awards take into account firm-wide, business unit level and individual performance metrics. Firm-wide metrics include the financial performance of RBC; business unit level metrics include the financial performance of individual business units (with the exception of Control Functions); individual performance metrics include the employee's contribution to overall performance and achievement of individual performance objectives. In cases where firm-wide performance is weak, or in a net-loss position, or under extreme conditions of losses or unmitigated risks, bonus pools may be reduced to zero at the discretion of the RBC CEO, UKHRC and RBC Board of Directors.

All employees will be assessed as part of RBC's Performance Management process. Bonus payout decisions are made on a judgmental basis taking account of the performance measures.

At the individual level, there are a number of factors that are considered in determining the extent to which an employee participates in a discretionary bonus distribution. Individual performance is evaluated using both financial and non-financial measures.

When determining the size of the pool, financial measures such as profitability, compensation ratios and business/economic profit are considered depending on the type of plan and business area. Risk-adjusted financial metrics such as provision for credit losses, cost and quantity of capital are also considered.

Non-financial measures considered in the discretionary bonus evaluation process include the following:

- Adherence to our Code of Conduct. RBC's Code of Conduct (Code) promotes standards of ethical behaviour that apply to directors, senior management and all employees. Our Code fosters an open environment in which questions and concerns may be brought forward. It creates a frame of reference for dealing with sensitive and complex issues, and provides for accountability if standards of conduct are not upheld. All employees are expected to adhere to our Code, and failure to adhere through unethical or non-compliant behaviours results in disciplinary or corrective action, which may include immediate or eventual dismissal. All employees receive Code of Conduct training and testing on joining RBC and every year thereafter
- Compliance with a full range of risk management policies specific to individual job requirements as outlined in employee Performance Management Documents
- Assessment of key behaviours, which are part of the RBC Global Performance Management process, and typically include the obligation to:
 - Abide by the letter and spirit of rules and procedures established by regulators
 - Follow all relevant internal policies and procedures including, but not limited to, trading and position limits and standing orders
 - At all times, act in the best interests of RBC and its clients

- Escalate, on a timely basis, any areas of material concern related to any of the above
- Lead by example so that direct reports adopt similar high standards
- Reports from control functions, including those from Internal Audit, Compliance (regulatory gaps, trades beyond excess limits), and Group Risk Management regarding operational, market and credit risks, among others
- Assessment of accountabilities and detailed action plans to implement and monitor changes required to close the gaps identified during risk management or internal audit reviews

Employees who are not meeting the above mentioned non-financial performance standards for their role are subject to our corrective action process, which can include either a significant reduction in bonus amounts or dismissal.

Furthermore, prior to vesting, Material Risk Takers deferred compensation is subject to review under the Company's risk and performance adjustment process whereby actual risk and performance outcomes are reviewed and if materially different from assessments made when deferred compensation was granted, or if misconduct has occurred, then deferred compensation may be reduced or forfeited in full.

All bonus awards made to Material Risk Takers under the Company's variable compensation schemes are subject to malus and clawback under the RBC Forfeiture and Clawback Policy for Code Material Risk Takers. A reduction will be applied in cases of misconduct, a material failure of risk management or if there is a material downturn in financial performance. Since January 2015, all variable compensation awards made to Material Risk Takers are subject to clawback for a seven year period from the date of award as required under UK remuneration rules. This can be extended to ten years in relation to PRA-designated Senior Management Functions where there is an outstanding internal or external investigation at the end of the seven year period which could result in the application of clawback. Clawback can be applied in cases of misconduct or a material failure of risk management.

11.5 Disclosures on Remuneration

During the year ended 31st October 2017, remuneration for staff whose professional activities have a material impact on the risk profile of the business was as follows:

Table 38: Aggregate remuneration awarded during the financial year to MRTs

£'000,000

		Remuneration amount	Senior management	Other material risk takers
Fixed remuneration	1	Number of employees	27	90
	2	Total fixed remuneration (3 + 5 + 7)	11.00	27.34
	3	Of which: cash-based	10.66	25.95
	4	Of which: deferred	-	-
	5	Of which: shares or other share-linked instruments	-	-
	6	Of which: deferred	-	-
	7	Of which: other forms	0.34	1.39
	8	Of which: deferred	-	-
Variable remuneration	9	Number of employees	20	84
	10	Total variable remuneration (11 + 13 + 15)	15.30	25.94
	11	Of which: cash-based	3.61	9.96
	12	Of which: deferred	0.56	2.47
	13	Of which: shares or other share-linked instruments	11.69	15.98
	14	Of which: deferred	8.63	9.49
	15	Of which: other forms	-	-
	16	Of which: deferred	-	-
	17	Total remuneration (2 + 10)	26.30	53.28

Item 7: other forms of fixed remuneration includes employee benefits

Table 39: Deferred Remuneration for MRTs

£'000,000

Deferred and retained remuneration	Total amount of outstanding deferred remuneration			Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment	Total amount of amendment during the year due to ex post explicit adjustments	Total amount of amendment during the year due to ex post implicit adjustments	Total amount of deferred remuneration paid out in the financial year
	Vested	Unvested	Total				
Senior management	2.07	25.24	27.31	-	-	-	15.16
Cash	1.05	1.19	2.24	-	-	-	2.00
Shares/share-linked instruments	1.02	24.05	25.07	-	-	-	13.16
Cash-linked instruments	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Other material risk takers	5.36	28.22	33.57	-	-	-	19.95
Cash	1.41	2.86	4.27	-	-	-	0.97
Shares/share-linked instruments	3.95	25.36	29.30	-	-	-	18.98
Cash-linked instruments	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	7.43	53.46	60.88	-	-	-	35.11

As at 31 October 2017. Includes outstanding deferred remuneration granted prior to acquiring MRT status

Table 40: Special Payments

No MRTs were awarded guaranteed bonuses, sign-on awards or severance payments during 2017.

	Guaranteed bonuses		Sign-on awards		Severance payments	
	No. of employees	Total amount	No. of employees	Total amount	No. of employees	Total amount
Senior management	-	-	-	-	-	-
Other material risk takers	-	-	-	-	-	-

Table 41: MRTs with Total Remuneration above One Million Euros

The number of MRTs with total compensation awarded for the financial year which was EUR1 million or more, arranged by compensation band, was as follows:

Total Compensation Band (EUR)	Number of MRTs
1,000,000 < 1,500,000	11
1,500,000 < 2,000,000	5
2,000,000 < 2,500,000	5
2,500,000 < 3,000,000	0
3,000,000 < 3,500,000	1
3,500,000 < 4,000,000	0
4,000,000 < 4,500,000	0
4,500,000 < 5,000,000	0
5,000,000 < 6,000,000	1

12.0 Appendices

12.1 Appendix 1: Board Membership

Current Independent Non-Executive Directors

Director	Role	Biography
John Roberts (Residency: UK) Resigned on 16 March 2017	Chair Member of Audit Committee, Risk Committee, Nomination Committee, and UK Human Resources Committee	<p>John Roberts is the former CEO of United Utilities plc, Manweb and Hyder Utilities. His current roles include Chairman of the Halite Energy Group Limited, BlackRock New Energy Investment Trust, Impello plc and BlueBay Asset Management.</p> <p>He was an adviser to Glenmont Partners and Senn Delaney LLP.</p> <p>He is a Fellow of the Royal Academy of Engineering, the Institution of Engineering and Technology and the Association of Chartered Certified Accountants. He is a Companion of the Chartered Management Institute.</p> <p>He was awarded the CBE in 2005.</p>

<p>Jim Pettigrew (Residency: UK)</p>	<p>Chairman (since 16 March 2017) previously also Chair of Audit Committee and Risk Committee</p> <p>Member of Nomination Committee, Audit Committee, Risk Committee and UK Human Resources Committee</p>	<p>Jim Pettigrew has over 30 years of experience as a chartered accountant, with extensive experience in a listed environment at Board and Executive management level, including as CEO and Chairman.</p> <p>Jim trained with Ernst and Young before moving into the corporate sector where he has held several senior finance and leadership roles.</p> <p>He joined Sedgwick Group plc in 1988 rising to become Group Treasurer and stayed until December 1998 at which point he was Deputy Group FD.</p> <p>In January 1999 he joined ICAP plc which became a FTSE 100 company and the world's largest specialist inter-dealer broker, as Group Finance Director.</p> <p>He was Chief Operating and Financial Officer of Ashmore Group plc from 2006 to 2007 where he played an important role supporting the IPO initiative and managing the post IPO process both internally and externally.</p> <p>Jim then became Chief Executive Officer of CMC Markets plc in October 2007 having previously served as a Non- Executive Director with a seat on the Remuneration and Nominations Committees as well as chairing the Audit Committee.</p> <p>Currently Jim is Chairman of CYBG plc; Chairman of The Edinburgh Investment Trust PLC; Senior Independent Non-Executive Director of Crest Nicholson Holdings PLC; Chairman of RBC Europe Limited; Chairman of Scottish Financial Enterprise; Co- Chairman of the Financial Services Advisory Board with Nicola Sturgeon, First Minister of Scotland. Also, Jim has recently been appointed as a Non-Executive Director to the Audit, Remuneration, Risk and Nomination Committees for Rathbone Brothers plc.</p> <p>He was previously Non-Executive Director at Aberdeen Asset Management PLC, Non-Executive Director at AON UK Limited and Non-Executive Director at Hermes Fund Managers Limited. He is also the former President of the Institute of Chartered Accountants of Scotland.</p>
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<p>Nicola Mumford</p> <p>(Residency: UK)</p>	<p>Chair of UK Human Resources Committee and Nomination Committee</p> <p>Member of Audit Committee and Risk Committee</p>	<p>Nicola has spent the majority of her career with Wragge & Co LLP, the international law firm. She joined as a solicitor in 1987 and, since then, has gone on to become Senior Director and Managing Partner of the London Office. In her role as London Managing Partner, she was responsible for strategy for the London office, and the firm's business development. As a lawyer, she was Senior Litigation Partner in the firm's Dispute Resolution Group working with clients such as Legal and General, London Stock Exchange and others in the automotive sector. She currently also resides on the Board of Harbour Litigation Funding, the UK's largest provider of litigation funding.</p>
<p>Polly Williams</p> <p>(Residency: UK)</p> <p>Appointed 16 March 2017</p>	<p>Chair of Risk and Audit Committees.</p> <p>Member of UK Human Resources Committee and Nomination Committee</p>	<p>Polly Williams is a Non-Executive director of Jupiter Fund Management plc where she chairs the Audit and Risk Committee and is chair of the Audit and Risk Committees and Senior Independent Director at RBC Europe Limited. In addition Polly is Chair of the Audit Committee at TSB Group plc which she joined on the creation of the Board for the flotation from Lloyds Banking Group in 2014. She is also a member of both the Risk and Remuneration Committees. Polly is a non-executive director and chairs the Remuneration Committee at XP Power plc, a FTSE small cap engineering business. She is a Trustee and chairs the Audit Committee of Guide Dogs for the Blind.</p> <p>Polly trained as a Chartered accountant with KPMG where she was a partner in the financial sector practice for 6 years until she retired for family reasons. Since then she has held a number of non- executive roles in the IT, telecoms and financial sectors.</p>

Current Shareholder Representative Non-Executive Directors

Director	Role	Biography
<p>Janice Fukakusa</p> <p>(Residency: Canada)</p> <p>Resigned – 15 Dec 2016</p>	<p>Chief Administrative Officer and Chief Financial Officer, RBC</p> <p>Member of Audit Committee, Nomination Committee and UK Human Resources Committee.</p>	<p>Janice started her career with PricewaterhouseCoopers LLP, where she obtained the professional designations of chartered accountant and chartered business valuator.</p> <p>She holds a BA from University of Toronto and holds an MBA from Schulich School.</p>

<p>Troy Maxwell (Residency: Canada)</p>	<p>COO of RBC Capital Markets</p>	<p>Troy Maxwell is Chief Operating Officer of RBC Capital Markets with global responsibility for all operational and administrative matters of the firm, including optimizing cost base management and financial resources, and leading the response to regulatory change. Previously, Mr. Maxwell was Executive Vice President of Finance and Chief Financial Officer of RBC Capital Markets and Technology & Operations, where he oversaw all finance services to RBC's wholesale business and technology and operations platform.</p> <p>Mr. Maxwell is a champion for diversity-related initiatives at RBC and an active member of the community. Since 2009, he has served as the executive sponsor of RBC's Advancement of Women in Leadership committee, a global leadership forum responsible for driving actions to improve representation of senior women at the bank. Additionally, Mr. Maxwell is a senior advisor for RWomen, RBC Capital Markets' internal forum dedicated to fostering the development and career aspirations of women. Mr. Maxwell has played a key role in RBC's annual United Way campaign for several years and acts as Co-Chair of RBC's national Major Individual Gifts Committee. He is also a member of the United Way Toronto & York Region's Major Individual Giving Cabinet.</p> <p>Prior to joining RBC, Mr. Maxwell was Chief Financial Officer of CIBC World Markets and a partner at PricewaterhouseCoopers LLP, where he led the financial institutions and corporate treasury risk management consulting and advisory business.</p> <p>Mr. Maxwell is a Chartered Professional Accountant, and holds an Honours BA and a Master's Degree in Accounting from the University of Waterloo.</p>
<p>Nadine Ahn (Residency: Canada) Appointed on 2 June 2017</p>	<p>CFO, RBC Capital Markets</p>	<p>Nadine Ahn is currently Senior Vice-President, CFO Capital Markets, RBC. She has global accountability for financial governance, control, valuations and performance management for Investor & Treasury Services and Capital Markets, and is a member of Operating Committees for both businesses. She is also a member of the CAO & CFO Operating Committee and is based in Toronto, Canada.</p>

Executive Directors

Director	Role	Biography
Stephen Krag (Residency: UK)	Chief Financial Officer, Europe	<p>Stephen joined RBC Capital Markets in April 2011 from Daiwa Capital Markets Europe where he was Chief Financial Officer.</p> <p>Prior to this, Stephen was Chief Operating Officer for HBOS Treasury Services and held a number of senior finance positions within capital markets, equities and global financial market businesses for NatWest Securities.</p> <p>Stephen graduated from Cambridge University and is a qualified Chartered Accountant.</p>
Bruce MacLaren (Residency: UK)	Chief Risk Officer, Europe & APAC	<p>Bruce is the Chief Risk Officer in Europe, with responsibility for providing independent oversight of risk for all RBC businesses across the region. He sets the strategic direction of risk management and provides leadership in the implementation and execution of leading practices in risk oversight and governance for Europe. Bruce also has global accountability for risk oversight in Investor & Treasury Services, as well as the majority of RBC's Asian operations.</p> <p>Based in London, Bruce is a member of the global Investor & Treasury Services Operating Committee and the Capital Markets Europe Operating Committee.</p> <p>Bruce is a graduate of the University of Toronto and York University. He joined RBC in 1987 and held various positions in client-facing roles in corporate banking, corporate finance, loan syndications and market management in both Toronto and London. He was appointed Vice President of Risk Management in 1997 responsible for financial institutions, and became Senior Vice President within Group Risk Management – Credit, in 2003. He assumed his current responsibilities in September 2015.</p>
Harry Samuel (Residency: UK)	CEO, RBC Investor & Treasury Services	<p>Harry started with RBC in 1989 in FX and Money Markets, working in London, Toronto and Sydney.</p> <p>He holds a BA (Hons) from McGill University and MSc from the London School of Economics.</p>

<p>David Thomas (Residency: UK)</p>	<p>CEO, RBC Europe Limited</p>	<p>David joined RBC Capital Markets in 1992, following periods at National Westminster Bank and Sherwood Systems. He has held positions in IT, Risk Management and Compliance.</p> <p>He holds a BSc (Hons) in Chemistry and Management Studies from Loughborough University.</p>
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12.2 Appendix 2: Board and Management Committees

Board Committee	Frequency
Risk Committee (RC)	Quarterly
Audit Committee (AC)	Quarterly
Human Resources Committee (HRC)	Quarterly
Nominations Committee	Ad Hoc

Management Committee	Frequency
Asset and Liability Committee (ALCO)	Monthly
European Operating Committee (EOC)	Monthly
UK Counterparty Credit Risk Committee (UKCCRC)	Monthly
UK Market Risk Management Committee (UKMRMC)	Fortnightly and as required
UK Lending Risk Management Committee (UKLMC)	Monthly
Operational Risk Committee (ORC)	Monthly
Reputation and Compliance Committee (RACC)	Ad Hoc
Attestation Committee	Monthly
Valuations Committee (VC)	Monthly
New Business Committee (NBC)	Monthly and as required
Regulatory Policy Interpretation Committee (RPIC)	Quarterly and as required
Common Reporting Data Attestation Committee (CRDAC)	Quarterly

12.3 Appendix 3: Regulatory Capital Calculation Methods

The table below lists the relevant approaches elected to calculate the capital requirements for each applicable risk:

Risk Type	Approach or Treatment
Market Risk	Market risk pillar 1 calculations are undertaken according to the standardised approach. This provides a method for calculating position risk requirement (PRR) for all categories of market risk in the trading book in accordance with Part Three, Title 4 of the Capital Requirements Regulation (CRR). Market risk categories include interest rate risk, equity position risk, foreign exchange risk, commodities risk, options risk, collective investment undertakings risk and securities underwriting risk.
Specific Interest Rate Market Risk	Specific interest rate risk is calculated based on Articles 334 to 338 of the CRR for products for which there is a risk of loss for reasons other than a general move in market interest rates.
General Interest Rate Market Risk	General interest rate risk calculation is based on the maturity based method described in Article 339 of the CRR.
Foreign Exchange Position Risk	Net open position risk by currency is calculated in accordance with the provisions set out in Part Three, Title 4, Chapter 4 of the CRR.
Equity Position Risk	Equity risk PRR is calculated in accordance with Part Three, Title 4, Chapter 3, Section 3 of the CRR. Specific risk is calculated in line with Article 342, and general market risk is calculated in line with Article 343 of the CRR.
Option Position Risk	The Company calculates option risk PRR in accordance with Article 329 of the CRR.
Commodity Risk	Commodity risk is calculated in accordance with Part Three, Title 4, Chapter 4 of the CRR. The Company calculates commodity risk PRR using the Maturity ladder approach, as described in Article 359 of the CRR.
Credit Risk Capital Component	The Company has adopted the standardised approach to credit risk in accordance with Part Three, Title 2, Chapter 2 of the CRR.
Intra Group Exposures	In the absence of any intra-group waivers, exposures to RBC group entities are treated in the same manner as exposures to third-parties.
Counterparty Risk Capital Component	For repo-style transactions, OTC derivatives and other products generating counterparty credit risk in the trading books, the exposure amounts are calculated as per Part Three, Title 2, Chapter 6 of the CRR. The credit risk mitigation techniques are applied per Part Three, Title 2, Chapter 4 of the CRR. Calculation of the capital requirements is then derived by applying a risk weight depending on the counterparty and other criteria, as set out in Part Three, Title 2, Chapter 2, Section 2 of the CRR. Settlement Risk capital requirements for unsettled transactions are derived directly based on Part Three, Title 5 of the CRR.
Credit Risk Mitigation	CRM is recognised in line with the requirements of Part Three, Title 2, Chapters 4 and 6 of the CRR for the calculation of the counterparty risk capital component arising from derivatives, repurchased transactions and securities lending and borrowing, and for banking book exposures arising from Wealth Management and Corporate Investment Banking businesses.
Operational Risk	The Company has adopted the Basic Indicator Approach (BIA) to calculate its operational risk capital requirements, per Part Three, Title 3, Chapter 2 of the CRR. Under the BIA, capital for operational risk is determined by multiplying gross average positive operating and interest revenues for the past three years by a fixed percentage (15%).
Concentration Risk Capital Component	The Company monitors and, if applicable, calculates the concentration risk capital component of the credit risk capital requirement in line with Part Four of the CRR.

12.4 Appendix 4: Countercyclical Buffer Disclosure

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer
As at 31 October 2017
€'000

	General Credit Exposures		Trading Book Exposures		Securitisation Exposures		Own Funds Requirements				Own Funds Requirements Weight	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Exposure Value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure Value for SA	Exposure Value for IRB	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
Breakdown by Country:												
AUSTRALIA	3,762	-	3,357	-	-	-	301	269	-	570	0.21%	0.00%
AUSTRIA	32,628	-	0	-	-	-	2,610	0	-	2,610	0.97%	0.00%
BELGIUM	3,552	-	0	-	-	-	284	0	-	284	0.11%	0.00%
BERMUDA	0	-	18,521	-	-	-	0	1,482	-	1,482	0.55%	0.00%
UNITED KINGDOM	1,296,074	-	397,496	-	-	-	71,744	23,045	-	94,789	35.18%	0.00%
VIRGIN ISLANDS, BRITISH	3,336	-	0	-	-	-	93	0	-	93	0.03%	0.00%
CANADA	408,855	-	7,864	-	-	-	7,934	548	-	8,483	3.15%	0.00%
CAYMAN ISLANDS	7,806	-	102,735	-	-	-	589	8,219	-	8,808	3.27%	0.00%
CURACAO	53,557	-	0	-	-	-	2,142	0	-	2,142	0.80%	0.00%
CZECH REPUBLIC	5	-	0	-	-	-	0	0	-	0	0.00%	0.50%
DENMARK	2,709	-	0	-	-	-	217	0	-	217	0.08%	0.00%
FINLAND	21,215	-	10,684	-	-	-	1,697	855	-	2,552	0.99%	0.00%
FRANCE	457,835	-	4,254	-	-	-	25,175	179	-	25,354	9.41%	0.00%
GERMANY	183,997	-	4,605	-	-	-	12,765	368	-	13,133	4.87%	0.00%
GUERNSEY	16,921	-	0	-	-	-	1,354	0	-	1,354	0.50%	0.00%
HONG KONG	20,000	-	0	-	-	-	1,600	0	-	1,600	0.59%	1.25%
HUNGARY	105	-	0	-	-	-	8	0	-	8	0.00%	0.00%
INDIA	1,410	-	0	-	-	-	39	0	-	39	0.01%	0.00%
IRELAND	92,228	-	193,124	-	-	-	7,378	15,450	-	22,828	8.47%	0.00%
ISLE OF MAN	27,168	-	0	-	-	-	2,173	0	-	2,173	0.81%	0.00%
ITALY	44,940	-	0	-	-	-	3,517	0	-	3,517	1.31%	0.00%
JAPAN	0	-	98,203	-	-	-	0	4,011	-	4,011	1.49%	0.00%
JERSEY	53,420	-	0	-	-	-	3,618	0	-	3,618	1.34%	0.00%
JORDAN	22,904	-	0	-	-	-	1,832	0	-	1,832	0.68%	0.00%
LUXEMBOURG	146,352	-	7,919	-	-	-	11,708	634	-	12,342	4.58%	0.00%
MALTA	0	-	980	-	-	-	0	78	-	78	0.03%	0.00%
MEXICO	4,370	-	0	-	-	-	122	0	-	122	0.05%	0.00%
NETHERLANDS	109,631	-	25,806	-	-	-	8,902	2,064	-	10,967	4.07%	0.00%
NORWAY	0	-	340	-	-	-	0	27	-	27	0.01%	1.50%
OMAN	4,088	-	0	-	-	-	114	0	-	114	0.04%	0.00%
POLAND	7,937	-	0	-	-	-	635	0	-	635	0.24%	0.00%
PORTUGAL	39,821	-	0	-	-	-	3,186	0	-	3,186	1.18%	0.00%
QATAR	6,117	-	0	-	-	-	285	0	-	285	0.11%	0.00%
ROMANIA	1	-	0	-	-	-	0	0	-	0	0.00%	0.00%
SAUDI ARABIA	57,321	-	0	-	-	-	4,348	0	-	4,348	1.61%	0.00%
SINGAPORE	11,218	-	0	-	-	-	897	0	-	897	0.33%	0.00%
SOUTH AFRICA	18,467	-	0	-	-	-	1,477	0	-	1,477	0.55%	0.00%
SPAIN	111,766	-	0	-	-	-	8,941	0	-	8,941	3.32%	0.00%
SWEDEN	0	-	5,536	-	-	-	0	443	-	443	0.16%	2.00%
SWITZERLAND	76,768	-	56,537	-	-	-	2,276	4,464	-	6,740	2.50%	0.00%
UNITED ARAB EMIRATES	9,363	-	0	-	-	-	346	0	-	346	0.13%	0.00%
UNITED STATES	85,683	-	133,750	-	-	-	6,308	10,700	-	17,008	6.31%	0.00%
Total	3,443,339		1,071,709				196,621	72,836		269,457	100.00%	

Total risk exposure amount	7,156,992
Institution specific countercyclical capital buffer rate	0.0109%
Institution specific countercyclical capital buffer requirements	777

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

As at 31 October 2016

£'000

	General Credit Exposures		Trading Book Exposures		Securitisation Exposures		Own Funds Requirements				Own Funds Requirements Weight	Countercyclical Capital Buffer Rate
	Exposure Value for SA	Exposure Value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure Value for SA	Exposure Value for IRB	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
Breakdown by Country:												
AUSTRALIA	723	-	189	-	-	-	42	15	-	57	0.02%	0.00%
AUSTRIA	33,999	-	-	-	-	-	2,720	-	-	2,720	1.12%	0.00%
BELGIUM	396	-	1	-	-	-	32	-	-	32	0.01%	0.00%
BERMUDA	-	-	2,748	-	-	-	-	220	-	220	0.09%	0.00%
UNITED KINGDOM	1,283,766	-	306,961	-	-	-	69,073	17,330	-	86,403	35.67%	0.00%
VIRGIN ISLANDS, BRITISH	3,336	-	-	-	-	-	93	-	-	93	0.04%	0.00%
CANADA	81,751	-	6,679	-	-	-	2,796	107	-	2,903	1.20%	0.00%
CAYMAN ISLANDS	20,921	-	71,630	-	-	-	1,624	5,730	-	7,354	3.04%	0.00%
CURACAO	58,187	-	-	-	-	-	931	-	-	931	0.38%	0.00%
CZECH REPUBLIC	5	-	-	-	-	-	-	-	-	-	0.00%	0.00%
FINLAND	17,564	-	594	-	-	-	1,405	48	-	1,453	0.60%	0.00%
FRANCE	467,522	-	2,481	-	-	-	26,722	99	-	26,821	11.07%	0.00%
GERMANY	135,159	-	29	-	-	-	10,473	2	-	10,475	4.32%	0.00%
GUERNSEY	6,040	-	-	-	-	-	170	-	-	170	0.07%	0.00%
HONG KONG	23,255	-	-	-	-	-	1,691	-	-	1,691	0.70%	0.63%
HUNGARY	10,003	-	8,679	-	-	-	800	694	-	1,495	0.62%	0.00%
IRELAND	101,131	-	213,847	-	-	-	8,090	17,108	-	25,198	10.40%	0.00%
ISLE OF MAN	20,200	-	-	-	-	-	1,616	-	-	1,616	0.67%	0.00%
ITALY	46,373	-	-	-	-	-	3,632	-	-	3,632	1.50%	0.00%
JAPAN	-	-	268	-	-	-	-	11	-	11	0.00%	0.00%
JERSEY	38,045	-	-	-	-	-	2,031	-	-	2,031	0.84%	0.00%
LUXEMBOURG	128,052	-	11,340	-	-	-	10,244	907	-	11,151	4.60%	0.00%
MALTA	-	-	149	-	-	-	-	12	-	12	0.00%	0.00%
MEXICO	4,350	-	-	-	-	-	122	-	-	122	0.05%	0.00%
MONACO	6,159	-	-	-	-	-	493	-	-	493	0.20%	0.00%
NETHERLANDS	67,015	-	14,429	-	-	-	5,484	1,154	-	6,638	2.74%	0.00%
NORWAY	-	-	24	-	-	-	-	2	-	2	0.00%	1.50%
OMAN	5,132	-	-	-	-	-	244	-	-	244	0.10%	0.00%
PORTUGAL	38,704	-	-	-	-	-	3,096	-	-	3,096	1.28%	0.00%
QATAR	7,165	-	-	-	-	-	211	-	-	211	0.09%	0.00%
ROMANIA	1	-	-	-	-	-	-	-	-	-	0.00%	0.00%
RUSSIAN FEDERATION	1,420	-	-	-	-	-	40	-	-	40	0.02%	0.00%
SAUDI ARABIA	125,862	-	-	-	-	-	7,991	-	-	7,991	3.30%	0.00%
SINGAPORE	16,220	-	-	-	-	-	981	-	-	981	0.41%	0.00%
SOUTH AFRICA	19,915	-	-	-	-	-	1,593	-	-	1,593	0.66%	0.00%
SPAIN	107,854	-	-	-	-	-	8,628	-	-	8,628	3.56%	0.00%
SWEDEN	-	-	248	-	-	-	-	20	-	20	0.01%	1.50%
SWITZERLAND	105,709	-	84,708	-	-	-	4,204	5,707	-	9,911	4.09%	0.00%
THAILAND	1,410	-	-	-	-	-	39	-	-	39	0.02%	0.00%
UNITED ARAB EMIRATES	8,609	-	-	-	-	-	273	-	-	273	0.11%	0.00%
UNITED STATES	107,331	-	101,787	-	-	-	7,330	8,143	-	15,473	6.39%	0.00%
Total	3,099,286		826,791				184,917	57,309		242,227	100.00%	

Total risk exposure amount	5,609,747
Institution specific countercyclical capital buffer rate	0.0045%
Institution specific countercyclical capital buffer requirements	252