Pillar 3 disclosures for the year ended 31 March 2019

Mizuho International plc



Group Pillar 3 disclosures for the year ended 31 March 2019

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1 Introduction

1.1 Objective

This document sets out disclosures in respect of the consolidated group comprising Mizuho International plc (MHI) and Mizuho Securities Europe GmbH (MHEU), together "the Group", required under European Union (EU) CRD IV legislation, consisting of the Capital Requirements Regulation¹ (CRR) and the Capital Requirements Directive² (CRD).

Pillar 3 disclosures, as required under Part Eight of the CRR provide market participants with information on a firm's risk governance, risk management processes, risk exposures, and capital resources.

Directive imposed disclosure requirements are implemented within the UK through Prudential Regulation Authority (PRA) rules³. These disclosures provide market participants and other stakeholders with information in relation to a firm's governance and remuneration practices.

1.2 Regulatory information

The PRA supervises the Group on a consolidated basis. The Group consists of MHI and MHEU, both of which are subject to the CRR. MHI is authorised by the PRA and regulated by the Financial Conduct Authority (FCA) and the PRA. MHI is entered into the Financial Services Register and its register reference number is 119256. MHEU is authorised and regulated by the Federal Financial Supervisory Authority (BaFin). MHEU is entered on the BaFin's authorised database of companies with ID number 149548.

1.3 Forward looking statements

Certain statements in this disclosure document are forward looking with respect to plans, goals and expectations relating to the future financial position, business performance and results of the Group. Although the Group believes that the expectations reflected in these forward-looking statements are reasonable, the Group can give no assurance that these expectations will prove to be an accurate reflection of actual results. As these statements involve risks and uncertainties, actual results may differ materially from those expressed or implied by these forward-looking statements. The Group undertakes no obligation to update any forward-looking statements whether as a result of new information, future events or otherwise.

1.4 Overview of Basel framework and Pillar 3

The CRD IV legislation, designed to implement the Basel III reforms of the Basel Committee on Banking Supervision, came into force in the EU on 1 January 2014. However, certain aspects of CRD IV are subject to phased implementation and may also be dependent on final technical standards to be issued by the European Banking Authority (EBA) and adopted by the European Commission, and ultimately implemented in the UK.

Prudential requirements under the Basel framework are categorised under three pillars as described below.

Pillar 1 – Industry minimum capital requirements

Risk based requirements

¹ Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms.

² Regulation (EU) No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms.

³ Section 4.3A.11 of the PRA's Senior Management Arrangements, Systems and Controls (SYSC) sourcebook.

The first pillar of the Basel framework focuses on the determination of minimum capital requirements applicable to all firms to support exposures to credit, counterparty credit, market and operational risks. Capital requirements may also be expressed as risk weighted assets (RWAs), being a notional amount 12.5 times the size of the capital requirement.

Risk based minimum capital requirements may be determined using a number of approaches. These are summarised below, together with the approach which has been adopted by the Group:

Approach	Group	Summary
Credit risk		
Standardised approach	✓	 Standardised risk weightings are applied to credit risk exposures. Credit exposures in respect of counterparty risk must be calculated in accordance with prescribed methods, being either: mark-to-market, standardised, or the internal model method (IMM). Credit ratings supplied by external credit assessment institutions (ECAIs) are used to determine the appropriate risk weight to be applied to exposure amounts. Credit risk mitigation techniques are recognised.
Internal ratings based (IRB) approach	×	 There are two main IRB approaches for wholesale exposures: The foundation IRB approach allows banks to make their own internal assessment of counterparty's probability of default (PD), but subjects their quantified estimates of exposure at default (EAD) and loss given default (LGD) to standard supervisory parameters. The IRB advanced approach allows banks to use their own internal assessment in determining PD, quantifying EAD and LGD.
Counterparty credit risk		
Mark-to-market Method	\checkmark	Under this method an add-on for potential future exposure (PFE) is applied to the mark-to-market value of the instrument to give the overall exposure. Exposure value is then subject to risk-weighting under Standardised Approach to determine capital requirement.
Original Exposure Method	×	Under this method the exposure value is calculated by multiplying the notional amount of the instrument by set percentages prescribed depending on maturity.
Standardised Method	×	The exposure value is calculated by applying a multiplier to the market value, dependent on the type of contract.
Internal Model Method (IMM)	×	Under the IMM approach, the fair value on the balance sheet is replaced by an exposure value calculated using internal models.
Market risk		
Standardised approach	\checkmark	Requires the calculation of position risk requirements for each type of market risk within the trading book in accordance with standard rules.
Internal models approach	×	Capital requirements are calculated using internal Value at Risk (VaR) models.
Operational risk		
Basic indicator approach	✓	Capital requirements are calculated as 15% of three year average income.
Standardised approach	×	Capital requirements are calculated from the three year average of aggregate risk weighted indicators. A firm's business must be split into defined business lines with specific risk weights applied to each business line.
Advanced measurement approach	×	Capital requirements are calculated through the use of internal operational risk measurement systems.

Table 1: Basel Pillar 1 risk based approaches

Non-risk based requirements

Under CRD IV risk based requirements are supplemented by a leverage ratio, under which firms are required to maintain Tier 1 capital in excess of a minimum ratio to a gross measure of exposures. Exposures comprise on and off balance sheet items, calculated from the accounting balance sheet subject to a defined set of adjustments. Whereas risk-weighted capital ratios differentiate capital requirements according to estimates of the relative riskiness of different asset classes, a leverage ratio weights all assets equally. The leverage ratio is intended to limit the risk of excessive leverage across the banking sector and to reinforce risk based requirements with a simple backstop measure.

In accordance with CRD IV banks are required to publish their leverage ratios from 2015, with a binding requirement across the EU expected to come into force from 2021. Institutions will from this point be required to maintain capital in excess of the greater of the risk based and non-risk based requirements. The Group's current leverage ratio is provided in section 6 of this document.

Pillar 2 - Supervisory review process

The second pillar of the Basel framework is designed to assess the adequacy of a firm's capital resources by considering all material risks to the firm's business, including those not covered or adequately addressed by the first pillar, together with the impact upon the capital position that is forecast to occur using stressed macroeconomic scenarios.

Firms are required to conduct an Internal Capital Adequacy Assessment Process (ICAAP) at least annually to review their capital resources in light of material risks identified, and the outcome of stress testing procedures performed. This internal assessment is subject to the Supervisory Review and Evaluation Process (SREP) and forms part of the PRA's own assessment of the risks to which firms are exposed, their risk management and capital adequacy.

Following the SREP, the PRA sets firms a Pillar 2A capital requirement on an individual and consolidated basis, for the amount and quality of capital the PRA considers the firm must hold, in addition to the capital it must hold to comply with the CRR (Pillar 1 capital) to meet the overall financial adequacy rule. The sum of Pillar 1 and Pillar 2A capital requirements is the firm's Total Capital Requirement (TCR). TCR is set as a percentage of RWAs.

The PRA may also notify firms of an amount and quality of capital, over and above the level of capital required to meet its TCR and over and above the CRD IV buffers (Capital Conservation and Countercyclical Capital Buffers), that should be held for the PRA Buffer; the PRA Buffer is set as a percentage of RWAs.

Pillar 3 - Market discipline

The third pillar of the Basel framework requires public disclosure surrounding a firm's risk governance, risk management practices, its approach to capital management, capital resources and Pillar 1 capital requirements. These disclosures are intended to foster market discipline in relation to a firm's risk management practices.

1.5 Notes on basis of preparation

Scope of consolidation

These disclosures are comprehensive and prepared in respect of the Group in accordance with CRR article 13. Comparatives for 2018 were prepared on a solo MHI basis. See also section 2.6 for more details on the establishment of MHEU.

Basis of preparation

These disclosures have been prepared in accordance with regulatory capital adequacy concepts and rules rather than in accordance with accounting standards. Certain information provided within these

disclosures is therefore not directly comparable with financial information contained within the annual financial statements.

The table below shows the relationship between the Group's accounting balance sheet categories and the calculation of RWAs by risk driver. The table does not include all inputs included in the calculation of RWAs, but is intended to provide an overview of the link between accounting and Pillar 1 regulatory measures:

Table 2: RWA calculation drivers split by balance sheet category

Accounting balance sheet category		RWA risk type	
	Credit risk	Counterparty credit risk	Market risk
Assets			
Reverse repurchase agreements	-	\checkmark	\checkmark
Debt and equity securities	-	-	\checkmark
Derivative assets	-	\checkmark	\checkmark
Loans and advances to banks	\checkmark	-	-
Shares in group undertakings	\checkmark	-	-
Intangible fixed assets	-	-	-
Tangible fixed assets	\checkmark	-	-
Other assets, prepayments and accrued income	\checkmark	-	-
Liabilities and equity			
Deposits by banks	-	-	-
Customer accounts	-	-	-
Repurchase agreements	-	\checkmark	\checkmark
Short trading positions	-	-	\checkmark
Derivative liabilities	-	\checkmark	\checkmark
Debt securities in issue	-	-	-
Subordinated debt	-	-	-
Other liabilities, provisions and accruals	-	-	-

Not all Pillar 3 disclosure requirements under CRD IV are applicable to the Group.

Location and verification

A standalone copy of these disclosures is located on the Mizuho EMEA website (<u>www.mizuho-emea.com</u>). These disclosures should be read in conjunction with the Group financial statements for the year ended 31 March 2019, which are also published on this website.

Whilst the disclosures presented within this document do not require validation through external audit, they have been subject to internal governance procedures, including review and approval by MHI's Chief Financial Officer (CFO) and Chief Risk Officer (CRO) and the Board of Directors of MHI (the Board).

Frequency of disclosure and comparative balances

Disclosures are provided in accordance with EBA guidelines, on an annual basis and published in conjunction with the date of publication of the financial statements and, unless otherwise indicated, all current year figures are stated as at the Group's financial year end, 31 March 2019.

More frequent disclosures may be provided in the event that a material change occurs to the Group's business.

Comparative balances as at 31 March 2018 have generally been presented within this document. Where required, comparative prior year values have been restated to align with the 2019 presentation of disclosures.

Immaterial disclosures

In line with Article 432 of the CRR, where the information required under a particular disclosure is considered by the Group to be immaterial, such disclosures have been omitted. The determination of immateriality is based upon the guidance issued by the EBA.

2 Corporate governance

2.1 Role of the Board

The Board has overall responsibility for the management of MHI and its subsidiaries, although certain matters are reserved to the shareholder whether under English law or by decision of the shareholder as set out in a Statement of Delegated Authority by the shareholder reviewed and approved by the shareholder on 16 February 2017 and by the Board on 23 February 2017. The role of the Board is to provide leadership of MHI within a framework of prudent and effective internal controls, in order to maintain effective operations, control of financial affairs and compliance with law and regulation. The Board is responsible for the long term success of the Group and, to this end, sets the strategy and risk appetite for MHI and the Group, whilst ensuring that an effective risk management framework is maintained.

Certain matters are reserved for approval by the Board due to their significance. These matters include decisions concerning Board membership (subject to approval by the shareholder at an annual general shareholder meeting of the appointment / continuation in office of any Board member appointed during the previous year) and corporate governance, strategy, approval of risk appetite and risk management oversight, capital and liquidity matters, corporate structure, financial performance, remuneration policy and significant legal and regulatory matters. Matters not specifically reserved to the Board are delegated to MHI's executive officers.

2.2 Directors' responsibilities

Under UK company law, directors must promote corporate success by exercising independent judgement with reasonable care, skill and diligence, while having regard to the long-term consequences of their decisions.

Directors of UK regulated banks are also required by the PRA and FCA to act in accordance with their principles, including requirements in relation to observing proper standards of market conduct, dealing with regulators in an open and co-operative manner, taking reasonable steps to ensure that business is organised to facilitate effective control, and compliance with the regulatory system.

The principal roles on the Board and the responsibilities attaching to those roles are summarised below:

Chair of the Board Chief Executive Officer (CEO)	 Leads the Board and sets/reviews the Board's agenda Facilitates engagement and participation from all Board members Ensures effective communication with MHI's shareholder Acts as Chair of the Nomination Committee Recommends MHI strategy to the Board Responsible for implementation of strategy and day-to-day management of MHI's affairs
Non-executive directors	 Offers constructive challenge to management and oversees achievement of agreed objectives Monitors operation of effective internal control and risk management
Senior independent non- executive directors	 Acts as a sounding board for the Chair Available to act as an intermediary for other Board members and stakeholders
Executive Directors	 Support the CEO in delivery of MHI's strategy and day-to-day management of MHI's affairs.

Table 3: Roles on the Board

2.3 Board composition

The Board is made up of a majority of non-executive directors. The importance of maintaining an appropriate balance of skills, experience, diversity and independence is recognised. The Nomination Committee assesses on an annual basis the structure, size and composition of the Board, together with the balance of knowledge, skills and experience of its members.

The Board composition at 31 March 2019 with regard to the balance of executive and non-executive membership is shown below:

Table 4: Board composition as at 31 March 2019

Board members	Number of individuals
Chair and independent non-executive directors	4
Other non-executive directors	3
Executive directors	3
Total	10

After the financial year ended 31 March 2019, the Senior Independent Non-Executive Director commenced a transition to the position of Notified Non-Executive Director, with the role of Senior Independent Non-Executive Director being taken on by one of the existing Independent Non-Executive Directors. Additional details around this transition can be found in the Group's Annual Report.

MHI is committed to diversity and respects the diversity and individuality of all persons, irrespective of nationality, gender, age, career-level, or lifestyle. The Nomination Committee will recommend Board appointments on the basis of the benefits individual appointees can bring to the firm. This will take account of their knowledge, skills and experience measured against identified objective criteria, as well as the broader contribution they can make to the Board by widening the collective expertise and increasing the scope for effective challenge. The Nomination Committee has set an initial target for gender diversification on the Board at a minimum of 10% which has been met.

Directorships held by Board members are reviewed to ensure compliance with the PRA's requirements regarding the total number of such positions which may be held. As at 31 March 2019, the Board contained 10 members who held a total of 19⁴ directorships (inclusive of those held on the Board). The total of such directorships held by each individual director was in compliance with those requirements.

2.4 Board performance

Arrangements for induction of new Board members and ongoing training are in place to ensure that directors are fully informed of key business, legal and regulatory matters relevant to the performance of their roles. Review of Board performance and that of individual directors plays an important role in ensuring effective ongoing governance, and MHI has made arrangements for the Nomination Committee to conduct annual performance evaluations and to make recommendations to the Board arising out of these reviews.

2.5 Board committees

The Board has established a number of committees under the Board (Board Committees) to enable detailed oversight of particular areas of Board responsibility and to facilitate oversight of senior management. Board and Board Committee meetings are held on a regular basis and sufficient time is

⁴ This disclosure is given in accordance with the definition used in Article 91 of CRD IV and implemented by the PRA, whereby directorships in organisations which do not pursue predominantly commercial objectives are not counted and directorships held within the same group are counted as a single directorship.

allocated to ensure that relevant business is fully considered. The Board Committees are described below, together with a summary of their respective responsibilities:

Table 5: Board committees

Board						
Audit & Compliance Committee	Board Risk Committee	Nomination Committee	Remuneration Committee (RemCo)	Crisis Management Committee		
 Reviews the appropriateness and completeness of the internal control framework, receives reports from internal and external auditors and monitors the progress of remedial action with regard to control weaknesses. Reviews arrangements established by management for compliance with regulatory requirements and reviews any matters of significance regarding MHI's relationship with its regulators. 	 Makes recommendations to the Board concerning MHI's risk appetite and reviews the supporting Board level limit framework and key metrics. Evaluates and reports to the Board on matters concerning MHI's overall risk profile and performance against risk appetite, giving consideration to key trends and concentrations, compliance with limits and significant risk issues. The Committee evaluates MHI's governance, risk and control framework. Provides input to the Remuneration Committee with regard to appropriate risk adjustments to be made to remuneration packages. 	 Reviews and makes recommendations with regard to Board composition, performance, and Board and senior management succession planning. Selects and recommends to the Board candidates for membership in accordance with its assessment of the balance of skills, experience, diversity and independence to be maintained on the Board. 	 Sets and recommends to the Board the objectives, principles and parameters of MHI's Remuneration Policy. Reviews the individual remuneration arrangements of senior staff having regard to the impact on behaviour, risk appetite and risk profile of these arrangements, and the degree to which performance assessment takes account of current and potential future risks. 	• Convened at the request of (i) any two of the CEO, CFO, CRO and Treasurer, (ii) the Risk Management Committee, (iii) the Chair of the Board, (iv) the Chair of the Board, (iv) the Chair of the Board Risk Committee, or (v) the Senior Independent Non-Executive Director of the Board to resolve a crisis or threat situation.		

2.6 MHEU

During the financial year ended 31 March 2019, MHI established a subsidiary in Frankfurt-am-Main, Germany under German law, MHEU. This entity commenced business operations from 1 April 2019 and therefore, while these disclosures are on a consolidated basis, MHEU contributed a comparatively small part of these results as at 31 March 2019. The management board of MHEU has responsibility for the control and oversight of its activities, while MHI supervises MHEU's activities through its existing Board and committees as the firm's shareholder by establishing appropriate reporting arrangements and through its shareholder representative.

The management board of MHEU comprises three local directors: the CEO, CRO and CFO. Subcommittees of the management board are formed to allow for consideration of specific matters.

3 Risk management framework

The Group maintains a prudent approach to risk to ensure that it can operate safely and to support sustainable business development in keeping with the Board's strategy. A culture which is supportive of strong risk management, in line with clear principles and tolerance for risk is led by the Board. The Group has a strong and independent Risk Management function responsible for the identification of principal risks, maintenance of risk control frameworks, and for keeping the Board informed of the Group's risk profile.

3.1 Risk culture

The Group believes that a strong risk management culture is essential to achieve its business objectives. With ultimate responsibility for risk governance in the group, the Board embeds a strong risk management culture through the establishment of an independent Risk Management function which works closely with the business and treats risk management as a shared responsibility.

3.2 Risk principles

The Board has established clearly defined risk principles which describe the Group's key risk management objectives in support of its business strategy, which are summarised below:

- Maintain a predictable cautious to moderate risk profile;
- Ensure that effective control of balance sheet usage and concentration risk is exercised, without tolerating breaches of the limit framework;
- Preserve strong capital and liquidity ratios and comply with all regulatory requirements;
- Maintain a diversified funding strategy with regard to both the sources and tenor of funding; and
- Ensure that remuneration arrangements are aligned to risk appetite.

3.3 Risk appetite

The Board's risk appetite describes the levels and types of risk that the Group is prepared to accept in pursuit of its business strategy. The risk appetite is prudently quantified with reference to scenario and stress testing, and is set so as to ensure that the Group is able to maintain a sound financial position throughout economic cycles.

The risk appetite is implemented through a supporting limit framework that ensures all material sources of risk are controlled in a manner consistent with the Board's overall risk tolerance. The Group adopts a structured approach to limit management which ensures that limit reporting and oversight take place at the appropriate level within the organisation. The status of the Group's overall risk profile in relation to the risk appetite is overseen by the Board.

3.4 Risk governance and assigning responsibility

Three lines of defence

In keeping with the Group's risk culture, responsibilities for risk management are assigned to multiple functions within the organisation under the three lines of defence model, to ensure that the risk management framework is robust and effective.

First line: Business and support functions which originate or accept risk are held responsible for the management and control of that risk in line with risk appetite, supporting limit framework and other related risk policies.

Second line: The second line of defence is provided by risk control functions which exercise independent oversight of the management of risk by those originating functions. The principal risk control functions comprise of Risk Management and Compliance functions, supported by the Finance and Legal teams.

Third line: Independent and post-dated assurance with regard to the effectiveness of risk management strategies, policies and processes is provided by the Group's Internal Audit function and its external auditors.

Risk governance

The Board retains responsibility for approval of the Group's risk appetite, risk management oversight and capital and liquidity matters, including compliance with applicable regulation. The heads of the principal risk control functions, being the CRO and the Head of Compliance, are mandated through dual reporting lines to update and inform the relevant Board committees of matters relating to their functions and group wide risk management.

Responsibility for the day-to-day running of the business is delegated by the Board to the CEOs of MHI and MHEU, who in turn mandate the heads of the principal control functions to assume responsibility for risk challenge and oversight.

3.5 Risk Management function and approach

MHI and MHEU maintain strong and independent Risk Management functions which are headed by the CROs of MHI and MHEU. Risk Management is mandated to oversee all material classes of risk to which MHI and MHEU are exposed, other than conduct risks which are overseen by each entity's Compliance function.

Risk Management is structured to facilitate oversight of these principal risk classes and incorporates separate teams with responsibility for market, credit, liquidity, regulatory governance, and operational risk oversight. A common approach to risk oversight is adopted for each principal risk class, in accordance with risk policies established for those classes.

Risk identification and assessment

All material risk exposures are identified and recorded within the MHI and MHEU risk registers, whilst responsibility for the assessment of those risks resides with both the business and the risk control functions. Risks and sub-components of risk are assessed through the implementation of a variety of measures or metrics relevant to each risk class. Risk assessment measures are developed in accordance with accepted measurement methodologies for each class of risk, and the resulting assessments are classified according to severity, to provide clear identification of the Group's material exposures. Risk assessments are conducted in relation to both normal and stressed market conditions.

Control and mitigation

Risk exposures are managed by business and support functions using a range of techniques relevant to the individual risk class. Such techniques encompass market based hedging activities, credit risk mitigation techniques, diversification of funding sources and tenor, business continuity planning and the purchase of insurance.

Risk control limits and key risk indicators are established to ensure that risk exposures remain within specified levels, and that the Group is able to operate in accordance with its overall risk appetite. A comprehensive limit framework is maintained by risk class, with defined levels of authorisation to ensure that risk exposure levels are authorised and monitored at the appropriate level within the Group's governance hierarchy.

Monitoring and reporting

Reporting of risk exposures in relation to risk limits, and more broadly with regards to trends in the Group's risk profile and emerging risks, is performed by the Risk Management function (and by the Compliance function with regards to conduct related matters). Reporting is conducted in relation to all principal risk factors, and is designed to enable effective governance of the Group's risk profile. In

particular the Board and the Board Risk Committee are regularly informed of the Group's risk exposures and compliance with risk limits.

In addition to monitoring current risk exposures, the Group also monitors potential future adverse developments by establishing entity-specific early warning indicators whose breach may indicate deterioration in the capital and liquidity strength. Monitoring and reporting the status of these early warning indicators forms part of Group's contingency planning arrangements.

3.6 Strategy and planning

The Group conducts formal business planning on an annual basis, through which the Board's strategic objectives are developed into detailed business plans. Commercial objectives and plans are established for all significant business lines, and from these financial projections are developed, which take account of expected macroeconomic and market conditions.

The Group risk appetite is also formally reviewed on an annual basis as part of the business planning cycle, to ensure that business strategy and risk management activities are aligned. Business plans are also reviewed by Risk Management to ensure that planned developments are achievable given the Group's risk management capabilities, and to form a view with regard to the balance of risk and reward attributable to planned activities.

As part of its business planning activities the Group also conducts capital planning to ensure that an appropriate balance between capital resources and capital requirements is maintained through the planning cycle. As part of its capital planning framework, the Group utilises stress tests to ensure that it is able to maintain a sound financial position in the event of severe economic stress. Stress tests are developed based upon potential future scenarios, selected in light of the Group's risk profile and plausible future market and economic developments. Stress tests are conducted so as to apply selected scenarios in a consistent manner to the market, credit and liquidity risks to which the Group is exposed and to take account of any concentrations of exposure.

3.7 Adequacy of risk management arrangements

The Group assesses the adequacy of its risk management framework and of the amount of capital and liquidity that it needs to hold in respect of its risk profile on an annual basis, or more frequently if required. This assessment is formally documented within the Group's ICAAP and Internal Liquidity Adequacy Assessment Process (ILAAP), and is approved by the Board.

The most recent ICAAP and ILAAP exercises concluded that the risk management arrangements adopted by both entities were adequate in relation to their risk profile and strategy. Further, through its risk management framework, risk appetite and limit framework, independent reviews and ongoing programme of enhancements, MHI and MHEU confirm that their risk management is effective.

3.8 Financial risks from climate change

Climate change and society's responses present financial risks which may crystallise in full over long time horizons, but are also becoming apparent now. The Group is currently developing a strategic approach that considers how actions today will affect future financial risks, in a way which is proportionate to the Group's nature, scale and complexity of its business. This includes developing appropriate disclosures in line with the FSB's Task Force on Climate-related Financial Disclosures' recommendations⁵ as well as reporting on principal risks and uncertainties in the Strategic Report within the Group's Annual Report per the UK Companies Act.

⁵ In April 2015 the G20 asked the FSB to consider climate risk and in December 2015 the FSB launched the industry-led Task Force on Climaterelated Financial Disclosures (TCFD) to develop recommendations on climate-related financial disclosures. The Task Force published its final recommendations in June 2017.

4 Risk profile

The Group's business strategy is based on the provision of intermediation services within the capital markets for an international client base. In keeping with this overall strategy, the Group operates Investment Banking and Markets & Products business lines. Investment Banking services chiefly comprise the underwriting and distribution of new debt and equity issuance on behalf of the Group's clients together with the provision of mergers & acquisition services. Within its Markets & Products division the Group acts as Mizuho Securities Co. Ltd.'s primary dealer and provider of secured financing in European debt securities, offers broking services in Japanese and Asian equities, and provides derivative risk management solutions to clients.

The Board requires that a cautious to moderate risk profile is maintained in pursuit of this strategy. The Group's Investment Banking and equity broking activities result in low levels of risk exposure as underwriting activity is predominantly conducted without accepting significant underwriting risk and equity broking activity does not expose the Group directly to equity market risk. Fixed income trading activities result in low to moderate levels of risk as the Group maintains sovereign, financial and corporate inventory, provides securities financing services, and offers predominantly vanilla and cleared derivative risk management solutions to clients.

The Board's risk appetite with respect to capital is quantified with reference to minimum capital requirements and stress testing, and ensures an appropriate surplus is maintained over the Group's assessed capital requirements; this includes regulatory TCR and capital buffers, ensuring that the Group meets regulatory capital requirements on an ongoing basis. The aggregate risk appetite measure is supported by a range of supporting limits and metrics which facilitate the control of individual risk factors at a detailed operational level. Key regulatory metrics are shown below:

	2019	2018
	£m	£m
Available capital (amounts)	· · ·	
Common Equity Tier 1 (CET1)	662.5	690.9
Tier 2	45.0	45.0
Total capital	707.5	735.9
Risk-weighted assets (amounts)		
Total risk-weighted assets (RWA)	2,385.8	2,257.0
Risk-based capital ratios as a percentage of RWA		
Common Equity Tier 1 ratio (%)	27.8%	30.6%
Tier 1 ratio	27.8%	30.6%
Total capital ratio (%)	29.7%	32.6%
Additional CET1 buffer requirements as a percentage of RWA		
Capital conservation buffer requirement (2.5% from 2019) (%)	2.5%	1.875%
Countercyclical buffer requirement (%)	0.256%	0.074%
Total of bank CET1 specific buffer requirements (%)	2.756%	1.949%
EBA leverage ratio		
Total EBA leverage ratio exposure measure	17,704.5	15,348
EBA leverage ratio (%)	3.74%	4.50%
Liquidity Coverage Ratio (LCR)		
Total High Quality Liquid Assets (HQLA)	2,040.4	1,996.8
Total net cash outflow	513.3	517.3
LCR ratio (%)	416%	396%

Table 6: Key regulatory metrics

5 Capital resources

5.1 Capital ratios

The Group has continued to maintain capital resources significantly above the minimum requirements established by the Basel Pillar 1 framework. The Group's ratio of tier 1 capital to Pillar 1 RWAs is given below:

Table 7: Tier 1 capital ratios

	2019	2018
Tier 1 capital ratio	27.8%	30.6%

5.2 Capital resources reconciliation

As at 31 March 2019, the Group's total capital resources consisted of £662.5m CET1 capital, and £45.0m of Tier 2 capital.

The difference between total equity on an accounting basis and regulatory capital arises from regulatory adjustments, as shown below:

Table 8: Capital resources reconciliation

	2019	2018
	£m	£m
Share capital	725.5	725.5
Reserves	14.7	36.1
Total equity (accounting)	740.2	761.6
Regulatory adjustments to accounting total equity		
Prudent valuation adjustment	(4.5)	(4.7)
Intangible assets	(73.2)	(66.0)
Total CET1 capital	662.5	690.9
Total Tier 2 capital	45.0	45.0
Total capital resources (regulatory)	707.5	735.9

Table 9: Own Funds

		2019	2018
1	T1: instruments and reserves Capital instruments and the related share premium accounts	£m 725.5	£m 725.5
1	of which: Instrument type 1	725.5	725.5
	of which: Instrument type 2		
	of which: Instrument type 3		
2	Retained earnings	20.4 39.8	39.8 12.2
	Previous years' retained earnings Profit or loss eligible	(19.5)	27.6
3	Accumulated other comprehensive income (and other reserves)	(5.6)	(3.7)
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	740.2	761.6
CET	T1: regulatory adjustments		
7	Additional value adjustments (negative amount)	(4.5)	(4.7)
8	Intangible assets (net of related tax liability) (negative amount)	(73.2)	(66.0)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(77.7)	(70.7)
29	CET1	662.5	690.9
45	Tier 1 capital (T1 = CET1 + AT1)	662.5	690.9
Tier	r 2 capital: instruments and provisions		
46	Capital instruments and the related share premium accounts	45.0	45.0
51	Tier 2 (T2) capital before regulatory adjustments	45.0	45.0
Tie 57	r 2 capital: regulatory adjustments Total regulatory adjustments to Tier 2 capital	-	-
58	Tier 2 capital	45.0	45.0
59	Total capital (TC = T1 + Tier 2)	707.5	735.9
60	Total RWAs	2,385.8	2,257.0
Cap	pital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	27.8%	30.6%
62	Tier 1 (as a percentage of total risk exposure amount)	27.8%	30.6%
63	Total capital (as a percentage of total risk exposure amount)	29.7%	32.6%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of risk exposure amount)	2.756%	1.949%
65	of which: capital conservation buffer requirement	2.500%	1.875%
66	of which: countercyclical buffer requirement	0.256%	0.074%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	16.1%	18.9%

Note: Only rows relevant to the Group are shown in Table 9, remaining rows from EBA disclosure template have been left out as these are nil rows.

6 Capital requirements

6.1 RWAs and Pillar 1 capital requirements

The Group's Pillar 1 capital requirements and RWAs as at 31 March 2019 are set out below by risk class. These requirements are further analysed in the following sections as referenced below:

	Section	2019 RWAs £m	2019 Pillar 1 capital requirements £m	2018 RWAs £m	2018 Pillar 1 capital requirements £m
Interest rate position risk	7	1,719.8	137.6	1,585.7	126.9
Equity position risk	7	-	-	-	-
Foreign currency position risk	7	2.9	0.2	13.0	1.0
Market risk total		1,722.7	137.8	1,598.7	127.9
Counterparty credit risk	9	181.4	14.5	182.3	14.6
Concentration risk	8	-	-	-	-
Credit risk	8	88.0	7.0	98.7	7.9
Credit risk total		269.4	21.5	281.0	22.5
Operational risk	10	393.6	31.5	377.3	30.2
Total Pillar 1 capital requirement		2,385.7	190.8	2,257.0	180.6

Table 10: RWAs and Pillar 1 capital requirements

6.2 Pillar 2 capital requirements

The PRA prescribes a TCR to firms as part of its supervision of the banking sector. MHI has been issued with a TCR by the PRA in May 2018 and maintains capital that exceeds this requirement. MHI's TCR was £279.4m as at 31 March 2019 and this was met entirely by CET1 capital.

The Group ICAAPs provide an assessment of risks not covered or not fully captured through Pillar 1 capital requirements. Each entity on an individual basis and the Group ensures that it maintains capital which also exceeds this internal assessment of risk exposures. Some of the key risks assessed within the ICAAP under Pillar 2A include:

Risks not fully captured under Pillar 1

- Operational risk operational risk losses measured using an internal approach to assessing potential operational risk scenarios.
- Concentration risk the risk of additional losses arising due to a higher level of default correlation than is assumed in Pillar 1 approaches; for example, due to sectoral concentrations.
- Counterparty risk additional counterparty risk exposure measured using a credit portfolio model (VaR calculated for the credit portfolio model).
- Market risk additional market risk exposure calculated using market stress and issuer default scenarios measured at the 99th percentile.

Risks not included under Pillar 1

- Pension risk the risk of additional defined benefit pension contributions arising due to adverse movements in market rates or increases in longevity.
- Structural foreign exchange risk the risk of deterioration of Group's capital surplus due to the revaluation of non-sterling risk assets with regard to foreign exchange rates.
- Interest rate risk in the banking book the risk of losses due to adverse interest rate movements which impact non-trading assets and liabilities.

Underwriting risk - the risk of overestimating demand for an underwritten issue or if market conditions change suddenly, requiring the Group to hold part of the issue in inventory or sell at a loss.

The ICAAPs forecast capital requirements and capital resources under stressed scenarios, which enable the Group to make an internal assessment of the capital buffer required to ensure that it will continue to meet minimum capital requirements throughout the economic cycle. The Group maintains capital which exceeds the higher of the TCR and the PRA's requirements and its internal assessment of potential future capital needs.

6.3 CRD IV capital buffers

Introduction

Alongside the minimum capital requirements, CRD IV requires institutions to hold capital buffers that can be drawn down in times of economic stress to absorb losses. Specific capital buffers that the Group is required to hold include:

Capital conservation buffer (CCoB)

The CCoB is designed to ensure that institutions build up capital buffers outside of times of stress that can be drawn upon if required; the requirement is 2.5% of RWAs.

Countercyclical capital buffer (CCyB)

The CCyB is designed to require financial institutions to hold additional capital to reduce the build-up of systemic risk in a credit boom by providing additional loss absorbing capacity and acting as an incentive to limit further credit growth.

The following table shows all positive CCyB rates recognised or set by the Financial Policy Committee (FPC) on foreign exposures for UK firms in specific countries that are relevant to MHI at 31 March 2019.

Country	Current CCyB rate	Implementation date
Hong Kong	2.50%	01 January 2019
Lithuania	0.50%	31 December 2018
Denmark	0.50%	31 March 2019
Iceland	1.25%	01 November 2017
Czech Republic	1.25%	01 January 2019
Slovakia	1.25%	01 August 2018
Sweden	2.00%	19 March 2017
Norway	2.00%	31 December 2017

Table 11: CCyB rates on foreign exposures set by the FPC

Each institution's specific CCyB rate is a weighted average of the CCyBs that apply in the jurisdictions where the institution's relevant credit exposures are located. The FPC is responsible for setting the UK CCyB rate (for credit exposures located in the UK). The UK CCyB rate was 1% as at 31 March 2019. MHI continues to adhere to these buffer requirements.

Table 12 shows the Group's specific CCyB rate and requirement. The table is split down into:

- The total risk exposure amount, for exposures in all countries;
- The institution specific CCyB rate, which is the weighted-average CCyB rate, calculated by multiplying the total exposure to each geographical area by the CCyB rate set for that region (including those countries with a CCyB rate set to zero); and
- The institution specific CCyB requirement, which is calculated by multiplying the above two figures together.

Table 12: Institution-specific CCyB

CCyB metric	2019 £m	2018 £m
Total risk exposure amount	2,385.8	2,257.0
Institution-specific CCyB rate (%) Institution-specific CCyB requirement	0.256% 6.11	0.074% 1.67

As at 31 March 2019, geographical breakdown of credit exposures relevant for the calculation of the CCyB is shown in Table 13.

Table 13: Geographical distribution of credit exposures relevant for the calculation of the CCyB

Breakdown by country	Exposure value for SA	Sum of long and short positions of trading book exposures for SA	of which: General credit exposures	of which: General trading book	Total	Own funds requirements weights	CCyB rate
	£m	£m	£m	£m	£m		
United Arab Emirates	0.23	13.66	0.00	0.82	0.82	0.03	
Austria	0.00	5.20	0.00	0.01	0.01	0.00	
Australia	0.00	8.08	0.00	0.13	0.13	0.00	
Belgium	0.00	12.75	0.00	0.96	0.96	0.04	
Bahrain	0.00	0.78	0.00	0.06	0.06	0.00	
Bermuda	0.00	2.57	0.00	0.04	0.04	0.00	
Brazil	0.00	0.00	0.00	0.00	0.00	0.00	
Canada	0.00	6.81	0.00	0.11	0.11	0.00	
Chile	0.00	1.41	0.00	0.02	0.02	0.00	
Czech Republic	0.00	0.05	0.00	0.00	0.00	0.00	1.25%
Germany	0.00	53.12	0.00	1.56	1.56	0.06	
Denmark	0.00	0.87	0.00	0.03	0.03	0.00	0.50%
Estonia	0.00	0.16	0.00	0.01	0.01	0.00	
Spain	0.00	5.36	0.00	0.43	0.43	0.02	
Finland	0.00	7.14	0.00	0.11	0.11	0.00	
France	0.00	99.84	0.00	4.68	4.68	0.17	0.00%
United Kingdom	58.52	30.70	4.72	1.98	6.70	0.24	1.00%
Hong Kong	1.30	0.81	0.02	0.03	0.05	0.00	2.50%
Hungary	0.00	0.00	0.00	0.00	0.00	0.00	
Indonesia	0.00	0.02	0.00	0.00	0.00	0.00	
Ireland	0.00	1.75	0.00	0.03	0.03	0.00	0.00%
Israel	0.00	0.00	0.00	0.00	0.00	0.00	
Italy	0.01	4.17	0.00	0.33	0.33	0.01	
Jersey	0.00	0.00	0.00	0.00	0.00	0.00	
Japan	28.55	5.98	1.01	0.32	1.34	0.05	
Korea, Republic of	0.02	0.00	0.00	0.00	0.00	0.00	
Cayman Islands	3.02	3.18	0.24	0.25	0.49	0.02	
Luxembourg	0.17	30.74	0.00	1.12	1.13	0.04	
Mexico	0.00	3.54	0.00	0.24	0.24	0.01	

Breakdown by country	Exposure value for SA	Sum of long and short positions of trading book exposures for SA	of which: General credit exposures	of which: General trading book	Total	Own funds requirements weights	CCyB rate
	£m	£m	£m	£m	£m		
Malaysia	0.00	0.00	0.00	0.00	0.00	0.00	
Netherlands	0.00	90.57	0.00	3.49	3.49	0.13	
Norway	0.00	0.00	0.00	0.00	0.00	0.00	2.00%
New Zealand	0.00	0.00	0.00	0.00	0.00	0.00	
Panama	0.00	0.00	0.00	0.00	0.00	0.00	
Poland	0.00	2.73	0.00	0.22	0.22	0.01	
Portugal	0.00	0.85	0.00	0.01	0.01	0.00	
Sweden	0.00	0.96	0.00	0.08	0.08	0.00	2.00%
Singapore	0.00	0.09	0.00	0.00	0.00	0.00	
Taiwan, Province of China	0.00	0.00	0.00	0.00	0.00	0.00	
United States	12.88	113.13	0.21	4.00	4.21	0.15	
Virgin Islands, British	0.18	2.96	0.01	0.05	0.06	0.00	
Total	104.88	509.98	6.23	21.14	27.37		

6.4 Leverage ratio

Management of leverage forms part of the Group's business planning process and risk appetite framework. The Group's leverage ratio as at 31 March 2019 meets the expected future requirements set out above. The Group is committed to ensuring that full compliance with all relevant regulatory requirements is maintained.

Solo and consolidated leverage ratios are monitored on a daily basis, and Recovery Plan early warning indicators have been established to ensure the Group's leverage balance sheet is sustainable and in line with risk appetite.

The Group's leverage ratio as at 31 March 2019 was 3.74% (31 March 2018: 4.50%).

Table 14 LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

	CRR leverage ratio exposure 2019	CRR leverage ratio exposure 2018
	£m	£m
Total assets as per published financial statements	19,384.1	15,517.3
Adjustments for derivative financial instruments	(1,918.5)	(44.1)
Adjustment for securities financing transactions (SFTs)	311.2	(60.5)
Adjustments for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	5.4	5.8
Other adjustments	(78)	(70.7)
Leverage ratio total exposure measure	17,704.5	15,347.8

Table 15 LRCom: Leverage ratio common disclosure

		CRR leverage ratio exposures 2019	CRR leverage ratio exposures 2018
		£m	£m
	nce sheet exposures (excluding derivatives and Securities g Transactions (SFTs))		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary	5,672.1	5,982.5
2	assets, but including collateral) (Asset amounts deducted in determining Tier 1 capital)	(77.6)	(70.7)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and	5,594.1	5,911.8
4	fiduciary assets) (sum of lines 1 and 2) Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	139.1	123.2
5	Add-on amounts for PFE associated with all derivatives transactions	2,393.8	1,968.8
8	(mark-to-market method) (Exempted CCP leg of client-cleared trade exposures)	-	0.0
9	Adjusted effective notional amount of written credit derivatives	18.0	115.6
10	(Adjusted effective optional offsets and add-on deductions for written credit derivatives)	(18.0)	(115.6)
11	Total derivatives exposures (sum of lines 4 to 10)	2,532.9	2,092.1
SFT exp	osures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	16,530	15,828.1
13	(Netted amounts of cash payables and cash receivables of gross SFT	(7,124)	(8,660.6)
14	assets) Counterparty credit risk exposure for SFT assets	165.7	170.6
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance	-	0.0
15	with Articles 429b(4) and 222 Regulation (EU) No 575/2013 Agent transaction exposures	-	0.0
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	-	0.0
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	9,571.7	7,338.1
Other of	f-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	5.5	5.8
18	(Adjustments for conversion to credit equivalent amounts)	(0.1)	(0.0)
19	Other off-balance sheet exposures (sum of lines 17 to 18)	5.4	5.8
Capital a	ind total exposure measure		
20	Tier 1 capital	662.5	690.9
21	Leverage ratio total exposure measure (sum of lines 3,11, 16, 19, EU- 19a and EU-19b)	17,704.5	15,347.8
Leverage		-	
22	Leverage ratio	3.74%	4.50%
Choice of items	on transitional arrangements and amount of derecognised fiduciary		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully Phased in-	Fully phased in

Table 16 LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

		CRR leverage ratio exposures 2019	CRR leverage ratio exposures 2018
		£m	£m
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	5,672.1	5,982.6
EU-2	Trading book exposures	5,489.0	5,608.1
EU-3	Banking book exposures, of which:	183.1	374.5
EU-5	Exposures treated as sovereigns	8.5	234.5
EU-7	Institutions	74.8	52.0
EU-10	Corporate	0.0	-
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	99.8	88.0

7 Market risk

7.1 Risk management

Market risk is the risk of financial loss or reduced valuation arising from adverse market movements (including changes in interest rates, foreign exchange rates, credit spreads, bond prices, equity prices and their associated volatilities). Credit valuation adjustments are considered within section 9 of this disclosure.

Market risk appetite is a component of the Group's overall risk appetite and is approved by the Board. The Group provides liquidity to customers of the wider Mizuho Financial Group, Inc. group of companies in European debt products, and holds inventory in its core product classes. The Group's market risk appetite is to maintain a cautious to moderate risk profile, whilst focusing upon client transaction flows in actively traded vanilla products.

The Group's market risk exposures arise principally from trading operations in government, supranational, sub-sovereign, agency, and corporate debt instruments; and provision of derivatives for client risk management solutions. Exposures are partially mitigated through the execution of offsetting transactions in other debt instruments or through the use of hedging derivative contracts.

Market risk is managed in accordance with a variety of risk measures including sensitivity based measures (e.g. sensitivity to a basis point move in interest rates or credit spreads), VaR, and stress testing. Market risk limits are set and monitored using these measures as appropriate on a business line basis. Key risk exposures on solo and consolidated bases, which incorporate the effect of hedging activity, are monitored by the Risk Management function on a daily basis.

Market risk exposure is routinely monitored by the Risk Management Committee, and is overseen by the Board Risk Committee and the Board. Significant exposures are escalated in accordance with an established market risk policy.

7.2 Balance sheet split of trading and banking books

Trading books comprise those positions that are held with trading intent or to hedge such positions. In addition to these positions, the trading books also contain assets held as part of the HQLA portfolio for the purpose of managing liquidity risks and ensuring ongoing conformance with the LCR.

The Group's balance sheet is split between trading and non-trading or 'banking' books as shown below:

Table 17: Balance sheet split by trading and banking books

	2019					
Balance sheet category	Trading Book	Banking book	Total			
	£m	£m	£m			
Reverse repurchase agreements	9,257.5	-	9,257.5			
Debt and equity securities	5,087.0	1.2	5,088.2			
Derivative assets	4,445.8	5.6	4,451.4			
Loans and advances to banks	-	146.9	159.8			
Shares in group undertakings	-	8.6	8.6			
Intangible fixed assets	-	73.2	73.2			
Tangible fixed assets	-	31.2	31.2			
Other assets, prepayments and accruals	51.5	275.6	327.1			
Total assets	18,841.8	542.3	19,384.1			
Deposits by banks	-	196.2	196.2			
Customer accounts	-	610.0	610.0			
Repurchase agreements	6,306.2	-	6,306.2			
Short trading positions	5,208.7	-	5,208.7			
Derivative liabilities	4,281.3	3.8	4,285.1			
Debt securities in issue	-	1,453.2	1,453.2			
Subordinated debt	-	45.3	45.3			
Other liabilities, provisions and accruals	50.4	488.8	539.2			
Total liabilities	15,846.6	2,797.3	18,643.9			

7.3 Internal risk measures

MHI has continued to manage its market risk at low levels over the past year, with average VaR of ± 1.3 m (2018: ± 1.7 m). The table below shows the internal VaR measurement, determined using a 99th percentile confidence level over a one day time horizon, by risk factor:

Table 18: VaR by risk factor

		2019				2018		
VaR by risk factor	Close £m	Average £m	High £m	Low £m	Close £m	Average £m	High £m	Low £m
Interest rate risk	0.7	0.8	1.1	0.5	0.8	0.9	2.3	0.6
Credit spread risk	0.9	1.0	2.4	0.3	1.3	1.7	3.0	0.6
Equity risk	-	-	0.0	-	-	-	-	-
Foreign exchange risk	0.1	1.0	0.3	0.0	0.1	0.1	0.3	-
Total VaR ⁽¹⁾	1.0	1.3	2.0	0.9	1.2	1.7	2.6	1.0

⁽¹⁾ Total VaR assumes some diversification across risk types and therefore does not represent the simple sum of component risk factors.

7.4 Pillar 1 requirements by risk category

The Group's largest sources of market risk derive from general debt instrument risk within its trading inventory of flow derivative instruments, and specific debt instrument risk from the trading inventory of fixed income securities. Specific debt instrument risk arising from the trading of fixed income securities represents exposure to risk factors related to the issuer relevant to the pricing of individual debt securities.

The table below shows the Group's Pillar 1 market risk capital requirements, calculated using the standardised approach by risk factor:

Table 19: Pillar 1 market risk under standardised approach

Market risk under standardised approach	2019 £m	2018 £m
General interest rate risk – debt instrument	102.1	70.8
Specific risk – debt instrument	35.5	56.1
General interest rate risk – equity instrument	-	-
Specific risk – equity instrument	-	-
Foreign exchange risk	0.2	1.0
Total market risk	137.8	127.9

7.5 Non-traded market risk

Market risk exposures which arise from non-trading activities are not captured or fully captured through Pillar 1 capital requirements, and thus attract Pillar 2 charges. The market risk exposures which arise in respect of non-trading activities are summarised below:

Table 20: Summary of non-traded market risk

	Principal risk factors					
	Interest rate	Inflation	Credit spread	Equity		
Non-trading book	\checkmark	×	×	\checkmark		
Pension scheme	\checkmark	\checkmark	\checkmark	\checkmark		

Equity risk in the banking book

Banking book equity investments, being those which are not held for trading intent, attract credit risk capital requirements under the standardised approach.

The Group's most significant non-trading equity asset constitutes a carried interest entitlement in a private equity healthcare fund, representing a contractual interest in the fund's performance in excess of predefined thresholds. This interest had a fair value of £1.1m as at 31 March 2019.

The Group maintains holdings of Mizuho Financial Group, Inc. shares in connection with share based remuneration arrangements as discussed in section 12.

The balance sheet value of non-trading equity investments is shown below by investment category. These holdings are recorded at fair value, with revaluation gains taken through profit and loss:

Table 21: Banking book equity by category

	2019	2018	
Banking book equity	Balance sheet value £m	Balance sheet value £m	
Private equity	1.1	0.5	
Exchange traded	8.7	6.2	
Other	-	-	
Total banking book equity	9.8	6.7	

Interest rate risk in the banking book

The Group's banking books comprise assets and liabilities which are not held or issued for trading purposes. These include the raising and provision of funding to support the Group's trading activities, acceptance of customer deposits and investment activities. Funding and deposit taking activity, including related derivative hedging, is conducted in such a manner as to minimise, where possible, interest rate risk. A summary of the Group's non-trading notional interest rate risk exposure by maturity band is included in Note 31B of the 31 March 2019 financial statements.

Pension scheme market risk

The Group sponsors one defined benefit pension plan, the Mizuho International plc Retirement Benefits Scheme (the "Scheme"). The Scheme closed to new members in 1996. Accrual of further liabilities ceased on the retirement of the last active member, prior to the 31 March 2009 actuarial valuation of the Scheme. The requirement to fund the Scheme is borne jointly by MHI and Asset Management One International Ltd (a Mizuho Financial Group company) in proportion to the historical association of Scheme members to those employers.

The Scheme's investment strategy is set by the Trustees, in consultation with MHI and recorded in the Scheme's Statement of Investment Principles. The strategy involves retaining longevity risk within the Scheme and holding a proportion of return seeking assets.

With regard to market risks, the Scheme's assets give rise to interest rate, credit spread and equity risk and the Scheme's liabilities give rise to interest rate and inflation risk.

8 Credit risk

8.1 Risk management

Credit risk is the risk of financial loss arising from the failure of a customer, client, issuer, or counterparty to meet its contractual obligations. The Group's activities that give rise to counterparty credit risk, such as securities financing, derivatives and securities trading which supports the Group's market-making are discussed in section 9 and the credit risk arising from exposure to issuers of traded debt is discussed within section 7.

Credit risk appetite forms a key component of the Group's overall risk appetite and is approved by the Board. The Group employs a range of metrics in support of this, which are used to limit and monitor the credit risk exposures in accordance with credit risk management policies.

Aside from those credit risks discussed in sections 7 and 9, the principal sources of non-trading credit risk exposures arise from funding operations through the placement of cash resources and deposits with third parties. Credit exposures also arise in the ordinary course of business through short term receivables and, in addition, Pillar 1 credit risk charges also apply to investments in fixed assets. The Group does not undertake commercial or retail lending activity and does not extend credit through the provision of guarantees.

Non-trading credit risk exposures are measured in accordance with balance sheet carrying values, after taking account of any applicable credit risk mitigation (CRM) arrangements and adjustments for credit impairment.

8.2 Pillar 1 requirements

RWAs and Pillar 1 credit risk capital requirements calculated under the standardised approach are set out below:

	20 1	9	2018	8
	RWAs £m	Pillar 1 capital requirements £m	RWAs £m	Pillar 1 capital requirements £m
Central government or central banks	-	-	-	-
Public sector entities	-	-	-	-
Multilateral development banks	-	-	-	-
Regional governments or local authorities	-	-	-	-
Institutions	15.0	1.2	10.4	0.8
Corporates	0.0	-	0.0	0.0
Equity	10.3	0.8	7.1	0.6
Other	62.7	5.0	81.1	6.5
Total	88.0	7.0	98.7	7.9

Table 22: Credit risk RWAs and Pillar 1 capital requirements by exposure class

8.3 Analysis of credit risk exposures

Credit risk exposures by credit quality

Credit risk exposures before and after CRM and RWAs by credit quality, in accordance with the credit quality steps used within the standardised approach, are given below.

Under the standardised approach, credit ratings assigned by credit rating agencies are used in the calculation of RWAs. The PRA determines which rating agencies may be used in the calculation of risk weights, of which the Group uses ratings assigned by Standard & Poor's Financial Services LLC (S&P), Moody's Investor Service, Inc. (Moody's) and Fitch Ratings, Inc. (Fitch). Credit exposures must be assigned to one of six credit quality steps if a rating is available. Risk weight percentages are assigned based on the credit quality step, exposure class and maturity of each credit exposure. Where an external credit rating is not available or where exposures exist to central counterparties, a default treatment is applied as specified by regulatory guidance.

Table 23: Credit risk exposures and RWAs by credit quality step

	2019				
	Gross credit exposure £m	CRM £m	Net credit exposure £m	RWAs £m	
Credit quality step 1	8.5	-	8.5	-	
Credit quality step 2	183.7	74.8	108.9	21.8	
Credit quality step 3	0.0	-	0.0	-	
Credit quality step 4	-	-	-	-	
Credit quality step 5	8.7	-	8.7	8.7	
Credit quality step 6	1.1	-	1.1	1.6	
Unrated	55.9	-	55.9	55.9	
Total	257.9	74.8	183.1	88.0	

	2018				
	Gross credit exposure £m	CRM £m	Net credit exposure £m	RWAs £m	
Credit quality step 1	234.5	-	234.5	-	
Credit quality step 2	83.1	31.1	52.0	10.4	
Credit quality step 3	0.0	-	-	0.0	
Credit quality step 4					
Credit quality step 5	6.8	-	6.8	7.1	
Credit quality step 6	81.1	-	81.1	81.1	
Total	405.5	31.1	374.4	98.6	

Gross credit exposures by exposure class

Gross credit risk exposures, before the impact of CRM, as at year end and averaged over the financial year are summarised below:

Table 24: Gross credit risk exposures by exposure class

	2019		2018		
	Average gross exposure £m	Year-end gross exposure £m	Average gross exposure £m	Year-end gross exposure £m	
Central government or central banks	57.4	8.5	122.6	234.5	
Public sector entities	-	-	-	-	
Multilateral development banks	-	-	-	-	
Regional governments or local authorities	-	-	-	-	
Institutions	120.8	140.6	128.0	83.1	
Corporates	0.0	0.0	0.0	0.0	
Equity	13.2	9.9	9.5	6.8	
Other	94.6	99.0	76.8	81.1	
Total	286.0	258.0	336.9	405.5	

Geographic distribution of gross credit exposures

The geographic distribution of gross credit exposures as at 31 March 2019 is given below:

Table 25: Geographic distribution of gross credit risk exposures

	2019					
	UK £m	Japan £m	US £m	Europe £m	Other £m	Total £m
Central government or central banks	8.5	-	-	-	-	8.5
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
Regional governments or local authorities	-	-	-	-	-	-
Institutions	1.7	65.8	28.5	44.5	0.1	140.6
Corporates	-	-	-	-	0.0	-
Equity	1.1	8.7	0.1	-	-	9.9
Other	55.9	28.8	12.8	1.5	-	99.0
Total credit risk exposure	67.2	103.3	41.4	46.0	0.1	258.0

	2018					
	UK £m	Japan £m	US £m	Europe £m	Other £m	Total £m
Central government or central banks	234.5	-	-	-	-	234.5
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
Regional governments or local authorities	-	-	-	-	-	-
Institutions	1.3	31.1	40.7	10.0	0.0	83.1
Corporates	-	-	-	-	0.0	0.0
Equity	0.6	6.1	0.2	-	-	6.9
Other	81.1	-	-	-	-	81.1
Total credit risk exposure	317.5	37.1	40.9	10.0	0.1	405.5

Residual maturity of gross credit exposures

The residual maturity of gross credit exposures as at 31 March 2019 is given below:

Table 26: Residual maturity of gross credit risk exposures

	2019				
	Less than 1 year £m	1 to 5 years £m	5 to 10 years £m	Over 10 years £m	Total £m
Central government or central banks	8.5	-	-	-	8.5
Public sector entities	-	-	-	-	-
Multilateral development banks	-	-	-	-	-
Regional governments or local authorities	-	-	-	-	-
Institutions	140.6	-	-	-	140.6
Corporates	0.0	-	-	-	-
Equity	1.2	-	-	8.7	9.9
Other	99.0	-	-	-	99.0
Total credit risk exposure	249.3	-	-	8.7	258.0
	2018				

	Less than 1 year £m	1 to 5 years £m	5 to 10 years £m	Over 10 years £m	Total £m
Central government or central banks	234.5	-	-	-	234.5
Public sector entities	-	-	-	-	-
Multilateral development banks	-	-	-	-	-
Regional governments or local authorities	-	-	-	-	-
Institutions	83.1	-	-	-	83.1
Corporates	-	-	-	-	-
Equity	-	-	-	6.8	6.8
Other	81.1	-	-	-	81.1
Total credit risk exposure	398.7	-	-	6.8	405.5

8.4 Impairment adjustments

At each balance sheet date, the Group assesses whether those financial and other assets which are not accounted for at fair value through profit and loss are impaired. As at 31 March 2019, no adjustments in respect of asset impairment were made (31 March 2018: no impairment adjustments were made).

The Group's accounting policies concerning the treatment of impaired financial and non-financial assets are set out in its financial statements.

9 Counterparty credit risk

9.1 Risk management

Counterparty credit risk forms part of the Group's overall credit risk but is differentiated from that discussed in section 8 in that it arises where the failure of a counterparty to meet its contractual obligations may lead to losses of an uncertain nature, driven by fluctuations in market valuations.

Counterparty credit risk forms a key component of the Group's overall risk appetite, and is approved by the Board. The Group employs a number of metrics in support of this which are used to limit and monitor the credit risk exposures in accordance with credit risk management policies.

The Group is exposed to counterparty credit risk principally through derivative contracts and repurchase agreement contracts arising from its trading activities, and to a lesser extent from securities trading which supports the Group's market-making activities.

Counterparty credit risk methodology

Counterparty credit risk is assessed and limits are set in accordance with the Group's methodology. Exposure is evaluated by determining the potential size of counterparty exposures which may arise from transactions together with an assessment of the creditworthiness of the obligor.

The potential size of counterparty credit risk is a function of both current and potential future exposures. Potential future exposures to a counterparty default, which may arise through securities trading, derivatives, and repurchase agreement contracts, are estimated using historical volatilities of key pricing variables to those contracts over their remaining life.

Counterparty credit quality is assessed using external credit ratings where available, or alternatively an internal rating is assigned in accordance with internal credit rating methodology.

Counterparty credit limits are established in accordance with the Group's methodology for measuring counterparty credit risk, taking into account executed documentation with permissible netting and collateral management arrangements, and consistent with the overall credit risk appetite.

Counterparty credit risk mitigation

Risk mitigation techniques are used to reduce counterparty credit risks arising from the Group's activities. These techniques include the use of netting agreements, acceptance of collateral, application of haircuts, and execution of transactions with central counterparties, whereby credit risk to individual counterparties is replaced by exposure to a central counterparty.

Derivative and repurchase agreement trading activity is undertaken using netting agreements on a collateralised basis, unless exceptions are approved in accordance with credit risk policies. Collateral arrangements are governed by standard agreements (such as Credit Support Annexes to International Swaps and Derivatives Association (ISDA) Master Agreements and Global Master Repurchase Agreements). The forms of collateral which may be accepted are subject to the Group's internal credit risk policies, which seek to ensure that in the event of counterparty default the value of collateral held is sufficient to compensate for losses arising from such default.

Repurchase agreement trading activity is principally conducted using high-quality government securities as collateral, and minimal use is made of sub-investment grade corporate securities as collateral. This is in line with the Group's requirement to only accept high quality collateral for margining purposes, which must be of at least of equivalent quality to the collateral of the underlying transaction. Collateral is revalued on a daily basis in accordance with collateral management procedures.

In order to recognise the effects of CRM, a number of conditions must be met, and in particular agreements must be legally enforceable and legal title to collateral must be passed to MHI or MHEU. Once these conditions are satisfied the effect of collateral is reflected through the reduction in the measure of credit exposure.

Credit valuation adjustments are established in accordance with valuation policies for derivative and repurchase agreement transactions. Credit valuation adjustments concerning individual counterparties are based upon the potential size of exposures to those counterparties, taking account of legally enforceable netting and collateral agreements, together with market pricing of the creditworthiness of those counterparties.

Correlated risk

Correlated or wrong way risk arises where the probability of counterparty default is positively correlated to the risk of the underlying transaction. The Group adopts an integrated market risk and credit risk stress testing methodology which highlights correlated exposures across a range of scenarios.

Credit risk policies have been implemented to mitigate wrong way risk which, for example, prohibiting the acceptance of collateral issued by a connected entity to the transaction counterparty, and overcollateralisation. Wrong way risk is further controlled through the operation of a credit limit framework in respect of specific counterparties, groups of counterparties and countries.

9.2 Pillar 1 requirements

The Group's RWAs and Pillar 1 counterparty risk requirements, in respect of counterparty risk arising within trading and non-trading books, are set out below as calculated under the mark-to-market method:

Table 27: Counterparty credit RWAs and Pillar 1 capital requirements

	2019		201	8
	RWAs Pillar 1 capital requirements		RWAs	Pillar 1 capital requirements
	£m	£m	£m	£m
Counterparty credit risk	181.4	14.5	182.3	14.6

The total counterparty credit risk RWA and Pillar 1 capital requirement includes default funds, settlement risk and CVA capital requirement.

9.3 Analysis of counterparty risk exposures

RWAs and exposures by product type

An analysis of counterparty credit risk RWAs and exposures as at 31 March 2019 by product type is given below:

Table 28: Counterparty credit RWAs and exposures by product type

	2019		2018	
	RWAs	Credit risk exposure ⁽¹⁾	RWAs	Credit risk exposure
	£m	£m	£m	£m
Derivative contracts and Long dated exposures	68.2	2,362.4	67.9	1,998.8
Securities financing contracts	62.2	315.3	55.2	325.7
Other	51.0 ⁽²⁾	74.3 ⁽³⁾	59.2 ⁽²⁾	66.4 ⁽³⁾
Total	181.4	2,752.0	182.3	2,390.9

⁽¹⁾ Credit risk exposure is shown as the credit exposure, calculated in accordance with Pillar 1 standard rules using the mark to market approach, less deductions in respect of CRM.

⁽²⁾ Includes a credit valuation adjustment charge, settlement and delivery risk charges, default fund and Treasury Default Loss Allocation Regime contribution.

⁽³⁾ Includes Treasury Default Loss Allocation Regime contribution , settlement and delivery risk charges and default fund

Further analysis of credit risk exposure in respect of derivative contracts is given below, and shows the impact of netting benefits from legally enforceable netting agreements and collateral arrangements:

Table 29: Derivative counterparty credit risk exposures

	2019	2018
	Credit risk exposure £m	Credit risk exposure £m
Gross positive fair value of derivative contracts	6,529.5	3,045.6
Potential future credit exposure	2,393.8	1,968.8
Netting benefits	(6,369.0)	(2,724.5)
Netted credit exposure on derivative contracts	2,554.3	2,289.9
Collateral (held) / placed	(202.6)	(297.4)
Long settlement	10.7	6.3
Total net derivatives credit risk exposure	2,362.4	1,998.8

Counterparty credit risk exposures by exposure class

An analysis of counterparty credit risk exposures as at 31 March 2019 by principal exposure class is given below:

Table 30: Counterparty credit risk exposures by exposure class

	2019 Credit risk exposure £m	2018 Credit risk exposure £m
Central government or central banks	17.9	56.5
Public sector entities	1.1	1.5
Multilateral development banks	34.3	27.3
Regional governments or local authorities	-	-
Institutions	2,693.6	2,296.5
of which: CCPs	2,449.8	2,070.8
Corporates	5.0	9.1
Equity	-	-
Other	-	-
Total	2,752.0	2,390.9

Counterparty credit risk exposures by credit quality

The Group has maintained a cautious approach with regard to the credit standing of its counterparties. An analysis of counterparty credit risk exposures as at 31 March 2019 by credit quality, in accordance with the credit quality steps used within the Pillar 1 Standardised Approach, is given below:

Table 31: Counterparty credit risk exposures by credit quality step

	2019 Credit quality steps						
	1	2	3	4	N/A ⁽¹⁾	Total	
	£m	£m	£m	£m	£m	£m	
Central government or central banks	17.9	-	-	-	-	17.9	
Public sector entities	1.1	-	-	-	-	1.1	
Multilateral development banks	34.3	-	-	-	-	34.3	
Regional governments or local authorities	-	-	-	-	-	-	
Institutions	-	243.6	-	0.1	2,449.8	2,693.5	
of which: CCPs					2,449.8	2,449.8	
Corporates	0.2	0.0	4.8	-	-	5.0	
Equity	-	-	-	-	-	-	
Other	-	-	-	-	-	-	
Total credit risk exposure	53.5	243.6	4.8	0.1	2,449.8	2,752.0	

	2018 Credit quality steps					
	1 £m	2 £m	3 £m	4 £m	N/A ⁽¹⁾ £m	Total £m
Central government or central banks	56.5	-	0.0	-	-	56.5
Public sector entities	1.5	-	-	-	-	1.5
Multilateral development banks	27.3	-	-	-	-	27.3
Regional governments or local authorities	-	-	-	-	-	-
Institutions	-	225.6	-	0.1	2,070.8	2,296.5
of which: CCPs	-	-	-	-	2,070.8	2,070.8
Corporates	-	-	9.1	-	-	9.1
Equity	-	-	-	-	-	-
Other	-	-	-	-	-	-
Total credit risk exposure	85.3	225.6	9.2	0.1	2,070.8	2,390.9

⁽¹⁾ Uniform regulatory treatment applied. Qualifying central counterparties attract a uniform 2% risk weighting from irrespective of credit quality.

External ratings are mapped to EBA prescribed credit quality step assessment scale and applied to exposures.

The counterparty credit risk exposures described in the analysis above include credit derivative contracts which give rise to counterparty credit risk exposure to the counterparty to the contract.

9.4 Notional value of credit derivative transactions

The following table shows the notional value of the credit derivative transactions outstanding as at 31 March 2019, arising in respect of the Group's own credit portfolio or through intermediation activities. Transactions in respect of the Group's own credit portfolio comprise both hedges of market risk associated with trading inventory and hedges used in connection with the issuance of structured notes:

Table 32: Notional value of credit derivative transactions

	201	9	2018 Own credit portfolio		
	Own credit	portfolio			
Notional value of outstanding transactions	Protection purchased £m	Protection sold £m	Protection purchased £m	Protection sold £m	
Credit default swaps	25.7	18.0	122.7	115.6	

10 Operational risk

10.1 Risk management

Operational risk is the risk of financial loss resulting from inadequate or failed internal processes, people and systems or from external events.

Operational risk tolerance forms a component of the Group's overall risk appetite and is approved by the Board. The Group has no tolerance for inappropriate staff behaviour which may result in damage to its reputation or to the interests of its clients.

The principal operational risks to which the Group is exposed include technology failures (including cyber-attack), fraud, human error, the creation of unauthorised credit or market risks, regulatory breaches, and litigation.

Operational risk exposures are assessed and measured using a framework which includes: risk and control self-assessments, key risk indicators, internal loss event reporting, external loss event capture, and scenario stress testing.

The Group mitigates such risks through the maintenance of a comprehensive system of internal controls, which incorporates a strict segregation of duties between front and back office functions, the purchase of external insurance, and business continuity planning. Root cause analysis is undertaken to investigate internal instances of operational loss or near miss incidents. In cases where internal controls cannot be implemented to reduce operational risk to an acceptable level, consideration is given to avoiding or transferring the risk altogether.

Operational risk reporting is undertaken routinely to the Risk Management Committee and to the Operational Risk Committee. Significant matters are escalated to the Board Risk Committee and to the Board.

10.2 Pillar 1 requirements

As at 31 March 2019, the Pillar 1 capital requirement in respect of operational risk was £31.5m (2018: £30.2m) as calculated under the basic indicator approach.

11 Liquidity risk

11.1 Risk management

Liquidity risk is the risk that the Group does not have sufficient capital and funding resources to meet its financial contractual obligations as they fall due. Liquidity risk can result from a lack of availability of external funding, and the inability to convert securities into cash to meet near-term funding requirements.

Strategies and processes in the management of liquidity risk

The Group's management of liquidity risk aims to ensure that there are sufficient liquid resources, both in amount and quality, to enable MHI and MHEU to meet financial contractual obligations as they fall due, even during times of idiosyncratic and / or market stress. MHI and MHEU maintain liquidity in excess of regulatory and internal risk appetite requirements.

The Group's business model is simple, largely cash-based, with derivatives predominantly being of a vanilla and cleared nature, has access to diverse funding sources, allocates costs to businesses in a transparent and effective way, and has a robust limit and control framework to protect against liquidity risks in excess of appetite.

The Group further mitigates liquidity risks through maintenance of HQLAs in a segregated portfolio under the control of its Treasury & Funding function, as well as holding additional HQLA-eligible unencumbered assets elsewhere across the firm but under the operational control of Treasury & Funding.

MHI and MHEU perform stress testing of their liquidity risk positions; a dynamic and forward looking approach is taken for internal liquidity stress scenarios and their underlying assumptions. Reporting of liquidity risks and associated stress testing is undertaken routinely by the Stress Testing Committee and the Risk Management Committee. Significant matters are escalated to the Board Risk Committee and the Board.

The Group also considers the effects of a downgrade in the rating of MHI and Mizuho Bank, Ltd., whose rating is referenced within the Credit Support Annexes under which MHI may be required to pay collateral to its counterparties. Stress testing is conducted which incorporates the impact of a two notch downgrade in the ratings of MHI and Mizuho Bank, Ltd., and this modelling indicates that MHI has sufficient available liquidity resources to manage the cash requirements which may arise in such a situation.

Structure and organisation of the liquidity risk management function

Liquidity risk appetite is a component of the Group's overall risk appetite and is set and approved by the Board. The Board delegates responsibility over the day to day management of liquidity risk to the Executive Committee who in turn empower the Asset & Liability Committee with responsibility for the day-to-day management of liquidity risk. Responsibility for liquidity risk oversight is delegated to the Board Risk Committee, to which the CRO is primarily accountable. The CRO is supported by Risk Management Department, and chairs the Risk Management Committee and Stress Testing Committee.

The Group adopts a three lines of defence model in the management of liquidity risk:

- The first line of defence is primarily accountable for liquidity risk on an operational level. This is considered to be led by Treasury & Funding and Operations with collaboration from all other Front Office personnel.
- The second line of defence is primarily accountable for liquidity risk oversight. This comprises Liquidity Risk Management and Regulatory Reporting.

• The third line of defence of Internal Audit provides assurance over the risk management framework and is totally independent of both first and second lines of defence.

Scope and nature of liquidity risk reporting and measurement systems

Robust systems, procedures and policies ensure that liquidity regulatory reporting and risk oversight metrics are produced in compliance with the internal and regulatory requirements.

Adequacy of liquidity risk management arrangements

MHI and MHEU have produced and maintain ILAAP documents detailing how principal liquidity risks are assessed, quantified, and managed. Further, these documents highlight the Group's approach to determining the minimum level of liquidity resources required to be maintained to mitigate those risks in line with its overall liquidity risk management and liquidity risk appetite, approved by the Board.

The approval and overall ownership of the ILAAP is the responsibility of the Board of the Group. The leadership for preparation of the ILAAP document has been delegated to the CRO with support from the Risk Management Department, Finance, Regulatory Reporting, Treasury & Funding, Compliance, and impacted business areas. The document has been discussed and challenged by senior management, including the CEO, the CFO, the Head of Compliance and the Treasurer.

The ILAAP document is an integral part of the Group's liquidity management framework and informs the Board of the ongoing assessment and quantification of liquidity risks, how these are mitigated, and required liquidity resources. The CRO, through the Head of Regulatory & Liquidity Risk Management and supporting functions, is responsible for maintaining and updating the ILAAP document, monitoring liquidity adequacy, and ensuring that the ILAAP document is reflective of the Group's liquidity risk management at all times.

The ILAAP document is dynamic and updated at least annually, but also in line with changes in regulations, risk appetite, business model, and market conditions. The annual Board approval of the ILAAP, including statement of liquidity risk appetite, is taken as management's declaration and attestation of the overall liquidity adequacy requirement of liquidity risk management systems and conformance with overall liquidity risk profile.

11.2 Liquidity Coverage Ratio (LCR)

Disclosures on the Group's liquidity buffer, total net cash outflows and LCR averaged over the 12 months to 31 March 2019 are presented below.

Scope of consolidation: consolidated		Total weighted value (average)					
Currency and units: £m							
Quarter ending on:		30 Jun 2018	30 Sept 2018	31 Dec 2018	31 Mar 2019		
Number of data points used in the calculation of averages		12	12	12	12		
		TOTAL ADJUSTED VALUE					
21	Liquidity buffer	2,099.2	2,155.3	2,122.1	2,040.4		
22	Total net cash outflows	536.7	545.7	538.4	513.3		
23	Liquidity Coverage Ratio (%)	398.2%	401.3%	411.6%	415.5%		

Table 33: LCR Disclosure Template

11.3 Asset encumbrance

The secured and unsecured wholesale market, together with the debt issuance programme, is the prime funding source for the Group. The Group provides securities financing transactions and collateralised borrowing as part of its repurchase agreement business and these result in off-balance sheet encumbrance. Another form of encumbrance is pledging securities with central counterparties to facilitate trading activities and meet initial margin requirements. Assets on the balance sheet are considered encumbered when they have been pledged or used to secure or collateralise a transaction that impacts their transferability. Treasury & Funding control the funding strategies for assets and monitor asset encumbrance levels daily.

Encumbrance disclosures for the Group in the following tables are disclosed in accordance with Commission Delegated Regulation (EU) 2017/2295⁶. During the year, due to FINREP requirements being introduced, reporting of collateral received was changed to be on a net basis, from previously being on a gross basis. As such, the comparatives in the following tables have also been restated to align to the new basis.

⁶ COMMISSION DELEGATED REGULATION (EU) 2017/2295 of 4 September 2017 supplementing Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to regulatory technical standards for disclosure of encumbered and unencumbered assets.

Table 34: Encumbered and unencumbered Assets

As at 31 March 2019		Carrying a	amount of	Fair value of encumbered		Carrying amount of		Fair value of	
		encumbered assets		assets		unencumbered assets		unencumbered assets	
£m			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
		10	30	40	50	60	80	90	100
10	Assets of the reporting institution	2,700.1	2,441.7			16,329.4	11,160.3		
30	Equity instruments	-	-			12.4	0.2		
40	Debt securities	2,648.2	2,441.7	2,664.3	2,456.0	2,467.7	2,056.8	2,485.6	2,066.8
50	of which: covered bonds	-	-	-	-	83.9	82.8	84.2	83.1
60	of which: asset-backed securities	-	-	-	-	-	-	-	-
70	of which: issued by general governments	2,168.6	2,167.3	2,179.5	2,178.2	1,156.1	1,142.9	1,162.1	1,147.3
80	of which: issued by financial corporations	321.4	151.6	323.3	152.5	906.2	521.4	913.8	525.5
90	of which: issued by non-financial corporations	195.2	140.4	196.8	141.5	377.4	233.5	380.6	235.1
120	Other assets	60.8	-			13,850.5	9,103.4		

As at	t 31 March 2018	Carrying a encumber		Fair value of			amount of ered assets		alue of ered assets
£m		encumber	of which notionally eligible EHQLA and HQLA	ass	of which notionally eligible EHQLA and HQLA	unencumb	of which EHQLA and HQLA	unencumb	of which EHQLA and HQLA
		10	30	40	50	60	80	90	100
10	Assets of the reporting institution	2,653.9				14,173.7			
30	Equity instruments	-				8.1			
40	Debt securities	2,586.3		2,600.2		2,319.9		2,358.8	
50	of which: covered bonds	7.7	Not	7.8	Not	40.7	Not	41.0	Not
60	of which: asset-backed securities	-	required in 2018	-	required in	-	required in 2018	-	required in
70	of which: issued by general governments	2,007.1	disclosure	2,016.9	2018	1,122.9	disclosure	1,143.0	2018
80	of which: issued by financial corporations	346.1		348.6	disclosure	782.8	alcolocaro	794.0	disclosure
90	of which: issued by non-financial corporations	223.2		225.3		289.7		292.7	
120	Other assets	71.6				11,988.3			

EHQLA: assets of extremely high liquidity and credit quality

Table 35: Collateral received

			As at 31 Ma	arch 2019			As at 31 March 2018			
				Unencu	Imbered			Unencu	umbered	
		Fair value of collateral rec debt secur	eived or own	received o securitie availa	of collateral or own debt es issued ble for brance	Fair value of collateral rec debt securi	eived or own	received of securities iss	of collateral or own debt sued available mbrance	
£m			of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA	
		10	30	40	60	10	30	40	60	
130	Collateral received by the reporting institution	9,211.4	8,814.5	306.3	250.1	9,271.1		187.0		
140	Loans on demand	-	-	-	-	-		-		
150	Equity instruments	1.8	0.9	-	0.2	1.8		-		
160	Debt securities	9,209.6	8,813.6	306.3	250.1	9,269.1		186.9		
170	of which: covered bonds	31.1	49.5	0.9	1.5	45.1		0.5		
180	of which: asset-backed securities	-	-	-	-	-		-		
190	of which: issued by general governments	8,216.4	8,151.8	175.0	174.4	8,359.2		121.9		
200	of which: issued by financial corporations	621.4	473.5	43.5	23.4	498.1	Not	23.2	Not	
210	of which: issued by non-financial corporations	454.7	252.6	57.6	29.5	327.1	required in 2018 disclosure	39.0	required in 2018 disclosure	
220	Loans and advances other than loans on demand	-	-	-	-	-	uisciosure	-	uisciosure	
230	Other collateral received	-	-	-	-	-		-		
231	of which:									
240	Own debt securities issued other than own covered bonds or asset-backed securities	-	-	10.6	-	-		-		
241	Own covered bonds and asset-backed securities issued and not yet pledged			-	-			-		
250	Total assets, collateral received and own debt securities issued	12,058.1	11,438.5			11,860.1				

Table 36: Encumbered assets/collateral received and associated liabilities

		20	19	20	18
		Matching liabilities, contingent liabilities or securities lent	Asset, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	Matching liabilities, contingent liabilities or securities lent	Asset, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		10	30	10	30
10	Carrying amount of selected financial liabilities	5,605.3	8,662.6	5,637.8	8,124.9

ABSs: asset-backed securities

12 Remuneration

The following sections relate to MHI on a solo basis. Some aspects of remuneration policy also apply to MHEU where applicable. Quantitative data provided in section 12.8 relates to the Group on a consolidated basis.

12.1 The Remuneration Committee

As part of the Group's corporate governance arrangements the Board has established a RemCo to approve remuneration policy and set specific remuneration at certain levels. RemCo members are appointed by the Board and solely comprise Non-Executive Directors; the committee reports to the Board through its Chair. The remuneration of MHI's Executive Directors is approved by the RemCo. The RemCo also approves the remuneration of Managing Directors and above and of Material Risk Takers (MRTs), a definition of which is set out below. Between 1 April 2018 and 31 March 2019, the RemCo held seven meetings.

12.2 Remuneration policy

MHI maintains a remuneration policy which applies to all employees together with staff seconded from affiliates within the Mizuho Financial Group, Inc. group of companies. The policy takes into account the PRA and FCA's Remuneration Codes and related guidance as well as the EBA Guidelines on Sound Remuneration Policies, and is intended to promote effective risk management whilst retaining the flexibility to make changes dependent upon external factors including, but not limited to, future legislative or regulatory changes. The policy also provides a market based remuneration framework, which enables the Group to recruit and retain high calibre staff and promote fairness and consistency throughout the employment relationship whilst not compromising the Group's high standards of control and risk management.

The remuneration policy and its implementation are reviewed and approved by the RemCo from time to time and at least annually. Any changes to the policy will only take effect upon approval by the RemCo and will be subject to ratification by the Board. RemCo approved a revised remuneration policy during the meeting of 29 April 2019.

12.3 Material Risk Takers (MRTs)

MRTs are defined as staff whose professional activities can have a material impact on MHI's risk profile, taking into account the criteria set out in the European Banking Authority's Regulatory Technical Standard CDR (EU) No 604/2014.

A list of MRTs is held by MHI's Human Resources (HR) department. Employees that appear on this list are notified by HR of their status and of the implications of being defined as an MRT.

As at 31 March 2019 for the fiscal year 2018/19, 66 active members of staff in MHI and MHEU were identified as MRTs.

12.4 Control functions

The compensation of employees engaged in control functions is based principally on the achievement of objectives linked to those functions and MHI performance. Compensation for the heads of those control functions is approved by the RemCo.

12.5 The link between pay and performance

The remuneration policy is designed to align employee rewards with performance and aims to protect and promote shareholder interests by incentivising staff to deliver sustained performance and create long-term value through delivery of MHI's goals. The policy also provides a market-competitive remuneration structure to attract and retain high calibre staff. The policy is reviewed at least annually and approved by the RemCo and the Board. The policy is made available to all employees on MHI's intranet site and when updated it is mandatory that all employees attest that they have read and understood the policy.

The policy states that variable remuneration awards are conditional, discretionary and contingent upon a sustainable and risk-adjusted performance, in excess of that required to fulfil the employee's job description as part of the employee's terms of employment. All staff (including Front Office revenue generating staff) performance is assessed on a range of both quantitative and qualitative measures. Awards of variable remuneration are capable of forfeiture or reduction at the discretion of MHI, including down to zero.

Variable remuneration will be paid only if it is sustainable in the context of MHI's financial situation and is justified on the basis of individual, departmental, MHI or wider Mizuho Financial Group, Inc. performance.

A remuneration sub-group consisting of the Head of HR, the Chief Compliance Officer, the CFO, the CRO and a representative from Internal Audit, meets regularly (generally before each RemCo meeting) to discuss a number of remuneration related matters including behaviour and conduct. The sub-group is involved in the process to review and set remuneration. Concerns regarding an individual's activities and/or conduct can be raised at any stage and are taken into account by management through the Balanced Scorecard Appraisal process; this is described in further detail below.

An Evaluation Committee, comprising Executive Committee members, meets on an annual basis to assess individual staff behaviours, the results of which form part of the appraisal and remuneration process. This is in addition to the specific involvement of the remuneration sub-group.

The RemCo will use information in respect of corporate performance and risk management to make informed decisions when reviewing the appropriateness of discretionary reward and specifically the remuneration of MRTs. The level of discretionary remuneration is agreed with MHI's parent company, Mizuho Securities Co., Ltd., with final approval by RemCo.

The staff appraisal system ensures that an individual's behaviour and their adherence to control and compliance requirements is taken into account, and that sole reliance is not placed on an individual's financial performance. The assessment is in the form of a Balanced Scorecard Appraisal. The Balanced Scorecard Appraisal consists of the following:

- 1. Financial, Strategic & Operational: this measures employees' performance against *SMART* (Specific, Measurable, Achievable, Relevant, Time-bound) objectives set at the beginning of the financial year; and
- 2. Culture & Conduct: this comprises inputs from the remuneration sub-group, Internal Audit, and Front Office Supervisory Reporting, and is strongly linked to MHI's values (Speed, Innovative Spirit, Team Spirit, Passion and Customer First) through a competency framework.

The Balanced Scorecard Appraisal is used to determine the overall performance ratings and as a basis for determining any adjustments to individual discretionary remuneration awards, including malus and clawback. All permanent employees qualify for consideration of discretionary remuneration; no formulaic discretionary remuneration is awarded by MHI.

An employee's individual performance is measured on a rating scale of 1 (Poor performance) to 5 (Outstanding performance). An employee will not be assigned a rating higher than a 3 if they have not met their objectives including any financial targets. Where a Balanced Scorecard Appraisal rating is a 2 or lower then malus (up to 100%) may be applied to any discretionary remuneration awarded to the employee.

12.6 The design characteristics of the remuneration scheme

During the period in question variable remuneration for MRTs (who were not subject to the de minimis concession) was paid in cash and shares, with elements subject to deferral. MRTs that fell under the de minimis concession were paid in cash only. Variable remuneration is subject to the following design characteristics:

Risk adjustment

The Board and RemCo are of the view that a purely formulaic approach to discretionary remuneration adjustment is not suitable. As a result, the level of discretionary remuneration is determined from accounting based performance measures; and is further risk adjusted by the RemCo. The CRO attends RemCo and contributes to discussions on the size of overall discretionary remuneration relative to risk by reference to a number of metrics including adherence to MHI's risk appetite. The CRO and CFO (who also attend the RemCo on a frequent basis) can recommend discretionary or formulaic adjustments to accrued discretionary remuneration throughout the year via the RemCo or the Board Risk Committee where relevant performance metrics are discussed.

Deferral policy

During the financial year April 2018 to March 2019 variable pay for MRTs and certain other staff was subject to a deferral plan. The deferral plan for MRTs (who were not subject to the de minimis concession) provided for deferral of between 40% and 60% of variable pay for a period of between three and seven years in line with the Remuneration Codes and subject to an MRT's categorisation (Senior Manager, Risk Manager or Other MRT). For all other staff subject to the deferral plan (and MRTs who fell under the de minimis concession), the deferral plan provided for cash deferrals of between 20% and 40% of variable pay over a prescribed threshold for a period of three years.

Malus: performance adjustment

A deferred award may be subject to adjustment (including forfeiture) as set out below and will only vest to the extent determined by the RemCo at its discretion, giving regard to such matters as it considers appropriate, including but not limited to:

- 1. In the case of all staff including MRTs, any restatement or recalculation of individual and/or departmental and/or MHI and/or Mizuho Financial Group, Inc. company financial performance (including but not limited to following the discovery of incorrect or false accounting); and/or
- 2. In the case of MRTs only:
 - whether vesting is (a) sustainable according to the financial situation of MHI, and/or (b) justified on the basis of individual and/or departmental and/or MHI and/or Mizuho Financial Group, Inc. company performance; and/or
 - any assessment or reassessment of individual and/or departmental and/or MHI and/or Mizuho Financial Group, Inc. company performance, (b) any evidence of an individual's misbehaviour and/or material error, (c) any material downturn in departmental and/or MHI and/or Mizuho Financial Group, Inc. company financial performance, and/or (d) any material failure of risk management suffered by MHI and/or any Mizuho Financial Group, Inc. company and/or the individual's department; and/or
 - any conduct which the individual participated in and/or was responsible for and which resulted in significant losses to MHI and/or any Mizuho Financial Group, Inc. company and/or the individual's department, and/or (b) any failure of the individual to meet appropriate standards of fitness and/or propriety (including, without limitation, any such standards set by a regulator and/or MHI and/or any Mizuho Financial Group, Inc. company) and/or to comply with MHI and/or Mizuho Financial Group, Inc. company policies; and/or
 - any misconduct and/or material failure of risk management which the individual could (a) reasonably be expected to be aware of but failed to take adequate steps to promptly identify,

assess, report, escalate or address, and/or (b) by virtue of the individual's role or seniority, be deemed indirectly responsible and/or accountable for, including, without limitation, by virtue of being senior staff in charge of setting MHI and/or Mizuho Financial Group, Inc. company culture and/or strategy; and/or

3. In the case of all staff including MRTs, any other circumstance as required by law and/or any regulator.

Clawback

The Remuneration Codes require MHI to apply clawback to the variable remuneration of MRTs. The following provisions apply in respect of payments of all discretionary remuneration awards for a period of seven years after the date the award is made (which can be extended from seven to ten years for Senior Managers in certain circumstances where at the end of the normal seven year clawback period (i) MHI has commenced an internal inquiry into a possible material failure which could lead to clawback or (ii) a regulatory authority has notified MHI that it has commenced an investigation which could lead to clawback):

- An employee who is or becomes an MRT may be required to repay to MHI up to 100% of the gross amount of any non-deferred cash award, deferred cash award, non-deferred share award and/or deferred share award paid pursuant to a discretionary remuneration award in the event that the employee is involved in or is responsible for:
 - any misconduct and/or material failure of risk management suffered by MHI and/or the employee's department, including any misconduct and/or material failure of risk management which the employee could (i) reasonably be expected to have been aware of but failed to take adequate steps to promptly identify, assess, report, escalate or address, and/or (ii) by virtue of the employee's role or seniority, be deemed indirectly responsible or accountable for; and/or
 - 2. conduct which results in significant losses to MHI and/or the employee's department; and/or
 - 3. any restatement or recalculation of individual and/or departmental and MHI financial performance (including but not limited to following the discovery of incorrect or false accounting); and/or
 - 4. any material error and/or any failure to meet appropriate standards of fitness and/or propriety (including, without limitation, any such standards set by a regulator and MHI) and/or to comply with MHI policies which apply to an employee; and/or
 - 5. where a Reduction Notice is received in respect of a buy-out award and/or any other circumstance as required by law and / or any regulator.
- The RemCo, in its sole discretion shall determine whether and the extent to which some or all of any part of the discretionary remuneration award that has previously been paid must be repaid pursuant to these clawback provisions.
- An employee who accepts an award and is or becomes an MRT agrees that MHI shall be entitled to withhold or collect any repayment required pursuant to the clawback provisions (i) by deduction from any salary or other earnings or payments due to the employee at any time, (ii) directly from the employee by immediate payment in cleared funds or (iii) by selling some or all of any shares held on the employee's behalf.

12.7 Remuneration leverage

Remuneration leverage is the ratio of fixed to the variable components of remuneration. MHI ensures that fixed and variable components of total remuneration are appropriately balanced and sets fixed

remuneration at a level which permits a fully flexible discretionary remuneration policy (including the award of no variable remuneration in appropriate circumstances). For 2018/19, the maximum leverage ratio for all Front Office staff (and the President and Chief Executive Officer) was set as 1:2 (Fixed : Variable), and for all support and control functions staff this was set at 1:1 (Fixed : Variable). In accordance with the Remuneration Codes, approval for the aforementioned ratios has been obtained from the shareholders.

12.8 Remuneration awards and expenditure

The following disclosures on remuneration awards and expenditure are for the Group.

Aggregate MRT remuneration by business area

Aggregate remuneration awards to MRTs by business area are shown below:

Table 37: Aggregate MRT remuneration by business area

	2019	2018
	Aggregate	Aggregate
	remuneration	remuneration
	awards	awards
	£m	£m
Investment Banking	6.0	5.2
Markets and Products	9.8	14.9
Central functions	13.5	14.8
Total	29.3	34.9

Aggregate remuneration of MRTs by type of award

Aggregate remuneration awards in respect of MRTs by type of award, split between senior management and other staff, are set out below:

Table 38: Aggregate MRT remuneration by type of award

	2019		2018	
MRT aggregate remuneration	Senior management £m	Other MRTs £m	Senior management £m	Other MRTs £m
Fixed remuneration	6.8	12.6	6.8	13.1
Variable remuneration	2.9	7.0	4.7	10.3
Total remuneration	9.7	19.6	11.5	23.4

The number of MRTs in respect of whom remuneration awards were made during the year is as follows:

Table 39: Number of MRTs subject to awards

	2019		2018	
MRT staff numbers	Senior management	Other MRTs	Senior management	Other MRT
Number of staff	19	47	19	51

#	Features	CET1	Unsecured subordinated loan	
1	Issuer	Mizuho International plc	Mizuho International plc	
2	Unique identifier (e.g. CUSIP, ISIN, or Bloomberg identifier for private placement)	BBG000N27XG2	N/A	
3	Governing law(s) of the instrument	English Law	English Law	
Regu	latory treatment			
4	Transitional CRR rules	CET1	Tier 2	
5	Post-transitional CRR rules	CET1	Tier 2	
6	Eligible at solo/(sub-) consolidated/solo & (sub-) consolidated	Solo	Solo	
7	Instrument type (types to be specified by each jurisdiction)	Common shares	Other Tier 2 instruments	
8	Amount recognised in regulatory capital (currency in millions, as of most recent reporting date)	GBP 709.9 million	GBP 45 million	
9	Nominal amount of instrument	GBP 709.9 million	GBP 45 million	
10	Accounting classification	Shareholders' equity	Liability	
11	Original date of issuance	N/A	23/03/2015	
12	Perpetual or dated	Perpetual	Dated	
13	Original maturity date	N/A	22/03/2025	
14	Issuer call subject to prior supervisory approval	No	No	
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	
16	Subsequent call dates, if applicable	N/A	N/A	
Coup	ons / dividends			
17	Fixed or floating dividend/coupon	N/A	Floating	
18	Coupon rate and any related index	N/A	3 month LIBOR + margin	
19	Existence of a dividend stopper	No	No	
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Mandatory	
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Mandatory	
21	Existence of step up or other incentive to redeem	No	No	
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	
23	Convertible or non-convertible	Non-convertible	Non-convertible	
24	If convertible, conversion trigger(s)	N/A	N/A	
25	If convertible, fully or partially	N/A	N/A	
26	If convertible, conversion rate	N/A	N/A	
27	If convertible, mandatory or optional conversion	N/A	N/A	
28	If convertible, specify instrument type convertible into	N/A	N/A	
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	
30	Write-down feature	No	No	
31	If write-down, write-down trigger(s)	N/A	N/A	
32	If write-down, full or partial	N/A	N/A	
33	If write-down, permanent or temporary	N/A	N/A	
34	If temporary write-down, description of write-down mechanism	N/A	N/A	
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The most subordinated claim	Unsecured subordinated to the claims of all senior creditors	
36	Non-compliant transitioned features	No	No	
37	If yes, specify non-compliant features	N/A	N/A	

Appendix 1: Capital instruments main features

