

# Regulatory Disclosure (UK)

Morgan Stanley International Limited Group

As at 31 December 2015

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#### 1. Morgan Stanley International Limited Group

The principal activity of Morgan Stanley International Limited ("MSI") together with its subsidiaries (the "MSI Group") is the provision of financial services to corporations, governments and financial institutions. There have not been any significant changes during 2015 and no other significant change in the MSI Group's principal activity is expected.

As at 31 December 2015, the following entities within the MSI Group were authorised by the Prudential Regulation Authority ("PRA") and regulated by the PRA and Financial Conduct Authority ("FCA"):

- Morgan Stanley & Co. International plc ("MSIP")
- Morgan Stanley Bank International Limited ("MSBIL")

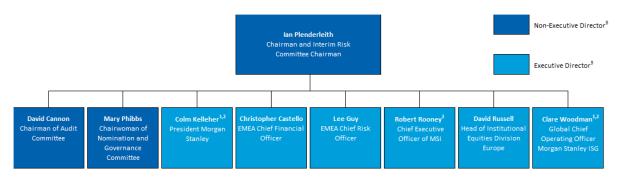
On 28 September 2015, the PRA approved a request to deregister Morgan Stanley Securities Ltd ("MSSL") ahead of its planned closure. This had no impact on the risk profile of the MSI Group.

As at 31 December 2015 the following entities within the MSI Group were authorised and regulated by the FCA:

- Morgan Stanley & Co. Limited ("MSCL")
- Morgan Stanley Investment Management Limited ("MSIM")
- Morgan Stanley Investment Management (ACD) Limited ("MSIM ACD")

#### The MSI Board of Directors

As at 31 December 2015, the MSI Board was comprised of 9 directors (6 executive directors and 3 non-executive directors). For further details on the MSI Board members including detailed biographies and other directorships refer to Appendix IV.



- Colm Kelleher and Clare Woodman resigned as directors of MSI on 5 February 2016.
- 2. Colm Kelleher, Clare Woodman and Robert Rooney were each appointed to the above executive roles post 31 December 2015.
- 3. Terri Duhon (non-executive) and Jakob Horder (executive) were appointed to the MSI Board effective 14 April 2016 and 8 June 2016 respectively.

# **Background**

The MSI Group's ultimate parent undertaking and controlling entity is Morgan Stanley, a Delaware corporation, which together with its consolidated subsidiaries, form the Morgan Stanley Group ("Morgan Stanley Group"). Morgan Stanley is a "Financial Holding Company" as defined by the Bank Holding Company Act of 1956, as amended, and is subject to regulation by The Board of Governors of the Federal Reserve System (the "Federal Reserve").

The MSI Group is a wholly owned subgroup of the Morgan Stanley Group. Whilst the MSI Group is a material sub-group, the information disclosed in this document is not necessarily indicative of the Morgan Stanley Group as a whole, nor is it comprehensively representative of the Morgan Stanley Group's activity in any

particular region. Investors, stakeholders, creditors or other users seeking information on capital adequacy, risk exposure and risk management policies should consult the public disclosures of Morgan Stanley Group.

The Morgan Stanley Group and its United States ("US") Banks became subject to US Basel III requirements from 1 January 2014. For more details, see the latest Morgan Stanley Group Pillar 3 disclosure at <a href="http://www.morganstanley.com/about-us-ir/pillar-us/content/msdotcom/en/about-us-ir/pillar-us">http://www.morganstanley.com/about-us-ir/pillar-us/content/msdotcom/en/about-us-ir/pillar-us</a>. Morgan Stanley is listed on the New York Stock Exchange and is required, by the US Securities and Exchange Commission ("SEC"), to file public disclosures, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

These disclosures can be found at <a href="http://www.morganstanley.com/pub/content/msdotcom/en/about-us-ir/sec-filings.html">http://www.morganstanley.com/pub/content/msdotcom/en/about-us-ir/sec-filings.html</a>.

# 2. Capital Framework

The Basel Capital Accord provides a global regulatory framework for capital and liquidity. It is detailed in the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version" June 2006 ("Basel II"). This was revised in 2010 following the financial crisis through a number of reforms collectively known as Basel III, and, in particular, "Basel III: a Global regulatory framework for more resilient banks and banking systems" and "Revisions to the Basel II market risk framework".

The revised Basel Capital Accord has been implemented in the European Union via the Capital Requirements Directive ("CRD") and the Capital Requirements Regulation ("CRR") (collectively known as "CRDIV"). These new requirements took effect from 1 January 2014.

The framework consists of three "pillars":

- Pillar 1 Minimum capital requirements: defines rules for the calculation of credit, market and operational risk;
- Pillar 2 Supervisory review process: including a requirement for firms to undertake an Internal Capital Adequacy Assessment Process ("ICAAP");
- Pillar 3 Market discipline: requires expanded disclosures to allow investors and other market participants to understand capital adequacy, particular risk exposures and risk management processes of individual firms.

This document represents the annual public Pillar 3 qualitative and quantitative disclosures required by CRDIV in relation to the MSI Group, as at 31 December 2015. The remuneration disclosure is published separately and can be found at <a href="http://www.morganstanley.com/about-us-ir/pillar-uk.html">http://www.morganstanley.com/about-us-ir/pillar-uk.html</a>.

The Pillar 3 disclosures in sections 6 through to 14 are based on the Pillar 1 capital requirements.

# 3. Capital Management

The MSI Group views capital as an important source of financial strength. It actively manages and monitors its capital in line with established policies and procedures and in compliance with local regulatory requirements.

The MSI Group, in line with Morgan Stanley Group capital management policies, manages its capital position based upon among other things, business opportunities, risk appetite, capital availability and rate of return together with, regulatory requirements and rating agency guidelines and, therefore, in the future may expand

or contract its capital base to address the changing needs of its businesses. The appropriate level of capital is determined at a legal entity level to safeguard that entity's ability to continue as a going concern and ensure that it meets all regulatory capital requirements. The key components of the capital management framework used by the MSI Group are set out in the Capital Management Policy and include a point in time capital assessment, forward looking capital projections and stress testing.

The MSI Group conducts an Individual Capital Adequacy Assessment Process ("ICAAP") annually in order to meet its obligations under CRDIV.

The ICAAP is a key tool used to inform the MSI Board and the Executive on risk profile and capital adequacy. The MSI Group's ICAAP:

- Is designed to ensure the risks to which the MSI Group is exposed are appropriately capitalised and risk managed, including those risks that are either not captured, or not fully captured under Pillar 1.
- Uses stress testing to size a capital buffer aimed at ensuring the MSI Group will continue to operate above regulatory requirements under a range of severe but plausible stress scenarios.
- Assesses capital adequacy under normal and stressed operating environments over the three year capital planning horizon to ensure the MSI Group maintains a capital position in line with internal operating targets and post-stress minimum levels.

The key elements of the ICAAP are embedded in the MSI Group's day-to-day management processes and decision-making culture.

The PRA reviews the MSI Group ICAAP through its Supervisory Review Process ("SREP") and sets an Individual Capital Guidance ("ICG") which establishes the minimum level of regulatory capital for the MSI Group. In addition, the PRA requires a buffer which is available to support the MSI Group in a stressed market environment.

MSI Group capital is managed to ensure risk and leverage based requirements assessed through the ICAAP and SREP are met. Internal capital ratio targets are set to ensure the MSI Group and its subsidiaries have sufficient capital to meet their regulatory and internal minimum requirements at all times. The capital managed by the MSI Group broadly includes share capital, Additional Tier 1 capital instruments, subordinated debt and reserves. In order to maintain or adjust its capital structure, the MSI Group may pay dividends, return capital to its shareholders, issue new shares, or issue or repay subordinated debt.

## 4. Risk Management

The numerical disclosures in this document are calculated with reference to regulatory methodologies set out in CRDIV and are not necessarily the primary exposure measures used by internal management.

The business strategy acts as a key driver for the MSI Group's business model which in turn drives the risk strategy and the consequent risk profile of the group. As part of the annual strategic review and subsequent planning process, or more frequently if necessary, business strategy and risk assessment are considered and aligned.

# **Risk Strategy and Appetite**

The MSI Group assesses appetite for risk-adjusted returns through prudent and conservative risk-taking that protects its capital base and franchise, utilising risk limits and tolerances that avoid outsized risk-taking. The risk appetite statement is further expanded into qualitative and quantitative risk tolerance statements that are supported by a focused suite of risk metrics and limits designed to cover the MSI Group's risks. The risk

appetite framework has been enhanced to provide a clear linkage to both qualitative and quantitative measures. The combination of risk appetite, tolerance statements and limits aims to ensure that the MSI Group's businesses are carried out in line with its risk strategy in both normal and stressed environments.

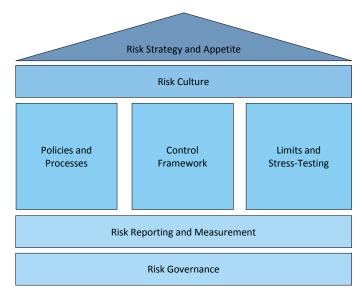
#### **Risk Culture**

The MSI Group promotes a sound risk culture that encourages open dialogue, effective challenge, escalation and reporting of risk to senior management, the MSI Risk Committee, the MSI Board and the MSI Group's regulators as well as external disclosures of risk matters. The senior management practices of MSI Group reward and enable individuals to make appropriate risk decisions. The MSI Group's Risk Appetite Statement is embedded in the MSI Group's risk culture and linked to its short-term and long-term strategic, capital and financial plans, as well as compensation programs.

### **Risk Management Framework**

Risk of loss is an inevitable consequence of the MSI Group's businesses activities and effective risk management is vital to the group's success. The key elements of the MSI Group's Risk Management Framework are outlined in Figure 1.

Figure 1 Risk Management Framework



## **Risk Policies and Processes**

The MSI Group has a number of policies and processes to establish the standards which govern the business and operations across the group. A number of these policies (along with associated procedures and guidance) cover the identification, measurement, management, monitoring, control and mitigation of the MSI Group's risks.

# **Control Framework**

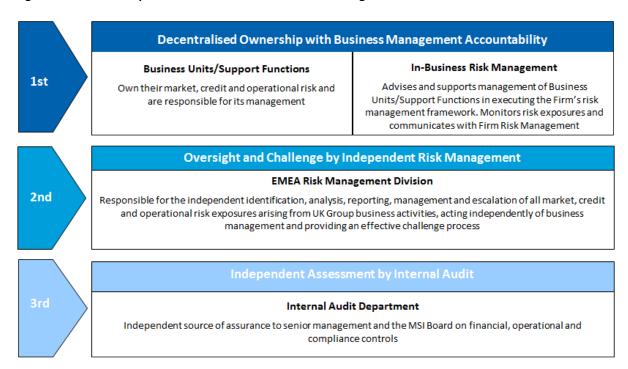
The MSI Group operates an array of controls across all its lines of business and across all risk classes. The framework within which the group organises its controls is a "Three Lines of Defence" model as outlined in Figure 2. The group believes that this structure creates clear delineation of responsibilities between the elements of risk control (1st Line), independent oversight and challenge (2nd Line) and audit assurance (3rd Line).

Business Unit management has primary responsibility and accountability for managing all the business unit risks – including market, credit, and operational risk, as well as ensuring compliance with applicable laws, rules and regulations.

The Risk Management Division provides governance and oversight of activities carried out by the Business Units. The Risk Management Division is the MSI Group's independent risk management function and is responsible for the management of all risk exposures arising from MSI Group business activities, as well as ensuring effective communication of risk matters to senior management and ultimately to the Board. The Risk Management Division is independent, both of the Business Units, and other support and control functions.

The Internal Audit Department is an independent source of assurance to the MSI Board on financial, operational, and compliance controls. Internal Audit independently verifies that the Risk Management Framework has been implemented as intended and is functioning effectively, including opining on the overall appropriateness and adequacy of the framework and the associated governance processes.

Figure 2 The MSI Group's Three Lines of Defence — Risk Management



# **Limits & Tolerance Framework**

The MSI Group's risk appetite is translated into a comprehensive suite of limits and tolerance frameworks across four primary areas: Market Risk, Credit Risk, Operational Risk and Liquidity Risk. Other risks that are monitored regularly include Leverage Risk, Valuation Risk, Conduct Risk and Reputational Risks. Using a suite of tools, most notably limits, these risks are tracked, monitored and reported to the appropriate executive risk committees, MSI Risk Committee and the MSI Board. Stress tests set the boundary for risk-taking activities relative to the MSI Group's risk capacity and are used to set risk limits and tolerances. Figure 3 outlines the MSI Group's risk limit framework for specific risk areas.

The framework is comprised of market and credit risk limits including aggregate macroeconomic stress scenarios and proprietary tail risk metric limits, quantitative loss tolerances for each of the top operational

risks and liquidity sufficiency limits which are all set by the MSI Board. These are complemented by granular business line limits that are set by the In-Business risk senior management for day-to-day risk management.

### **Stress Testing**

Stress testing plays a central role in the MSI Group, informing a number of processes and associated decisions. Most notably, stress testing is used for:

- Risk Management: Identifying areas of potential vulnerabilities in the portfolio, measuring portfolio
  losses and concentrations as a basis for senior management to review portfolio-level risk and
  determine risk mitigation actions and set exposure limits.
- Capital and Liquidity planning: Informing the proposed stressed capital and liquidity forecasts through severe but plausible stress tests.
- Strategy Planning: Identifying business model vulnerabilities through Reverse Stress Testing ("RST") and identifying the potential mitigating actions available as part of recovery planning.

**Figure 3 MSI Group Limit Framework** 

	MARKET	CREDIT	OPERATIONAL	LIQUIDITY AND FUNDING
	RISK	RISK	RISK	RISK
Į,	MSI Group-wide	MSI Group-wide	<ul> <li>Quantitative thresholds for</li> </ul>	<ul> <li>Liquidity Sufficiency Limits</li> </ul>
₹	Macroeconomic Scenario	Macroeconomic Scenario	each top operational risk	<ul> <li>Portfolio level Liquidity and</li> </ul>
⋾	Loss Limits and proprietary	Loss Limits and proprietary	and against an aggregate	Funding mix Limits
ş	tail risk metric	tail risk metric	risk tolerance level	<ul> <li>Granular business area</li> </ul>
8	• Legal Entity Value at Risk	<ul> <li>MSI Group Credit Limits</li> </ul>		specific limits on Liquidity
Ě	("VaR") and Exposure limits	<ul> <li>Single Name, Country, and</li> </ul>		and Funding
불	Detailed risk exposure	Industry Credit Limits		
RISK	limits are allocated by			
æ	Desk/Products			

## **Risk Reporting and Measurement**

The MSI Group has a suite of risk reporting across its main risk classes. The information includes quantitative measurements and qualitative assessments that enable a comparison of the MSI Group's risk profile against risk limits and risk tolerance statements. Reporting identifies matters for decisions as well as highlighting emerging risks, mitigating actions and matters that are significant to the MSI Group's strategy. Material risk issues are investigated and escalated where appropriate as per the specific escalation procedures. Escalation triggers have been articulated, with separate triggers for notification and further escalation where relevant.

The Risk reporting capabilities are supported by a well-controlled infrastructure, including front-office risk systems and the MSI Group's Risk Management systems. Key risk data are subject to several control assessments, including: self-assessments, attestations, independent validation, reconciliation and internal audit reviews.

# **Risk Governance**

The MSI Group has a comprehensive risk management governance framework which includes Board approved policies and defined senior management risk oversight and escalation process. The MSI Board and EMEA executive management develop and oversee Morgan Stanley's strategy in Europe. EMEA executive management are responsible for its execution. Details of the MSI Board and its Committee structure, the EMEA Executive Committee structure and selected management level committees are set out in Figure 4.

The MSI Board (and its Committees) determines the strategy for the MSI Group and provides oversight of the key risk and control issues that the execution of the strategy presents, or is likely to present. The MSI Board has delegated authorities to its Audit, Risk and Nomination and Governance committees. The MSI Board, through the MSI Risk Committee, is regularly informed of the MSI Group's risk profile and relevant trends impacting its risk profile, (see Appendix IV for details of the MSI Board Members, including their knowledge, skills and experience). The Executive Committees are the most senior MSI Group executive management committees and have responsibility for overseeing business performance, operations and risks identified in relation to the MSI Group. The management level committees support the Executive committees in their oversight of specific areas of the MSI Group's activities.

#### **MSI Board Committees**

The MSI Risk Committee is appointed by the MSI Board to assist and provide guidance to the MSI Board on the management of financial and non-financial risks, including: (i) risk strategy and appetite; (ii) risk identification and management; (iii) risk governance framework and policies; (iv) measurement of risk and risk tolerance levels and limits; (v) risk culture; and (vi) financial resource management and capital. The MSI Risk Committee met thirteen times in 2015. The MSI Risk Committee review quarterly detailed risk reports on portfolio risk, market risk, credit risk, operational risk and model changes.

Areas of Committee's focus during the year included:

- Improvements to risk appetite and the connection between risk and return.
- Enhancements to the UK Group stress testing process including increased bespoke stress testing and new topical scenarios.
- Improvements to risk reporting.

The MSI Audit Committee is appointed by the MSI Board to assist and provide guidance to the MSI Board in monitoring: (i) financial reporting; (ii) internal controls; (iii) legal and regulatory compliance; (iv) internal audit; and (v) external auditors.

The MSI Nomination and Governance Committee is appointed by the MSI Board to (i) identify and recommend candidates qualified to become board members for approval; (ii) assess the structure, size, composition, performance and effectiveness of the board and the committees; (iii) recommend to the board corporate governance principles applicable to the MSI Group.

# **EMEA Executive Committees**

The **EMEA Operating Committee** is the forum for key decisions regarding matters affecting the operations and performance of the MSI Group and is responsible for the execution of strategy. The Committee provides oversight of: (i) strategy; (ii) financial performance; (iii) risk and control; (iv) operational, legal and regulatory matters; and (v) human resources.

The **EMEA Risk Committee** assists in the oversight of the MSI Group's management of risk (including financial and non-financial risks) within the MSI Group. The Committee provides oversight of: (i) risk strategy and appetite; (ii) risk identification and measurement; (iii) risk framework and policies; (iv) risk culture; and (v) financial resource management.

## Management Committees (associated with Risk Governance)

The **EMEA Franchise Committee** assists in the oversight of potentially significant franchise risks including by reviewing relevant activities, transactions and clients, and reviewing the franchise implications of situations that involve suitability or conflicts of interest concerns.

The **EMEA Asset and Liability Committee ("EMEA ALCO")** assists the EMEA Risk Committee to oversee the capital adequacy, including the risk of excessive leverage, and liquidity risk management of the MSI Group.

The **EMEA Operational Risk Oversight Committee** provides guidance to the EMEA Risk Committee in relation to the oversight of the management of operational risk of the MSI Group.

The Client Assets Governance Committee provides support for MSI Group's compliance with Client Assets Sourcebook ("CASS") requirements, and acts as the principal body for providing governance of CASS related issues, being responsible for co-ordinating the approach to managing Client Money and Client Assets.

The **EMEA Conduct Risk Committee** assists the EMEA Risk Committee in the oversight and management of conduct risk within MSI Group.

MSI Board and Board Committees

Risk Committee

Audit Committee

Nominations and Governance
Committee

Executive Committees

EMEA Operating Committee

EMEA Operating Committee

EMEA Franchise
EMEA ALCO
Risk Oversight
Governance
Risk Committee

Figure 4 MSI Board Committee Structure and EMEA Executive Management Structure

#### **Adequacy of Risk Management Arrangements**

The MSI Board is satisfied that the risk management arrangements and systems, as described above, are appropriate given the strategy and risk profile of the group. These elements are reviewed at least annually and, where applicable, updated to reflect best practice, evolving market conditions and in response to changing regulatory requirements.

# 5. Application of Pillar 3

This disclosure is made on a consolidated basis, rather than on an individual basis for each regulated entity, as permissible by CRDIV. The basis of consolidation for prudential purposes is materially the same as consolidation for accounting purposes. The MSI Group completes its prudential consolidation in compliance with CRR Part One, Title II Chapter 2, with all entities fully consolidated.

The most significant subsidiary of the MSI Group is MSIP, the results of which are material to the MSI Group. The risk profile of MSIP is materially the same as the MSI Group and risk management policies and procedures are applied consistently. This disclosure comprehensively conveys the risk profile of the MSI Group.

Audited financial statements are prepared for all subsidiaries where there is a legal requirement to do so. This includes financial statements prepared in accordance with applicable UK company law, UK accounting requirements under Financial Reporting Standard 101 ("FRS 101") and for the MSIP Group in accordance with EU adopted International Financial Reporting Standards ("IFRS").

This document does not constitute a set of financial statements. With effect from 2014, the MSI Group applied the United Kingdom ("UK") Companies Act 2006 exemption from producing statutory group accounts. The exemption applies to a UK parent company where certain conditions are met. Specifically this includes where the UK parent and all of its subsidiaries are included in group accounts of a larger non-European Economic

Area ("EEA") group prepared in accordance with accounting standards which are equivalent to EU-adopted IFRS. Statutory group accounts will therefore not be published. However, statutory accounts are available for each regulated entity including group financial statements for MSIP and its subsidiaries ("MSIP Group"), which form the significant majority of the MSI Group.

Audited, consolidated non-statutory financial information has been produced for the MSI Group, as received by the MSI Board and MSI Audit Committee, in accordance with the recognition and measurement principles of IFRS issued by the International Accounting Standards Board as adopted by the European Union. Refer to Appendix V for MSI Group non-statutory financial information.

Trading Book and Non-Trading Book definitions used in this document refer to the regulatory view and may differ from the accounting definitions. Trading book positions represent positions held as part of market-making and underwriting businesses. These positions, which reflect assets or liabilities that are accounted for at fair value, and are subject to the market risk capital requirements discussed in Section 11. Non-Trading Book positions, which may be accounted for at amortized cost, lower of cost or market, fair value or under the equity method, are subject to credit risk capital requirements which are discussed in Section 9.

The MSI Group has policies and procedures in place to assess the appropriateness of its Pillar 3 disclosures, including their verification and frequency. The MSI Group's Pillar 3 Disclosures are not required to be, and have not been, audited by the Company's independent registered public accounting firm. The MSI Group's Pillar 3 Disclosures were based on its current understanding CRDIV and related legislation, which may be subject to change as the Company receives additional clarification and implementation guidance from regulators relating to CRDIV and as the interpretation of the final rule evolves over time.

## **Key Pillar 3 Enhancements**

Key enhancements required by the European Banking Authority ("EBA") are:

- New Leverage Ratio disclosure prepared on the basis of the Delegated Act passed by the European Commission, providing a credible supplementary non-risk based measure to the risk-based capital requirements. The mandated regulatory minimum is expected to be 3%, but is not yet a binding requirement. For a further discussion see Section 13, Leverage Ratio.
- Disclosure of the Countercyclical Capital Buffer that was introduced to ensure macro-financial factors, for example, excess credit growth, are accounted for. As at 31 December 2015 this buffer was in place for Norway & Sweden. For a further discussion see Section 8.

# **Forward Looking Framework**

- CRDIV established the Conservation Buffer, in addition to its Pillar 1 and Pillar 2 requirements, requiring banks to build up a capital buffer that could be utilised to absorb losses during period of stress, whilst remaining compliant with minimum requirements. It will be phased-in from 2016, with full compliance required by the beginning of 2019.
- Liquidity Coverage Ratio ("LCR"): The LCR was developed to ensure banking organisations have sufficient high quality liquid assets to cover net cash outflows arising from significant stress over 30 calendar days. The standard's objective is to promote the short-term resilience of the liquidity risk profile of banking organisations. The LCR is being phased in from its effective date of 1 October 2015, with full compliance required by the beginning of 2018. MSI Group is compliant with the minimum required LCR based on current interpretations and continues to evaluate the impact on its liquidity and funding requirements.

# 6. Capital Adequacy

Under PRA supervision, the MSI Group is required to maintain a minimum ratio of Own Funds to Risk Weighted Assets (RWA's). As at 31 December 2015, the MSI Group is in compliance with the PRA capital requirements as defined by CRR. Capital Resources, described in CRR and tables below as Own Funds, and Risk Weighted Assets as at 31 December 2015 are calculated and presented on the basis of CRDIV. Table 1 summarises the MSI Group's key capital ratios.

Table 1: Capital Summary		
	MSI GROUP <sup>1</sup>	MSIP <sup>2</sup>
	\$MM	\$MM
Common Equity Tier 1 Capital	16,749	13,955
Additional Tier 1 Capital	1,300	1,300
Tier 1 Capital	18,049	15,255
Tier 2 Capital	6,820	7,906
Total Own Funds	24,869	23,161
RWAs	108,321	98,603
CET1 Ratio	15.5%	14.2%
Tier 1 Capital Ratio	16.7%	15.5%
Total Capital Ratio	23.0%	23.5%
Leverage Exposure	356,059	351,015
Leverage Ratio	5.1%	4.3%

<sup>1.</sup> MSI Group's RWAs as at 31 December 2014 were \$143,630MM and CET1 Ratio, Tier 1 Capital Ratio & Total Capital Ratio were 11.9%, 12.8% & 19.2% respectively.

## 7. Capital Resources

The capital resources of the MSI Group and MSIP are set out in Table 2. All capital resources included in Tier 1 and 2 capital are of standard form and the main terms and conditions of the capital instruments are disclosed in Appendix I.

Table 2: Own Funds		
	MSI GROUP <sup>1</sup>	MSIP <sup>2</sup>
	\$MM	\$MM
Capital instruments eligible as CET1 Capital	1,614	11,978
Retained Earnings	9,786	1,871
Accumulated other comprehensive income	(551)	(117)
Other reserves	7,461	1,403
Adjustments to CET1 due to prudential filters	(971)	(1,011)
Other Intangible Assets	(410)	N/A
IRB Shortfall of credit risk adjustments to expected losses	(180)	(169)
Common Equity Tier 1 Capital	16,749	13,955
Additional Tier 1 Capital	1,300	1,300
Tier 1 Capital	18,049	15,255
Capital instruments and subordinated loans eligible as T2 Capital	419	7,906
Instruments issued by subsidiaries that are given recognition in T2 Capital	4,143	N/A
Transitional adjustments due to additional recognition in T2 Capital of	2,258	N/A
instruments issued by subsidiaries	2,238	IN/A
Tier 2 Capital	6,820	7,906
Total Own Funds	24,869	23,161

<sup>1.</sup> MSI Group's Tier 1 Capital and Total Own Funds as at 31 December 2014 were \$18,375MM and \$27,600MM, respectively.

<sup>2.</sup> MSIP's RWAs as at 31 December 2014 were \$130,819MM and CET1 Ratio, Tier 1 Capital Ratio & Total Capital Ratio were 10.3%, 11.3% & 17.4% respectively.

<sup>2.</sup> MSIP's Tier 1 Capital and Total Own Funds as at 31 December 2014 were \$14,793MM and \$22,699MM, respectively.

The capital resources of the MSI Group are based on audited, consolidated non-statutory financial information and MSIP's capital resources are based on audited financial statements. Appendix III provides a reconciliation of own funds to audited shareholders equity.

The MSI Group relies on its policies, procedures and systems to determine the adequacy of valuation for financial assets and compliance with accounting standards. To comply with the requirements of CRDIV, additional valuation adjustments are applied to capital over and above those that are taken in order to comply with the accounting requirements. The regulatory adjustments are shown in the above table as prudential filters.

There are no current or foreseen material practical or legal impediments to the prompt transfer of capital resources or repayment of liabilities among the MSI Group and its subsidiary undertakings.

Management reviews capital levels on an ongoing basis in light of changing risk appetite, business needs and the external environment and ensures that appropriate levels of capital are maintained to support business needs whilst remaining in compliance with the target operating range established by the MSI Board. This includes consideration of quality of capital and in 2015, total tier 2 capital reduced, whilst overall capital adequacy remained strong.

# 8. Capital Requirements

The MSI Group calculates Pillar 1 capital requirements in accordance with CRDIV as 8% of RWAs. As at 31 December 2015, the MSI Group had the following capital requirements, as detailed in Table 3.

Table 3: Capital Requirements		
	MSI GROUP <sup>1</sup>	MSIP <sup>2</sup>
	\$MM	\$MM
Credit and Counterparty Credit Risk		
Internal Model	3,386	3,226
Standardised	305	235
CCP Default fund	49	48
Total Credit and Counterparty Credit Risk	3,740	3,509
Market Risk		
Internal Model	2,359	2,359
Standardised	1,025	790
Total Market Risk	3,384	3,149
Operational Risk	805	524
Credit Valuation Adjustment	732	702
Large Exposures in the Trading Book	-	-
Settlement and Delivery Risk	3	3
Total	8,664	7,887

- 1. MSI Group's Capital Requirements as at 31 December 2014 was \$11,490MM.
- 2. MSIP's Capital Requirements as at 31 December 2014 was \$10,466MM.

Credit and counterparty credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations. Credit and counterparty credit capital requirements are derived from RWAs, determined using approved internal modelling approaches – the Foundation Internal Ratings Based approach ("IRB") for credit risk and the Internal Models Method ("IMM") for counterparty risk – as well as standardised approaches. For a further discussion, see Section 9 Credit Risk.

Market risk is the risk of loss resulting from adverse changes in market prices and other factors. The market risk capital requirements of the MSI Group comprise capital associated with the internal modelling approaches

approved by the PRA and that associated with the standardised approach. For further discussion, see Section 11 Market Risk.

Operational Risk refers to the risk of loss or damage to Morgan Stanley's reputation, resulting from inadequate or failed processes, people and systems or from external events. This definition includes legal risk, but excludes strategic risk. Capital requirements for operational risk are currently calculated under the Basic Indicator Approach. For a further discussion, see Section 12 Operational Risk.

Credit Valuation Adjustment ("CVA") is the capital requirement that covers the risk of mark-to-market losses on the expected counterparty risk of Over-the-Counter ("OTC") derivatives. It is calculated using a combination of an advanced approach based on using internal modelling approaches and a standardised approach.

Large Exposures in the Trading Book is the capital requirement that covers the risk due to concentrated exposures to a single counterparty or group of connected counterparties.

The risk capital calculations evolve over time as the MSI Group enhances its risk management strategy and incorporates improvements in modelling techniques while maintaining compliance with the regulatory requirements. MSI Group's RWAs reduced year-on-year following a number of such enhancements and changes in the market environment.

#### **Additional Capital Buffer Requirements**

The capital requirements quoted in Table 3 are based on the Basel solvency standard of 8%. In addition, the Countercyclical Capital Buffer has been introduced to ensure that excess credit growth in specific countries is accounted for, and increases the minimum capital ratio by between 0% and 2.5%. As at 31 December 2015, it was in place for Norway and Sweden, set at a rate of 1%. The MSI Group's RWAs against counterparties located in these countries was \$230MM and \$539MM respectively. Of this, the majority arises from MSIP with RWAs against Norway of \$229MM and Sweden \$520MM. The application of the buffer resulted in an immaterial minimum capital ratio increase of 0.015% for both the MSI Group and MSIP. In early 2016 Hong Kong also introduced a buffer of 0.625%. The MSI Group's RWAs against counterparties in Hong Kong as at 31 December 2015 were \$974MM, and indicatively would have increased the minimum capital ratio by a further 0.012%. At the MSIP level, those RWAs were \$892MM, and indicatively would have increased MSIP's minimum capital ratio by a further 0.011%.

Countercyclical Capital Buffers have also been announced for Iceland, the Czech Republic and the UK, starting in 2017. Exposures to Iceland and the Czech Republic are immaterial for the UK Group. The MSI Group's RWAs to counterparties in the UK as at 31 December 2015 was \$8,635MM, and at the set rate of 0.5% indicatively increases the minimum capital ratio by 0.083%. MSIP's RWAs to counterparties in the UK at the same date were \$11,304MM, the indicative increase to the minimum capital ratio would have been 0.113%.

### 9. Credit Risk

# 9.1 Credit Risk Management

Credit and counterparty risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations. The MSI Group primarily incurs credit risk exposure to Corporates, Institutions, Central Governments and Central Banks through its Institutional Securities business segment. In order to help protect the MSI Group from losses resulting from its business activities, the Credit Risk Management ("CRM") function establishes practices to evaluate monitor and control credit risk exposure at the transaction, obligor and portfolio levels. CRM analyses material lending and derivative transactions and ensures that the

creditworthiness of the MSI Group's counterparties and borrowers is reviewed regularly and that credit exposure is actively monitored and managed.

#### **Credit Risk Policies and Procedures**

The CRM policies and procedures of the MSI Group aim to ensure transparency of material credit risks, compliance with established limits, requisite approvals for material extensions of credit, and escalation of risk concentrations to appropriate senior management.

#### **Credit Risk Limits**

Credit risk exposure is managed under limits delegated by the MSI Board. The MSI Group Credit Limits Framework is one of the primary tools used to evaluate and manage credit risk levels. The Credit Limits Framework includes single name limits and portfolio concentration limits by country, industry and product type (counterparty, lending, settlement and treasury). The MSI Group credit limit restricts potential credit exposure to any one borrower or counterparty and to groups of connected borrowers or counterparties. The limits are assigned based on multiple factors including the size of counterparty, the counterparty's Probability of Default ("PD"), the perceived correlation between the credit exposure and the counterparty's credit quality, and the Loss-Given Default ("LGD") and tenor profile of the specific credit exposure.

#### **Credit Evaluation**

The MSI Group is exposed to single-name credit risk and country risk, requiring credit analysis of specific counterparties, both initially and on an ongoing basis. Credit risk management takes place at the transaction, counterparty and portfolio levels. For lending transactions, the MSI Group evaluates the relative position of its particular exposure in the borrower's capital structure and relative recovery prospects. The MSI Group also considers collateral arrangements and other structural elements of the particular transaction.

# **9.2 Counterparty and Credit Risk Capital Requirements**

The regulatory framework distinguishes between Credit Risk and Counterparty Credit Risk capital requirements. The Credit Risk capital component reflects the capital requirements attributable to the risk of loss arising from a borrower failing to meet its obligations and relates to investments made in the Non-Trading Book such as loans and other securities that the MSI Group holds until maturity with no intention to trade. Counterparty credit exposure arises from the risk that counterparties are unable to meet their payment obligations under contracts for traded products including OTC derivatives, securities financing transactions and margin lending. The distinction between Credit Risk and Counterparty Credit Risk exposures is due to the bilateral nature of the risk for Counterparty Credit Risk exposures.

The MSI Group uses the IMM and the Mark-to-Market Method for calculating its Counterparty Credit Risk exposure. The majority of OTC derivatives within the MSI Group are in scope of the IMM permission. The IMM approach uses a Monte Carlo simulation technique to measure and monitor potential future exposures of derivative portfolios. The models used simulate risk factors and replicate the risk mitigation techniques such as netting and collateral. The most material risk factors are calibrated daily to market implied data, while other risk factors are calibrated based on three years or more of historical data.

RWAs are determined using the IRB approach which reflects the MSI Group's internal estimate of a borrower or counterparty's creditworthiness. For exposures not covered by the IRB approach, the standardised approach is applied. The standardised approach uses supervisory risk weights which are a function of the exposure class and, where applicable and available, the rating by an External Credit Assessment Institution ("ECAI") of the borrower or counterparty.

Table 4 shows the Credit Risk and Counterparty Credit Risk for the MSI Group as at 31 December 2015, for each exposure class, as per the classifications set out in the CRR.

Table 4: Credit Risk and Counterparty Credit Risk EAD, RWAs and Capital Requirements<sup>1</sup>

	EAD <sup>2</sup> \$MM	RWAs \$MM	CAPTIAL REQUIREMENTS <sup>3</sup> \$MM
IRB			
Central Governments or Central Banks	8,134	1,052	84
Corporates	45,466	24,485	1,959
Equity	924	2,733	218
Institutions	44,963	13,746	1,100
Securitisation	434	309	25
Total (IRB)	99,921	42,325	3,386
Standardised			
Central Governments Or Central Banks	171	44	4
Corporates	9,039	2,794	223
High Risk	96	143	11
Institutions	5,610	589	47
Multilateral Development Banks	2	1	0
Public Sector Entities	22	21	2
Regional Government Or Local Authorities	169	4	0
Securitisation	218	193	15
Units Or Shares In CIUs	38	38	3
Total (Standardised)	15,365	3,827	305
Total (CCP Default Fund)	588	618	49
Total	115,874	46,770	3,740

Exposure classes where the MSI Group has no exposure are not shown in the table.

# 9.3 Internal Ratings Based Approach

The MSI Group has permission to use the IRB approach for the calculation of credit and counterparty credit risk capital requirements. The permission covers all material portfolios and is applicable to exposures to Central Governments, Central Banks, Institutions and Corporates.

The MSI Group leverages the IRB process for internal risk management processes. Internal ratings are used in the sizing of credit limits and also influence the terms under which credit exposures are undertaken, including collateral and documentation.

# **Rating Process**

CRM expresses the creditworthiness of each counterparty by assigning it a rating. The rating scale includes 18 segments on a scale from AAA to D, with a single category for defaulted counterparties.

Counterparty ratings correspond to a PD, a "through-the-cycle" measure that reflects credit quality expectation over a medium-term horizon. Each rating is linked to an exposure limit. To monitor the credit risk of the portfolio, the MSI Group uses quantitative models to estimate various risk parameters related to each counterparty and/or facility. CRM rates counterparties based on analysis of qualitative and quantitative factors relevant to credit standing in that industry or sector. The rating process typically includes analysis of the counterparty's financial statements, evaluation of its market position, strategy, management, legal and environmental issues, and consideration of industry dynamics affecting its performance. CRM also consider security prices and other financial data reflecting a market view of the counterparty, and carry out due diligence with the counterparty's management, as needed.

Exposure at Default ("EAD").

<sup>3.</sup> CCP Default Fund requirements have been included in the table to reflect the full population of Credit and Counterparty Credit Risk. CCP Default Fund exposures are not shown in any of the remaining Credit Risk tables.

CRM assigns counterparty ratings at the highest level in the counterparty's corporate structure. A subsidiary's rating may vary based on a variety of factors considered and documented during the rating process.

MSI Group wholesale exposures fall into the following exposure classes: Central Governments or Central Banks, Institutions and Corporates. The Central Governments or Central Banks exposure class mainly includes traded products, lending and treasury exposures to Sovereign Governments, Central Banks, Government Guaranteed Entities, Government Guaranteed Banks and Supranationals.

The Sovereign ratings process, used for Central Governments or Central Banks, applies a methodology based on quantitative and qualitative factors which incorporate consideration of the financial systems, legal and regulatory risks (e.g. macro-prudential supervision) as well as the reputational risk of extending credit in the country. The methodology is supplemented by expert judgment to reflect CRM's assessment of the future ability and willingness of sovereign governments to service debt obligations in full and on time, if material risk factors are not adequately represented in the methodology.

The Institutions exposure class mainly includes traded products, lending and treasury exposures to banks. The ratings process for Institutions applies a methodology that is based on a range of risk factors including capital adequacy, asset quality, earnings, funding and management. The regulatory environment and implicit government support is incorporated where applicable and permitted. The approach to rating Institutions can vary depending on whether the bank is domiciled in a developed or emerging market.

The Corporates exposure class mainly includes traded products and lending to wholesale counterparties not covered under the Central Governments or Central Banks and Institutions exposure classes. The ratings process for Corporates has different methodologies depending on the industry to which the counterparty belongs. The general characteristics employed include quantitative factors such as leverage, interest coverage, cash flow and company size, as well as qualitative factors such as industry and business risk, market position, liquidity/funding, event risk, management and corporate governance. Tailored methodologies are applied for certain specialist sectors such as broker-dealers, insurance and funds.

Ratings for Special Purpose Vehicles ("SPV") reflect CRM's assessment of the risk that the SPV will default. The rating therefore incorporates the MSI Group relative position in the counterparty's payment structure as well as the default risk associated with the underlying assets. Ratings are often "tranche specific" (e.g. the AAA rated senior tranche or the BBB subordinated tranche).

# **Rating Philosophy and PD Estimation**

The MSI Group internal rating process and philosophy are similar to Standard and Poor's ("S&P"). For credit risk capital and risk management purposes, CRM maps internal ratings to S&P ratings and then applies S&P's extensive default history to determine the PD. Minor adjustments are made for specific items, such as preserving the monotonic relationship among rating grade PDs and maintaining the regulatory floor of 0.03% for counterparties which are not Central Governments or Central Banks.

The present method of using S&P's extensive default history reflects a long-run view. The 2015 PDs are long-run averages of one-year default rates and are grounded on historical experience and empirical evidence. They are based on S&P's annual default rates from 1981 to 2012. This historical period covers at least three major credit downturn periods (1990-91, 2001-02 and 2007-09).

The MSI Group confirms through an internal validation process that the PD values it uses are prudent when compared to actual Morgan Stanley Group default experience.

### **Control Mechanisms for the Rating System**

The rating system and its components are validated on a periodic basis. The model validation process is independent of the internal models' development, implementation and operation. The validation process includes tests of the model's sensitivity to key inputs and assumptions and evaluation of conceptual soundness. Model governance committees are in place to provide appropriate technical and business review and oversight.

The performance of the rating system is assessed on a quarterly basis. This includes a review of key performance measures including comparison of internal ratings versus agency ratings, ratings of defaulted

parties, transitions across grades, and analysis of expert overrides.

Table 5 shows a breakdown of the IRB related exposure amounts for the MSI Group as at 31 December 2015 for the Central Governments or Central Banks, Corporates and Institutions exposure classes.

	TOTAL	EXPOSURE	OUTSTANDING	EXPOSURE	EXPOSURE	EXPOSURE
	GROSS	VALUE AFTER	LOANS	VALUE OF	WEIGHTED	WEIGHTED
	EXPOSURE <sup>2</sup>	CREDIT RISK MITIGATION <sup>3</sup>		UNDRAWN COMMITMENTS	AVERAGE RISK	AVERAGE PD
		WITIGATION		COMMITTIVIENTS	WEIGHT	PD
	\$MM	\$MM	\$MM	\$MM		
Central Governments or						
Central Banks						
0.00% - 0.08%	14,160	7,056	-	90	9%	0.04%
0.09% - 0.17%	798	743	-	-	25%	0.12%
0.21% - 0.40%	190	187	-	-	46%	0.33%
0.51% - 1.65%	133	124	-	-	74%	0.60%
1.92% - 100%	77	24	1	-	189%	8.03%
Total	15,358	8,134	1	90		
Corporates						
0.00% - 0.08%	14,169	8,943	46	1,384	26%	0.06%
0.09% - 0.17%	39,140	20,526	-	484	37%	0.13%
0.21% - 0.40%	11,010	6,263	1	876	63%	0.29%
0.51% - 1.65%	9,353	5,547	68	513	78%	0.72%
1.92% - 100%	8,467	4,187	227	206	153%	10.56%
Total	82,139	45,466	342	3,463		
Institutions						
0.00% - 0.08%	40,783	28,804	-	343	20%	0.07%
0.09% - 0.17%	21,529	12,623	-	-	39%	0.12%
0.21% - 0.40%	8,906	2,291	-	-	67%	0.30%
0.51% - 1.65%	4,595	1,049	25	-	97%	0.71%
1.92% - 100%	1,150	196	-	-	178%	7.99%
Total	76.963	44.963	25	343		

The table does not include the IRB Equities and IRB Securitisation exposure classes, as these exposures are treated through the IRB simple risk weight approach (CRR Article 155.2), and the IRB ratings based method (CRR Article 261), respectively.

# **Non-Trading Book Equity Exposures**

The MSI Group applies the IRB simple risk weight approach for equity exposures falling outside of the Trading Book. The majority of the equity positions are held as hedges for employee long-term compensation schemes. Table 6 shows a breakdown of the equity exposures falling outside of the Trading Book by risk weight.

Table 6: Non Trading Book Equity Exposures<sup>1</sup>

EAD	CAPITAL REQUIREMENTS <sup>2</sup>
\$MM	\$MM
-	-
-	-
855	198
69	20
924	218
	\$MM - - 855 69

<sup>1.</sup> For all Equities, the balance sheet value is equal to the Fair Value

Total Gross Exposure column heading is the credit exposure after the application of netting benefits but before the application of financial collateral.

<sup>3.</sup> Exposure value after Credit Risk Mitigation is equivalent to Exposure at Default ("EAD").

<sup>2.</sup> Capital Requirements is calculated as 8% of RWAs.

Table 7 shows realised and unrealised gains and losses for equity exposures falling outside of the trading book.

Table 7: Non Trading Book Equity Gains and Losses					
	\$MM				
Cumulative Amount of realised gains or losses resulting from sales and liquidations in the period	58				
Total unrealised gains or losses	(87)				
Total latent revaluation gains or losses	0				
Amount of unrealised gains or losses or latent revaluation gains or losses included in Tier 1 Capital	0				

# **Estimates Versus Actual Probability of Default and Losses**

An analysis of estimated versus actual default rates by exposure class is shown in Table 8. The estimated PDs are expressed as the average PD calculated on the number of obligors covered in each exposure class. These estimated PDs are a prediction, as at the end of prior year, of the 1-year forward looking default rate on a through-the-cycle basis, and are compared with the actual (realised) defaults in the current year. The comparatively low percentage of actual defaults reflects the benign credit environment.

Table 8: Estimated Versus Actual PD by Exposure Class <sup>1</sup>									
	<b>ESTIMATE</b>	<b>ACTUAL AT</b>	<b>ESTIMATE</b>	<b>ACTUAL AT</b>					
	AT	2015	AT	2014					
	2014		2013 <sup>2</sup>						
Central Governments or Central Banks	0.27%	-	0.74%	-					
Corporates	2.75%	0.06%	3.37%	0.01%					
Institutions	1.30%	-	1.46%	-					

<sup>1.</sup> The averaging approach for estimated PDs facilitates a meaningful comparison with actual defaults. The weighted average PDs by exposure class, as shown in Table 5, are

An analysis of credit risk adjustments and expected loss by IRB exposure class is shown in Table 9 including additional information on charges to the profit and loss for loss events that occurred during the respective periods. The credit risk adjustments balances reflect impaired legacy loans entered into pre-2008 that were affected by the economic downturn and have not recovered. Charges to the profit and loss reflect continued write-downs of these positions.

The MSI Group does not establish credit reserves for traded products. Incurred credit valuation adjustments and debit valuation adjustments are taken through profit and loss.

Table 9: IRB Credit Risk Adjustments, Expected Loss and Charge to the Profit and Loss<sup>1</sup> SPECIFIC RISK **EXPECTED CHARGE TO** SPECIFIC RISK **EXPECTED CHARGE TO ADJUSTMENTS** LOSS THE PROFIT & **ADJUSTMENTS** LOSS THE PROFIT LOSS<sup>2</sup> **AND LOSS** 2015 2015 2015 2014 2014 2014 \$MM \$MM \$MM \$MM \$MM \$MM **Central Governments** 3 3 or Central Banks Corporates 50 243 313 6 13 130 Institutions 28 39 15 Equity 8 50 13 130 370 6 **Total** 282

<sup>2.</sup> Following a change in the basis of preparation for this table, the ESTIMATE AT 2013 comparative has been revised from the 31 December 2014 Pillar 3 Disclosure.

Expected Loss mainly arise from exposures on MSIP

<sup>2.</sup> Charge to the Profit and Loss represents loss events that occurred during the period, and does not include the effect of other movements in the Credit Risk Adjustments balance due to: currency translation; changes in estimates of losses arising on events which occurred in the preceding period.

# 9.4 Standardised Approach

A Standardised approach is used for certain asset categories, including exposure to central counterparties, receivables (e.g. fees and interest), unsettled trades and other assets.

Table 10 shows the exposures for the MSI Group, calculated using the Standardised approach for each exposure class and broken down by Credit Quality Step ("CQS").

Table 10: Standard	Table 10: Standardised Approach EAD by Credit Quality Step									
		CQS1	CQS2	CQS3	CQS4	CQS5	CQS6	OTHER	UNRATED	TOTAL
		\$MM	\$MM	\$MM						
Central Governments	GROSS EAD	0	-	0	-	-		-	171	171
or Central Banks	EAD	0	-	0	-	-	-	-	171	171
Cornoratos	GROSS EAD	19	22	7	0	-	-	6,827	2,473	9,348
Corporates	EAD	19	22	7	0	-	-	6,518	2,473	9,039
Lligh viel	GROSS EAD	-	-	-	-	1	2	-	93	96
High risk	EAD	-	-	-	-	1	2	-	93	96
Institutions	GROSS EAD	123	286	238	39	0	-	4,986	303	5,975
institutions	EAD	123	286	238	39	0	-	4,621	303	5,610
Multilateral	GROSS EAD	0	-	-	-	-	-	-	2	2
developments banks	EAD	0	-	-	-	-	-	-	2	2
Dublic as show sublified	GROSS EAD	2	1	-	-	-	-	0	19	22
Public sector entities	EAD	2	1	-	-	-	-	0	19	22
Regional governments	GROSS EAD	0	-	-	-	-	-	181	1	182
or Local Authorities	EAD	0	-	-	-	-	-	168	1	169
Committeetion	GROSS EAD	203	-	-	4	11	-	-	-	218
Securitisation	EAD	203	-	-	4	11	-	-	-	218
Units or shares	GROSS EAD	-	-	-	-	-	-	-	38	38
in CIUs	EAD	-	-	-	-	-	-	-	38	38
TOTAL	GROSS EAD	347	309	245	43	12	2	11,994	3,100	16,052
TOTAL	EAD	347	309	245	43	12	2	11,307	3,100	15,365

Under the Standardised Approach, risk weights are generally applied according to the relevant exposure class and the associated credit quality (CRR Article 113). Credit quality may be determined by reference to the credit assessments of an ECAI, which are then mapped to a CQS. The Unrated segment represents exposure for which no ECAI credit assessment is available.

# 9.5 Maturity Analysis

Maturity analysis of IRB and Standardised exposures are shown in Table 11.

The OTHER segment represents exposures where alternative rules to the CQS treatment described in the note above apply. The majority of exposures in this segment are exposures to central counterparties.

Table 11: Residual Weighted Maturity Breakdown of EAD										
· ·	LESS THAN	OVER 1	5 YEARS	NO	TOTAL					
	OR EQUAL	<b>YEAR AND</b>	<b>AND ABOVE</b>	MATURITY						
	TO 1 YEAR	<b>LESS THAN 5</b>								
	\$MM	\$MM	\$MM	\$MM	\$MM					
IRB										
Central Governments Or Central Banks	5,710	1,721	703	-	8,134					
Corporates	25,613	12,847	7,006	-	45,466					
Equity	-	-	924	-	924					
Institutions	28,907	11,759	4,297	-	44,963					
Securitisation	6	392	36	-	434					
Total (IRB)	60,236	26,719	12,966	-	99,921					
Standardised										
Central Governments Or Central				171	171					
Banks	-	-	-	1/1	1/1					
Corporates	3,146	3,372	1,121	1,400	9,039					
High Risk	-	-	-	96	96					
Institutions	764	3,856	-	990	5,610					
Multilateral Development Banks	-	-	-	2	2					
Public Sector Entities	-	-	-	22	22					
Regional Governments Or Local Authorities	107	61	-	1	169					
Securitisation	-	218	-	-	218					
Units Or Shares In CIUs	-	-	-	38	38					
Total (Standardised)	4,017	7,507	1,121	2,720	15,365					
Total	64,253	34,226	14,087	2,720	115,286					

## 9.6 Credit Risk Mitigation

The MSI Group may seek to mitigate credit risk from its lending and trading activities in multiple ways, including netting, collateral, guarantees and hedges. At the transaction level, the MSI Group seeks to mitigate risk through management of key risk elements such as size, tenor, financial covenants, seniority and collateral. The MSI Group actively hedges its lending and derivatives exposure through various financial instruments that may include single-name, portfolio and structured credit derivatives. Additionally, the MSI Group may sell, assign or syndicate funded loans and lending commitments to other financial institutions in the primary and secondary loan market. In connection with its derivatives trading activities, the MSI Group generally enters into master netting agreements and collateral arrangements with counterparties. These agreements provide the MSI Group with the ability to demand collateral, as well as to liquidate collateral and offset receivables and payables covered under the same master agreement in the event of a counterparty default.

# Netting

The MSI Group has policies and procedures in place for assessing the validity, enforceability and treatment of netting agreements with clients in connection with its derivative trading activities. In order to net a group of similar exposures with counterparty, a qualifying master netting agreement must be in place between Morgan Stanley and the counterparty. The agreement must be valid and legally enforceable. Upon an event of default, including in the event of a bankruptcy or insolvency of the counterparty, all transactions within the netting set are terminated in a timely manner and a single net close-out amount is determined under a qualifying master netting agreement. Repo-style transactions must also be executed under an agreement that provides for the close-out on a net basis.

The MSI Group does not make use of on-balance-sheet netting of loans and deposits in regulatory capital calculations.

## **Collateral**

The amount and type of collateral required by the MSI Group depends on an assessment of the credit risk of the counterparty. Collateral held is managed in accordance with the MSI Group's guidelines and the relevant underlying agreements.

The MSI Group actively manages its credit exposure through the application of collateral arrangements. The use of collateral in managing OTC derivative risk is standard in the market place, and is governed by appropriate documentation; for example, the Credit Support Annex to the International Swaps and Derivatives Association ("ISDA") documentation. In line with these standards, the Morgan Stanley Group generally accepts only cash and G7 government bonds, corporate debt and main index equities as eligible collateral. Other securities may be accepted in securities lending, repo and prime brokerage, subject to conservative haircuts based on assessments of collateral volatility and liquidity. There is an established and robust infrastructure to manage, maintain and value collateral on a daily basis.

The MSI Group's collateral management policies include arrangements for maintaining the integrity of the margining process, including the capture of collateral terms and haircuts and the underlying legal rights, interest and ownership of collateral transferred. The policies also include arrangements for safeguarding collateral, rehypothecation, collateral concentrations and dispute resolution. Collateral concentration in OTC derivatives is assessed through considering concentration relative to the liquidity of the underlying assets.

#### Guarantees

Letters of credit and guarantees can be used to transfer the credit risk of an exposure to another counterparty. For specific transactions or counterparties, the MSI Group will accept letters of credit and guarantees following an appropriate level of due diligence. In such instances, the exposure is assumed to be to the provider of the letter of credit or guarantee. The acceptable types of provider of letters of credit and guarantees are sovereigns, certain supranational and multilateral development banks, banks and other financial institutions, and corporates that are rated at least investment grade. A provider is not deemed acceptable if the provider's creditworthiness is positively correlated with the credit risk of the exposures for which it has provided guarantees.

Table 12 shows the impact of financial collateral and guarantees on exposures.

Table 12: Credit EAD IRB + Stand	ardised by Exp	osure Type <sup>1</sup>			
	CREDIT	TOTAL	TOTAL	EAD	AVERAGE
	<b>EXPOSURE</b>	<b>EXPOSURE</b>	<b>EXPOSURE</b>		12-
	PRIOR TO	VALUE	VALUE		MONTH
	CREDIT	COVERED BY	COVERED BY		EAD
	MITIGATION <sup>2</sup>	ELIGIBLE	GUARANTEES		
		FINANCIAL			
	4	COLLATERAL	4	4	
	\$MM	\$MM	\$MM	\$MM	\$MM
IRB					
Central Governments or Central Banks	15,358	7,208	-	8,134	8,292
Corporates	82,139	35,764	985	45,466	51,655
Equity	924	-	-	924	1,004
Institutions	76,963	31,885	-	44,963	49,734
Securitisation	483	-	49	434	263
Total (IRB)	175,867	74,857	1,034	99,921	110,948
Standardised					
Central Governments and Central Banks	171	-	-	171	175
Corporates	9,348	309	-	9,039	9,994
High Risk	96	-	-	96	50
Institutions	5,976	366	-	5,610	6,657
International Organisations	-	-	-	-	1
Multilateral Development Banks	2	-	-	2	2
Public Sector Entities	22	-	-	22	4
Regional Governments or Local Authorities	183	14	-	169	319
Securitisation	218	-	-	218	255
Units Or Shares In CIUs	38	-	-	38	40
Total (Standardised)	16,054	689	-	15,365	17,497
Total	191,921	75,546	1,034	115,286	128,445

There were no exposures covered by other eligible collateral as at 31 December 2015.

# 9.7 Derivative credit exposure

Table 13 shows the Trading Book gross positive fair value of derivative contracts, netting benefits, netted current credit exposure and collateral held as at 31 December 2015 for the MSI Group.

Table 13: Derivative Credit Exposures				
	\$MM			
Gross positive fair value of contracts	246,166			
Netting benefits	(197,493)			
Gross positive fair value after netting	48,673			
Collateral held	(74,156)			
Of which: Unused collateral due primarily to overcollateralisation	35,974			
Net derivatives Credit exposure (after netting and collateral)	10,492			

Gross positive fair value represents any long market value on derivative transactions before netting benefits are applied but after any regulatory eliminations and exemptions are applied. Collateral held represents the market value of enforceable collateral received after regulatory eliminations and exemptions are applied.

Net derivatives credit exposure represents the net exposure after collateral received has been applied.

Table 14 shows the Derivative Contracts EAD by calculation method and exposure class for the MSI Group as at 31 December 2015. EAD is inclusive of potential future exposure.

Credit exposure prior to credit risk mitigation describes exposure after the application of netting benefits before the application of financial collateral.

Table 14: Derivative EAD by Calculation method			
	IMM	MTM	TOTAL
		METHOD	
	\$MM	\$MM	\$MM
Central Governments or Central Banks	2,556	255	2,811
Corporates	17,943	12,682	30,625
Institutions	11,433	12,525	23,958
Total	31,932	25,462	57,394

#### **Credit Derivative Transactions**

Table 15 shows the notional value of credit derivatives, namely Credit Default Swaps ("CDS") and Total Return Swaps ("TRS"), segmented by either own credit portfolio or intermediation activities. Own credit portfolio comprises trades used for hedging and credit portfolio management of the Non-Trading Book. Intermediation activities cover all other credit derivatives and mainly comprise derivatives to manage the Trading Book.

Table 15: Notional Value of Credit Derivative Transactions						
OWN CREDIT INTERMEDIATION PORTFOLIO ACTIVITIES ACTIVITIES						
	PURCHASER	SELLER	PURCHASER	SELLER		
	\$MM	\$MM	\$MM	\$MM		
Credit Default Swaps	1,076	19	463,439	456,076		
Total Return Swaps	-	34	3,647	1,703		
Total	1,076	53	467,086	457,779		

<sup>1.</sup> Own Credit Portfolio: credit derivatives used to manage the Non-Trading Book.

#### 9.8 Collateral Impact of a Downgrade

In connection with certain OTC trading agreements and certain other agreements where the MSI Group is a liquidity provider to certain financing vehicles, the Firm may be required to provide additional collateral or immediately settle any outstanding liability balances with certain counterparties or pledge additional collateral to certain exchanges and clearing organisations in the event of a future credit rating downgrade irrespective of whether the Company is in a net asset or net liability position.

The additional collateral or termination payments that may be called in the event of a future credit rating downgrade vary by contract and can be based on ratings by either or both of Moody's and S&P. As at 31 December 2015, the future potential collateral amounts and termination payments that could be called or required by counterparties or exchanges and clearing organisations, in the event of one-notch or two-notch downgrade scenarios, from the lowest of Moody's or S&P ratings, based on the relevant contractual downgrade triggers, were \$536 million and an incremental \$658 million, respectively.

#### 9.9 Wrong Way Risk

Specific wrong way risk arises when a transaction is structured in such a way that the exposure to the counterparty is positively correlated with the PD of the counterparty. For example, a counterparty writing put options on its own stock or a counterparty collateralised by its own or related party stocks. The MSI Group considers these matters when approving transactions. Ongoing monitoring of transactions with specific wrong way risk is facilitated by systematic identification from inception of the trade throughout the entire lifecycle of the trade. Further, credit and capital exposures are adjusted automatically to reflect the identified specific wrong way risk.

<sup>2.</sup> Intermediation activities: credit derivatives used to manage the Trading Book.

General wrong way risk arises when the counterparty PD is correlated, for non-specific reasons, with the market or macroeconomic factors that affect the value of the counterparty's trades. Single-factor stress tests are used to probe for general wrong way risk, and counterparties with identified sensitivities are subject to heightened monitoring. Where positions raise concerns, a risk mitigation strategy is agreed between CRM and the business units.

# 9.10 Industry and Geographical Breakdowns

Tables 16 to 20 show industry and geographical breakdowns.

Table 16: EAD by Credit Industry Type					
	IRB	STANDARDISED	TOTAL		
	\$MM	\$MM	\$MM		
Banks And Securities Firms	52,734	1,149	53,883		
Energy And Utilities	3,401	38	3,439		
Exchanges And Clearing Houses	635	11,380	12,015		
General Industrials	3,836	16	3,852		
Healthcare And Consumer Goods	2,289	23	2,312		
Insurance	4,534	7	4,541		
Leverage And Other Funds	6,137	49	6,186		
Mutual And Pension Funds	15,803	16	15,819		
Other Corporates	1,834	2,260	4,094		
Real Estate	532	220	752		
Sovereign	7,233	177	7,410		
Special Purpose Vehicles	450	2	452		
Technology Media And Telecoms	503	28	531		
Total	99,921	15,365	115,286		

Table 17: Impaired and Past Due Exposures, Credit Risk Adjustments by Industry Type							
	PAST DUE <sup>1, 2</sup>	IMPAIRED EXPOSURES <sup>3</sup>	SPECIFIC CREDIT RISK ADJUSTMENTS	GENERAL CREDIT RISK ADJUSTMENTS	CHARGES FOR SPECIFIC AND GENERAL CREDIT RISK ADJUSTMENTS <sup>4</sup>		
	\$MM	\$MM	\$MM	\$MM	\$MM		
Sovereigns	15	-	-	-	-		
Banks and Securities Firms	323	-	-	-	-		
General Industrials	842	29	(29)	-	8		
Other Corporates	-	45	(43)	-	12		
Real Estate	-	7	(6)	-	-		
Total	1,180	81	(78)	-	20		

<sup>1.</sup> A financial asset is considered past due when a counterparty has failed to make a payment when contractually due.

Past due exposures arise principally from MSIP.

<sup>3.</sup> A financial asset is considered 'impaired' under the Impairment policy if, and only if, there is objective evidence of impairment resulting from events occurring after initial recognition that have an impact on estimated future cash flows of the financial asset, and the impact on those cash flows can be reliably estimated.

<sup>4.</sup> Charges for Specific and General Credit Risk Adjustments represents the movement in the Credit Risk Adjustments balance for the year and may include: loss events that occurred during the period and changes in estimates of losses arising on events which occurred in the preceding period.

Table 18: Geographical Breakdown of EAD	<sup>1</sup>			
	AMERICA	<b>EMEA</b>	ASIA	TOTAL
	\$MM	\$MM	\$MM	\$MM
IRB				
Central Governments or Central Banks	1,701	4,786	1,647	8,134
Corporates	16,244	27,032	2,190	45,466
Equity	647	244	33	924
Institutions	17,536	19,020	8,407	44,963
Securitisation	0	434	-	434
Total (IRB)	36,128	51,516	12,277	99,921
Standardised				
Central Governments or Central Banks	5	150	16	171
Corporates	211	8,460	368	9,039
High risk	10	65	21	96
Institutions	340	5,160	110	5,610
Multilateral developments banks	0	2	0	2
Public sector entities	5	5	12	22
Regional governments or Local Authorities	0	1	168	169
Securitisation	-	218	-	218
Units or shares in CIUs	16	22	0	38
Total (Standardised)	587	14,083	695	15,365
Total	36,715	65,599	12,972	115,286

<sup>1.</sup> Supranational exposures have been allocated to the region of the headquarters of the institution.

Table 19: Impaired and Past Due Exposures, Credit Risk Adjustments by Geographic Region

	AMERICA \$MM	EMEA \$MM	ASIA \$MM	OTHER \$MM	TOTAL \$MM
Impaired	1	77	3	-	81
Past Due Exposures <sup>1</sup>	133	968	79	-	1,180
General Credit Risk Adjustments	-	-	-	-	-
Specific Credit Risk Adjustments	(1)	(74)	(3)	-	(78)
Total	133	971	79	_	1,183

Past due exposures arise principally from MSIP.

	AMERICAS	<b>EMEA</b>	ASIA
Central Governments or Central Banks	0.08%	0.09%	0.06%
Corporates	1.31%	0.89%	3.53%
Institutions	0.09%	0.20%	0.14%

<sup>1.</sup> The table does not include the IRB Equities and IRB Securitisation exposure classes, as these exposures are treated through the IRB simple risk weight approach (CRR Article 155.2), and the IRB ratings based method (CRR Article 261) respectively.

# **9.11 Credit Risk Adjustments**

The main considerations for the impairment assessment include whether there are any known difficulties in the cash flows of counterparties, credit rating downgrades, or infringement of the original terms of the contract.

<sup>2.</sup> Supranational exposures have been allocated to the region of the headquarters of the institution.

The MSI Group determines the allowance appropriate for each individually significant asset on an individual basis. Items considered when determining the allowance amount include the sustainability of the counterparty's business plan, the counterparty's ability to improve performance once a financial difficulty has arisen, the realisable value of collateral, and the timing of expected cash flows. The impairment losses are evaluated at least at each reporting date.

	GENERAL CREDIT RISK ADJUSTMENTS	SPECIFIC CREDIT RISK ADJUSTMENTS
	\$MM	\$MM
Opening Balances as at 1 January 2015	-	(176)
Amounts taken against the credit risk adjustments	-	(20)
Amounts set aside or reversed for estimated probable losses	-	77
Any other adjustments	-	41
Closing Balances as at 31st December 2015	-	(78)

#### 10. Securitisation

## **10.1 Securitisation Activities**

The MSI Group acts, or has historically acted, as originator, sponsor, liquidity provider, servicer and derivative counterparty to its own originated and sponsored securitisations, as well as those of third party securitisations. The MSI Group also acts as market maker for securitized products in EMEA. The majority of the securitisation exposures result from this activity and are Trading Book as at 31 December 2015.

The MSI Group's strategy has been to use securitisations for customer facilitation. The MSI Group has engaged in securitisation activities related to commercial and residential mortgage loans, corporate bonds and loans, and other types of financial instruments. Derivative exposures to securitisations are generally interest rate swaps and usually with senior payment priority.

The MSI Group participated as a book runner or lead manager in a number of new securitisations during 2015. The MSI Group did not originate or sponsor any new securitisations in 2015.

# **10.2 Regulatory Capital Treatment**

The MSI Group employs the IRB approach and the Standardised approach to calculate the capital on its securitisation positions. The IRB Approach is applied to securitisation exposures where the MSI Group has regulatory approval to use the IRB approach for the assets underlying the securitisation and the Standardised approach for all other assets. In general, this means securitisations of retail exposures are treated under the Standardised Approach, whilst securitisations of non-retail exposures are captured under the IRB Approach. Both approaches use rating agency credit ratings to determine risk weights. The MSI Group uses ratings from three external credit assessment institutions: Moody's Investor Service, S&P's Ratings Services and Fitch Ratings.

# **10.3 Securitisation Exposures**

traditional securitisation activity.

Table 22 shows the exposures and capital requirements of securitisation positions within the MSI Group as at 31 December 2015.

Table 22: Securitisation Exposures and Capital Requirements <sup>1</sup>	
TRADING BOOK	NON- TRADING BOOK
Ć D A D A	Ć D A D A

	ВООК	ВООК
	\$MM	\$MM
Exposures	1,263	652
Capital Requirements	675	40
<ol> <li>Securitisation exposures and capital requirements decreased by \$1,036MM and \$406MM respectively, compared to 2014.</li> </ol>	This was primarily dri	ven by a reduction in

Table 23 and Table 24 show the securitisation positions broken down by capital approach and CQS within the

MSI Group as at 31 December 2015.

Table 23: IRB Securitisation Exposures and Capital Requirements by Credit Quality Step <sup>1</sup>				
	TRADING BOOK EXPOSURE  NON- TRADING BOOK EXPOSURE		TRADING BOOK CAPITAL REQUIREMENTS	NON-TRADING BOOK CAPITAL REQUIREMENTS
	\$MM	\$MM	\$MM	\$MM
Amount of Securitisation Purchased				
CQS 1-3	24	-	0	-
CQS 4-6	8	35	0	1
CQS 7-11	147	126	48	8
All Other CQS	189	-	200	-
Unrated	112	1	102	1
Amount of Securitisation Retained				
CQS 1-3	0	105	0	3
CQS 4-6	-	67	-	2
CQS 7-11	16	99	1	9
Below CQS 11	14	-	15	-
Amount of Re-securitisation Purchased				
CQS 7-11	4	-	1	-
All Other CQS	0	-	0	-
Unrated	2	-	2	-
Amount of Re-securitisation Retained				
Unrated	-	1	-	1
Total	516	434	369	25

<sup>1.</sup> The exposures above are after a financial guarantee which reduced one re-securitisation exposure purchased position by \$49MM.

**Table 24: Standardised Securitisation Exposures and Capital Requirements by Credit Quality** 

	TRADING	<b>NON-TRADING</b>	TRADING	<b>NON-TRADING</b>
	воок	ВООК	<b>BOOK CAPITAL</b>	<b>BOOK CAPITAL</b>
	<b>EXPOSURE</b>	<b>EXPOSURE</b>	REQUIREMENTS	REQUIREMENTS
	\$MM	\$MM	\$MM	\$MM
<b>Amount of Securitisation Purchased</b>				
CQS 1-3	369	203	17	3
CQS 4-5	157	-	68	-
Unrated	221	-	221	-
<b>Amount of Securitisation Retained</b>				
CQS 4-5	-	15	-	12
Total	747	218	306	15

Table 25 and Table 26 provide a summary of the types of securitisation exposures within the MSI Group as at 31 December 2015.

Table 25: Trading Book Securitisation Exposures by Exposure Type<sup>1</sup>

	TRADITIONAL \$MM	SYNTHETIC \$MM	POSITIONS RETAINED \$MM	POSITIONS PURCHASED \$MM
Residential Mortgages	748	-	-	748
Commercial Mortgages	72	-	30	42
Credit Card Receivables	0	-	-	0
Loans to Corporates or SMEs (treated as Corporates)	418	11	-	429
Consumer Loans	5	-	-	5
Other Assets	9	-	-	9
Total	1,252	11	30	1,233

There were no off-balance-sheet exposures in the Trading Book as at 31 December 2015.

Table 26: Non-Trading Book Securitisation Exposures by Exposure Type<sup>1</sup> **TRADITIONAL POSITIONS POSITIONS** OFF-**RETAINED PURCHASED BALANCE** SHEET **EXPOSURE** \$MM \$MM \$MM \$MM **Residential Mortgages** 218 15 203 35 **Commercial Mortgages** 129 93 1 Loans to Corporates or SMEs 305 179 126 (treated as Corporates)

287

330

35

0

652

# **10.4** Accounting

Other Assets

**Total** 

In the event that the MSI Group acts as the originator of a securitisation, transfers of financial assets in the transaction are generally accounted for as sales when the MSI Group has relinquished control over the transferred assets and met CRR requirements for significant risk transfer. The gain or loss on sale of such

<sup>1.</sup> There were no synthetic securitisation exposures in the Non-Trading Book as at 31 December 2015.

financial assets depends, in part, on the previous carrying amount of the assets involved in the transfer (generally at fair value) and the sum of the proceeds and the fair value of the retained interests the date of sale.

For further information on the MSI Group's financial instruments and derecognition accounting policies, please refer to notes 2c and 2e in Appendix V.

## 10.5 Valuation

The MSI Group may retain interests in the securitised financial assets of one or more tranches of the securitisation. These retained interests are included at fair value. Any changes in the fair value of such retained interests are recognised through the profit and loss in the audited financial statements of the entity holding such interests.

For further information on the MSI Group's valuation techniques related to securitisation, please refer to note 2d in Appendix V, and pages 129 to 134 of the 2015 Form 10-K.

## 10.6 Risk Monitoring

The credit risk of the MSI Group's securitisations is controlled by actively monitoring and managing the associated credit exposures. The MSI Group evaluates collateral quality, credit subordination levels and structural characteristics of securitisation transactions at inception and on an ongoing basis, and manages exposures against internal limits.

The MSI Group follows a set of rigorous procedures for risk managing market risk on securitised products, evolving them with changes in market conditions:

- The MSI Group conducts an assessment of risk limits at least once a year, and more often if required. Market conditions, collateral quality, liquidity and downside risk are important factors for setting market risk limits.
- The MSI Group measures downside risk using various metrics, such as VaR and scenarios analysis, differentiating products based on collateral, seniority and liquidity.

# 11. Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities (the price volatility of the underlying instrument imputed from option prices), correlations or other market factors, such as liquidity, will result in losses for a position or portfolio.

Sound market risk management is an integral part of the Morgan Stanley Group culture. The various business units and trading desks are responsible for ensuring that market risk exposures are well managed and prudent. The control groups help ensure that these risks are measured and closely monitored and are made transparent to senior management. The Market Risk Department ("MRD") is responsible for ensuring transparency of material market risks, monitoring compliance with established limits, and escalating risk concentrations to appropriate senior management. To execute these responsibilities, MRD monitors the Morgan Stanley Group's risk against limits on aggregate risk exposures, performs a variety of risk analyses, routinely reports risk summaries, and maintains the Morgan Stanley Legal Entity VaR ("Value-at-Risk") and scenario analysis systems. These limits are designed to control price and market liquidity risk. Market risk is also monitored through various measures: statistically (using VaR and related analytical measures); by measures of position sensitivity; and through routine stress testing, which measures the impact on the value of existing portfolios of specified changes in market factors, and scenario analyses conducted by MRD in collaboration with the

business units. The material risks identified by these processes are summarised in reports produced by MRD that are circulated to and discussed with senior management.

## **Risk Mitigation Policies**

The MSI Group manages its trading positions by employing a variety of risk mitigation strategies. These strategies include diversification of risk exposures and hedging. Hedging activities consist of the purchase or sale of positions in related securities and financial instruments, including a variety of derivative products (e.g. futures, forwards, swaps and options). Hedging activities may not always provide effective mitigation against trading losses due to differences in the terms, specific characteristics or other basis risks that may exist between the hedge instrument and the risk exposure that is being hedged. The MSI Group manages and monitors its market risk exposures in such a way as to maintain a portfolio that the MSI Group believes is well-diversified in the aggregate with respect to market risk factors and that reflects the MSI Group's aggregate risk tolerance as established by the MSI Group senior management.

#### 11.1 Value at Risk

The MSI Group uses the statistical technique known as VaR as one of the tools used to measure, monitor and review the market risk exposures of its trading portfolios. The market risk department calculates and distributes daily VaR-based risk measures to various levels of management.

# VaR Methodology, Assumptions and Limitations

The MSI Group estimates VaR using a model based on volatility adjusted historical simulation for general market risk factors and Monte Carlo simulation for name-specific risk in corporate shares, bonds, loans and related derivatives. The model constructs a distribution of hypothetical daily changes in the value of trading portfolios based on the following: historical observation of daily changes in key market indices or other market risk factors; and information on the sensitivity of the portfolio values to these market risk factor changes. The Group's current VaR model uses four years of historical data with a volatility adjustment to reflect current market conditions. The Group's prior VaR model also used four years of historical data, but did not make any volatility adjustments and was therefore less responsive to current market conditions. The Group's 99%/one-day VaR corresponds to the unrealised loss in portfolio value that, based on historically observed market risk factor movements, would have been exceeded with a frequency of 1%, or once every 100 trading days, if the portfolio were held constant for one day.

The MSI Group's VaR model generally takes into account linear and non-linear exposures to equity and commodity price risk, interest rate risk, credit spread risk and foreign exchange rates as well as linear exposures to implied volatility risks. The VaR model also captures certain implied correlation risks associated with portfolio credit derivatives as well as certain basis risks (e.g. corporate debt and related credit derivatives).

The group uses VaR as one of a range of risk management tools. Among their benefits, VaR models permit estimation of a portfolio's aggregate market risk exposure, incorporating a range of varied market risks and portfolio assets. One key element of the VaR model is that it reflects risk reduction due to portfolio diversification or hedging activities. However, VaR has various limitations, which include, but are not limited to: use of historical changes in market risk factors, which may not be accurate predictors of future market conditions, and may not fully incorporate the risk of extreme market events that are outsized relative to observed historical market behaviour or reflect the historical distribution of results beyond the 95% confidence interval; and reporting of losses in a single day, which does not reflect the risk of positions that cannot be liquidated or hedged in one day. A small proportion of market risk generated by trading positions is

not included in VaR. The modelling of the risk characteristics of some positions relies on approximations that, under certain circumstances, could produce significantly different results from those produced using more precise measures. VaR is most appropriate as a risk measure for trading positions in liquid financial markets and will understate the risk associated with severe events, such as periods of extreme illiquidity. The MSI Group is aware of these and other limitations and, therefore, uses VaR as only one component in its risk management oversight process. This process also incorporates stress testing and scenario analysis and extensive risk monitoring, analysis and control at the trading desk, division and the MSI Group levels.

The MSI Group's VaR models evolve over time in response to changes in the composition of trading portfolios and to improvements in modelling techniques and systems capabilities. The MSI Group is committed to continuous review and enhancement of VaR methodologies and assumptions in order to capture evolving risks associated with changes in market structure and dynamics. In addition, risk models are subject to independent validation by a quantitative group specialising in the independent validation of models.

Since the VaR statistics reported in Table 27 are estimates based on historical position and market data, considering its limitations, VaR should not be viewed as predictive of the MSI Group's future revenues or financial performance or of its ability to manage risk. There can be no assurance that the MSI Group's actual losses on a particular day will not exceed the VaR amounts indicated below or that such losses will not occur more than once in 100 trading days. VaR does not predict the magnitude of losses which, should they occur, may be significantly greater than the VaR amount.

The methodology, assumptions and limitations of the MSI Group's VaR model are consistent with those of the Morgan Stanley Group. For a further discussion see pages 102 to 107 of the 2015 Form 10-K.

Table 27: Sensitivi	ty Analysis for the 99% N	/ISIP Regulatory Val	₹1	
	PERIOD END VAR <sup>2</sup>	AVERAGE	HIGH	LOW
	\$MM	\$MM	\$MM	\$MM
Interest Rate	20.1	27.5	50.9	14.7
Credit Spread	8.4	12.3	17.9	8.3
Equity	19.1	19.8	63.2	13.5
Foreign Exchange	4.4	8.8	15.6	4.4
Commodity	0.4	1.2	3.3	0.3
Diversification <sup>3</sup>	(23.6)			
Total	28.8	35.8	69.6	24.6

- There is no VaR approval for the MSI Group.
- 2. This is the 1 Day 99% VaR for the year ending 31 December 2015.
- The extent of diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a point in time.

# 11.2 Market Risk Capital Requirements

The market risk capital requirements of the MSI Group comprises of capital which is calculated from Internal Models in accordance with PRA's approved models and of capital based on the Standardised approach. The VaR-based capital and the Stressed VaR based capital are determined by the higher of the 60-day average of the 10-day VaR / 10-day Stressed VaR numbers multiplied by the regulatory Internal Model multiplication factor as prescribed by the PRA, and the 10-day VaR/ 10-day Stressed VaR for the relevant day. The Incremental Risk Charge ("IRC") and All Price Risk ("APR") charges are determined by the higher of the average of the latest 12 weeks IRC/APR and the IRC/APR charge for the relevant day.

Table 28 shows the maximum, minimum and average VaR and Stressed VaR, as well as the IRC and APR measures, for the year ending 31 December 2015. For further discussion see Sections 11.4 and 11.5.

Table 28: Market Risk Internal Model Measures <sup>1</sup>					
	VAR <sup>2</sup>	STRESSED VAR <sup>2</sup>	IRC	APR	
	\$MM	\$MM	\$MM	\$MM	
Average	113	206	597	8	
Minimum	78	128	264	3	
Maximum <sup>3</sup>	220	653	1,338	21	
Period End	91	231	264	21	

- 1. VaR, Stressed VaR, IRC and APR are components of the \$2,359MM modelled market risk capital in table 3, for the year ending 31 December 2015.
- 2. VaR and Stressed VaR are at a 99% confidence interval, 10-day holding period.
- 3. Peak position appeared only for 1-day.

To validate the accuracy of the VaR models for entities having regulatory permission to use VaR for Internal Model capital calculations a daily backtesting analysis is performed at various levels of the business hierarchy, as part of a range of tools. Backtesting is performed on the firm's Trading Book population and compares the P&L (for MSIP and MSSL up to deregistration) for trade date N against the 99%/one-day Regulatory Trading VaR for N-1. As per the requirements of the CRR rules, backtesting uses 'Actual' and 'Hypothetical' definitions of the P&L. Backtesting on hypothetical changes in the portfolio's value refers to a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. Backtesting on Actual changes in the portfolio's value refers to a comparison between the portfolio's end-of-day value and its actual value at the end of the subsequent day (i.e. inclusive of intra-day trading/new activity). Both measures of the backtesting P&L also exclude non risk based fees (ie service fees), commissions, and net interest income.

On days where losses (on either an Actual and/or Hypothetical P&L basis) exceed the prior day's VaR, an exception is recorded and is reported by close of business (N+2) to the PRA. MSIP, the material subsidiary within the MSI Group, performed within the PRA's "Green Zone" for its standard for model accuracy. Similarly, for MSSL the PRA's "Green Zone" standard was also met before being deregistered during 2015.

The MSI Group has a comprehensive framework of policies, controls and reporting to meet the requirements of CRR articles 102 to 104. The underlying policies, controls and reporting mechanisms cover a range of different aspects including Trading Intent, Valuation, Liquidity, Restrictions, Hedgeability, Active Management and transfers between the Trading and Non-Trading Books. Governance is provided by the Firm's Banking/Trading committee whose role with respect to the banking/trading boundary is to: develop firm policy and guidance, ensure effective control and reporting mechanisms are in place and to clearly set out roles and responsibilities across the firm.

Table 29 shows the market risk capital requirements for the MSI Group as at 31 December 2015, calculated in accordance with the standardised approach and categorised by component type.

Table 29: Market Risk Capital Requirements Calculated in Accordance with the Standardised Approach		
	\$MM	
Interest Rate <sup>1</sup>	833	
Equity PRR	1	
Commodity PRR	38	
Foreign Currency PRR	153	
Total	1,025	

<sup>1.</sup> Of which: Specific Interest Rate Risk of Securitisation Positions \$675MM.

#### 11.3 Stressed VaR

Stressed VaR uses the same underlying models as VaR to produce a 1-day 99% VaR constructed over a 1-year period of continuous stress. Stressed VaR uses data based on historical and non-volatility adjusted simulations for the general market risk factors and Monte Carlo simulation for name specific risk in corporate shares, bonds, loans and related derivatives. The 1-year stressed window is chosen for each of the UK Regulated legal entities which have VaR model approval, MSIP and MSSL before deregistration as a regulated entity in September 2015. The Stressed VaR model is agreed and approved by the PRA for use in regulatory calculations. Stressed 10-day VaR is constructed by scaling the Stressed 1-day VaR. The Stressed 10-day VaR as at 31 December 2015 was \$231MM. The MSI Group's Stressed VaR capital requirement was \$676MM as at 31 December 2015 based upon the higher of the average of the 60-day Stressed 10-day VaR number multiplied by the multiplication factor, and the Stressed 10-day VaR for the relevant day.

## 11.4 Incremental Risk Charge

IRC measures the migration and default risk of traded instruments by issuers in a single integrated framework. The model assumes a constant level of risk and is calculated over a one-year horizon at a confidence level of 99.9% using Monte Carlo simulations. The chief risk factors modelled are defaults, credit migrations, recovery risk and liquidity risk. The model differentiates the underlying traded instruments by liquidity horizon, with the minimum liquidity horizon set at three months. Concentrated positions are assigned higher liquidity horizons. The weighted liquidity horizon for IRC is 4.65 months. The MSI Group's capital requirements relating to IRC was \$264MM as at 31 December 2015.

Table 30: IRC Liquidity Horizon for Material Sub Portfolios		
	LIQUIDITY HORIZON (MONTHS)	
Bank Resource Management <sup>1</sup>	5.99	
Commodities	4.38	
Fixed Income Division	4.59	
Institutional Equity Division	4.45	

Bank Resource Management is a division within the Institutional Securities Group that is responsible for the Firm's securities financing transactions (including repo and securities lending), hedging of OTC derivative counterparty exposures and global collateral management.

## 11.5 All Price Risk

APR is a measure used to calculate all risks within designated credit correlation trading portfolios, as preapproved by the PRA. Calculated as the 99.9 percentile simulated loss, the APR covers the major risk types associated within the credit correlation trading portfolio, including credit migrations, defaults, recoveries, credit spread and correlation movements and liquidity risk. APR is calculated over a one-year horizon assuming a constant level of risk. The constant liquidity horizon for APR is six months. The overall APR is floored at 8% of the corresponding standardized rules for the same portfolio. The MSI Group's capital requirements relating to APR was \$21MM as at 31 December 2015.

# **11.6 Stress Testing**

The MSI Group has a comprehensive and dynamic Stress testing framework incorporating deterministic group-wide Macroeconomic Stress tests, Business area single and multi-factor scenarios and RST scenarios. Stress testing is one of the MSI Group's principal risk management tools used to identify and assess the impact of severe stresses on its portfolios. It complements other risk metrics by providing a flexible and easy to understand approach to understanding risk and assessing the MSI Group's resilience in the face of various scenarios over a range of severities.

In addition to helping the MSI Group understand the risks it is exposed and/or vulnerable to under a range of scenarios, Stress testing is also used by the MSI Board to set the boundary for risk taking within the loss capacity of the MSI Group.

# 11.7 Interest Rate Risk In The Non-Trading Book

Interest rate risk refers to the risk of losses arising from an adverse change in the interest rates curve within the defined Non-Trading Book population.

The MSI Group is exposed to interest rate risk primarily through the Trading Book, which is captured within VaR.

The interest rate risk in the Non-Trading Book is driven by counterparty exposure on interest rate derivatives and Corporate Treasury activities with subordinated debt liabilities the main contributor. The interest rate risk is measured on a daily basis through firmwide risk systems, except for the risks on internal funding positions which are measured on a quarterly basis.

The interest rate risk in the Non-Trading Book is not material in the context of the MSI Group. The amount is \$55K per basis point as at 31 December 2015 and the MSI Group risk is exposed to the yield curve lowering.

Table 31 shows the impact of a one basis point ("1bp") parallel shift in interest rates on the value of interest rate positions in the Non-Trading Book for the MSI Group as at 31 December 2015.

Table 31: Interest Rate Risk in Non Trading Book				
	PROFIT OR LOSS OF A +1BP	PROFIT OR LOSS OF A -1BP		
	PARALLEL SHIFT IN	PARALLEL SHIFT IN		
	INTEREST RATES	INTEREST RATES		
	\$MM	\$MM		
USD	0.05	(0.05)		
EUR	0.01	(0.01)		
GBP	(0.03)	0.03		
JPY	(0.01)	0.01		
Other	0.03	(0.03)		
Total	0.05	(0.05)		

# **12. Operational Risk**

Operational risk refers to the risk of loss, or of damage to the Company's reputation, resulting from inadequate or failed processes, people and systems or from external events (e.g. fraud, theft, legal and compliance risks or damage to physical assets). Operational risk relates to the following risk event categories as defined by Basel III: internal fraud; external fraud, employment practices and workplace safety; clients, products and business practices; business disruption and system failure; damage to physical assets; and execution, delivery and process management.

Operational risk may be incurred across the MSI Group's full scope of business activities, including revenuegenerating activities (e.g. sales and trading) and support control functions (e.g. information technology and trade processing).

The MSI Group is subject to operational risks, including a failure, breach or other disruption of operational or security systems, that could adversely affect its business or reputation.

Operational risk management policies and procedures for MSI Group are consistent with those of the Morgan Stanley Group and include escalation to the MSI Board and appropriate senior management personnel. The MSI Group has established an operational risk framework to identify measure, monitor and control risk in the context of an approved risk tolerance appetite, set by the MSI Board.

The MSI Group has implemented operational risk data and assessment systems to monitor and analyse internal and external operational risk events, business environment and internal control factors and to perform scenario analysis.

The MSI Group's business is highly dependent on its ability to process, on a daily basis, a large number of transactions across numerous and diverse global markets. In some MSI Group businesses, the transactions processed are complex. In addition, new products or services may be introduced that impact or change business processes, thereby resulting in new operational risks that may not have been fully anticipated or identified. In general, the transactions processed are increasingly complex. The trend toward direct access to automated, electronic markets and the move to more automated trading platforms has resulted in the use of increasingly complex technology that relies on the continued effectiveness of the programming code and integrity of the data to process the trades. The MSI Group performs the functions required to operate different businesses either by itself or through agreements with third parties. The MSI Group relies on the ability of the Morgan Stanley Group's employees, internal systems, and systems at technology centres operated by unaffiliated third parties to process a high volume of transactions.

As a major participant in the global capital markets, the MSI Group maintains extensive controls to reduce the risk of incorrect valuation or risk management of trading positions due to flaws in data, models, electronic trading systems or processes or due to fraud. Nevertheless, such risk cannot be completely eliminated.

The MSI Group also faces the risk of operational failure or termination of any of the clearing agents, exchanges, clearing houses or financial intermediaries it uses to facilitate securities/ client transactions. In the event of a breakdown or unauthorised or improper operation of the MSI Group's or a third party's systems or unauthorized action by third parties or the firms employees, the MSI Group could suffer financial loss, an impairment to its liquidity, a disruption of its businesses, regulatory sanctions or reputation damage. In addition, the interconnectivity of multiple financial institutions with central agencies, exchanges and clearing houses, and the increased importance of these entities, increases the risk that an operational risk failure at one institution or entity may cause an industry-wide operational failure that could materially impact the MSI Group's ability to conduct business.

Despite the business contingency plans in place, there can be no assurance that such plans will fully mitigate all potential business continuity risks to MSI Group. MSI Group's ability to conduct business may be adversely affected by a disruption in the infrastructure that supports its business and the communities where MSI Group and its affiliates are located, which are concentrated in the New York metropolitan area, London, Hong Kong and Tokyo as well as Mumbai, Budapest, Glasgow and Baltimore. This may include a disruption involving physical site access, cyber incidents, terrorist activities, disease pandemics, catastrophic events, natural disasters, extreme weather events, electrical, environmental, computer servers, communications or other services, employees or third parties with whom MSI Group conducts business.

Although MSI Group devotes significant resources to maintaining and upgrading its systems and networks with measures such as intrusion and detection prevention systems, monitoring firewalls to safeguard critical business applications, and supervising third party providers that have access to its systems, there is no guarantee that these measures or any other measures can provide absolute security. Like other financial services firms, the MSI Group and its third party providers continue to be the subject of attempted unauthorised access, mishandling or misuse of information, computer viruses or malware and cyber-attacks designed to obtain confidential information, destroy data, disrupt or degrade service, sabotage systems or

cause other damage, denial of service attacks and other events. These threats may derive from human error, fraud or malice on the part of MSI Group employees or third parties, including third party providers, or may result from accidental technological failure. Additional challenges are posed by external extremist parties, including foreign state actors, in some circumstances as a means to promote political ends. Any of these parties may also attempt to fraudulently induce employees, customers, clients, third parties or other users of MSI Group systems to disclose sensitive information in order to gain access to MSI Group data or that of its customers or clients. There can be no assurance that such unauthorized access or cyber incidents will not occur in the future, and they could occur more frequently and on a more significant scale.

If one or more of these events occur, the events could have a security impact on the MSI Group's systems and jeopardise the MSI Group's or the MSI Group's clients', partners' or counterparties' personal, confidential, proprietary or other information processed, stored in and transmitted through, the MSI Group's, its affiliates' and its third party providers' computer systems. Furthermore, such events could cause interruptions or malfunctions in the MSI Group's, the MSI Group's clients', the MSI Group's counterparties' or third parties' operations, which could result in reputational damage with its clients and the market, client dissatisfaction, additional cost to repair systems, add new protective technologies and/ or personnel, regulatory investigations, litigation or enforcement, or regulatory fines or penalties not covered by insurance maintained by the MSI Group, all or any of which could adversely affect the business, financial condition and results of operations.

Given MSI Group's global footprint and the high volume of transactions processed by the MSI Group, the large number of clients, partners and counterparties with which MSI Group does business, and the increasing sophistication of cyber-attacks, a cyber-attack could occur and persist for an extended period of time without detection. MSI Group expects that any investigation of a cyber-attack would be inherently unpredictable and that it would take time before the completion of any investigation and before there is availability of full and reliable information. During such time MSI Group would not necessarily know the extent of the harm or how best to remediate it, and certain errors or actions could be repeated or compounded before they are discovered and remediated, all or any of which would further increase the costs and consequences of a cyber-attack.

While many of MSI Group's agreements with partners and third party vendors include indemnification provisions, it may not be able to recover sufficiently, or at all, under such provisions to adequately offset any losses. In addition, although MSI Group maintains insurance coverage that may, subject to policy terms and conditions, cover certain aspects of cyber risks, such insurance coverage may be insufficient to cover all losses.

Conduct risk refers to the risk that MSI Group's or its employees' actions or behaviours do not adequately consider the impact on the clients, expected market users or the markets, and could result in detrimental outcomes or undermine the Integrity of financial markets, or have the potential to cause reputational damage to the Firm. Conduct risk within the MSI Group is managed and owned across the businesses and control functions through policies, process and controls within a designed framework.

#### 13. Leverage

The Basel III framework introduced a simple, transparent, non-risk based leverage ratio to act as a credible supplementary measure to the risk-based capital requirements. The Basel Committee is of the view that a simple leverage ratio framework is critical and complementary to the risk-based capital framework and that a credible leverage ratio is one that ensures broad and adequate capture of both the on- and off-balance sheet sources of banks' leverage.

Although there is no current binding leverage requirement under CRDIV, the MSI Group and MSIP's leverage exposures are calculated monthly and weekly, respectively, and reported to EMEA ALCO who monitors this to ensure against excessive leverage.

The disclosures in the tables below have been made in accordance with the EU Delegated Act and are disclosed on a fully phased basis.

During the period the leverage ratio has moved from 4.5% in December 2014 to 5.1% as of December 2015. There was no material movement in the ratio after the implementation of the EU Delegated Act which came into effect from 1 January 2015. A reduction in the balance sheet and the associated decrease in financial assets held for trading drove the change in leverage ratio during the period.

Table 32: Reconciliation of Accounting Assets & Leverage Ratio Exposures					
	MSI GROUP \$MM	MSIP \$MM			
Total assets as per published financial statements <sup>1</sup>	397,007	392,721			
Adjustments for derivative financial instruments	(52,355)	(53,191)			
Adjustments for securities financing transactions "SFTs"	29,504	29,583			
Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	3,224	2,261			
(Adjustment for intragroup exposures excluded from the leverage ratio					
exposure measure in accordance with Article 429 (7) of Regulation (EU) No	-	(12,320)			
575/2013)					
Other adjustments	(21,321)	(8,039)			
Total leverage ratio exposure	356,059	351,015			

See appendix V for MSI Group total assets.

Table 33: Split of On Balance Sheet Exposures (excluding derivatives,		
SFTs and exempted exposures)	MSI	MSIP
	GROUP	
	\$MM	\$MM
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	107,951	105,329
Trading book exposures	91,048	89,554
Non-Trading book exposures, of which:	16,903	15,775
Exposures treated as sovereigns	47	4
Institutions	10,367	10,489
Corporate	5,881	5,087
Exposures in default	3	-
Other exposures (eg equity, securitisations, and other non-credit obligation assets)	605	195

Table 34 : Leverage Ratio Common Disclosure		
Tubic 34 . Leverage Natio common Disclosure	MSI	MSIP
	GROUP	
	\$MM	\$MM
On-balance sheet exposures (excluding derivatives and SFTs)		-
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but	107.051	117 412
including collateral)	107,951	117,413
(Asset amounts deducted in determining Tier 1 capital)	(1,714)	(1,293)
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary	106,237	116,120
assets)		
<b>Derivative exposures</b> Replacement cost associated with <i>all</i> derivatives transactions (ie net of eligible		
cash variation margin)	39,717	39,069
Add-on amounts for PFE associated with <i>all</i> derivatives transactions (mark-to-		
market method)	108,588	107,217
(Deductions of receivables assets for cash variation margin provided in		
derivatives transactions)	(22,090)	(21,897)
Adjusted effective notional amount of written credit derivatives	459,636	459,636
(Adjusted effective notional offsets and add-on deductions for written credit	•	
derivatives)	(451,332)	(451,332)
Total derivative exposures	134,519	132,693
Securities financing transaction exposures		
Gross SFT assets (with no recognition of netting), after adjusting for sales	136,836	137,007
accounting transactions		
(Netted amounts of cash payables and cash receivables of gross SFT assets)	(36,978)	(36,854)
Counterparty credit risk exposure for SFT assets	12,221	12,108
Total securities financing transaction exposures	112,079	112,261
Other off-balance sheet exposures		
Off-balance sheet exposures at gross notional amount	5,213	3,265
(Adjustments for conversion to credit equivalent amounts)	(1,989)	(1,004)
Total Other off-balance sheet exposures	3,224	2,261
Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and		
off balance sheet)		
(Intragroup exposures (solo basis) exempted in accordance with Article 429(7)	-	(12,320)
and (14) of Regulation (EU) No 575/2013 (on and off balance sheet))		
Capital and total exposure measure	18,049	15,255
Tier 1 capital	356,059	
Total leverage ratio exposures  Leverage ratio	5.1%	351,015 4.3%
Choice on transitional arrangements and amount of derecognised fiduciary	3.170	4.3%
items		
	Fully	Fully
Choice on transitional arrangements for the definition of the capital measure	Phased In	Phased In

## **14. Asset Encumbrance**

Borrowing and lending securities and hence the encumbrance of assets, is a fundamental part of Morgan Stanley's business within the MSI Group. The following disclosure details the MSI Group's encumbered and unencumbered assets, along with the matching liabilities. An asset is considered encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralise or credit enhance any transaction from which it cannot be freely withdrawn. In compliance with the PRA guidelines, the amounts are presented

as a median of the twelve month ends over 2015. Note the rows in the templates are not additive, with the median calculated individually across all cells.

The majority of the on-balance-sheet assets in Table 35 are not subject to any form of encumbrance, given they are mostly cash or receivable assets, for example reverse repo or derivatives positions. The MSI Group also receives securities from the market, which are off-balance-sheet, reported in the collateral received template. These may be pledged to the market and encumbered, or held as part of the MSI Group's unencumbered pool of assets. For both on balance sheet assets and collateral received, the level of encumbrance over 2015 is relatively consistent to the 2014 disclosure, with the median having decreased marginally year on year. The key sources of encumbrance are secured funding repo and stock lending transactions. Other sources of encumbrance include short coverage cash collateral pledged against derivatives and cash segregated for Client Money purposes. A portion of the assets are internal intercompany movements with other Morgan Stanley Group entities.

Table 35: Assets				
	CARRYING	FAIR VALUE OF	CARRYING	<b>FAIR VALUE OF</b>
	<b>AMOUNT OF</b>	<b>ENCUMBERED</b>	<b>AMOUNT OF</b>	UNENCUMBERED
	<b>ENCUMBERED</b>	ASSETS	UNENCUMBERED	ASSETS
	ASSETS		ASSETS	
	\$MM	\$MM	\$MM	\$MM
Assets of the reporting institution	98,261	N/A	368,665	N/A
Equity Instruments	33,464	33,464	11,940	11,940
Debt Securities	18,080	18,080	7,523	7,523
Other Assets <sup>1</sup>	48,059	N/A	345,500	N/A

<sup>1. &</sup>quot;Other Assets" incorporate Loans on Demand and Loans and Advances other than Loans on Demand.

Table 36: Collateral Received		
	FAIR VALUE OF	FAIR VALUE OF COLLATERAL
	ENCUMBERED	RECEIVED OR OWN DEBT
	COLLATERAL RECEIVED	SECURITIES ISSUED AVAILABLE
	OR OWN DEBT	FOR ENCUMBRANCE
	SECURITIES ISSUED	
	\$MM	\$MM
Collateral Received by the reporting institution	197,145	33,580
Equity Instruments	86,038	5,066
Debt Securities	112,697	28,759
Other Collateral Received	0	0

Table 37: Encumbered Assets / Collate	eral Received and Associa	nted Liabilities
	MATCHING LIABILITIES,	ASSETS, COLLATERAL RECEIVED
	CONTINGENT LIABILITIES	AND OWN DEBT SECURITIES OTHER
	OR SECURITIES LENT	THAN COVERED BONDS AND ABS's
		ENCUMBERED
	A	4
	\$MM	\$MM
Carrying Amount of selected financial liabilities <sup>1</sup>	291,121	295,820

<sup>1.</sup> On- and off-balance-sheet liabilities that are a source of encumbrance are reported.

# 15. Appendix I: Capital Instruments Template

## REPORTED IN USD UNLESS OTHERWISE STATED

DESCRIPTION	COMMON E	QUITY TIER 1	ADDITIONAL TIER 1	SUBORD	INATED DEBT	
	Α	В	С	D	Е	F
Issuer	Morgan Stanley International Limited	Morgan Stanley International Limited	Morgan Stanley International Limited	Morgan Stanley & Co. International plc	Morgan Stanley International Limited	Morgan Stanley International Limited
Unique Identifier (e.g. CUSIP, ISIN, or Bloomberg identifier for private placement)	N/A	N/A	N/A	N/A	N/A	N/A
Governing law(s) of the instrument	English Law	English Law	English Law	English Law	English Law	English Law
Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Additional Tier 1	Tier 2 [19.0% ineligible]	Tier 2	Tier 2
Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
Eligible at solo/(sub-) consolidated/solo&(sub-) consolidated	(Sub-) Consolidated	(Sub-) Consolidated	(Sub-) Consolidated	Solo and (Sub-) Consolidated	(Sub-) Consolidated	(Sub-) Consolidated
Instrument type	Ordinary Shares	Ordinary Shares	Perpetual Unsecured Fixed Rate Securities	Long-term subordinated loan facility	Long-term subordinated multicurrency loan facility	Long-term subordinated multicurrency loan facility
Amount recognised in regulatory capital (\$MM)	USD 1,164MM	USD 0MM	USD 1,300MM	USD 6,401MM [The amount of Sub-debt issued by subsidiaries that is given recognition in Tier 2 Capital is determined in accordance with articles 87 and 480 of the CRR]	USD 51MM	USD 368MM

DESCRIPTION	COMMON EQL	ON EQUITY TIER 1 ADDITIONAL TIER 1		ADDITIONAL TIER 1 SUBORDINATED DEBT		
	Α	В	С	D	E	F
Nominal amount of instrument	Currency of issuance and reporting currency; USD 1,614,167,000	Currency of issuance: GBP 2 Reporting currency: USD 3	Currency of issuance and reporting currency; USD 1,300,000,000	Currency of issuance and reporting currency; USD 7,906,000,000	Currency of issuance and reporting currency: USD 51,000,000	Currency of issuance: GBP 250,000,000 Reporting currency: USD 368,337,500
Issue Price	USD 1,614,180,150	GBP 2	USD 1,300,000,000	USD 7,906,000,000	USD 51,000,000	GBP 250,000,000
Redemption Price	N/A	N/A	USD 1,300,000,000	USD 7,906,000,000	USD 51,000,000	GBP 250,000,000
Accounting Classification	Shareholders' Equity	Shareholders' Equity	Shareholders' Equity	Liability - amortised cost	Liability - amortised cost	Liability - amortised cost
Original date of issuance	13/11/1998	18/06/1998	15/12/2014	31/10/2005	21/12/2015	21/12/2015
Perpetual or dated	Perpetual	Perpetual	Perpetual	Dated	Dated	Dated
Original maturity date  Issuer call subject to	No maturity	No maturity	No maturity	31/10/2025	21/12/2025	21/12/2025
prior supervisory approval	No	No	Yes	No	No	No
Option call date, contingent call dates and redemption amount	N/A	N/A	Issuer call option date is 5 years after the issue date (15-Dec 2019), after which the issuer has the option to redeem in whole or in part. In the event of a taxation event; can be redeemed at the option of the Issuer in whole, but not in part. In the event of a Capital Disqualification event the issuer can redeem in whole.  The redemption price is equal to the outstanding principal	N/A	N/A	N/A
Subsequent call dates, if applicable	N/A	N/A	amount being redeemed The option to redeem of the Issuer continues on any date after the initial call option date	N/A	N/A	N/A

DESCRIPTION		N EQUITY ER 1	ADDITIONAL TIER 1	SUBORDINATED DEBT		
	Α	В	С	D	E	F
Fixed or floating dividend / coupon	N/A	N/A	Fixed Rate	Floating	Floating	Floating
Coupon rate and any related index	N/A	N/A	9% <sup>(2)</sup>	3mth USD LIBOR + 1.475%	Fed Funds + 2.086%	SONIA + 2.121%
Existence of a dividend stopper	No	No	No	No	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully Discretionary	Fully Discretionary	Fully Discretionary	Mandatory	Mandatory	Mandatory
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully Discretionary	Fully Discretionary	Fully Discretionary	Mandatory	Mandatory	Mandatory
Existence of step up or other incentive to redeem	No	No	No	No	No	No
Noncumulative or cumulative	Noncumulative	Noncumulative	Noncumulative	Cumulative	Cumulative	Cumulative
Convertible or non-convertible	Nonconvertible	Nonconvertible	Nonconvertible	Nonconvertible	Nonconvertible	Nonconvertible
If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A
If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A	N/A
If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A	N/A
If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A	N/A
If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A	N/A
If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A	N/A

DESCRIPTION	COMMON EQU	COMMON EQUITY TIER 1			SUBORDINATED DEBT		
	Α	В	С	D	E	F	
Write-down features	No	No	Yes	No	No	No	
If write-down, write-down trigger(s)	N/A	N/A	Common Equity Tier 1 Capital Ratio of UK Group falls below 7.00%	N/A	N/A	N/A	
If write-down, full or partial	N/A	N/A	Always full	N/A	N/A	N/A	
If write-down, permanent or temporary	N/A	N/A	Permanent	N/A	N/A	N/A	
If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A	N/A	
Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Perpetual Unsecured Resettable Securities [column C]	Perpetual Unsecured Resettable Securities [column C]	Long-term sub- ordinated loan facility [columns D,E,F,]	Other liabilities	Other liabilities	Other liabilities	
Non-compliant transitioned features	No	No	No	No	No	No	
If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A	N/A	

## **Further notes**

Note 1: all capital instruments issued by the UK Group are issued within Morgan Stanley and are not marketable instruments

Note2: Initial rate of interest of 8.75% applied up to and including 31-Jan'15

# **16. Appendix II: Own Funds Transitional Template**

Appendix II: Own Funds Transitional Template		
	TRANSITIONAL	FULLY
	RULES	LOADED
		POSITION
	\$MM	\$MM
Capital instruments and the related share premium accounts	1,614	1,614
Paid up capital instruments	1,614	1,614
Share premium	-	-
Retained earnings	9,786	9,786
Accumulated other comprehensive income (and other reserves, to include	6,910	6,910
unrealised gains and losses under the applicable accounting standards)		•
Common Equity Tier 1 (CET1) capital before regulatory adjustments	18,310	18,310
Additional value adjustments (negative amount)	(1,123)	(1,123)
Intangible assets (net of related tax liability) (negative amount)	(410)	(410)
Negative amounts resulting from the calculation of expected loss amounts	(180)	(180)
Gains or losses on liabilities valued at fair value resulting from changes in own	152	152
Total regulatory adjustments to Common equity Tier 1 (CET1)	(1,561)	(1,561)
Common Equity Tier 1 (CET1) capital	16,749	16,749
Capital instruments and the related share premium accounts	1,300	1,300
Additional Tier 1 (AT1) capital	1,300 1,300	1,300
Tier 1 capital (T1 = CET1 + AT1)	18,049	18,049
Capital instruments and the related share premium accounts	419	419
Qualifying own funds instruments included in consolidated T2 capital	413	413
(including minority interests and AT1 instruments not included in rows 5 or	4,143	4,143
34) issued by subsidiaries and held by third parties	7,143	4,143
Of which: Instruments issued by subsidiaries subject to phase out	2,258	_
Tier 2 (T2) capital before regulatory adjustments	6,820	4,562
Tier 2 (T2) capital	6,820	4,562
Total capital (TC = T1 + T2)	24,869	22,611
Total risk weighted assets	108,321	108,321
Common Equity Tier 1 (as a percentage of risk exposure amount)	15.5%	15.5%
Tier 1 (as a percentage of risk exposure amount)	16.7%	16.7%
Total capital (as a percentage of risk exposure amount)	23.0%	20.9%
Institution specific buffer requirement (CET1 requirement in accordance with	23.070	20.570
article 92 (1) (a) plus capital conservation and countercyclical buffer		
requirements, plus systemic risk buffer, plus the systemically important	0.01%	2.51%
institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk	0.0270	2.02/
exposure amount)		
Of which: Capital conservation buffer requirement	_	2.50%
Of which: Counter cyclical buffer requirement	0.01%	0.01%
Common Equity Tier 1 available to meet buffers (as a percentage of risk		
exposure amount)	10.7%	10.7%
Direct and indirect holdings of the capital of financial sector entities where		
the institution does not have a significant investment in those entities	85	85
(amount below 10% threshold and net of eligible short positions)		
Direct and indirect holdings by the institution of the CET 1 instruments of		
<u> </u>		
financial sector entities where the institution has a significant investment in		
financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short	-	-

# 17. Appendix III: Reconciliation of Balance Sheet Total Equity to Regulatory Capital

# Appendix III: Reconciliation of Balance Sheet Total Equity to Regulatory Capital<sup>1</sup>

		COMMON EQUITY TIER 1 (CET1) CAPITAL	ADDITIONAL TIER 1 (AT1) CAPITAL	TIER 2 (T2) CAPITAL
	\$MM	\$MM	\$MM	\$MM
Equity Instruments	2,914	1,614	1,300	-
Other reserves	7,461	7,461	-	-
Other Comprehensive Income	(551)	(551)	-	-
Retained Earnings	10,395	10,395	-	-
Non-controlling interest	87	87	-	-
Balance sheet total equity	20,306	19,006	1,300	0
Add:				
Tier 2 instruments classified as other liabilities	9,145			9,145
Less:  Qualifying own funds subordinated debt				
instruments not included in consolidated T2 capital	(2,325)	-	-	(2,325)
Part of interim or year-end profit not eligible	(609)	(609)	-	-
Minority interests (amount not allowed in consolidated CET1)	(87)	(87)	-	-
Additional value adjustments (negative amount)	(1,123)	(1,123)	-	-
Negative amounts resulting from the calculation of expected loss amounts	(180)	(180)	-	-
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	152	152	-	-
Intangible assets (net of related tax liability) (negative amount)	(410)	(410)	-	-
Total Own Funds (Transitional Rules)	24,869	16,749	1,300	6,820
Less:				
Qualifying own funds subordinated debt instruments issued by subsidiaries subject to phase out	(2,258)	-	-	(2,258)
Total Own Funds (Fully Loaded Position)	22,611	16,749	1,300	4,562

<sup>1.</sup> Due to the exemption allowed under section 401 of the Companies Act 2006, the MSI Group does not publish its own audited statutory consolidated group accounts because the MSI Group is consolidated into the accounts of Morgan Stanley. However, audited, consolidated non-statutory financial information has been produced for the MSI Group, as received by the MSI Board and MSI Audit Committee, in accordance with the recognition and measurement principles of IFRS issued by the International Accounting Standards Board as adopted by the European Union. For further detail, refer to Appendix V.

#### 18. Appendix IV: Board of Directors Knowledge, Skills and Expertise

#### Ian Plenderleith

Ian Plenderleith was appointed a non-executive director in December 2011 and as Chairman of the MSI Board in January 2014. He is also interim Chairman of the MSI Risk Committee and a member of the MSI Audit Committee. Ian has worked in the financial sector for over forty years. He was Executive Director responsible for Financial Market Operations at the Bank of England when he retired in 2002 and has held a number of other positions with the Bank of England since joining in 1965, including Head of the Bank of England's Markets Division (1980 to 1994) and Private Secretary to the Governor of the Bank of England (1976 to 1979). Ian was a member of the Monetary Policy Committee from its inception in 1997. He has also served as Deputy Governor of the South African Reserve Bank (2003 to 2005).

lan holds non-executive directorships at a number of other financial institutions. He also has a degree in Literae Humaniores from the University of Oxford and an MBA from Columbia Business School.

#### **David Cannon**

David Cannon was appointed a non-executive director of the MSI Board in June 2013. He is Chairman of the MSI Audit Committee and a member of the Risk Committee and the Nomination and Governance Committee.

David has over thirty years' experience in the financial sector, with a particular focus on accounting and investment banking. He was a Partner at Ernst & Young from 1986 to 1995, leading the audit of a number of large financial services groups and being responsible for one of Ernst & Young's audit divisions before leaving in 1995 to become Chief Financial Officer of BZW/Barclays Capital. He returned to Ernst & Young in 1998 as Managing Partner of the London Financial Services Office. Between 2003 and 2012, David held a number of positions at Deutsche Bank including Deputy Group CFO and Chief Finance Officer for the Investment Bank.

David is a member of the Financial Reporting Councils' Conduct Committee. He has an M.A. in PPE from the University of Oxford and is a qualified Chartered Accountant.

### **Mary Phibbs**

Mary Phibbs was appointed a non-executive director of the MSI Board in May 2013. She chairs the MSI Nomination and Governance Committee and is a member of the Audit Committee and Risk Committee.

Mary has over thirty years' experience in audit, advisory, banking (wholesale and retail), finance and insurance in the UK, Australia and Asia Pacific. During her career she has held roles with a number of retail and investment banks predominantly in Australia, including Standard Chartered Bank and National Australia Bank.

Mary holds a number of non-executive directorships with other financial institutions. She also has a Bachelor of Science degree from Surrey University and is a qualified Chartered Accountant.

## **Colm Kelleher**

Colm Kelleher is President of Morgan Stanley (appointed January 2016) and was an executive director of the MSI Board (from April 2011 until his resignation as a director in February 2016). Prior to assuming this role in January 2016, Colm served as President of Morgan Stanley Institutional Securities and CEO EMEA and Asia Pacific (2010 – 2016), Chief Financial Officer and Co-Head of Corporate Strategy for Morgan Stanley (2007 to 2009) and Head of Global Capital Markets (2006 to 2007). Prior to 2006, he held a number of other roles including Co-Head of Fixed Income Europe, Sales.

Colm has an M.A. in History from the University of Oxford and qualified as a Chartered Accountant at Arthur Anderson & Co. before joining Morgan Stanley in 1989.

#### **Christopher Castello**

Christopher Castello is EMEA Chief Financial Officer and an executive director of the MSI Board (appointed September 2014).

Christopher joined Morgan Stanley in March 2014 from Goldman Sachs Group where he was Asia Pacific Controller (2008 to 2014) and Chief Administrative Officer Japan and Korea (2012 to 2014). Prior to this, Christopher held roles in Product Control, including Product Control Managing Director and Head of Asia Product Control. He joined Goldman Sachs Group in 1993.

Christopher has a First Class Honours degree in Business Administration from Pace University and an MBA from Columbia Business School. He is a CFA Charterholder® and holds a Certified Public Accountant qualification.

#### Lee Guy

Lee Guy is EMEA Chief Risk Officer and an executive director of the MSI Board (appointed September 2014).

Lee joined Morgan Stanley in July 2014 from Barclays Investment Bank where he was Co-Chief Risk Officer from 2011. Prior to this, Lee was Head of Operational Risk (2011) and Head of Market Risk (2004 to 2011) at Barclays Capital Inc. Lee has also held risk management roles at Dresdner Kleinwort Wasserstein (2001 to 2004) and Kleinwort Benson Limited (1994 to 1997).

Lee has a degree in Mathematics from Warwick University and is a CFA Charterholder®.

#### **Robert Rooney**

Robert Rooney is Chief Executive Officer of MSI and is an executive director of the MSI Board (appointed July 2010).

He was appointed as Chief Executive Officer of MSI in January 2016. Prior to this he was Global Co-Head of Fixed Income, Sales & Trading (appointed May 2013) and has previously held a number of other roles within Morgan Stanley including Head of Fixed Income EMEA, Global Head of Income Sales, Client Coverage.

Robert graduated from Columbia University in 1989 before joining Morgan Stanley in 1990.

#### **David Russell**

David Russell is Head of Morgan Stanley's Institutional Equities Division in Europe and an executive director of the MSI Board (appointed May 2011). He joined Morgan Stanley in 1990 as a European Equity trader and has held a number of other roles including Head of Trading for Europe and Head of Institutional Equities Division in Asia before taking up his current role.

David graduated from the University of London in 1987 with a degree in History.

#### **Clare Woodman**

Clare Woodman is Global Chief Operating Officer of Morgan Stanley's Institutional Securities Group and was an executive director of the MSI Board (from March 2009 until her resignation in February 2016). Clare's previous roles with Morgan Stanley include Chief Operating Officer of MSI and Co Global Chief Operating Officer of Morgan Stanley's Institutional Securities Group. Clare joined Morgan Stanley in 2002 as a lawyer specialising in Banking and Derivatives for Global Capital Markets and Investment Banking in EMEA. She was previously a lawyer with Clifford Chance in London and New York.

Clare is a Non-Executive Director for a number of financial associations. She is also a trustee of the Morgan Stanley International Foundation, Morgan Stanley's charitable trust entity.

Clare has a First Class Honours degree in Government from the University of Essex and a graduate diploma in Law from the College of Law and qualified as a solicitor in 1994.

#### **Appointments to MSI Board**

When identifying and recommending candidates to join the MSI Board, the MSI Nomination and Governance Committee will consider a broad range of qualities and characteristics, giving due regard to ensuring a broad range of knowledge, skills, diversity and experience is present on the Board and its Committees. It will also take into account relevant policies of the MSI Group. When identifying and selecting non-executive directors, the Nomination and Governance Committee may also consult with executive search firms. The Nomination and Governance Committee met four times during 2015.

#### Diversity and the Composition of the MSI Board

The MSI Board recognises the importance and benefits of diversity both within business operations and at a board level. All appointments to the MSI Board are made on merit, in the context of the skills and experience that the MSI Board as a whole requires to be effective, with due regard given to the benefits of diversity. When assessing the composition of the MSI Board and recommending new directors, the MSI Nomination and Governance Committee considers the benefits of all aspects of diversity, including gender diversity.

The MSI Board is aiming to reach a target of 25% female representation by the end of 2016. Selection of female candidates to join the MSI Board will be, in part, dependent on the pool of female candidates with the necessary skills, knowledge and experience. In order to promote the specific objective of gender diversity at Board level, the Nomination and Governance Committee expects short-lists of potential candidates prepared by external executive search firms to include at least one female candidate.

## **MSI Directors: Number of Directorships**

	NUMBER OF DIRECTORSHIP	DIRECTORSHIPS
	HELD AS AT 31	ADJUSTED
	DECEMBER 2015	FOR SYSC4.3A.7(2)
Ian Plenderleith	10	4
Colm Kelleher	4	1
David Cannon	4	1
Mary Phibbs	10	4
Christopher Castello	3	1
Lee Guy	3	1
Robert Rooney	3	1
David Russell	6	2
Clare Woodman	8	2

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Consolidated non statutory financial information

31 December 2015

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#### DIRECTORS' RESPONSIBILITIES STATEMENT

The Directors, the names of whom are set out below, confirm that to the best of their knowledge:

- the accounting policies are appropriate to the circumstances of the Morgan Stanley International Group which comprises of Morgan Stanley International Limited ("the Company") and its subsidiaries (together "the Group") and the policies have been consistently applied and adequately disclosed;
- ii) significant accounting estimates applied are reasonable; and
- iii) the consolidated non statutory financial information is free from material misstatement

Approved by the Board and signed on its behalf by:

l Fastille

C Castello Director

22 June 2016

#### **Board of Directors:**

D O Cannon

C Castello

T Duhon

L Guy

J Horder

M C Phibbs

I Plenderleith (Chairman)

R P Rooney

D A Russell

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY INTERNATIONAL LIMITED

We have audited the consolidated non statutory financial information of the Morgan Stanley International Group which comprises of Morgan Stanley International Limited ("the Company") and its subsidiaries (together "the Group") for the year ended 31 December 2015 which comprises the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity, the consolidated statement of financial position and the related notes 1 to 2. The basis of preparation and accounting policies applied in their preparation are detailed in notes 1 and 2.

This report is made solely to the company's directors in accordance with our engagement letter dated 15 April 2016 and solely for the purpose of providing an opinion over the consolidated non statutory financial information contained within this document titled 'Consolidated non statutory financial information'. Our audit work has been undertaken so that we might state to the company's directors those matters we are required to state to them in an independent auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company, for our audit work, for this report, or for the opinions we have formed.

## Respective responsibilities of directors and auditor

The directors are responsible for the preparation of the consolidated non statutory financial information. Our responsibility is to audit and express an opinion on this consolidated non statutory financial information in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### Scope of the audit of the consolidated non statutory financial information

An audit involves obtaining evidence about the amounts and disclosures in the consolidated non statutory financial information presented to give reasonable assurance that it is free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Group's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the consolidated non statutory financial information. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

#### Opinion on the consolidated non statutory financial information

In our opinion the consolidated non statutory financial information has been properly prepared in accordance with the basis of preparation and accounting policies stated in notes 1 and 2.

Deloitte LLP Chartered Accountants

aut up

London, UK

23 Juna 2016

# CONSOLIDATED INCOME STATEMENT Year ended 31 December 2015

	2015 \$millions	Unaudited 2014 \$millions
Net gains on financial instruments classified as held for trading	3,639	3,193
Net gains on financial instruments designated at fair value through profit and loss	161	80
Net gains on available-for-sale financial assets	2	2
Interest income	180	398
Interest expense	(674)	(645)
Other income	2,353	2,385
Other expense	(4,846)	(5,456)
Loss on disposal of fixed assets	-	(77)
PROFIT/ (LOSS) BEFORE INCOME TAX	815	(120)
Income tax expense	(346)	(51)
PROFIT/ (LOSS) FOR THE YEAR	469	(171)
Attributable to:	455	(174)
Owners of the parent Non-controlling interests	453 14	(174)
PROFIT/ (LOSS) FOR THE YEAR	469	(171)

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME Year ended 31 December 2015

	2015 \$millions	Unaudited 2014 \$millions
PROFIT/ (LOSS) FOR THE YEAR	469	(171)
OTHER COMPREHENSIVE INCOME, NET OF TAX		
Items that will not be reclassified subsequently to profit or loss: Remeasurement of net defined benefit liability Tax adjustment on net defined benefit liability Share-based payments	20 (22) 2	(11) - 7
Items that may be reclassified subsequently to profit or loss: Currency translation reserve:		
Foreign currency translation differences arising on foreign operations	(135)	(256)
Available-for-sale reserve: Net change in fair value of the available-for-sale financial assets	(1)	9
OTHER COMPREHENSIVE INCOME AFTER INCOME TAX FOR THE YEAR	(136)	(251)
TOTAL COMPREHENSIVE INCOME/ (LOSS) FOR THE YEAR	333	(422)
Attributable to:		
Owners of the parent	326	(416)
Non-controlling interest	7	(6)
TOTAL COMPREHENSIVE INCOME/ (LOSS) FOR THE YEAR	333	(422)

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2015

	Equity instruments Smillions	Currency translation reserve \$millions	Available- for-sale reserve Smillions	Capital contribution reserve \$millions	Capital redemption reserve \$millions	Pension reserve \$millions	Retained carnings \$millions	Attributable to owners of the parent Smillions		Total equity \$millions
Unaudited balance at 1 January 2014	1,614	(101)	33	6,061	1,400	(125)	10,139	19,021	82	19,103
Profit/ (loss) for the year			-		-		(174)	(174)	3	(171)
Other comprehensive income		(247)	9			(11)	7	(242)	(9)	(251)
Total comprehensive income/ (loss)	-	(247)	9			(11)	(167)	(416)	(6)	(422)
Transactions with owners:										
Issue of Additional Tier I capital	1,300				-		-	1,300		1,300
Movement in non- controlling interest		_	-	<del>.</del>			_		1,780	1.780
Unaudited balance at 31 December 2014	2.914	(348)	42	6,061	1,400	(136)	9,972	19,905	1,856	21,761
Profit for the year	-	-			-	-	455	455	14	469
Other comprehensive income		(128)	(1)			20	(20)	(129)	(7)	(136)
Total comprehensive income/ (loss)		(128)	(1)		-	20	435	326	7	333
Transactions with owners:										
Dividends		-		-	-		(12)	(12)	-	(12)
Movement in non- controlling interest				-	-			-	(1,776)	(1,776)
Balance at 31 December 2015	2,914	(476)	41	6,061	1,400	(116)	10,395	20,219	87	20,306

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION As at 31 December 2015

ACCIPIE	2015 \$millions	Unaudited 2014 \$millions
ASSETS Loans and receivables:		
Cash and short-term deposits	12,199	12.056
Cash collateral on securities borrowed	22,433	12,056
Securities purchased under agreements to resell	58,523	15,906 58,456
Trade receivables	51,315	56,532
Other receivables	1,254	3,353
Office (Contractor)	145,724	146,303
Financial assets classified as held for trading	248,108	304,921
Financial assets designated at fair value through profit or loss	1,636	4,736
Available-for-sale financial assets	79	87
Current tax assets	197	235
Deferred tax assets	210	218
Prepayments and accrued income	185	217
Property, plant and equipment	458	445
Intangible assets	410	336
TOTAL ASSETS	397,007	457,498
LIABILITIES AND EQUITY		
Financial liabilities at amortised cost:		
Bank loans and overdrafts	161	219
Cash collateral on securities loaned	16,268	17,609
Securities sold under agreements to repurchase	37,274	45,094
Trade payables	82,323	83,983
Subordinated loans	9,145	10,571
Other payables	8,675	9,879
42 10 M	153,846	167,355
Financial liabilities classified as held for trading	216,855	261,514
Financial liabilities designated at fair value through profit or loss	4,865	5,504
Provisions	85	109
Current tax liabilities	174	147
Deferred tax liabilities	39	71
Accruals and deferred income	828	1,031
Post-employment benefit obligations	9	6
TOTAL LIABILITIES	376,701	435,737
EQUITY		
Equity instruments	2,914	2,914
Pension reserve	(116)	(136)
Currency translation reserve	(476)	(348)
Available-for-sale reserve	41	42
Capital contribution reserve	6,061	6,061
Capital redemption reserve	1,400	1,400
Retained earnings	10,395	9,972
Equity attributable to the owners of the parent	20,219	19,905
Non-controlling interests	87	1,856
TOTAL EQUITY	20,306	21,761
TOTAL LIABILITIES AND EQUITY	397,007	457,498

The consolidated non statutory financial information was approved by the Board and authorised for issue on 22 June 2016.

Signed on behalf of the Board

C Castello Director

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

#### 1. BASIS OF PREPARATION

The Company has prepared consolidated non statutory financial information comprising of information about the Company and its subsidiaries (together "the Group") as at 31 December 2015. The Company confirms in accordance with section 435 of the Companies Act 2006 that:

- the consolidated non statutory financial information does not constitute its statutory accounts;
- a copy of the Company's statutory accounts for the year ended 31 December 2015 has been filed with the Registrar of Companies for England and Wales, Companies House, Cardiff CF14 3UZ; and
- the Company's independent auditor has issued an unqualified report on the Company's statutory accounts for the year ended 31 December 2015.

The Group has prepared the consolidated non statutory financial information in accordance with the basis of preparation detailed in the Company's statutory accounts plus the basis of consolidation set out below. A summary of significant accounting policies applied to the Group are detailed in note 2 below.

#### Basis of consolidation

The consolidated non statutory financial information of the Group comprises of information of the Company and its subsidiaries as at 31 December 2015. Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The information for the subsidiaries is prepared for the same reporting year as the Group, using consistent accounting policies. The information of subsidiaries which have a non-US dollar reporting currency are translated into US dollars as described in note 2(b). Subsidiaries are consolidated from the date that the Group gains control until the date that control ceases.

In certain cases, the Group may exercise control over another entity on behalf of investors or other parties. In such cases it is necessary, as part of the assessment of whether it should consolidate the entity, for the Group to determine whether it exercises such control primarily as an agent for the other investors or whether it does so primarily as principal on its own behalf. In making such a determination, the Group will consider all relevant factors, including in particular:

- the scope of the Group's decision-making authority over the investee;
- the rights, including removal rights, held by other parties;
- the remuneration to which the Group is entitled; and
- the significance of the Group's exposure to variability of returns from its interests in the entity.

Intra-group balances, transactions, income and expenses and profits and losses resulting from intra-group transactions are eliminated in preparing the consolidated non statutory financial information

Non-controlling interests represent the portion of profit or loss and total equity not owned, directly or indirectly, by the Group and are presented separately in the consolidated income statement, consolidated statement of comprehensive income and within equity in the consolidated statement of financial position, separately from parent shareholders' equity. The amount of non-controlling interest is measured at the non-controlling interest's proportionate share of the identifiable net assets.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## a. Functional currency

Items included within the consolidated non statutory financial information are measured and presented in US dollars, the currency of the primary economic environment in which the Group operates.

#### Foreign currencies

All monetary assets and liabilities denominated in currencies other than US dollars are translated into US dollars at the rates ruling at the reporting date. Transactions and non-monetary assets and liabilities denominated in currencies other than US dollars are recorded at the rates prevailing at the dates of the transactions. Foreign exchange differences on available-for-sale financial assets are recorded in the 'Available-for-sale reserve' in equity, with the exception of translation differences on the amortised cost of monetary available-for-sale assets, which are recognised through the consolidated income statement. Assets and liabilities of operations which have a non-US dollar reporting currency are translated into US dollars using the closing rate method. Translation differences arising from the net investments in non-US dollar reported operations are taken to the 'currency translation reserve'. All other translation differences are taken through the consolidated income statement. Exchange differences recognised in the consolidated income statement are presented in 'Other income' or 'Other expense', except where noted in 2(c) below.

On disposal of a foreign operation, the related cumulative gain or loss in the 'currency translation reserve' attributable to the owners of the parent is reclassified to the consolidated income statement and recorded within 'Net currency translation gain/ (loss) on disposal of subsidiary'.

#### c. Financial instruments

The Group classifies its financial assets into the following categories on initial recognition: financial assets classified as held for trading, financial assets designated at fair value through profit or loss, available-for-sale financial assets and loans and receivables.

The Group classifies its financial liabilities into the following categories on initial recognition: financial liabilities classified as held for trading, financial liabilities designated at fair value through profit or loss and financial liabilities at amortised cost.

More information regarding these classifications is included below:

## i) Financial instruments classified as held for trading

Purchases and sales of non-derivative financial instruments classified as held for trading are initially recognised on settlement date at fair value, including regular way securities transactions. For purchases of non-derivative financial instruments classified as held for trading, from the date that the terms are agreed (trade date) until the settlement date, the Group recognises any unrealised fair value in the consolidated statement of financial position as 'Financial instruments classified as held for trading' with corresponding profit or loss recognised within the consolidated income statement in 'Net gains/ (losses) on financial instruments classified as held for trading'. For sales of non-derivative financial instruments unrealised fair value changes are no longer recognised in the consolidated income statement from trade date. Upon settlement date the resulting financial instrument is recognised or de-recognised from the consolidated statement of financial position.

Derivatives are initially recognised on trade date at fair value. All subsequent changes in fair value are reflected in the consolidated income statement in 'Net gains/ (losses) on financial instruments classified as held for trading'.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial instruments (continued)

## i) Financial instruments classified as held for trading (continued)

All changes in fair value, foreign exchange differences, interest and dividends are reflected in the consolidated income statement in 'Net gains/ (losses) on financial instruments classified as held for trading'. When interest is included as a component of the instruments' fair value, interest is also reflected in the income statement in 'Net gains/ (losses) on financial instruments classified as held for trading', otherwise, it is included within 'Interest income' or 'Interest expense'.

For all financial instruments classified as held for trading, transaction costs are excluded from the initial fair value measurement of the financial instrument. These costs are recognised in the consolidated income statement in 'Other expense'.

# ii) Financial instruments designated at fair value through profit or loss

The Group has designated certain financial instruments at fair value through profit or loss when:

- the financial instruments are managed, evaluated and reported internally on a fair value basis;
- the designation at fair value eliminates or significantly reduces an accounting mismatch which would otherwise arise; or
- the financial instrument contains an embedded derivative that significantly modifies the cash flows that would otherwise be required under the contract.

From the date the transaction in a financial instrument designated at fair value through profit or loss is entered into (trade date) until settlement date, the Group recognises any unrealised fair value changes in the contract as financial instruments designated at fair value through profit or loss. On settlement date, the fair value of consideration given or received is recognised as a financial instrument designated at fair value through profit or loss (see note 2(d) below). All subsequent changes in fair value, foreign exchange differences, interest and dividends are reflected in the consolidated income statement in 'Net gains/ (losses) on financial instruments designated at fair value through profit or loss'.

Transaction costs are excluded from the initial fair value measurement of the financial instrument. These costs are recognised in the consolidated income statement in 'Other expense'.

#### iii) Available-for-sale financial assets

Financial assets classified as available-for-sale are non-derivative financial assets that are either designated in this category or not classified in any of the other categories of financial instruments. Financial assets classified as available-for-sale are recorded on trade date and are initially recognised and subsequently measured at fair value (see note 2(d) below).

Transaction costs are directly attributable to the acquisition of an available-for-sale financial asset are added to the fair value on initial recognition.

For equity instruments, dividend income and impairment losses are recognised in the consolidated income statement in 'Net gains/ (losses) on available-for-sale financial assets'. All other gains and losses on equity instruments classified as available-for-sale are recognised in the 'Available-for-sale reserve' within equity.

On disposal or impairment of an available-for-sale financial asset, the cumulative gain or loss in the 'Available-for-sale reserve' is reclassified to the consolidated income statement and reported in 'Net gains/ (losses) on available-for-sale financial assets'.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial instruments (continued)

#### iv) Loans and receivables and financial liabilities at amortised cost

Financial assets classified as loans and receivables are recognised when the Group becomes a party to the contractual provisions of the instrument. They are initially measured at fair value and subsequently measured at amortised cost less allowance for impairment. Interest is recognised in the income statement in 'Interest income', using the effective interest rate method as described below. Transaction costs that are directly attributable to the acquisition of the financial asset are added to or deducted from the fair value on initial recognition. Impairment losses and reversals of impairment losses on financial assets classified as loans and receivables are recognised in the consolidated income statement in 'Other expense'.

Financial assets classified as loans and receivables include trade receivables.

Financial liabilities at amortised cost are recognised when the Group becomes a party to the contractual provisions of the instrument. They are initially measured at fair value and subsequently measured at amortised cost. Interest is recognised in the income statement in 'Interest expense' using the effective interest rate method as described below. Transaction costs that are directly attributable to the issue of the financial liability are added to or deducted from the fair value on initial recognition.

The effective interest rate method is a method of calculating the amortised cost of a financial instrument (or a group of financial instruments) and of allocating the interest income or interest expense over the expected life of the financial instrument. The effective interest rate is the rate that exactly discounts the estimated future cash payments and receipts through the expected life of the financial instrument (or, where appropriate a shorter period) to the carrying amount of the financial instrument. The effective interest rate is established on initial recognition of the financial instrument. The calculation of the effective interest rate includes all fees and commissions paid or received transaction costs, and discounts or premiums that are an integral part of the effective interest rate. Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial instrument.

In the course of financing its business and as part of its trading activities, the Group enters into arrangements which involve the sale of securities with agreements to repurchase, the purchase of securities with resale agreements, the lending of securities with collateral received and the borrowing of securities with collateral given. Cash collateral balances repayable and accrued interest arising under repurchase agreements and securities lending arrangements are classified as 'Financial liabilities at amortised cost' and the related securities, where owned by the Group, are included in 'Financial assets classified as held for trading', Cash collateral balances receivable and accrued interest arising under resale agreements and securities borrowing arrangements are classified as 'Loans and receivables'. Securities received by the Group under resale arrangements and securities borrowing arrangements are generally not recognised on the consolidated statement of financial position.

#### d. Fair value

Fair value measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e. the "exit price") in an orderly transaction between market participants at the measurement date.

Where the Group manages a group of financial assets and financial liabilities on the basis of its net exposure to either market or credit risk, the Group measures the fair value of that group of financial instruments consistently with how market participants would price the net risk exposure at the measurement date.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### d. Fair value (continued)

Fair value measurement (continued)

The fair value of a financial instrument on initial recognition is the transaction price (i.e. the fair value of the consideration given or received).

In determining fair value, the Group uses various valuation approaches and establishes a hierarchy for inputs used in measuring fair value that maximises the use of relevant observable inputs and minimises the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Group. Unobservable inputs are inputs that reflect the Group's assumptions about the assumptions other market participants would use in pricing the asset or liability, that are developed based on the best information available in the circumstances.

The hierarchy is broken down into three levels based on the observability of inputs as follows:

Level 1 - Quoted prices (unadjusted) in an active market for identical assets or liabilities

Valuations based on quoted prices in active markets for identical assets or liabilities that the Group has the ability to access. Valuation adjustments and block discounts are not applied to Level 1 instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these products does not entail a significant degree of judgement.

Level 2 - Valuation techniques using observable inputs

Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3 - Valuation techniques with significant unobservable inputs

Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The availability of observable inputs can vary from product to product and is affected by a wide variety of factors, including, for example, the type of product, whether the product is new and not yet established in the marketplace, the liquidity of markets and other characteristics particular to the product. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgement. Accordingly, the degree of judgement exercised by the Group in determining fair value is greatest for instruments categorised in Level 3 of the fair value hierarchy.

The Group considers prices and inputs that are current as of the measurement date, including during periods of market dislocation. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified from Level 1 to Level 2 or from Level 2 to Level 3 of the fair value hierarchy. In addition, a downturn in market conditions could lead to declines in the valuation of many instruments.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement falls in its entirety is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

The Group incorporates Fair Value Adjustments ("FVA") into the fair value measurements of over the counter ("OTC") uncollateralised or partially collateralised derivatives, and in collateralised derivatives where the terms of the agreement do not permit the re-use of the collateral received. In general, FVA reflects a market funding risk premium inherent in the noted derivative instruments. The methodology for measuring FVA leverages the Group's existing credit-related valuation adjustment calculation methodologies, which apply to both assets and liabilities.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Fair value (continued)

Valuation techniques

Many cash instruments and OTC derivative contracts have bid and ask prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Ask prices represent the lowest price that a party is willing to accept for an asset. For financial instruments whose inputs are based on bid-ask prices, the Group does not require that the fair value estimate always be a predetermined point in the bid-ask range. The Group's policy is to allow for mid-market pricing and to adjust to the point within the bid-ask range that meets the Group's best estimate of fair value. For offsetting positions in the same financial instrument, the same price within the bid-ask spread is used to measure both the long and short positions.

Fair value for many cash instruments and OTC derivative contracts is derived using pricing models. Pricing models take into account the contract terms (including maturity), as well as multiple inputs including, where applicable, commodity prices, equity prices, interest rate yield curves, credit curves, correlation, creditworthiness of the counterparty, creditworthiness of the Group, option volatility and currency rates. Where appropriate, valuation adjustments are made to account for various factors such as liquidity risk (bid-ask adjustments), credit quality, model uncertainty and concentration risk.

Adjustments for liquidity risk adjust model-derived mid-market levels of Level 2 and Level 3 financial instruments for the bid-mid or mid-ask spread required to properly reflect the exit price of a risk position. Bid-mid and mid-ask spreads are marked to levels observed in trade activity, broker quotes or other external third-party data. Where these spreads are unobservable for the particular position in question, spreads are derived from observable levels of similar positions.

Credit valuation adjustments are applied to both short-term instruments and long-term borrowings (primarily structured notes) which are designated at fair value through profit or loss and to OTC derivatives. The impact of changes in own credit spreads based upon observations of secondary bond market spreads is considered when measuring the fair value for short-term and long-term borrowings. For OTC derivatives, the impact of changes in both the Group's and the counterparty's credit standing is considered when measuring fair value. In determining the expected exposure the Group simulates the distribution of the future exposure to a counterparty, then applies market-based default probabilities to the future exposure, leveraging external third-party credit default swap ("CDS") spread data. Where CDS spread data are unavailable for a specific counterparty, bond market spreads, credit CDS spread data based on the counterparty's credit rating or CDS spread data that reference a comparable counterparty may be utilised. The Group also considers collateral held and legally enforceable master netting agreements that mitigate the Group's exposure to each counterparty.

Adjustments for model uncertainty are taken for positions whose underlying models are reliant on significant inputs that are neither directly nor indirectly observable, hence requiring reliance on established theoretical concepts in their derivation. These adjustments are derived by making assessments of the possible degree of variability using statistical approaches and market-based information where possible. The Group generally subjects all valuations and models to a review process initially and on a periodic basis thereafter.

The Group may apply a concentration adjustment to certain of its OTC derivatives portfolios to reflect the additional cost of closing out a particularly large risk exposure. Where possible, these adjustments are based on observable market information but in many instances significant judgement is required to estimate the costs of closing out concentrated risk exposures due to the lack of liquidity in the marketplace.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## d. Fair value (continued)

Valuation techniques (continued)

Fair value is a market-based measure considered from the perspective of a market participant rather than an entity-specific measure. Therefore, even when market assumptions are not readily available, the Group's own assumptions are set to reflect those that the Group believes market participants would use in pricing the asset or liability at the measurement date.

### Gains and losses on inception

In the normal course of business, the fair value of a financial instrument on initial recognition is the transaction price (i.e. the fair value of the consideration given or received). In certain circumstances, however, the fair value will be based on other observable current market transactions in the same instrument, without modification or repackaging, or on a valuation technique whose variables include only data from observable markets. When such evidence exists, the Group recognises a gain or loss on inception of the transaction.

When the use of unobservable market data has a significant impact on determining fair value at the inception of the transaction, the entire initial gain or loss indicated by the valuation technique as at the transaction date is not recognised immediately in the consolidated income statement and is recognised instead when the market data becomes observable.

### Derecognition of financial assets and liabilities

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risk and rewards of ownership of the asset.

The Group derecognises financial liabilities when the Group's obligations are discharged, cancelled or they expire.

#### f. Impairment of financial assets

At each reporting date, an assessment is made as to whether there is any objective evidence of impairment in the value of a financial asset classified as either available-for-sale or loans and receivables. Impairment losses are recognised if an event has occurred which will have an adverse impact on the expected future cash flows of an asset and the expected impact can be reliably estimated.

Impairment losses on available-for-sale financial assets are measured as the difference between cost (net of any principal repayment and amortisation) and the current fair value (see note 2(d) above). Where there is evidence that available-for-sale financial asset is impaired, the cumulative loss that had been previously recognised in other comprehensive income is reclassified from the 'Available-for-sale reserve' and recognised in the consolidated income statement within 'Net gains/ (losses) on available-for-sale financial assets'.

Impairment losses on loans and receivables are measured as the difference between the carrying amount of the loans and receivables and the present value of estimated cash flows discounted at the asset's original effective interest rate. Such impairment losses are recognised in the consolidated income statement within 'Other expense' and are recognised against the carrying amount of the impaired asset on the consolidated statement of financial position. Interest on the impaired asset continues to be accrued on the reduced carrying amount based on the original effective interest rate of the asset.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## f. Impairment of financial assets (continued)

Subsequent increases in fair value of previously impaired equity available-for-sale financial assets are reported as fair value gains in the 'Available-for-sale reserve' through other comprehensive income and not separately identified as an impairment reversal. For all other financial assets, if in a subsequent year, the amount of the estimated impairment loss decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed as detailed by financial asset in note 2(c) (iv). Any reversal is limited to the extent that the value of the asset may not exceed the original amortised cost of the asset had no impairment occurred,

## g. Impairment of non-financial assets

Non-financial assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Non-financial assets, other than goodwill, that have suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period. Such impairment losses are recognised in the consolidated income statement within 'Other expense' and are recognised against the carrying amount of the impaired asset on the consolidated statement of financial position.

## h. Fees and commissions

Fees and commissions classified within 'Other income' in the consolidated income statement include account servicing fees, investment management fees, sales commissions, placement fees, advisory fees and syndication fees. Fees and commissions classified within 'Other expense' in the consolidated income statement include transaction and service fees. These amounts are recognised as the related services are performed or received.

#### i. Property, plant and equipment

Property, plant and equipment are stated at cost net of depreciation and any provision for impairment in value, which are included within 'Other expense' in the consolidated income statement.

For premises held under operating leases, a reinstatement provision is recognised for the estimated cost to reinstate the premises at the end of the lease period. When the reinstatement provision is established and included within 'Provisions' in the consolidated statement of financial position, an equivalent asset is recognised and included in the cost of leasehold improvements at the initial present value of any reinstatement obligations. The discount effect included in the reinstatement provision is reversed over time using a constant effective yield method and included within 'Interest expense' in the consolidated income statement. The reinstatement asset is depreciated over the useful economic life of the relevant leasehold improvement asset and the depreciation charge is included within 'Other expense' in the consolidated income statement,

Depreciation is provided on property, plant and equipment at rates calculated to write off the cost of the assets on a straight line basis over their expected useful lives as follows:

Leasehold improvements including reinstatement assets - shorter of remaining lease term and 25 years
Fixtures, fittings and equipment - 3 to 8 years

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

# 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### j. Intangible assets

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

Expenditure on internally developed software is recognised as an asset when the Group is able to demonstrate its intention and ability to complete the development, to use the software in a manner that will generate future economic benefits, and to reliably measure the costs to complete the development. Internally developed software is stated at capitalised cost less accumulated amortisation and any impairment. Amortisation is recognised in 'Other expense' in the statement of consolidated income statement on a straight line basis over the estimated useful life of the software, from the date that it is available for use. The estimated useful life of internally developed software is two to ten years.

#### k. Income tax

The tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is calculated based on taxable profit for the year. Taxable profit may differ from profit before income tax as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date. Current tax is charged or credited in the consolidated income statement, except when it relates to items charged or credited directly to other comprehensive income or equity, in which case the current tax is also recorded within other comprehensive income or equity respectively.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the consolidated non statutory financial information and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each reporting date and limited to the extent that it is probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the consolidated income statement, except when it relates to items charged or credited directly to other comprehensive income or equity, in which case the deferred tax is reflected within other comprehensive income or equity, respectively.

Current tax assets are offset against current tax liabilities when there is a legally enforceable right to set off current tax assets against current tax liabilities and the Group intends to settle its current tax assets and current tax liabilities on a net basis or to realise the asset and settle the liability simultaneously. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and current tax liabilities on a net basis.

#### I. Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, when it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and when a reliable estimate can be made of the amount of the obligation.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### I. Provisions (continued)

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the year end date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

#### m. Post-employment benefits

The Group operates defined contribution and defined benefit post-employment plans. Contributions due in relation to the Group's defined contribution post-employment plans are recognised in 'Other expense' in the consolidated income statement when payable.

For the Group's defined benefit post-employment plans, the plans obligations are measured on an actuarial basis in accordance with the advice of an independent qualified actuary using the projected unit credit method and discounted at a rate that reflects the current rate of return on a high quality corporate bond of equivalent term and currency to the plan liabilities. Plan assets are measured at their fair value at the reporting date. A surplus or deficit of plan assets over liabilities is recognised in the consolidated statement of financial position as an asset or a liability respectively. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the measurement of the resulting defined benefit asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. The current service cost and any past service costs together with the net interest on the net defined benefit obligation/ asset is charged to 'Staff costs' within 'Other expense' in the consolidated income statement. Remeasurements that arise in calculating the Group's obligation in respect of a plan are recognised in other comprehensive income, in the period in which they occur.

## Operating leases

Rentals payable under operating leases are charged to 'other expense' in the consolidated income statement on a straight line basis over the lease term. Lease incentives are allocation on a straight line basis over the lease term as a reduction to rental expense.

Rentals receivable under operating leases are credited to 'Other income' in the consolidated income statement on a straight line basis over the lease term. Initial direct costs incurred in negotiating and arranging the lease are added to the carrying amount of the leased asset and recognised in the consolidated income statement on a straight line basis over the lease term. Lease incentives are allocated on a straight line basis over the lease term.

## o. Employee compensation plans

## i) Equity-settled share-based compensation plans

Morgan Stanley operates equity-based compensation plans on behalf of the Group in relation to which, the Group pays Morgan Stanley in consideration of the procurement of the transfer of shares to employees. The cost of equity-based transactions with employees is measured based on the fair value of the equity instruments at grant date. Fair value of stock unit awards is based on the market price of Morgan Stanley shares and fair value of stock option awards is estimated using the Black-Scholes valuation model, which takes into account the option's exercise price, its expected term, the risk free interest rate and the expected volatility of the market price of Morgan Stanley shares. Non-market vesting conditions are not taken into account when measuring fair value, but are reflected by adjusting over time the number of equity instruments included in the measurement of the transaction such that the amount ultimately recognised reflects the number that actually vest. The expense is recorded within 'Staff costs' in 'Other expense' in the consolidated income statement; the corresponding credit to retained earnings is reduced to the extent that payments are due to Morgan Stanley in respect of these awards.

# NOTES TO THE CONSOLIDATED NON STATUTORY FINANCIAL INFORMATION

Year ended 31 December 2015

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

## Employee compensation plans (continued)

#### ii) Other deferred compensation plans

Morgan Stanley also maintains deferred compensation plans on behalf of the Group for the benefit of certain employees that provide a return to the participating employees based upon the performance of various referenced investments. Liabilities for these awards, which are included within 'Accruals and deferred income' in the consolidated statement of financial position, are measured at fair value and recognised over time in accordance with the awards' vesting conditions. The related expense is recorded within 'staff costs' in 'Other expense'. The Group economically hedges the exposure created by these deferred compensation schemes by entering into derivative transactions with other Morgan Stanley Group undertakings. The derivatives are recognised within 'Financial instruments classified as held for trading' in the consolidated statement of financial position and the related gains and losses are recorded within 'Net gains/ (losses) on financial instruments classified as held for trading' in the consolidated income statement.

## p. Offsetting of financial assets and financial liabilities

Where there is a currently legally enforceable right to set off the recognised amounts and an intention to either settle on a net basis or to realise the asset and the liability simultaneously, financial assets and financial liabilities are offset and the net amount presented on the consolidated statement of financial position. In the absence of such conditions, financial assets and financial liabilities are presented on a gross basis.

## q. Interest income and interest expense

'Interest income' represents total interest generated from financial assets whilst 'interest expense' represents total interest generated from financial liabilities with the exception that:

- (a) when interest is included as a component of the instruments fair value, interest is reflected in 'net gains/ (losses) on financial instruments classified as held for trading'; and
- (b) interest expense generated from 'financial liabilities classified as held for trading' is reported as a reduction in 'interest income'.

'Interest income' also includes fees paid on securities borrowed transactions and 'interest expense' includes fees received on securities loaned balances and from prime brokerage customers for stock loan transactions incurred to cover customers' short positions.

No other gains or losses have been recognised in respect of loans and receivables other than as disclosed as 'Interest income', and foreign exchange differences and impairment losses and reversals of impairment losses disclosed in 'Other expense'.

# **20.** Appendix VI: List of Abbreviations

TERM	DEFINITION
APR	All Price Risk
BASEL II	International Convergence of Capital Measurement and Capital Standards: A
	Revised Framework — Comprehensive version June 2006
CDS	Credit Default Swaps
CASS	Client Assets Sourcebook
CQS	Credit Quality Step
CRD	Capital Requirements Directive
CRDIV	Capital Requirements Directive — EU implementation of Basel 3
CRM	Credit Risk Management
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
EAD	Exposure at Default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
EEA	European Economic Area
EMEA	Europe, the Middle East and Africa
FCA	Financial Conduct Authority
Federal Reserve	Board of Governors of the Federal Reserve System
FRS	Financial Reporting Standards
G-SIIs	Global Systematically Important Institutions
ICAAP	Internal Capital Adequacy Assessment Process
ICG	Individual Capital Guidance
IRB	·
	Foundation Internal Ratings Based
IFRS	International Financial Reporting Standards
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
IMM	Internal Model Method
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
Morgan Stanley Group	Morgan Stanley, a Delaware corporation, together with its consolidated subsidiaries
MRD	Market Risk Department
MSBIL	Morgan Stanley Bank International Limited
MSCL	Morgan Stanley & Co. Limited
MSI	Morgan Stanley International Limited
MSI Group	Morgan Stanley International Limited (and its subsidiaries)
MSIM	Morgan Stanley Investment Management Limited
MSIM ACD	Morgan Stanley Investment Management (ACD) Limited
MSIP	Morgan Stanley & Co. International plc
MSIP Group	Morgan Stanley & Co. International plc and its subsidiaries
MSSL	Morgan Stanley Securities Limited
OTC	Over-the-counter
PD	Probability of Default
PRA	Prudential Regulation Authority
RWAs	Risk Weighted Assets
SEC	US Securities and Exchange Commission
SFTs	Securities Financing Transactions
SPV	Special Purpose Vehicles
SREP	Supervisory Review Process
S&P	Standard and Poor's
TRS	Total Return Swaps
RST	Reverse Stress Testing
VaR	Value-at-Risk
vait	value at hisk