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MORGAN STANLEY & CO. INTERNATIONAL plc

Report and financial statements

31 December 2018

MORGAN STANLEY & CO. INTERNATIONAL plc

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MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

The Directors present their Strategic report for Morgan Stanley & Co. International plc (the “Company”) and all of its subsidiary undertakings (together “the Group”) for the year ended 31 December 2018.

INTRODUCTION

The principal activity of the Group is the provision of financial services to corporations, governments and financial institutions.

The Company operates branches in the Dubai International Financial Centre, the Netherlands, Poland, the Qatar Financial Centre, South Korea and Switzerland.

The Company is authorised by the Prudential Regulation Authority (“PRA”) and regulated by the Financial Conduct Authority (“FCA”) and the PRA. In addition, the Company is a registered swap dealer and is regulated by the United States (“US”) Commodity Futures Trading Commission (“CFTC”).

There have been no changes in the Group’s principal activity during the year and no significant change in the Group’s principal activity is expected.

The Group’s ultimate parent undertaking and controlling entity is Morgan Stanley, which, together with the Group and Morgan Stanley’s other subsidiary undertakings, form the “Morgan Stanley Group”.

The Morgan Stanley Group is a global financial services firm that maintains significant market positions in each of its business segments: Institutional Securities, Wealth Management and Investment Management. The Morgan Stanley Group provides a wide variety of products and services to a large and diversified group of clients and customers, including corporations, governments, financial institutions and individuals. As a key contributor to the execution of the Morgan Stanley Group’s Institutional Securities global strategy, the Group provides capital raising; financial advisory services, including advice on mergers and acquisitions, restructurings, real estate and project finance; corporate lending; sales, trading, financing and market-making activities in equity and fixed income products, including foreign exchange and commodities; and investment activities.

Certain disclosures required by relevant accounting frameworks in relation to the Company’s and Group’s financial risk management have been presented alongside other risk management information in this Strategic Report. Such disclosures are identified as audited. All other information in the Strategic Report is unaudited.

BUSINESS REVIEW

Global market and economic conditions

Global economic growth was strong at 3.7% in 2018. However, it was a year of two halves, with global growth clocking in at a strong 4.0% in the first half of the year before slowing to 3.6% in the second half. Growth accelerated in the US at 2.9% for the year as a whole. However, in the rest of the world, growth weakened considerably, particularly in the second half. A combination of lingering trade tensions, a slowdown in China and its spillovers, and a backdrop of tighter US Federal Reserve policy, even as global growth began to soften and the associated tightening of financial conditions weighed on sentiment and economic activity. Global growth was also held back by slower growth in the Euro area and Japan, which in turn were weighed down by factors such as a switch in emission standards in Germany and natural disasters in Japan. In terms of policy, the US Federal Reserve continued to hike interest rates by a further 100bps and continued its balance sheet normalisation process. In Europe, the European Central Bank (“ECB”) halved the size of its quantitative easing (“QE”) program to monthly purchases of €15bn after September, and ended the QE program after December. Policymakers in China intensified its easing measures by cutting taxes and boosting infrastructure spending as labour market pressures began to build. Since November, the US Federal Reserve has begun to signal policy flexibility in response to a deteriorating growth outlook. Other major central banks have also begun to guide for a more dovish policy outlook in early 2019 following the weaker than expected growth momentum in the fourth quarter of 2018.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

BUSINESS REVIEW (CONTINUED)

UK withdrawal from the EU

On 23 June 2016, the United Kingdom (the “UK”) electorate voted to leave the European Union (the “EU”). On 29 March 2017, the UK invoked Article 50 of the Lisbon Treaty which triggered a two-year period, subject to extension (which would need the unanimous approval of the EU Member States), during which the UK government negotiated a form of withdrawal agreement with the EU.

On 22 March, 2019, the UK and other EU Member States agreed to an extension of the two-year period to 22 May, 2019, (if the UK Parliament approved the withdrawal agreement by 29 March 2019) or 12 April 2019 (if it did not). On 11 April 2019, the UK and the other EU Member States agreed to a further extension to 31 October 2019 (or, if the Withdrawal Agreement is ratified by both parties before this date, until the first day of the following month). This further extension ceases to apply on 31 May 2019 in the event that the UK has not held elections to the European Parliament in accordance with applicable EU law and has not ratified the Withdrawal Agreement by 22 May 2019. Absent any further changes to this time schedule, the UK is expected to leave the EU by 31 October 2019 at the latest.

The proposed withdrawal agreement includes a transition period until December 2020 and provides that the UK will leave the EU single market and will seek a phased period of implementation for a new UK-EU relationship that may include the legal and regulatory framework applicable to financial institutions with significant operations in Europe, such as Morgan Stanley.

It is difficult to predict the future of the UK’s relationship with the EU, the uncertainty of which may increase the volatility in the global financial markets in the short- and medium-term and may negatively disrupt regional and global financial markets. Additionally, depending on the outcome, such uncertainty may adversely affect the manner in which we operate certain businesses in Europe.

The withdrawal agreement has been rejected by the UK Parliament on 15 January 2019 and on two subsequent occasions. As a result, the terms and conditions of the anticipated withdrawal from the EU remain uncertain. Discussions are ongoing within the UK Parliament on the negotiated withdrawal agreement and the alternatives to it, and between the UK Government and the EU.

The ongoing political uncertainty in relation to the proposed withdrawal agreement in the UK means there is a risk that these arrangements may not be ready for implementation by 31 October 2019 or that there will be no transition period. Potential effects of the UK exit from the EU and potential mitigation actions may vary considerably depending on the timing of withdrawal, the nature of any transition, implementation or successor arrangements, and the future trading arrangements between the UK and the EU.

If the withdrawal agreement (or any alternative agreement) is not agreed and as a result no transition period applies, our UK licensed entities may be unable to rely on EU passporting rights to provide services in a number of EU jurisdictions from the date the UK leaves the EU, absent further regulatory relief. Even if a transition period is agreed, our UK licensed entities may lose their rights to provide services in a number of EU jurisdictions after such transition period unless the new UK-EU relationship provides for such rights.

The Morgan Stanley Group is continuing to prepare its European operations to be able to do business with its clients in the EU regardless of whether or not a withdrawal or transition agreement is reached. Changes are being made to European operations in an effort to ensure that the Morgan Stanley Group can continue to provide cross-border banking and investment and other services in EU member states without the need for separate regulatory authorisations in each member state through the use of EU “passporting” arrangements, which allow for such cross-border activity. In the event that its UK licenced entities are unable to rely on EU passporting rights to provide services, the Morgan Stanley Group will adjust its operations in Europe to be able to carry out activities from within the EU.

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STRATEGIC REPORT

BUSINESS REVIEW (CONTINUED)

UK withdrawal from the EU (continued)

These changes include use of a new licenced investment firm, Morgan Stanley Europe S.E (“MSESE”), based in Germany, which will passport throughout the EU and serve EU-based clients where required; and the existing EU German licensed bank Morgan Stanley Bank AG (“MSBAG”), which will provide licensable banking activities where required. In addition, a new holding company for this structure has been incorporated, Morgan Stanley Europe Holding SE (“MSEHSE”). The Morgan Stanley Group will also serve EU clients out of branches of these entities in the EU and existing regulated entities in France and Spain as necessary.

The Morgan Stanley Group is continuing to build out the capabilities of these entities, including engagement with clients and local regulators. The Morgan Stanley Group also expects to continue to add personnel to certain existing offices in the EU. Certain of these personnel may be transferred from the Company, including its EU branches.

Certain activities currently transacted by the Group including cash and derivatives trading with these clients have moved, or may in future move, to these additional entities, including cash and derivative trading and capital markets activities moving from the Company to MSESE. The extent and timing of these moves will depend on client preferences and on licencing rules, which in turn will depend on the form of any withdrawal or transition agreement.

As part of the Group’s Brexit planning to achieve the strategy mentioned above, the Group has made certain entity structure changes. On 1 November 2018, the Company transferred its investment in MS France Holdings I S.A.S and its subsidiaries (“MS France Group”) to Morgan Stanley Investments (UK) (“MSIUK”), the Company’s parent undertaking. On 1 March 2019, the Company transferred its investments in MSEHSE and MSESE to MSIUK.

As a result of the political uncertainty described above, it is currently unclear what the final post-Brexit structure of European operations will be for the Morgan Stanley Group overall. Given the potential negative disruption to regional and global financial markets, and depending on the extent to which Morgan Stanley may be required to make material changes to European operations beyond those currently planned or executed, results of Morgan Stanley’s operations and business prospects could be negatively affected. However, following the reorganisations mentioned above, the Group’s principal activity and risks remain unchanged and while some business and client activity may be transferred from the Group to other Morgan Stanley Group entities that operate within the EU, the majority of current profitability and balance sheet remain within the Group.

Key performance indicators

The Board of directors monitors the results of the Group by reference to a range of performance and risk based metrics. For the risk information, refer to the Risk Management section later in this report. Certain performance metrics are shown below:

Profitability metrics

Return on ordinary shareholders equity: At 31 December 2018, the Group’s return on ordinary shareholders equity was 3.5% (2017: 5.0%). Return on ordinary shareholders equity is defined as Profit for the year attributable to the parent less dividends paid on AT1 Instruments as a percentage of ordinary shareholders equity (total equity less AT1 Instruments and Non-controlling Interest) at the beginning of the year.

Return on assets: The Group’s return on assets was 0.1% (2017: 0.2%). Return on assets is defined as profit/ loss for the year as a percentage of total assets at the beginning of the year.

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STRATEGIC REPORT

BUSINESS REVIEW (CONTINUED)

Key performance indicators (continued)

Balance sheet assets

Total assets: Total assets of the Group at 31 December 2018 were \$446,199 million, as disclosed on page 58. This is a decrease of 3.3% from 31 December 2017. Total assets continue to be closely monitored.

Capital

The Group continues to closely monitor its capital position against a range of key metrics including the following:

Tier 1 regulatory capital: As at 31 December 2018, the Company's Tier 1 capital ratio was 15.3% (2017: 12.8%), which is in excess of the required minimum regulatory ratio, as calculated in accordance with PRA rules which are based on the fourth EU Capital Requirements Directive and EU Capital Requirements Regulation ("CRR"), collectively known as "CRD IV". The Tier 1 capital ratio is defined as Tier 1 capital divided by risk-weighted assets ("RWAs"). Tier 1 capital was \$19,148 million (2017: \$16,971 million).

Leverage ratio: As at 31 December 2018, the Company had a leverage ratio of 4.6% (2017: 3.8%), which is above the expected minimum regulatory ratio of 3% that will apply once European legislation has been finalised. CRD IV, as amended by the European Commission Delegated Act, compares Tier 1 capital to a measure of leverage exposure, defined as the sum of leverage assets less Tier 1 capital deductions plus off-balance sheet exposures.

Overview of 2018 financial results

Set out below is an overview of the Group's financial results for the year ended 31 December 2018 and 31 December 2017.

| | Year ended 31 December 2018 | Year ended 31 December 2017 |
|--|--|--|
| | \$ millions | \$ millions |
| Net revenues⁽¹⁾ | 5,810 | 5,702 |
| Staff related expenses | (1,759) | (1,733) |
| Non-staff related expenses | (2,922) | (2,692) |
| Operating expenses | (4,681) | (4,425) |
| Impairment (loss) / gain | (7) | 1 |
| Net loss on transfer of investment in subsidiary | (66) | - |
| Profit before tax | 1,056 | 1,278 |
| Income tax expense | (359) | (414) |
| Profit after tax | 697 | 864 |
| Total Assets | 446,199 | 461,362 |
| Total Liabilities | 425,082 | 442,675 |
| Total Equity | 21,117 | 18,687 |

(1) Net revenue refers to the aggregate of 'Net trading income', 'Net income from other financial instruments held at fair value', 'Fee and commission income', 'Interest income', 'Interest expense', and 'Other revenue'

The consolidated income statement for the year is set out on page 55. The Group reported a profit after tax for the year of \$697 million, compared to a profit after tax of \$864 million for the year ended 31 December 2017, as expenses increased more than revenue for the period.

Net revenues for the year increased 1.9% to \$5,810 million compared to \$5,702 million in 2017.

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STRATEGIC REPORT

BUSINESS REVIEW (CONTINUED)

Overview of 2018 financial results (continued)

The increase in net revenues includes the impact from the adoption of IFRS 15 which increased both revenues and expenses by \$96 million (refer to note 7 for further details). Excluding the impact of IFRS 15, revenues were in line with 2017. Within Sales and Trading, an increase in Equity net revenues was offset by a decrease in Fixed Income net revenues. Investment Banking net revenues remained in line with 2017.

Equity net revenues increased primarily as a result of higher Equity Derivative and Prime Brokerage net revenues. Equity Derivative net revenues increased due to higher client activity driven by increased market volatility. Prime Brokerage net revenues increased due to higher average client balances and financing revenues.

Fixed Income net revenues decreased due to reduced credit product net revenues, partially offset by higher macro product net revenues. Credit product net revenues decreased as a result of credit spreads widening and reduced client activity. Macro product net revenues increased from higher client activity in foreign exchange products as a result of increased market volatility.

Operating expenses increased from \$4,425 million for the year ended 31 December 2017 to \$4,681 million for the year ended 31 December 2018.

Staff-related expenses increased by 2% from \$1,733 million to \$1,759 million in 2018. The increase was primarily driven by an increase in base salaries and discretionary compensation as a result of higher headcount and higher global Institutional Securities Group (“ISG”) revenues. This was offset by a decrease from mark-to-market on deferred compensation primarily relating to equity awards.

Non-staff related expenses increased by 9% from \$2,692 million in 2017 to \$2,922 million in 2018. Excluding the impact of IFRS 15, expenses increased by 5% driven by higher volume-related expenses including brokerage and transaction taxes from increased client activity.

There was a net loss on transfer of investment in subsidiary of \$66 million, resulting from the transfer to the income statement of the ‘currency translation reserve’ (“CTA”) balance relating to the MS France Group upon its transfer out of the Group. This had no overall impact on total equity. Refer to note 15 for further detail.

The Group’s tax expense for the year ended 31 December 2018 was \$359 million, compared to \$414 million for the year ended 31 December 2017. This represents an effective tax rate of 34.0% (31 December 2017: 32.4%), which is higher than the average standard rate of UK corporation tax (inclusive of the UK Banking surcharge) of 27% (31 December 2017: 27.25%). The reduction in 2018 tax charge is attributable to lower profits, a release of tax reserves on prior year matters, and the effect of lower non-deductible expenses. This was partially offset by group relief surrendered for nil consideration and an increase in French non-deductible expenses. See note 9 for further detail.

The Group’s total assets and liabilities decreased by \$15,163 million and \$17,593 million respectively, a decrease of 3.3% and 4.0% respectively as at 31 December 2018 when compared to the total assets and total liabilities as at 31 December 2017.

The decrease in total assets is driven by decreases in ‘trading financial assets’ of \$11,605 million, ‘secured financing’ of \$3,702 million and ‘trade and other receivables’ of \$5,667 million, partially offset by an increase of \$5,368 million in ‘cash and short term deposits’.

The decrease in ‘trading financial assets’ is due to a decrease in corporate equities primarily driven by the disposal of corporate equities held within the MS France Group, partially offset by an increase in derivatives as a result of fair value movements and an increase in client demand. The decrease in ‘secured financing’ is due to increases from higher client financing and repurchase agreements held for the liquidity reserve being more than offset by increased netting of ‘secured financing’ assets against ‘secured borrowing’ liabilities. The decrease in ‘trade and other receivables’ reflects lower collateral pledged in relation to derivative transactions as a consequence of changes in underlying derivative exposures. The increase in ‘cash and short term deposits’ is due to an increase in the Group’s liquidity reserve.

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STRATEGIC REPORT

BUSINESS REVIEW (CONTINUED)

Overview of 2018 financial results (continued)

The decrease in total liabilities is driven by decreases in ‘secured borrowing’ of \$8,259 million, ‘trade and other payables’ of \$5,462 million and ‘debt and other borrowings’ of \$2,823 million.

The decrease in ‘secured borrowing’ is due to increased client financing activity being more than offset by netting of ‘secured borrowing’ liabilities against ‘secured financing’ assets. The decrease in ‘trade and other payables’ reflects a decrease in collateral received in relation to derivative transactions as a consequence of changes in the underlying derivative exposures. The decrease in ‘debt and other borrowings’ is due to the repayment of \$2,000 million subordinated loans, and a decrease in unsecured funding, partially offset by the issue of a \$6,000 million debt instrument eligible for the Minimum Requirement for own funds and Eligible Liabilities (“MREL”).

Total Equity increased by \$2,430 million as a result of the issuance of \$2,200 million of Additional Tier 1 (“AT1”) capital instruments (“Instruments”) to Morgan Stanley International Limited (“MSI”), a UK incorporated indirect parent of the Company. Equity also increased as a result of the profit after tax of \$697 million, offset by dividends paid of \$529 million, including the dividend in specie of the MS France Group.

In addition, opening retained earnings as at January 1 2018 increased by \$68 million due to the Group’s adoption of IFRS 9 Financial Instruments (“IFRS 9”) mainly reflecting the reclassification of the available-for-sale reserve to retained earnings. This transfer had no overall impact on total equity. Refer to note 4.

The consolidated statement of cash flows presented on page 59 shows a net increase in cash and cash equivalents of \$5,487 million during the year (2017: net increase of \$5,017 million). Net cash inflows from operating activities were \$1,986 million (31 December 2017: net increase of \$3,436 million). Net cash inflows from financing activities during the year were \$5,833 million (2017: net cash outflow of \$245 million) due to the issuances of a \$6,000 million MREL eligible subordinated loan and a \$2,200 million AT1 instrument (2017: \$nil), partially offset by a \$2,000 million repayment of subordinated loan liabilities (31 December 2017: \$5,906 million).

KEY MANAGEMENT CONSIDERATIONS

In the preparation of the financial results throughout 2018, management have considered accounting and reporting matters to ensure appropriate recognition, measurement, presentation and disclosure. These matters include the fair value of financial instruments, revenue recognition, intercompany transactions, impairment of financial assets and recognition of uncertain litigation and tax provisions. The significant matters considered by management during 2018 include:

Valuation of financial instruments

The Group consider the key valuation metrics and judgements involved in the determination of the fair value of financial instruments. 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.

Management reviewed the key valuation metrics, assumptions and methodologies involved in the determination of the fair value of financial instruments and determined that the valuations were reasonable.

Refer to accounting policy note 3(d) for more detail on the Group’s fair value measurement and valuation methods.

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STRATEGIC REPORT

KEY MANAGEMENT CONSIDERATIONS (CONTINUED)

Intercompany transactions

In 2017, management identified that the control environment relating to certain business funding transactions and allocations required further enhancements. During 2017 and 2018 control enhancements were implemented, therefore management are satisfied that the financial performance of the Group is appropriately reported.

Uncertain Tax Provisions

The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions regarding the outcome of matters that are uncertain, including those relating to tax.

The Group has reserves arising on uncertain tax matters, for which management has made judgements and interpretations about the application of inherently-complex tax laws when determining these provisions. Whilst a range of outcomes is foreseeable, management considers the amount reserved to be a reasonable estimate of expected future liabilities after consideration of all pertinent facts, based on the status of inquiries at the date of approval of the accounts.

Refer to note 20 for further details of the estimates used in determining provisions on uncertain tax balances.

RISK MANAGEMENT

Risk is an inherent part of the Group's business activity. The Group seeks to identify, assess, monitor and manage each of the various types of risk involved in its business activities, in accordance with defined policies and procedures. The Group has developed its own risk management policy framework, which leverages the risk management policies and procedures of the Morgan Stanley Group. The risk management policy framework includes escalation to the Group's Board of Directors and to appropriate senior management of the Group as well as oversight through the Group's Board of Directors and through a dedicated Risk Committee of non-executive Directors that reports to the Board of MSI, the Company's ultimate UK parent undertaking.

Note 28 to the consolidated financial statements provides additional qualitative and quantitative disclosures about the Group's management of, and exposure to, financial risks.

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STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Risk strategy and appetite

The Group Risk Appetite Statement articulates the aggregate level and type of risk that the Group is willing to accept to execute its business strategy and is set to be within the resource capacity constraints.

The combination of qualitative risk appetite and tolerance statements and quantitative limits aims to ensure that the Group's businesses are carried out in line with the risk appetite approved by the Board, and to protect Morgan Stanley's reputation in both normal and stressed environments.

The Group has no risk appetite for conduct risk or reputational risk. It acknowledges, however, that conduct risk or reputational risk remains inherent in doing business and thus cannot be entirely eliminated.

The Group risk appetite is set by the MSI Board in conjunction with the MSI Group's strategy and the MSI Group capital and liquidity resource adequacy framework. The approved appetite assumes the Group will continue to provide cross-border banking and investment and other services, but expect to re-assess in light of any material changes in business model post Brexit.

Risk management framework

Risk of loss is an inevitable consequence of the Group's businesses activities and effective risk management is vital to the Group's success. The Risk Management Framework includes a well-defined, comprehensive risk governance structure with appropriate risk management expertise, including processes for periodically assessing the efficacy of the Risk Management Framework.

Risk policies and processes

Morgan Stanley Group has a number of well-established policies and processes which establish the standards that govern the identification, assessment, monitoring, management and mitigation of the various types of risk involved in its business activities. Specific risk management policies have been implemented to address local business and regulatory requirements where appropriate. The policies are approved by the MSI Board and reviewed annually.

Control framework

The MSI Group operates a control framework consistent with the "Three Lines of Defence" model, with the Business Unit being the first line, Independent Risk Management being the second and Internal Audit Department the third. This structure creates clear delineation of responsibilities between the business unit (1st Line), the control functions such as Independent Risk Management (2nd Line) and Internal Audit Department (3rd Line).

Business unit management has primary responsibility and accountability for managing all the business unit risks, including market, credit, operational, liquidity and funding risks. It implements policy and ensures compliance with applicable laws, rules and regulations, for every legal entity in the MSI Group and in all jurisdictions business is undertaken and booked.

Independent Risk Management and in certain other cases other control functions perform, identify, measure, monitor and control risks. It also provides governance and oversight of activities carried out by the business units. Independent Risk Management includes, for example, functions performed by the EMEA Risk Division and EMEA Compliance Department and EMEA Global Financial Crimes Department, as well as certain functions performed by the Legal Department.

The Internal Audit Department ("IAD") are the 3rd line of defence, and are an independent source of assurance to the MSI Board on financial, operational, and compliance controls. EMEA Internal Audit Department reports to the MSI Audit Committee and is independent of the Business Units, Support and Control Functions and Risk Management. 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 its associated governance processes as well as the design and operating effectiveness of the supporting controls.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Limits and tolerance framework

The MSI Group Risk Appetite is translated into a comprehensive Risk Limit and Tolerance framework 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, reputational risk, model risk and earnings at risk.

The MSI Group maintains risk limits and tolerances at various levels of the governance structure to support linkages between the Group’s overall risk appetite and more granular risk-taking decisions and activities. 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. All risk limits are reviewed periodically as appropriate and at least annually. Figure 1 outlines the MSI Group’s Risk Limit Framework for specific risk areas.

Figure 1 MSI Group limit framework

| | MARKET RISK | CREDIT RISK | OPERATIONAL RISK | LIQUIDITY AND FUNDING RISK |
|-------------------------|---|---|---|--|
| RISK METRICS AND LIMITS | <ul style="list-style-type: none"> MSI Group-wide macroeconomic scenario loss limits Legal entity Value at Risk ("VaR") and exposure limits Detailed risk exposure limits are allocated by desk/products | <ul style="list-style-type: none"> MSI Group-wide macroeconomic scenario loss limits MSI Group credit limits Single name, country and industry credit limits | <ul style="list-style-type: none"> Quantitative tolerances for each top operational risk and against an aggregate risk tolerance level | <ul style="list-style-type: none"> Liquidity and parent support limits Portfolio level liquidity and funding mix limits Granular business area specific limits on liquidity and funding |

Stress testing is one of the Group’s principal risk management tools, used to identify and assess the impact of severe stresses on its portfolios. It informs a number of processes and associated decisions. It complements other Group risk metrics by providing a clear and flexible approach to assessing the Group’s resilience in the face of various scenarios over a range of severities, relevant to current market conditions and forward looking macroeconomic views. 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 and identifying the potential mitigating actions available as part of recovery planning.

Given uncertainties surrounding the UK’s withdrawal from the EU, the Group has run stress tests to assess and manage market, credit and liquidity risks related to Brexit.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Risk reporting and measurement

The Group has a suite of risk reporting across the main risk types highlighted above. The risk reporting includes quantitative measurements and qualitative assessments that enable a comparison of the Group's risk profile against risk limits and risk tolerance statements. Reporting identifies matters for escalation and highlights emerging risks. Material risk issues are investigated and escalated where appropriate, as per the specific escalation procedures set down by the Group. Escalation triggers have been articulated, with separate triggers for notification and further escalation including to the MSIP Board where relevant. The EMEA Risk Management Division has constituted specific committees which provide senior management review of the risk reporting including stress testing and data quality information.

Risk reporting capabilities are supported by a well-controlled infrastructure, including Front Office risk systems and the 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 Group has a comprehensive risk management governance framework which includes Board approved policies and a defined senior management risk oversight and escalation process. The MSIP Board has overall responsibility for the business affairs of the Group and it is ultimately responsible for the Group's risk management. The MSI Risk Committee and EMEA Risk Committee assist and provide guidance to the MSIP Board on the oversight of Group's risk management activities.

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 authority to its Audit, Risk and Nomination and Governance committees. Each of the committees is comprised solely of non-executive directors. 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.

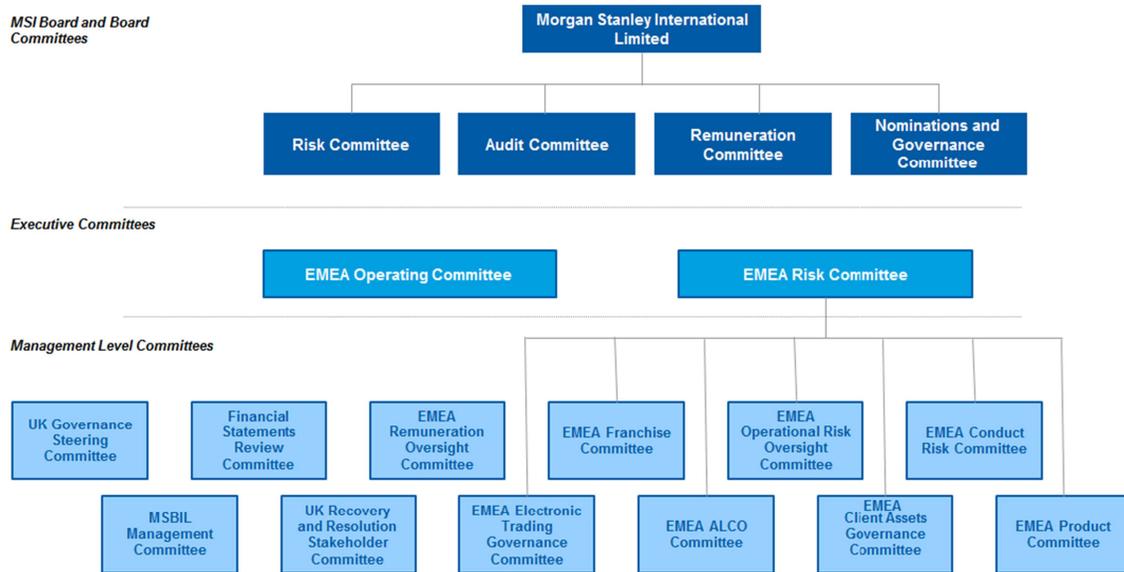
Day-to-day management of the MSI Group's business is delegated to executive management. The executive committees are the most senior MSI Group executive management committees and have responsibility for overseeing business performance, operations and risks identified in relation to the MSI Group. The management level committees support the executive committees in their oversight of specific areas of the MSI Group's activities.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Risk governance (continued)

Figure 2 MSI board committee structure and EMEA executive management structure



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; (vi) financial resource management and capital; and (vii) recovery and resolution. The MSI Risk Committee met 10 times in 2018. The MSI Risk Committee review quarterly detailed risk reports, including but not limited to portfolio risk, market risk, credit risk, operational risk and model changes.

The Committee’s focus during the year included:

- The MSI Group risk appetite framework and appetite statement;
- Enhancements to the MSI Group risk framework;
- Oversight of material event risks;
- Areas of regulatory focus and corresponding risk projects.

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STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

MSI board committees (continued)

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 auditor. The Audit Committee focused on a wide range of financial, control, and operational issues during 2018, including in particular:

- Transfer Pricing;
- Brexit Planning;
- Provision estimates, including litigation and taxation;
- Intercompany transactions;
- Implementation of new accounting standards IFRS 9 and IFRS 15;
- European Market Infrastructure Reporting II and Markets in Financial Instruments Directive II.

In addition to the Risk and Audit Committees, the MSI Board has also appointed a **MSI Nomination and Governance Committee** and a **MSI Remuneration Committee**.

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** (“ERC”) 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) 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 ERC 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 ERC in relation to the oversight of the management of operational risk of the MSI Group.

The **EMEA 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 ERC in the oversight and management of conduct risk within the MSI Group.

The **EMEA Electronic Trading Governance Committee** reviews and challenges controls applicable to the electronic trading business. Further, the Committee will monitor the risk appetite and limits set by the ERC which is applicable to electronic trading, and provide a forum to oversee the resolution of identified control issues in an appropriate and timely manner and escalate matters to the ERC as necessary.

The **EMEA Product Committee** assists the ERC in discharging its responsibilities for the oversight of approvals of New Products (“NPA”) and the oversight of product governance. In particular, the EMEA Product Committee reviews and challenges Heightened Risk NPA proposals and provides recommendations to the ERC.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Management committees (associated with financial reporting)

The **EMEA Financial Statement Review Committee** is appointed to review certain external reporting, which includes the financial statements and Pillar 3 disclosures of MSI and its regulated subsidiaries and their branches.

Market risk

Market risk refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities, correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio.

The Group manages the market risk associated with its trading activities at both a divisional and an individual product level, and also considers market risk at the legal entity level.

Sound market risk management is an integral part of the Group's culture. The Group is responsible for ensuring that market risk exposures are well-managed and monitored. The Group also ensures transparency of material market risks, monitors compliance with established limits, and escalates risk concentrations to appropriate senior management.

To execute these responsibilities, the Group monitors its market risk against limits on aggregate risk exposures, performs a variety of risk analyses including monitoring Value at Risk ("VaR") and stress testing analyses, routinely reports risk summaries and maintains the VaR and scenario analysis methodologies. The material risks identified by these processes are summarised and reported to senior management.

The market risk management policies and procedures for the Group are consistent with those of the Morgan Stanley Group and include escalation to the Group's Board of Directors and appropriate management personnel.

Primary market risk exposures and market risk management

During the year, the Group had exposures to a wide range of market risk factors related to the global markets in which it conducts its trading activities. These market risk factors include interest rate and credit spread risk, equity prices, foreign exchange rates and commodity prices and the associated implied volatilities.

The Group is exposed to interest rate and credit spread risk, as well as associated implied volatility risks, as a result of its market making activities in interest rate or credit sensitive financial instruments (e.g. risk arising from changes in the level of interest rates, the shape of the yield curve and credit spreads). The activities from which those exposures arise and the markets in which the Group is active include, but are not limited to: interest rate and credit derivatives, corporate and government debt across both developed and emerging markets and asset-backed debt (including mortgage-related securities).

The Group is exposed to equity price and implied volatility risk as a result of making markets in equity securities and derivatives and maintaining other positions (including positions in non-public entities). Positions in non-public entities may include, but are not limited to, exposures to private equity, venture capital, private partnerships, real estate funds and other funds. Such positions are less liquid, have longer investment horizons and are more difficult to hedge than listed equities.

The Group is exposed to foreign exchange rate and implied volatility risk as a result of making markets in foreign currencies and foreign currency derivatives, from maintaining foreign exchange positions and from holding non-US dollar-denominated financial instruments.

The Group has very limited exposure to commodities. This exposure is due to price and implied volatility risk as a result of market-making activities in crude and refined oil products, natural gas, electricity, and precious and base metals.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Market risk (continued)

Primary market risk exposures and market risk management (continued)

The 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 Group manages and monitors its market risk exposures, including outright and basis risks, in such a way as to maintain a portfolio that the Group believes is well-diversified in the aggregate with respect to market risk factors and that reflects the Group's aggregate risk tolerance, as established by the Group's Board of Directors. The effectiveness of hedges and mitigants is monitored using processes such as risk and limit reporting.

Aggregate market risk limits have been approved for the Group in line with the risk appetite set by the Board of Directors. Additional market risk limits are assigned, as appropriate, to trading desks, products and/ or regions and are commensurate with the aggregate limits. The Market Risk Department ("MRD") monitors market risk measures against limits in accordance with policies set by the Board of Directors and senior management.

Value at Risk

The 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. MRD calculates and distributes daily VaR-based risk measures to various levels of management.

VaR methodology, assumptions and limitations

The Group calculates 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. Market risk factors' daily moves are modelled either as difference changes or relative changes, dependent on the most suitable stochastic process (normal or lognormal diffusion process) to describe the daily risk factor changes. The model constructs a distribution of hypothetical daily changes in the value of trading portfolios based on: 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 basic methodology for VaR at Morgan Stanley is historical simulation. The risk exposures used for the daily VaR calculation are based on Greeks and full-revaluation grids, and simulations cover both systematic and specific risk components. The same valuation approach is used for Stressed VaR. The time series data is updated on a weekly basis, with the exception of idiosyncratic risk factors, which are updated quarterly. A set of internal processes and controls ensure that all trading positions booked by the Group are being included in VaR. Management VaR is computed at a 95% level of confidence over a one day time horizon, which is a useful indicator of possible trading losses resulting from adverse daily market moves. The 95%/one-day VaR corresponds to the unrealised loss in portfolio value that, based on historically observed market risk factor movements, could have been exceeded with a frequency of five times in every 100 trading days, if the portfolio were held constant for one day.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Market risk (continued)

VaR methodology, assumptions and limitations (continued)

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 market risks and portfolio assets. One key element of the VaR model is that it reflects 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 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 analyses and extensive risk monitoring, analysis, quantification of risk not captured in VaR, and control at the trading desk, division, entity and Group levels.

The Group is committed to continuous review and enhancement of VaR methodologies and assumptions to capture evolving risks associated with changes in market structure and dynamics. As part of regular process improvement, additional systematic and name-specific risk factors may be added to improve the VaR model's ability to estimate more accurately risks to specific asset classes or industry sectors.

Since the reported VaR statistics are estimates based on historical data, VaR should not be viewed as predictive of the Group's future revenues or financial performance or of its ability to manage risk. There can be no assurance that the Group's actual losses on a particular day will not exceed the VaR amounts indicated in the following paragraphs or that such losses will not occur more than five times in 100 trading days for a 95%/one-day VaR. VaR does not predict the magnitude of losses which, should they occur, may be significantly greater than the VaR amount.

VaR statistics are not readily comparable across firms because of differences in the firms' portfolios, modelling assumptions and methodologies. These differences can result in materially-different VaR estimates across firms for similar portfolios. The impact of such differences varies depending on the factor history assumptions, the frequency with which the factor history is updated and the confidence level. As a result, VaR statistics are more useful when interpreted as indicators of trends in a firm's risk profile rather than as an absolute measure of risk to be compared across firms.

The table on the next page shows the Group's VaR for primary risk categories and total Management VaR for the year ended 31 December 2018 and for the year ended 31 December 2017. The detailed table can be found in note 28 to the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Market risk (continued)

VaR methodology, assumptions and limitations (continued)

| | 95%/ one-day VaR for the year ended 31 December 2018 (audited) | | 95%/ one-day VaR for the year ended 31 December 2017 (audited) | |
|----------------------------------|---|-----------------------|---|-----------------------|
| | Period end \$millions | Average \$millions | Period end \$millions | Average \$millions |
| Primary Risk Categories | 17 | 19 | 20 | 21 |
| Credit Portfolio (1) | 4 | 4 | 5 | 6 |
| Less diversification benefit (2) | (3) | (2) | (3) | (4) |
| Total Management VaR | 18 | 21 | 22 | 23 |

(1) The Credit Portfolio VaR is disclosed as a separate category from the Primary Risk Categories and includes loans that are carried at fair value and associated hedges as well as counterparty credit valuation adjustments and related hedges.

(2) Diversification benefit equals the difference between total trading VaR and the sum of the VaRs for the individual risk categories. This benefit arises because the simulated one-day losses for each of the primary market risk categories occur on different days; similar diversification benefits are also taken into account within each category.

The Group's average VaR for Primary Risk Categories for 2018 was \$19 million compared with \$21 million for 2017. The decrease in average VaR for Primary Risk Categories is due to risk reduction across equity and foreign exchange.

The average Credit Portfolio VaR for 2018 was \$4 million compared with \$6 million for 2017. The decrease in the average VaR over the year was driven by exposure changes during 2018.

Additional information on non-trading risks and currency risk together with an analysis of VaR sensitivity, is presented in note 28 to the consolidated financial statements.

Credit risk

Credit risk management framework

Credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to the Group. Credit risk includes country risk, which is further described below.

The Group primarily incurs credit risk to institutions and sophisticated investors, mainly through its Institutional Securities business segment. This risk may be incurred through a variety of activities, including, but not limited to, the following:

- entering into derivative contracts under which counterparties may have obligations to make payments to the Group;
- extending credit to clients through lending commitments;
- providing short- or long-term funding that is secured by physical or financial collateral whose value may at times be insufficient to fully cover the repayment amount;
- posting margin and/ or collateral to clearing houses, clearing agencies, exchanges, banks, securities firms and other financial counterparties;
- placing funds on deposit at other financial institutions to support the Group's clearing and settlement obligations; and
- investing or trading in securities and loan pools, whereby the value of these assets may fluctuate based on realised or expected defaults on the underlying obligations or loans.

Credit Risk exposure is managed on a global basis and in consideration of each significant legal entity within the Morgan Stanley Group. The credit risk management policies and procedures establish the framework for identifying, measuring, monitoring and controlling credit risk whilst ensuring transparency of material credit risks, compliance with established limits and escalating risk concentrations to appropriate senior management.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Credit risk (continued)

Monitoring and control

To help protect the Group from losses, the Credit Risk Management Department establishes Firm-wide practices to evaluate, monitor and control credit risk at the transaction, obligor and portfolio levels. The Credit Risk Management Department approves extensions of credit, evaluates the creditworthiness of the Group's counterparties and borrowers on a regular basis, and helps ensure that credit exposure is actively monitored and managed. The evaluation of counterparties and borrowers includes an assessment of the probability that an obligor will default on its financial obligations and any subsequent losses that may occur when an obligor defaults. In addition, credit risk exposure is actively managed by credit professionals and committees within the Credit Risk Management Department and through various risk committees, whose membership includes individuals from the Credit Risk Management Department.

A Credit Limits Framework is utilised to manage credit risk levels across the MSI Group. The Credit Limits Framework is calibrated within the MSI Group's risk tolerance and includes single-name limits and portfolio concentration limits by country and industry. The Credit Risk Management Department helps ensure timely and transparent communication of material credit risks, compliance with established limits and escalation of risk concentrations to appropriate senior management.

The Credit Risk Management Department also works closely with the Market Risk Department and applicable business units to monitor risk exposures and to perform stress tests to identify, analyse and, control credit risk concentrations arising in the Group's lending and trading activities. The stress tests shock market factors (e.g. interest rates, commodity prices, credit spreads), and risk parameters (e.g. default probabilities and loss given default), to assess the impact of stresses on exposures, profit and loss, and the Group's capital position. Stress tests are conducted in accordance with established Group policies and procedures.

Credit evaluation

The evaluation of corporate and institutional counterparties includes assigning obligor credit ratings, which reflect an assessment of an obligor's probability of default and loss given default. Credit evaluations typically involve the assessment of financial statements, leverage, liquidity, capital strength, asset composition and quality, market capitalisation, access to capital markets, the adequacy of collateral, if applicable, and in the case of certain loans, cash flow projections and debt service requirements. The Credit Risk Management Department also evaluates strategy, market position, industry dynamics, management and other factors that could affect the obligor's risk profile. Additionally, the Credit Risk Management Department evaluates the relative position of the Group's exposure in the borrower's capital structure and relative recovery prospects, as well as adequacy of collateral (if applicable) and other structural elements of the particular transaction.

In addition to assessing and monitoring its credit exposure and risk at the individual obligor level, the Group also reviews its credit exposure and risk to geographic regions. As at 31 December 2018, the Group has no significant geographical concentration of risk but has credit exposure to North America, Asia, and Western Europe. In addition, the Group pays particular attention to smaller exposures in emerging markets given their unique risk profile. Sovereign ceiling ratings i.e. the maximum credit rating that can be assigned to a counterparty with a designated country of risk, are derived using methodologies generally consistent with those employed by external rating agencies.

The Group also reviews its credit exposure and risk to certain types of customers. At 31 December 2018, the Group's material credit exposure was to central clearing counterparties, corporate entities, financial institutions and sovereign-related entities.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Credit risk (continued)

Risk mitigation

The Credit Risk Management Department may seek to mitigate credit risk from its lending and trading activities in multiple ways, including collateral provisions, guarantees and hedges. At the transaction level, the Credit Risk Management Department seeks to mitigate risk through management of key risk elements such as size, tenor, financial covenants, seniority and collateral. The main types of collateral held are cash or similar highly-liquid assets. The Group has internal policies on the acceptability of specific classes of collateral or credit risk mitigation. There has been no change in the collateral policy of the Group during the year. The Group closely monitors collateral held for financial assets considered to be credit-impaired, as in such cases it is considered more likely that the Group will take possession of collateral to mitigate potential credit losses. The Group actively hedges its lending and derivatives exposure through various financial instruments that may include single-name, portfolio and structured credit derivatives. Additionally, the Group may sell, assign or syndicate funded loans and lending commitments in the primary and secondary loan markets. In connection with its derivatives trading activities, the Group generally enters into master netting agreements and collateral arrangements with counterparties. These agreements provide the Group with the ability to demand collateral, to liquidate collateral and to offset receivables and payables covered under the same master agreement in the event of a counterparty default.

- *Securities purchased under agreements to resell and securities borrowed*

The Group manages credit exposure arising from securities purchased under agreements to resell and securities borrowed transactions by, in appropriate circumstances, entering into master netting agreements and collateral agreements with counterparties that provide the Group, in the event of a counterparty default, with the right to net a counterparty's rights and obligations under such agreements and to liquidate and set off collateral held by the Group against the net amount owed by the counterparty. Under these securities purchased under agreements to resell and securities borrowed transactions, the Group receives collateral, including US government and agency securities, other sovereign government obligations, corporate and other debt and corporate equities. The Group also monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and, as necessary, requests additional collateral to ensure such transactions are adequately collateralised.

- *Derivatives*

The Group may seek to mitigate credit risk from its derivatives transactions in multiple ways, including documentation, collateral provisions, guarantees and hedges. At the transaction level, the Group seeks to mitigate risk through management of key risk elements such as size, tenor, financial covenants, seniority and collateral. The Group actively hedges its derivatives exposure through various financial instruments that may include single-name, portfolio and structured credit derivatives. The Group may enter into master netting agreements and collateral arrangements with counterparties. These master netting agreements and collateral arrangements may provide the Group with the ability to demand collateral, as well as to liquidate collateral and offset receivables and payables covered under the same master netting agreement in the event of counterparty default. The Group monitors the creditworthiness of counterparties to these transactions on an ongoing basis and requests additional collateral in accordance with collateral arrangements when deemed necessary.

Exposure to credit risk

- *Counterparty risk exposure*

The table on the next page shows the Group's maximum exposure to credit risk and credit exposure for certain financial assets which the Group believes are subject to credit risk and where the Group has entered into credit enhancements, including receiving cash and security as collateral and master netting agreements. The financial effect of the credit enhancements is also disclosed in the table. The net credit exposure represents the credit exposure remaining after the effect of the credit enhancements. Exposure to other Morgan Stanley Group undertakings is included in this table.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Credit risk (continued)

Exposure to credit risk (continued)

| | 31 December 2018 (audited) | | | 31 December 2017 (audited) | | |
|---|--|-----------------------------------|-----------------------------------|--|-----------------------------------|-----------------------------------|
| | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure \$millions | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure \$millions |
| Recognised financial instruments | | | | | | |
| Secured financing | 95,643 | (94,546) | 1,097 | 99,345 | (95,075) | 4,270 |
| Trading financial assets: | | | | | | |
| Derivatives | 179,311 | (173,250) | 6,061 | 167,008 | (159,176) | 7,832 |
| Unrecognised financial instruments | | | | | | |
| Loan commitments | 2,308 | (84) | 2,224 | 2,177 | (105) | 2,072 |
| | <u>277,262</u> | <u>(267,880)</u> | <u>9,382</u> | <u>268,530</u> | <u>(254,356)</u> | <u>14,174</u> |

(1) Gross credit exposure is the carrying amount which best represents the Group's maximum exposure to credit risk, and for recognised financial instruments is reflected in the consolidated statement of financial position.

Additional information on the exposure to credit risk, including the maximum exposure to credit risk by credit rating, is presented in note 28 to the Consolidated Financial Statements.

- *Country risk exposure*

Country risk is the risk that events in, or affecting, a foreign country might adversely affect the Group. "Foreign country" means any country other than the UK. Sovereign risk, by contrast, is the risk that a government will be unwilling or unable to meet its debt obligations, or will renege on the debt it guarantees. Sovereign risk is single-name risk for a sovereign government, its agencies and guaranteed entities.

Country risk exposure is measured in accordance with the Group's internal risk management standards and includes obligations from sovereign governments, corporations, clearing houses and financial institutions. The Group actively manages country risk exposure through a comprehensive risk management framework that combines credit and market fundamentals and allows the Group to effectively identify, monitor and limit country risk.

The Group's obligor credit evaluation process may also identify indirect exposures whereby an obligor has vulnerability or exposure to another country or jurisdiction. Examples of indirect exposures include mutual funds that invest in a single country, offshore companies whose assets reside in another country to that of the offshore jurisdiction and finance company subsidiaries of corporations. Indirect exposures identified through the credit evaluation process may result in a reclassification of country of risk.

Stress testing is one of the Group's principal risk management tools, used to identify and assess the impact of severe stresses on its portfolios. A number of different scenarios are used to measure the impact on the Group's credit risks and market risks stemming from negative economic and political scenarios, including possible contagion effects where appropriate. The results of the stress tests may result in the amendment of limits or exposure mitigation.

The Group's sovereign exposures consist of financial instruments entered into with sovereign and local governments. Its non-sovereign exposures primarily consist of exposures to corporations and financial institutions. The table on the next page shows the Group's five largest non-UK country net exposures. Exposure to other Morgan Stanley Group undertakings has been excluded from this table.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Credit risk

Exposure to credit risk

Each reference entity within an index is allocated to that reference entity's country of risk. Index exposures are allocated to the underlying reference entities in proportion to the notional weighting of each reference entity in the index, adjusted for any fair value receivable/ payable for that reference entity. Where credit risk crosses multiple jurisdictions, for example, a credit default swap ("CDS") purchased from an issuer in a specific country that references bonds issued by an entity in a different country, the fair value of the CDS is reflected in the Net counterparty exposure column based on the country of the CDS issuer. Further, the notional amount of the CDS, adjusted for the fair value of the receivable/ payable, is reflected in the Net inventory column, based on the country of the underlying reference entity.

Five largest non-UK country risk net exposures:

| Country | Net inventory⁽¹⁾ \$millions | Net counterparty exposure⁽²⁾ \$millions | Funded lending \$millions | Unfunded commitments \$millions | Exposure before hedges \$millions | Hedges⁽³⁾ \$millions | Net exposure⁽⁴⁾ \$millions |
|----------------------------|---|---|--------------------------------------|--|--|--|--|
| United States | | | | | | | |
| Sovereigns | 977 | 30 | - | - | 1,007 | - | 1,007 |
| Non-sovereigns | 927 | 1,489 | 20 | 572 | 3,008 | (67) | 2,941 |
| Total United States | 1,904 | 1,519 | 20 | 572 | 4,015 | (67) | 3,948 |
| Germany | | | | | | | |
| Sovereigns | 1,877 | 103 | - | - | 1,980 | (340) | 1,640 |
| Non-sovereigns | (312) | 1,923 | 3 | 31 | 1,645 | (335) | 1,310 |
| Total Germany | 1,565 | 2,026 | 3 | 31 | 3,625 | (675) | 2,950 |
| France | | | | | | | |
| Sovereigns | 273 | 1 | - | - | 274 | (50) | 224 |
| Non-sovereigns | (652) | 2,013 | 19 | 1,264 | 2,644 | (338) | 2,306 |
| Total France | (379) | 2,014 | 19 | 1,264 | 2,918 | (388) | 2,530 |
| Italy | | | | | | | |
| Sovereigns | 1,465 | (11) | - | - | 1,454 | 11 | 1,465 |
| Non-sovereigns | 225 | 352 | 1 | 190 | 768 | (74) | 694 |
| Total Italy | 1,690 | 341 | 1 | 190 | 2,222 | (63) | 2,159 |
| Japan | | | | | | | |
| Sovereigns | 728 | - | - | - | 728 | (37) | 691 |
| Non-sovereigns | 353 | 827 | - | - | 1,180 | (21) | 1,159 |
| Total Japan | 1,081 | 827 | - | - | 1,908 | (58) | 1,850 |

(1) Net inventory represents exposure to both long and short single-name and index positions (i.e. bonds and equities at fair value and CDS based on notional amount assuming zero recovery adjusted for any fair value receivable or payable). As a market maker, the Group transacts in these CDS positions to facilitate client trading.

(2) Net counterparty exposure (i.e. repurchase transactions, securities lending and over the counter ("OTC") derivatives) taking into consideration legally enforceable master netting agreements and collateral.

(3) Represents CDS hedges (purchased and sold) on net counterparty exposure and lending executed by trading desks responsible for hedging counterparty and lending credit risk exposures for the Group. Amounts are based on the CDS notional amount assuming zero recovery adjusted for any fair value receivable or payable.

(4) In addition, as at 31 December 2018, the Group had exposure to these countries for overnight deposits with banks of approximately \$3,436 million.

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Liquidity and funding risk

Liquidity and funding risk refers to the risk that the Group will be unable to finance its operations due to a loss of access to the capital markets or difficulty in liquidating its assets. Liquidity risk encompasses the Group's ability (or perceived ability) to meet its financial obligations without experiencing significant business disruption or reputational damage that may threaten its viability as a going concern. Liquidity risk also comprises the associated funding risks triggered by the market or idiosyncratic stress events that may cause unexpected changes in funding needs or an inability to raise new funding. Generally, the Group incurs liquidity and funding risk as a result of its trading, investing and client facilitation activities.

The Morgan Stanley Group's Liquidity Risk Management Framework is critical to helping ensure that the Group maintains sufficient liquidity reserves and durable funding sources to meet its daily obligations and to withstand unanticipated stress events. The Liquidity Risk Department ("LRD") is a distinct area in Risk Management, which oversees and monitors liquidity risk. The LRD ensures transparency of material liquidity risks, compliance with established risk limits and escalation of risk concentrations to appropriate senior management. To execute these responsibilities, the LRD:

- establishes limits in line with the Morgan Stanley Group's risk appetite;
- identifies and analyses emerging liquidity risks to ensure such risks are appropriately mitigated;
- monitors and reports risk exposures against metrics and limits, and;
- reviews the methodologies and assumptions underpinning the Morgan Stanley Group's Liquidity Stress Tests to ensure sufficient liquidity and funding under a range of adverse scenarios.

The liquidity risks identified by these processes are summarised in reports produced by the LRD that are circulated to and discussed with the EMEA ALCO, EMEA Risk Committee and the MSI Risk Committee as appropriate.

The Treasury Department and applicable business units have primary responsibility for evaluating, monitoring and controlling the liquidity risks arising from the Morgan Stanley Group's business activities, and for maintaining processes and controls to manage the key risks inherent in their respective areas. The LRD coordinates with the Treasury Department and these business units to help ensure a consistent and comprehensive framework for managing liquidity risk across the Morgan Stanley Group.

Operational risk

Operational risk refers to the risk of loss, or of damage to the Group's reputation, resulting from inadequate or failed processes or systems, from human factors or from external events (e.g. fraud, theft, legal and compliance risks, cyber-attacks or damage to physical assets). Operational risk relates to the following risk event categories as defined by Basel Capital Standards: 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. The Group may incur operational risk across the full scope of its business activities. Legal and compliance risk is included in the scope of operational risk and is discussed below under "Legal, regulatory and compliance risk".

The Group has established an operational risk framework to identify, measure, monitor and control risk across the Group. This framework is consistent with the framework established by the Morgan Stanley Group and includes escalation to the Group's Board of directors and appropriate senior management personnel. Effective operational risk management is essential to reducing the impact of operational risk incidents and mitigating legal and reputational risks. The framework is continually evolving to reflect changes in the Group and to respond to the changing regulatory and business environment.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Operational risk (continued)

The Group has implemented operational risk data and assessment systems to monitor and analyse internal and external operational risk events, to assess business environment and internal control factors and to perform scenario analysis. The collected data elements are incorporated in the operational risk capital model. The model encompasses both quantitative and qualitative elements. Internal loss data and scenario analysis results are direct inputs to the capital model, while external operational incidents, business environment and internal control factors are evaluated as part of the scenario analysis process.

In addition, the Group employs a variety of risk processes and mitigants to manage its operational risk exposures. These include a governance framework, a comprehensive risk management program and insurance. Operational risks and associated risk exposures are assessed relative to the risk tolerance established by the Board and are prioritised accordingly.

The breadth and variety of operational risks are such that the types of mitigating activities are wide-ranging. Examples of such activities include continuous enhancement of defenses against cyberattacks; use of legal agreements and contracts to transfer and/or limit operational risk exposures; due diligence; implementation of enhanced policies and procedures; exception management processing controls; and segregation of duties.

Primary responsibility for the management of operational risk is with the business segments, the control groups and the business managers therein. The business managers maintain processes and controls designed to identify, assess, manage, mitigate and report operational risk. Each of the business segments has a designated operational risk coordinator. The operational risk coordinator regularly reviews operational risk issues and reports to the Group's senior management within each business. Each control group also has a designated operational risk coordinator and a forum for discussing operational risk matters with the Group's senior management. Oversight of operational risk is provided by the Operational Risk Oversight Committee, regional risk committees and senior management. In the event of a merger; joint venture; divestiture; reorganisation; or creation of a new legal entity, a new product or a business activity, operational risks are considered, and any necessary changes in processes or controls are implemented.

The Operational Risk Department provides independent oversight of operational risk and assesses, measures and monitors operational risk against tolerance. The Operational Risk Department works with the business divisions and control groups to help ensure a transparent, consistent and comprehensive framework for managing operational risk within each area and across the Group.

The Operational Risk Department scope includes oversight of technology risk, cybersecurity risk, information security risk, the fraud risk management and prevention program and the third party risk management (supplier and affiliate risk oversight and assessment) program. Furthermore, the Operational Risk Department supports the collection and reporting of operational risk incidents and the execution of operational risk assessments; provides the infrastructure needed for risk measurement and risk management; and ensures ongoing validation and verification of the Group's advanced measurement approach for operational risk capital.

Business Continuity Management maintains programs for business continuity management and technology disaster recovery that facilitate activities designed to mitigate risk to the Group during a business continuity event. A business continuity event is an interruption with potential impact to normal business activity of the Group's people, operations, technology, suppliers, and/or facilities. The business continuity management program's core functions are business continuity planning and crisis management. As part of business continuity planning, business divisions and control groups maintain business continuity plans identifying processes and strategies to continue business critical processes during a business continuity event. Crisis management is the process of identifying and managing the Group's operations during business continuity events. Disaster recovery plans supporting business continuity are in place for critical facilities and resources across the Group.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Operational risk (continued)

In connection with its ongoing operations, the Group uses third party suppliers, which it anticipates will continue and may increase in the future. These services include, for example, outsourced processing and support functions and consulting and other professional services. The Group's risk-based approach to managing exposure to these services includes the performance of due diligence, implementation of service level and other contractual agreements, consideration of operational risks and ongoing monitoring of 'third party suppliers' performance. The Group maintains a third party risk program with appropriate governance, policies, procedures, and technology that supports alignment with the Group's risk tolerance and is designed to meet regulatory requirements. The third party risk program includes the adoption of appropriate risk management controls and practices through the supplier management lifecycle, including, but not limited to assessment of information security, service failure, financial stability, disaster recoverability, reputational risk, contractual risk, and safeguards against corruption.

Conduct risk

Conduct risk is defined within the MSI Group as the risk of an adverse impact on clients, markets or Morgan Stanley's reputation as a consequence of the conduct of Morgan Stanley and/or its employees. Conduct includes both intentional and unintentional behaviours.

The MSI Group has an approved a Conduct Risk Management Policy. The Policy covers the two main strands of Morgan Stanley's Conduct Risk management:

- Managing the risk posed by the MSI Group's business activity, for example risks posed by the MSI Group strategy or risks created in the execution of that strategy; and
- Managing the risk that employees of the MSI Group pose, for example risks arising from poor culture or failure to consider Morgan Stanley's values when conducting duties.

The policy sets out four statements outlining what the MSI Group must do to manage Conduct Risk:

- **Identification and Assessment:** Business and Support units must identify and assess the Conduct Risks which arise from their current or planned strategies and activities.
- **Management:** Internal controls and processes must be implemented to manage Conduct Risks identified. Reasonable steps must be taken to ensure effectiveness.
- **Incidents:** Areas must identify and record Conduct Risk Incidents ("CRIs").
- **Escalation & Reporting:** Processes must be established to report risks and incidents, ensuring prompt escalation and appropriate notification.

Furthermore, the policy sets out key roles and responsibilities and a framework identifying key functions and processes for the good management of Conduct Risk. The framework also sets out various key support and governance mechanisms, such as the production of key metrics and management information, and the establishment of a Conduct Risk Committee to oversee the management of Conduct Risk and the implementation of the framework.

Legal, regulatory and compliance risk

Legal, regulatory and compliance risk includes the risk of legal or regulatory sanctions, material financial loss; including fines, penalties, judgements, damages and/ or settlements or loss to reputation the Group may suffer as a result of a failure to comply with laws, regulations, rules, related self-regulatory organisation standards and codes of conduct applicable to our business activities. This risk also includes contractual and commercial risk, such as the risk that a counterparty's performance obligations will be unenforceable. It also includes compliance with Anti-Money Laundering and terrorist financing rules and regulations. The Group is generally subject to extensive regulation in the different jurisdictions in which it conducts its business.

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STRATEGIC REPORT

RISK MANAGEMENT (CONTINUED)

Operational risk (continued)

The Group, principally through the Morgan Stanley Group's Legal and Compliance Division, has established procedures based on legal and regulatory requirements on a worldwide basis that are designed to facilitate compliance with applicable statutory and regulatory requirements and to require that the Group's policies relating to business conduct, ethics and practices are followed globally.

In addition, the Group has established procedures to mitigate the risk that a counterparty's performance obligations will be unenforceable, including consideration of counterparty legal authority and capacity, adequacy of legal documentation, the permissibility of a transaction under applicable law and whether applicable bankruptcy or insolvency laws limit or alter contractual remedies. The heightened legal and regulatory focus on the financial services and banking industries globally presents a continuing business challenge for the Group.

Cyber and information security risk management

As a general matter, the financial services industry faces increased global regulatory focus regarding cyber and information security risk management practices. Many aspects of the businesses are subject to cybersecurity legal and regulatory requirements enacted by US federal and state governments and other non-US jurisdictions in Europe and Asia. These laws are aimed at codifying basic cybersecurity protections and mandating data breach notification requirements.

The Group maintains a program that oversees cyber and information security risks and is designed to address regulatory requirements. Cybersecurity and information security policies, procedures and technologies are designed to protect the Group's information assets against unauthorised disclosure, modification or misuse. These policies cover a broad range of areas, including: identification of internal and external threats, access control, data security, protective controls, detection of malicious or unauthorised activity, incident response and recovery planning.

Certain of the Group's businesses are also subject to privacy and data protection information security legal requirements concerning the use and protection of certain customer information. For example, the General Data Protection Regulation ("GDPR") became effective in the EU on 25 May 2018 as a replacement for the EU Data Protection Directive. The GDPR imposes mandatory breach notification obligations, including significant fines for noncompliance, enhanced governance and accountability requirements and has extraterritorial impact. In addition, other jurisdictions such as Australia, Singapore, Japan, Colombia, Argentina, India, Turkey, Hong Kong and Switzerland, have adopted or are proposing GDPR or similar standards.

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION

Liquidity and funding risk management framework

The Group's liquidity risk management policies and procedures are consistent with those of the Morgan Stanley Group. The MSI Board is ultimately responsible for establishing the liquidity risk tolerance and ensuring the Group's liquidity risk is appropriately managed. In addition to the internal liquidity risk management framework, the Group is locally subject to the liquidity regulations prescribed by the PRA. The Group has daily monitoring and reporting processes in place to ensure compliance with its regulatory requirements.

The primary goal of the Group's liquidity risk and funding management framework is to ensure that the Group has access to adequate funding across a wide range of market conditions and time horizons. The framework is designed to enable the Group to fulfil its financial obligations and support the execution of its business strategies.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Liquidity and funding risk management framework (continued)

The following principles guide the Group's liquidity and funding risk management framework:

- Sufficient liquid assets should be maintained to cover maturing liabilities and other planned and contingent outflows;
- Maturity profile of assets and liabilities should be aligned, with limited reliance on short-term funding;
- Source, counterparty, currency, region, and term of funding should be diversified; and
- Liquidity Stress Tests should anticipate, and account for, periods of limited access to funding.

The core components of the Group's liquidity and funding risk management framework, are the Required Liquidity Framework, Liquidity Stress Tests and the Liquidity Reserve (as defined below), which supports its target liquidity profile.

Balance sheet management

In managing both the Morgan Stanley Group's and the Group's funding risk the composition and size of the entire balance sheet, not just financial liabilities, is monitored and evaluated. The liquid nature of the marketable securities and short-term receivables arising principally from sales and trading activities in the Institutional Securities business provides the Morgan Stanley Group and the Company with flexibility in managing the composition and size of its balance sheet.

Required liquidity framework

The Required Liquidity Framework reflects the amount of liquidity the Group must hold in both normal and stressed environments to ensure that its financial condition and overall soundness is not adversely affected by an inability (or perceived inability) to meet its financial obligations in a timely manner. The Required Liquidity Framework considers the most constraining liquidity requirement to satisfy all regulatory and internal limits at a Morgan Stanley Group and legal entity level.

Liquidity stress tests

The Group uses Liquidity Stress Tests to model external and intercompany liquidity flows across multiple scenarios over a range of time horizons. These scenarios contain various combinations of idiosyncratic and systemic stress events of different severity and duration. The methodology, implementation, production and analysis of the Group's Liquidity Stress Tests are important components of the Required Liquidity Framework.

Liquidity Stress Tests are produced for the Group, to capture specific cash requirements and cash availability. The Liquidity Stress Tests assume that a legal entity will use its own liquidity first to fund its obligations before drawing liquidity from its ultimate parent undertaking, Morgan Stanley. Morgan Stanley will support its subsidiaries and will not have access to subsidiaries' liquidity reserves that are subject to any regulatory, legal or tax constraints. In addition to the assumptions underpinning the Liquidity Stress Tests, the Group takes into consideration the settlement risk related to intra-day settlement and clearing of securities and financing activities.

At 31 December 2018 and 31 December 2017, the Group maintained sufficient liquidity to meet current and contingent funding obligations as modelled in its Liquidity Stress Tests.

STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Liquidity reserve

The Group maintains sufficient liquidity reserves (“Liquidity Reserve”) to cover daily funding needs and to meet strategic liquidity targets sized by the Required Liquidity Framework and Liquidity Stress Tests. The size of the Liquidity Reserve is actively managed by the Group considering the following components: unsecured debt maturity profile, balance sheet size and composition, funding needs in a stressed environment inclusive of contingent cash outflows and collateral requirements. In addition, the Group’s Liquidity Reserve includes a discretionary surplus based on risk tolerance and is subject to change depending on market and firm-specific events. The Liquidity Reserve consists of cash and unencumbered securities sourced from trading assets, investment securities and securities received as collateral.

The Group’s holds its own Liquidity Reserve which is composed of diversified cash and cash equivalents and unencumbered highly liquid securities. Eligible unencumbered highly liquid securities include primarily non-US government securities in addition to US government securities and other highly liquid investment grade securities.

Regulatory liquidity framework

The Basel Committee has developed two standards intended for use in liquidity risk supervision: the LCR and the NSFR.

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 Group was required to comply with LCR minimum standards from 1 October 2015. The Group is in excess of the fully phased-in LCR required minimum of 100% based on current interpretation. The Group continues to evaluate the impact on its liquidity and funding requirements.

Net Stable Funding Ratio (“NSFR”): The objective of the NSFR is to reduce funding risk over a one year horizon by requiring banking organisations to fund their activities with sufficiently stable sources of funding to mitigate the risk of future funding stress. In October 2014, the Basel Committee finalised revisions to the NSFR, which became effective on 1 January 2018. As part of the European Commission’s comprehensive regulatory reform package discussed further below, the proposed NSFR rules are expected to be introduced in the EU in 2019 at the earliest, with Member States implementing the new rules in 2021 based on current estimates. The MSI Group continues to evaluate the NSFR and its potential impact on the Group’s liquidity and funding requirements.

Funding management

The Group manages its funding in a manner that reduces the risk of disruption to the Group’s operations. The Group pursues a strategy of diversification of secured and unsecured funding sources (by product, investor and region) and attempts to ensure that the tenor of its liabilities equals or exceeds the expected holding period of the assets being financed.

The Group funds itself through diverse sources. These sources may include equity capital, long-term debt, securities sold under agreements to repurchase, securities lending, deposits, commercial paper, letters of credit and lines of credit. The Group has active financing programmes for both standard and structured products, targeting global investors and currencies.

Minimum Requirement for own funds and Eligible Liabilities

The Bank of England, as the UK resolution authority, is required to set MREL for all institutions on both an individual and group consolidation basis, in line with the EU Bank Recovery and Resolution Directive (“BRRD”). MREL serves to ensure that the Group has sufficient eligible liabilities in a bail-in scenario to absorb losses and safeguard existing capital requirements. MREL requirements are effective from 1 January 2019. During the year the Group issued a \$6,000 million senior subordinated loan that is MREL-eligible, to ensure compliance with the regulations. Refer to note 19.

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STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Credit ratings

The Company relies on external sources to finance a significant portion of its daily operations. The cost and availability of financing generally are impacted by the Company's credit ratings, among other variables. In addition, the Company's credit ratings can have an impact on certain trading revenues, particularly in those businesses where longer-term counterparty performance is a key consideration, such as OTC derivative transactions, including credit derivatives and interest rate swaps. When determining credit ratings, ratings agencies consider company-specific factors, other industry factors such as regulatory or legislative changes, and the macroeconomic environment, among other things. Some rating agencies have stated that they currently incorporate various degrees of credit rating uplift from non-governmental third party sources of potential support.

At 31 December 2018, the Company's senior unsecured ratings were as follows:

| | Short- Term Debt | Long- Term Debt | Rating Outlook |
|--|-----------------------------|----------------------------|---------------------------|
| Moody's Investors Service, Inc ("Moody's") | P-1 | A1 | Stable |
| Standard & Poor's Rating Service ("S&P") | A-1 | A+ | Stable |

Collateral impact of a downgrade

The Company is a participant in global derivatives markets. In some cases, the derivative counterparties have contractual rights that require the Company to post collateral to them in the event that credit rating agencies downgrade the Company's credit rating.

In measuring collateral call risks, all amounts of collateral that could be required to post in accordance with the terms and conditions of the downgrade trigger clauses found in applicable legal agreements are considered.

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 2018, the future potential collateral amounts and termination payments that could be called or required by counterparties or exchange 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 \$121 million and an incremental \$222 million, respectively.

The impact of potential collateral calls related to the derivative exposures is inherently uncertain and would depend on a number of interrelated factors, including, among others, the magnitude of a downgrade, the rating relative to peers, the rating assigned by the relevant agency pre-downgrade, individual client behavior and future mitigating actions that could be taken. The Company manages the risk of potential collateral calls on the derivative positions by employing a variety of risk mitigation strategies, including modelling the impact of credit rating agency downgrades in the liquidity stress test program, monitoring historical changes in variation margin, diversifying risk exposures, hedging, managing counterparty and product risk limits and maintaining the liquidity reserve to enable the Company to meet unexpected collateral calls or other potentially adverse developments.

Capital management

The 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.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Capital management (continued)

In line with Morgan Stanley Group's capital management policies, the Group manages its capital position based upon, among other things, business opportunities, risks, capital availability and rates of return together with internal capital policies, regulatory requirements and rating agency guidelines. Therefore, in the future it may adjust its capital base in reaction to 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 Group are set out in the MSI Group's Capital Planning and Management Policy and include a point in time risk and leverage based capital assessment, forward-looking capital projections and stress testing.

The MSI Group conducts an Internal Capital Adequacy Assessment Process ("ICAAP") at least annually in order to meet its obligations under CRD IV and the requirements of the PRA. The ICAAP is one of the key tools used to inform the MSI Group's capital adequacy assessment, planning and management. The MSI Group ICAAP:

- Is designed to ensure the risks to which the MSI Group is exposed to 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; and
- Assesses capital adequacy under normal and stressed operating environments over the 3-year capital planning horizon to ensure the MSI Group maintains a capital position in line with internal pre- 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 ICAAP through its Supervisory and Evaluation Review Process ("SREP") and sets a Total Capital Requirement which establishes the minimum level of regulatory capital for the MSI Group. As of 31 December 2018 the MSIP TCR was set at 11.3%. If required, the PRA sets a buffer if required in addition to the Basel Combined Buffers.

The Company's capital is managed to ensure risk and leverage based requirements assessed through the ICAAP and SREP are met. Internal capital ratio minima are set to ensure the Company has sufficient capital to meet their regulatory requirements at all times.

The capital managed by the Company broadly includes share capital, Additional Tier 1 capital instruments, subordinated debt, senior subordinated debt and reserves. To maintain or adjust its capital structure, the Company may pay dividends, return capital to its shareholder, issue new shares, or issue or repay subordinated debt or Additional Tier 1.

Regulatory capital framework

The Group continues to manage its capital position to ensure adequate resources are available to support its activities, to enable it to withstand market stresses, and to meet regulatory stress testing requirements proposed by its regulators.

The Company is regulated by the FCA and the PRA and as such is subject to minimum capital requirements. The Company's capital is monitored on an ongoing basis to ensure compliance with these requirements. At a minimum, the Company must ensure that Capital Resources described in accordance with CRR as Own Funds, are greater than the Total Capital Requirement.

The Company complied with all of its regulatory capital requirements during the year.

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STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Regulatory capital framework

Own Funds

Set out below are details of the Company's Capital Resources, described in accordance with CRR and tables below as Own Funds, as at 31 December 2018 and 31 December 2017:

| | 2018 | 2017 |
|-------------------------------|----------------------|----------------------|
| | \$millions | \$millions |
| Common Equity Tier 1 ("CET1") | 15,648 | 15,671 |
| Additional Tier 1 | 3,500 | 1,300 |
| Tier 1 Capital | <u>19,148</u> | <u>16,971</u> |
| Tier 2 Capital | <u>5,000</u> | <u>7,000</u> |
| Total Own Funds | <u>24,148</u> | <u>23,971</u> |
| | | |
| RWAs | 124,950 | 132,724 |
| CET1 Ratio | 12.5% | 11.8% |
| Tier 1 Capital Ratio | 15.3% | 12.8% |
| Total Capital Ratio | 19.3% | 18.1% |
| Leverage Exposure | 417,315 | 448,591 |
| Leverage Ratio | 4.6% | 3.8% |

(1) The sum of CET 1 capital before deductions and Additional Tier 1 capital agrees to the Company's managed capital in note 28 of the Company's financial statements, with the exception of \$173 million of current year profit after tax which was not eligible as CET 1 capital as at the balance sheet date.

CET1 decreased by \$23 million in the year primarily as a result of dividends of \$529 million and a reduction in reserves on transfer of the MS France Group of \$157 million, more than offsetting audited profits recognised as CET1. Tier 1 capital increased by \$2,177 million in the year as a result of a \$2,200 million issuance of an AT1 Instrument offset by the CET1 decrease.

Leverage ratio framework

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 CRD IV, the MSI Group manages its risk of excessive leverage through the application of Business Unit leverage exposure limits and leverage ratio early warning trigger levels. Limits are calibrated in line with legal entity capacity and ensure that leverage exposure remains within the MSI Board's risk appetite. MSI Group and the Company's leverage exposures are calculated monthly and weekly, respectively, and reported to EMEA ALCO who monitor this, as well as maturity mismatches and Asset Encumbrance metrics, to ensure that any excessive risk is highlighted, assessed and mitigated appropriately. The Company's leverage ratio was 4.6% as of 31 December 2018 (3.8% as of 31 December 2017). The increase from prior year was driven by a decrease in on-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral) and an increase in Tier 1 Capital. A binding leverage ratio is expected to be introduced as part of the European Commission's comprehensive regulatory reform package published in November 2018 as described further below.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

Liquidity and Capital Regulatory Reform

Finalising Basel III reforms

On 7 December 2017, the Basel Committee released the final part of its Basel III reform package. The key amendments provide updates to the standardised measures for calculating capital requirements and include a RWA floor, calculated at 72.5% of total standardised RWA. These proposals will need to be transposed into national/EU law, however the timing of this is still uncertain.

European financial regulation reform

In November 2016, the European Commission published a comprehensive regulatory reform package which aims to continue the reforms that the EU implemented in the wake of the financial crisis. The proposals seek to amend to the existing prudential regime (CRD IV and CRR), impacting the risk-based capital, liquidity, leverage and large exposures regimes (known as “CRD V” and “CRR2”), the BRRD and the Single Resolution Mechanism (“SRM”).

The key amendments to the CRD V and CRR2 include:

- A binding leverage ratio;
- New standards on the total loss-absorbing capacity (“TLAC”);
- A binding NSFR;
- A new standardised approach for the calculation of counterparty credit exposures for derivatives;
- New standardised and advanced calculation approaches for market risk requirements; and
- A new requirement for certain large non-EU financial groups to set up EU Parent Intermediate Holding Companies (“EU IHC”) which will bring their EU-based regulated subsidiaries under common prudential consolidation groups.

These proposals are near to being finalised as they have entered the final stages of the European legislative process. While the draft proposed amendments are available, the final content and exact time of application is not yet known.

OTHER REGULATORY MATTERS

Resolution and recovery planning

Both the Morgan Stanley Group and the MSI Group prepare, on an annual basis, a recovery plan which identifies mitigation tools available to both groups in times of severe stress.

The Morgan Stanley Group has developed a resolution plan in accordance with the requirements of Section 165(d) of Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act and its implementing regulations adopted by the Federal Reserve Board and the Federal Deposit Insurance Corporation. The resolution plan presents the Firm’s strategy for resolution of the Firm upon material financial distress or failure in a severely adverse macroeconomic environment. The Company is a Material Operating Entity of the Morgan Stanley Group and is within the scope of the single point of entry resolution strategy adopted by the Morgan Stanley Group.

The BRRD has established a recovery and resolution framework for EU credit institutions and investment firms, including the Company. The Company produces information required by the UK Resolution Authority in the form of a resolution pack and ad hoc regulatory submissions, as necessary under BRRD and UK regulatory requirements.

STRATEGIC REPORT

OTHER REGULATORY MATTERS (CONTINUED)

MiFID II

Following the global financial crisis, the European Commission decided to review the Markets in Financial Instruments framework. The Markets in Financial Instruments Regulation and a revision of the Markets in Financial Instruments Directive (together, "MiFID II"), became effective on 3 January 2018 and introduced comprehensive and new trading and market infrastructure reforms in the EU, including new trading venues, enhancements to pre- and post-trading transparency, and additional investor protection requirements, among others. The Morgan Stanley Group has made extensive changes to its operations, including systems and controls in order to comply with MiFID II.

Derivatives regulation

The Group is subject to compliance with swap regulations under the Dodd-Frank Act, including requirements relating to public and regulatory reporting in the US, central clearing and mandatory trading on certain US exchanges. US and other global regulators, including the European Supervisory Authorities, have also finalised margin requirements for uncleared derivatives that apply to various entities in the Group, including the Company. Initial margin requirements will phase in between September 2016 and September 2020 depending on the parties' trading activity, and variation margin requirements began applying to most in-scope counterparties on 1 March 2017.

Expected replacement of London interbank offered rate ("LIBOR")

Central banks around the world, including the Federal Reserve, the Bank of England, and the European Central Bank, have commissioned working groups of market participants and official sector representatives with the goal of finding suitable replacements for LIBOR and replacements or reforms of other interest rate benchmarks, such as EURIBOR and EONIA (collectively, the "IBORs"). It is expected that a transition away from the widespread use of such rates to alternative reference rates selected by these central bank committees and working groups and other potential interest rate benchmark reforms, will occur over the course of the next few years. Although the full impact of such reforms and actions, together with any transition away from the IBORs, including the potential or actual discontinuance of any IBOR publication, remains unclear, the Group is preparing to transition from the IBORs to these alternative reference rates.

The Group's transition plan includes a number of key steps, including continued engagement with central banks and industry working groups and regulators, active client engagement, internal operational readiness, and risk management, among other things, to promote the transition to alternative reference rates.

There remain, however, a number of unknown factors regarding the transition from the IBORs and/or interest rate benchmark reforms that could impact our business, including, for example, the pace of the transition to replacement or reformed rates, the specific terms and parameters for, and market acceptance of, the alternative reference rates, prices of and the liquidity of trading markets for products based on the alternative reference rates, and our ability to transition to and develop appropriate systems and analytics for one or more alternative reference rates.

Impact of withdrawal from the EU

The Group is currently subject to EU regulatory requirements based on the implementation of EU directives by the UK and through EU regulations that apply directly. As a result of the UK's decision to leave the EU (Brexit), there is uncertainty around what EU regulatory requirements will continue to apply in the UK. EU regulatory requirements in effect at the withdrawal date may continue to apply to the Group directly. Alternatively, the UK may implement equivalent standards for a period of time, including introducing equivalent standards for evolving regulation being introduced by the EU, that would apply to the Group. This may include additional proposals made by the Basel Committee in its Basel III reform package.

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STRATEGIC REPORT

EMPLOYEE MATTERS

Culture, values and conduct of employees

All employees of the Morgan Stanley Group are accountable for conducting themselves in accordance with Morgan Stanley Group's core values - *Putting Clients First, Doing the Right Thing, Leading with Exceptional Ideas*, and *Giving Back*. The Morgan Stanley Group is committed to reinforcing and confirming adherence to the core values, through its governance framework, tone from the top, management oversight, risk management and controls, and a three lines of defence structure (business, control functions such as Risk Management and Compliance, and Internal Audit).

The Morgan Stanley Group's Board is responsible for overseeing the Morgan Stanley Group's practices and procedures relating to culture, values and conduct, as set forth in the Morgan Stanley Group's Corporate Governance Policies. The Morgan Stanley Group's Culture, Values and Conduct Committee, which is part of the Enterprise Risk Management framework, is the senior management committee that oversees the Firm-wide culture, values and conduct program. A fundamental building block of this program is the Morgan Stanley Group's Code of Conduct, which establishes standards for employee conduct that further reinforce the Morgan Stanley Group's commitment to integrity and ethical conduct. Every new employee and every current employee, annually, must attest to their understanding of and adherence to the Code of Conduct. The Morgan Stanley UK Group's Conduct Risk Management Policy also sets out a consistent framework for managing Conduct Risk (i.e. the risk arising from misconduct by employees or contingent workers) and CRI.

The annual employee performance appraisal process includes an evaluation of employee conduct related to risk management practices and the Morgan Stanley Group's expectations. The Morgan Stanley Group also has several mutually reinforcing processes to identify employee conduct that may have an impact on employment status, current year compensation and/or prior year compensation. For example, the Global Incentive Compensation Discretion Policy sets forth standards for managers when making annual compensation decisions and specifically requires managers to consider whether their employees effectively managed and/or supervised risk control practices during the performance year. Management committees from control functions periodically meet to discuss employees whose conduct does not meet the Firm's standards. These results are incorporated in the employees' performance evaluation, which links to compensation and promotion decisions.

The Morgan Stanley Group's clawback and cancellation provisions permit recovery of deferred incentive compensation, and cover a broad scope of employee conduct, including any act or omission (including with respect to direct supervisory responsibilities) that constitutes a breach of obligation to the Morgan Stanley Group or causes a restatement of the Morgan Stanley Group's financial results, constitutes a violation of the Morgan Stanley Group's global risk management principles, policies and standards, or causes a loss of revenue associated with a position on which the employee was paid and the employee operated outside of internal control policies.

Morgan Stanley Group is an equal opportunity employer committed to ensuring, within the framework of the law, that the work place is free from unlawful discrimination on the grounds of race, colour, nationality (including citizenship), ethnic or national origin, religion or belief, gender, gender reassignment, sexual orientation, pregnancy and maternity, age, marriage and civil partnership or disability. This commitment is stated in the Morgan Stanley Group's UK Equal Opportunities Statement.

The Morgan Stanley Group aims to ensure that staff achieve their full potential and that all employment decisions are taken without reference to irrelevant or discriminatory criteria. The Dignity at Work Policy for the Group aims to draw attention to, and therefore prevent, all forms of unacceptable behaviour and to ensure all staff are treated with dignity and respect.

Breach of the UK Equal Opportunity Statement and/or Dignity at Work Policy may result in disciplinary action being taken, up to and including termination of employment. Anyone who believes that they or, indeed anyone else employed by the Group, may have been disadvantaged on discriminatory grounds is entitled, and encouraged, to raise the matter through the Morgan Stanley Group's Grievance Procedure, as set out in the UK Employee Handbook.

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STRATEGIC REPORT

EMPLOYEE MATTERS (CONTINUED)

Culture, values and conduct of employees (continued)

The correlation between inclusive teams and improved decision-making, innovation and performance aligns with Morgan Stanley Group's core values of leading with exceptional ideas, putting clients first, and doing the right thing. The EMEA Diversity Action Council acts as a catalyst to drive forward the EMEA diversity strategy in partnership with the Human Resources, Diversity and Inclusion and Talent teams. Accountability is underscored by quarterly meetings with the European Operating Committee and regular discussion at Divisional Operating Committees.

The Group commits to complying with the spirit and intention of rules, employment laws and regulatory requirements in all office locations.

MSI is proud to be a signatory of the UK Government's Women in Finance Charter and to have been the first major US Investment bank to do so. The charter is a pledge to increase gender balance across the UK Financial Services Industry. Signing it reflects a long term commitment to support the advancement of women into senior roles and publicly demonstrating progress against diversity goals. In accordance with the UK Government regulations, the Group recently published the Group's Year 2 UK gender pay gap figures. The gender pay gap is the average pay difference between men and women across a company, irrespective of role or level. Equal pay, in contrast, is ensuring men and women are paid equally for the same or similar role, or for work of equal value. The Group is committed to making sure that every individual, regardless of gender, is compensated fairly for their role, performance and experience. The gender pay gap is impacted by the proportion of men and women in more senior, and therefore more highly paid roles – an issue affecting many companies. The Group acknowledges that meaningful and sustainable change will take time and reiterates its strong commitment to making this change happen. For further information on the Group's and Morgan Stanley Group's commitment to a culture that is diverse and inclusive, as well as details on the UK gender pay gap, see <http://www.morganstanley.com/about-us/diversity>.

Both the Company and the Morgan Stanley Group place considerable value on the investment in their employees and have continued their practice of keeping employees informed on matters affecting them. Employees are encouraged to present their suggestions and views on Morgan Stanley Group's performance to management and employees participate directly in the success of the business through Morgan Stanley Group's various compensation incentive plans.

Every effort is also made to ensure that disabled applicants, or those existing employees who are disabled or may have become disabled, are treated fairly on terms comparable with those of other employees. Appropriate training is arranged for disabled persons, including retraining for alternative work for employees who become disabled, to promote their career development within the organisation.

RESPECT FOR HUMAN RIGHTS

Morgan Stanley Group's Modern Slavery and Human Trafficking Statement displays the Morgan Stanley Group's commitment to supporting the protection and advancement of human rights in its business and throughout its supply chain. With operations around the world, the Group strives to uphold global standards for responsible business, including equal opportunity, freedom to associate and bargain collectively, and the elimination of child and forced labour.

The Group endeavours to exercise its influence in part by conducting business operations in ways that attempt to preserve, protect and promote the full range of human rights, such as those described in the United Nations Universal Declaration of Human Rights ("UDHR"). All employees must read and acknowledge the Morgan Stanley Code of Conduct annually, which underscores the Group's values and commitment to ensuring a workplace that includes equal opportunity, dignity and respect, including with respect to suppliers, affiliates and partners.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

RESPECT FOR HUMAN RIGHTS (CONTINUED)

The Group's vendor due diligence program assesses risk associated with third party suppliers. The assessment includes a review of the supplier's litigation history, regulatory profile and negative media coverage using publicly available material and news sources. This assessment identifies, among other things, potential for risks associated with human rights and other social and/or environmental issues. Where appropriate, issues are escalated to and considered by senior management.

To mitigate risk, the Group has identified spend categories (and the vendors associated with those spend categories) that may be subject to additional review, including for potential modern slavery related issues and reviewed supplier agreement templates to ascertain whether such agreements impose obligations on suppliers to address modern slavery issues in their business and supply chains.

If the Group becomes aware that any of its existing vendors have modern slavery related issues, the Group will review and address those situations as deemed appropriate.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Morgan Stanley, the Group's ultimate parent company, endeavours to advance sustainability by considering environmental, social and governance ("ESG") matters throughout the Firm's operations and businesses.

Through Morgan Stanley's three businesses, in partnership with the Global Sustainable Finance function, Morgan Stanley offers financial solutions and advisory services that create positive long-term benefits for clients and shareholders as well as the environment and global communities. The Morgan Stanley Institute for Sustainable Investing's advisory board helps to ensure the Morgan Stanley Group's sustainability strategy is comprehensive, rigorous and innovative.

ESG initiatives are overseen by the Morgan Stanley Group Nominating and Governance Committee and reported to the Board. These ESG initiatives include:

Institute for Sustainable Investing

Established in 2013, the Institute focuses on the adoption of sustainable investing. Chaired by Morgan Stanley's CEO, an Advisory Board of prominent leaders from business, academia and leading non-governmental organisations guide the Institute's work and strategic priorities. The Institute partners with business units across the Morgan Stanley Group to create scalable sustainable financing solutions, new sustainable investing tools and industry-leading insights.

In 2018, the Morgan Stanley Sustainable Investing Fellowship was expanded to the London office, with the goal of developing the next generation of sustainable investing leaders. The Institute also continued to publish content focused on the integration of ESG into investment decisions, including a paper entitled *Weathering the Storm: Integrating Climate Resilience into Real Assets Investing*, which provides investors with a framework for understanding climate risk in the investment lifecycle.

Institutional Securities

Morgan Stanley is committed to harnessing the power of capital markets to create sustainable, long-term value for clients and stakeholders.

In 2018, Morgan Stanley announced a public commitment to mobilise \$250 billion to support low-carbon solutions by 2030, and deployed \$29 billion in the first year. The Global Capital Markets Group acted as dealer pricing a \$500 million three-year Sustainable Development Goals ("SDG") bond focused on Clean Water and Sanitation ("SDG 6") and Life Below Water ("SDG 14") for the World Bank.

Morgan Stanley Sustainability Research also published thematic client-facing research reports on plastic, data privacy and governance.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (CONTINUED)

Environmental and Social Risk Management

Environmental and social risk management is a priority for Morgan Stanley. Its due diligence and risk management processes are designed to identify, analyse and address potentially significant environmental and social issues that may confront the Morgan Stanley Group or its clients. Morgan Stanley's processes include monitoring for emerging environmental and social risks and related trends, as well as engaging with clients and other stakeholders as appropriate. In 2018, Morgan Stanley participated in a roundtable with environmental Non-Governmental Organisations ("NGOs") to discuss how financial institutions are addressing climate change.

Corporate Sustainability

Morgan Stanley is committed to responsible corporate citizenship, and views strong sustainability performance as a means to reduce risk and enhance value for key stakeholders. In 2017, Morgan Stanley announced a five-year carbon neutrality goal, committing to source 100% of the Firm's global energy needs from renewable energy by 2022, and in 2018 created a Corporate Services Global Sustainability Council to execute on the Morgan Stanley Group's operational sustainability strategy, which focuses on resource efficiency, renewable energy and identifying innovative ways to shrink the environmental impacts of operations globally.

Morgan Stanley also developed a Supplier Code of Conduct which outlines Morgan Stanley's expectations and requirements for vendors on sustainability and human rights issues. Morgan Stanley is committed to providing its clients, investors and other stakeholders with useful, relevant information on climate change. Since 2006, the Morgan Stanley Group has disclosed detailed information on its approach to climate change and greenhouse gas inventory annually through the Carbon Disclosure Project ("CDP").

ANTI-CORRUPTION AND ANTI-BRIBERY

The Group, principally through Morgan Stanley Group's Legal and Compliance Division, has established and implemented policies, procedures, and internal controls reasonably designed to comply with applicable anti-corruption laws and regulations in the jurisdictions in which it operates.

Morgan Stanley Group's Global Anti-Corruption Policy, which is updated annually and approved by the Group's Audit Committee, addresses corruption risks and prohibits offering, promising, giving or authorising others to give anything of value, either directly or indirectly, to any party, to improperly obtain or retain business or gain an improper business advantage. It also prohibits receiving, or agreeing to receive, anything of value that results or may result in the improper performance of employees' duties at Morgan Stanley. These values are embedded within the Morgan Stanley Group's Code of Conduct, to which employees must attest their understanding of, and adherence to, on an annual basis.

The Global Anti-Corruption Policy sets forth rules and procedures designed to address corruption risk, including:

- Governance and oversight responsibilities;
- Pre-clearance, due diligence and monitoring requirements for engaging with certain third parties who will act on behalf of Morgan Stanley;
- Pre-approval requirements for certain meals, entertainment, gifts and charitable contributions;
- Transactional due diligence requirements;
- Pre-clearance, in certain circumstances, of candidates for employment;
- Prohibition on facilitation payments; and
- Maintenance of accurate books and records.

An annual risk assessment is performed to consider key areas of potential corruption risk to the Morgan Stanley Group, including business conducted in jurisdictions and industries deemed higher risk from a corruption perspective, the use of third party introducers and intermediaries, and the provision of gifts and entertainment.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

ANTI-CORRUPTION AND ANTI-BRIBERY (CONTINUED)

Anti-corruption training is provided to all staff globally on an annual basis via a mandatory financial crimes training module, and targeted training is additionally conducted to particular business units or on specific topics as necessary, such as where a particular risk is identified through the risk assessment.

The Group maintains whistleblowing policies and procedures to ensure that individuals can confidentially report concerns when these arise. Management information regarding the Group's anti-corruption program is reported to appropriate senior management personnel through Legal and Compliance Division governance frameworks.

GIVING BACK TO THE COMMUNITY

Morgan Stanley is committed to giving back to the communities in which it operates through a range of philanthropic programs. The impact of these philanthropic initiatives includes:

Volunteering

Global Volunteer Month is Morgan Stanley Group's annual global initiative focused on encouraging all employees to give their time to local communities. Through Global Volunteer Month and other campaigns, in 2018, employees logged over 488,000 volunteer hours for charities around the world.

In EMEA, over 95% of employees participated in volunteering service in 2018, with employees taking part in hundreds of activities, from packing nutritious food for children, to restoring parks, cleaning waterfronts, mentoring students, and hosting fitness activities for children.

Morgan Stanley Group's largest *pro bono* initiative is the Strategy Challenge, a program where selected top-performing employees embark on an eight-week consulting project with charity partners, resulting in the delivery of a fully implementable strategic plan to enable the charities to achieve their goals. Since inception in London in 2014, employees have contributed more than 17,300 service hours, valued at over \$2.5 million, to 24 charities in the UK. In 2018, five charities benefitted from the program. The winning team, working with children's charity Power2, developed an ambitious strategy to create a step-change in how the charity identifies, develops and retains relationships with school delivery partners as part of their Teens and Toddlers program.

Giving

Morgan Stanley and employee philanthropic giving continues to rise. In 2018, over 29,000 employees donated over \$38 million to charities globally.

In EMEA, employees nominate a charity partner, raising funds over a one or two year period, supported by the Morgan Stanley International Foundation (the "Foundation").

In London, since February 2017, employees nominated the children's charity, NSPCC as their charity partner. Employees and the foundation raised over \$1.8 million to help create the UK's first Child House, now renamed The Lighthouse, which officially opened on 5 December 2018. Funding has enabled the Morgan Stanley Therapeutic Suite at The Lighthouse, providing life changing and crucial therapy to victims of abuse, ensuring they get the specialist support they need to rebuild their lives.

In Glasgow, since March 2017, employees nominated Marie Curie as their local charity partner. Employees and the Foundation have raised over \$260,000 to help create the first full time Child Bereavement Helpline service in Scotland.

In 2019, UK employees and the Foundation have set out to raise over \$1.25 million over the next two years. In February 2019, London employees nominated Teenage Cancer Trust as their new charity partner and later in 2019 Glasgow employees will nominate their new charity partner.

Other employee-nominated charity partners across EMEA were; Bator Tabor in Budapest, Hilfe für krebskranke Kinder Frankfurt e.V in Frankfurt, L'Envol in Paris, Fundacion Aladina in Milan and Association CAF Onlus in Madrid. These charities all work to support a range of children's causes.

MORGAN STANLEY & CO. INTERNATIONAL plc

STRATEGIC REPORT

GIVING BACK TO THE COMMUNITY (CONTINUED)

Community Impact

For more than 50 years, the Morgan Stanley Foundation has supported healthy starts and solid educations for the children in our communities, and has continued to expand the reach of those initiatives globally for the past 20 years through the Morgan Stanley International Foundation.

Healthy London is part of a Morgan Stanley Global Programme – Healthy Cities. The program is designed to bring together local charities to offer parents better access to wellness, nutrition and play resources for children to get a healthy start in life. The program provides funding to five local charities in Poplar, Tower Hamlets.

2018 was the fourth year of the Healthy London program. To date over 52,000 meals have been delivered. Children and parents have received health care advice, attended exercise and wellbeing workshops. Three new safe places have been created and play specialists have led over 5,700 hours of play for local children. Employees have also engaged in the program and logged over 5,200 volunteer hours.

Due to the success of the program, Healthy Glasgow was launched in November 2017, focusing on the Sighthill Estate in the northeast of Glasgow. One year on, over 30,000 meals have been delivered and play specialists have led over 3,500 hours of play for children.

GOING CONCERN

Business risks associated with the uncertain market and economic conditions are being actively monitored and managed by the Group. Retaining sufficient capital and liquidity to withstand these market pressures remains central to the Group's strategy. In particular, the Group's capital and liquidity is deemed sufficient to exceed regulatory minimums under both a normal and in a stressed market environment, including potential Brexit stresses, for the foreseeable future. The specific impact of Brexit on the business of the Group has also been considered as part of the going concern analysis. Additionally, the Group has access to further Morgan Stanley Group capital and liquidity as required.

Taking all of these factors into consideration, the Directors believe it is reasonable to assume that the Group will have access to adequate resources to continue in operational existence for the foreseeable future. Accordingly they continue to adopt the going concern basis in preparing the annual reports and financial statements.

Approved by the Board and signed on its behalf by



Director
18 April 2019

MORGAN STANLEY & CO. INTERNATIONAL plc

DIRECTORS' REPORT

The Directors present their report and consolidated financial statements of Morgan Stanley & Co. International plc (the “Company”) and all of its subsidiary undertakings (together “the Group”), which comprise the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity, consolidated statement of financial position, consolidated statement of cash flows and the related notes 1 to 37, together with the Company’s statement of comprehensive income, statement of changes in equity, statement of financial position and related notes 1 to 31 and the appendix to the financial statements for the year ended 31 December 2018.

RESULTS AND DIVIDENDS

The Group’s profit for the year, after tax, was \$697 million (2017: \$864 million profit after tax).

The Company paid the following dividends during the year (see note 24):

- On 31 May 2018, the Directors approved a coupon payment on the AT1 capital instrument of \$119 million (2017: \$119 million).
- On 4 July 2018, the Company paid a dividend in specie of \$1 (2017: \$nil) to MSIUK, transferring its equity interest in Morgan Stanley Investment Management (Ireland) Limited.
- On 1 November 2018, the Company paid a dividend in specie of \$442 million (2017: \$nil) to MSIUK, transferring its equity interest in Morgan Stanley France Holdings I S.A.S.

REGULATION, RISK MANAGEMENT, BRANCHES AND FUTURE DEVELOPMENTS

Information regarding regulation, risk management, branches and future developments has been included in the Strategic report.

EMPLOYEES

Information on employee matters has been included in the Strategic Report on pages 34 to 35.

PILLAR 3 DISCLOSURES

The regulatory disclosures made in order to comply with the EU Directives and Regulation implementing the Basel capital framework (“the Pillar 3 disclosures”) are available on the Morgan Stanley website (see note 28 of the Company’s financial statements for further details).

CAPITAL REQUIREMENTS COUNTRY-BY-COUNTRY REPORTING

The disclosures made in order to comply with the Capital Requirements (Country-by-Country Reporting) Regulations 2018 will be made available on the Morgan Stanley website (see note 28 of the Company’s financial statements for further details).

MORGAN STANLEY & CO. INTERNATIONAL plc

DIRECTORS' REPORT

DIRECTORS

The following Directors held office throughout the year and to the date of approval of this report (except where otherwise shown):

| | |
|----------------|--|
| S Ball | (appointed 28 February 2019) |
| J Bloomer | (appointed Chairman from 31 March 2018) |
| D O Cannon | |
| C Castello | (resigned 31 January 2019) |
| T Duhon | |
| L Guy | |
| J Horder | |
| A Kohli | |
| K Lazaroo | (appointed 22 February 2019) |
| M C Phibbs | |
| I Plenderleith | (Chairman until resigned on 31 March 2018) |
| R P Rooney | (resigned 5 September 2018) |
| D A Russell | |
| N P Whyte | (appointed 14 May 2018) |
| C Woodman | (appointed 5 September 2018) |

DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

Directors' and Officers' Liability Insurance is taken out by Morgan Stanley, for the benefit of the Directors and Officers of the Group.

DIRECTORS' INDEMNITY

Qualifying third party indemnity provisions (as defined in section 234 of the Companies Act 2006) were in force during the year and up to and including the date of the Directors' report for the benefit of the Directors of the Group.

AUDIT COMMITTEE

MSI, the Company's ultimate UK parent undertaking, has an Audit Committee which assists the Boards of MSI, the Company, other MSI regulated subsidiary undertakings and certain other Morgan Stanley Group undertakings in meeting their responsibilities in ensuring an effective system of internal control and compliance, and in meeting their external financial reporting obligations. For details on the Risk governance framework, refer to pages 12 to 15 of the Strategic Report.

EMPLOYEE REMUNERATION

The Group employs staff directly, in addition to utilising staff employed by other Morgan Stanley Group undertakings. The Group's policies are comparable and consistent with those of the Morgan Stanley Group, which include the deferral of significant portions of certain key employees' discretionary compensation. Notes 7 and 34 to the consolidated financial statements provides additional information and disclosure regarding the Group's compensation policies.

CHARITABLE CONTRIBUTIONS

During the year the Group made donations to various charities totaling \$3.0 million (2017: \$2.1 million), of which \$2.7 million (2017: \$1.5 million) was donated to the Foundation.

EVENTS AFTER THE REPORTING DATE

On 1 March 2019, in relation to the Group's Brexit planning, the Company paid a dividend in specie of \$531 million (2017: \$nil) to MSIUK, transferring its equity interests in Morgan Stanley Europe SE and Morgan Stanley Europe Holding SE.

MORGAN STANLEY & CO. INTERNATIONAL plc

DIRECTORS' REPORT

AUDITOR

Deloitte LLP have expressed their willingness to continue in office as auditor of the Group and a resolution to re-appoint them will be proposed at the forthcoming annual general meeting.

Statement as to disclosure of information to the auditor

Each of the persons who are Directors of the Company at the date when this report is approved confirms that:

- so far as each of the Directors is aware, there is no relevant audit information (being information needed by the Group's auditor in connection with preparing their report) of which the Group's auditor is unaware; and
- each of the Directors has taken all the steps that he/she ought to have taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Group's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Approved by the Board and signed on its behalf by



K Lazaroo

Director

18 April 2019

MORGAN STANLEY & CO. INTERNATIONAL plc

DIRECTORS' REPORT

DIRECTORS' RESPONSIBILITIES STATEMENT

The Directors are responsible for preparing the annual report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Group financial statements in accordance with International Financial Reporting Standards ("IFRSs") as adopted by the EU and Article 4 of the International Accounting Standards ("IAS") Regulation and have elected to prepare the parent company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 "Reduced Disclosure Framework" ("FRS 101"). Under company law the Directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Group and of the profit or loss of the Group for that period.

In preparing the Group financial statements, the Directors are required by IAS 1 '*Presentation of financial statements*' ("IAS 1") to:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Group's ability to continue as a going concern.

In preparing the parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK accounting standards have been followed; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's transactions and disclose with reasonable accuracy at any time the financial position of the Group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Directors, the names of whom are set out on page 41, confirm to the best of their knowledge:

- in accordance with rule 4.1.12(3)(a) of the FCA's Disclosure and Transparency Rules, the consolidated financial statements, which have been prepared in accordance with IFRSs as issued by the International Accounting Standards Board ("IASB") and as endorsed by the EU, have been prepared in accordance with the applicable set of accounting standards and give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and the undertakings included in the consolidation taken as a whole; and
- the management report represented by the Strategic report has been prepared in accordance with rule 4.1.12(3)(b) of the FCA's Disclosure and Transparency Rules, and includes a fair review of the development and performance of the business and the position of the Group and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that the Group faces.

Approved by the Board and signed on its behalf by



Director, 18 April 2019

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

In our opinion:

- the financial statements of Morgan Stanley & Co. International plc (the “parent company”) and its subsidiaries (the “Group”) give a true and fair view of the state of the Group’s and the parent company’s affairs as at 31 December 2018 and of the Group’s profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (“IFRSs”) as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard (“FRS”) 101 “Reduced Disclosure Framework”; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards to the Group financial statements, Article 4 of the International Accounting Standards (“IAS”) Regulation.

We have audited the financial statements which comprise:

| Group | Parent company |
|--|--|
| <ul style="list-style-type: none">• Consolidated income statement for the year ended 31 December 2018;• Consolidated statement of comprehensive income for the year then ended;• Consolidated statement of changes in equity for the year then ended;• Consolidated statement of financial position as at 31 December 2018;• Consolidated statement of cash flows for the year then ended;• Relevant notes 1 to 37 to the consolidated financial statements; and• Information identified as “audited” in the Risk Management section of the Strategic Report on pages 9 to 26. | <ul style="list-style-type: none">• Statement of comprehensive income for the year ended 31 December 2018;• Statement of changes in equity for the year then ended;• Statement of financial position as at 31 December 2018; and• Relevant notes 1 to 31 to the financial statements. |

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and IFRSs as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 “Reduced Disclosure Framework” (United Kingdom Generally Accepted Accounting Practice).

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the "FRC's") Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Summary of our audit approach

| | |
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| Key audit matters | <p>The key audit matters that we identified in the current year were:</p> <ul style="list-style-type: none"> • Valuation of Level 3 financial instruments; • The completeness and accuracy of intercompany transactions; and • The appropriateness of provisions for uncertain tax positions. |
| Materiality | <p>The materiality that we used for the Group financial statements in the current year was \$100 million, which was determined on the basis of 0.5% of Total Equity.</p> |
| Scoping | <p>The planning and scoping of our audit considers the Group's business, organisational structure and global operating model. This model comprises a common control structure for key business processes and internal controls over financial reporting.</p> <p>Based on this global operating model, our audit scope is globally integrated with various audit testing procedures performed by our component auditor, Deloitte & Touche LLP, US, the lead auditor of the ultimate parent company, Morgan Stanley.</p> |
| Significant changes in our approach | <p>We determined our materiality to be 0.5% of Total Equity for 2018 which represented a change from 2017 where we applied 1.5% of Total equity. There was no significant change in our approach or procedures performed as a result of this change in materiality,</p> |

Conclusions relating to going concern

Work performed

We considered Brexit as part of our risk assessment and its impact on the nature of the Group, its business model and related risks, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the directors' assessment of the group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the directors' plans for future actions in the event that the Group is unable to rely on EU passporting rights to provide services.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

Conclusions

We are required by ISAs (UK) to report in respect of the following matters where:

- the directors' use of the going concern basis of accounting in preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's or the parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of these matters.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

| Valuation of Level 3 financial instruments | |
|--|--|
| Relevant references in the financial statements | <p>Group financial statements:</p> <ul style="list-style-type: none"> • Note 2 – Basis of Preparation – Critical judgements and key sources of estimation uncertainty • Note 3 – Summary of significant accounting policies <ul style="list-style-type: none"> • (d) Fair value • Note 32 – Assets and liabilities measured at fair value – (a) (c) (d) (e) (f) <p>Parent company financial statements:</p> <ul style="list-style-type: none"> • Note 26 – Assets and liabilities measured at fair value – (a) (c) (d) (e) (f) |
| Key audit matter description | <p>The Group's trading and financing activities will at times result in the Group carrying material financial asset and liability positions having limited price transparency. These financial instruments generally include derivative, security or lending positions spanning a broad array of product types. Under IFRS 13 <i>Fair Value Measurement</i>, these financial instruments are generally classified as Level 3 financial assets or liabilities.</p> <p>Unlike other financial instruments whose values or inputs are readily observable and therefore more easily independently corroborated, the valuation of financial instruments classified as Level 3 are inherently subjective, and often involve the use of proprietary valuation models whose underlying algorithms and valuation methodologies are complex. This degree of subjectivity may also give rise to potential fraud through management intentionally manipulating fair values or incorporating management bias in determining fair values. Auditing the Group's valuation of Level 3 financial instruments is therefore subjective and presents certain challenges in evaluating the appropriateness of the Group's valuation judgements and estimates.</p> |

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

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| | <p>Significant judgements made by the Group include the derivation of key model inputs which are not observable in the marketplace and the underlying valuation methodologies used by the pricing model to determine an appropriate fair value. Evaluating these judgements is subjective and complex, and requires the auditor to possess certain skills and expertise to effectively challenge the significant judgements made by management when pricing such instruments.</p> <p>As at 31 December 2018, the Group's total financial assets and liabilities measured at fair value were \$349.8 billion and \$256.2 billion, respectively, of which Level 3 financial assets and liabilities were \$4.1 billion and \$3.7 billion, respectively.</p> |
| <p>How the scope of our audit responded to the key audit matter</p> | <p>To address the complexities associated with auditing the value of Level 3 financial instruments, our team included valuation specialists having significant quantitative and modelling expertise to assist in performing our audit procedures. Our valuation audit procedures included the following control and substantive procedures:</p> <ul style="list-style-type: none"> • We tested the design and operating effectiveness of Morgan Stanley's valuation controls including the: <ul style="list-style-type: none"> - Model Risk Management control, which is designed to review a model's theoretical soundness and the appropriateness of its valuation methodology and calibration techniques developed by the business units. - Price Verification control, which is designed to review the appropriateness of valuation methodologies to derive model inputs which are not observable and determine whether such methodologies are consistent with how a market participant would arrive at the unobservable input. • Our substantive test procedures included: <ul style="list-style-type: none"> - Evaluated management's valuation methodologies, including the input assumptions, against the expected assumptions of other market participants leveraging relevant external data. - Assessed the consistency by which Group management has applied significant and unobservable valuation assumptions. - Performed a retrospective assessment of management's valuation estimate by comparing such estimate against relevant subsequent transactions. - Developed independent valuation estimates, using externally sourced inputs and challenger models, and used such estimates to further evaluate management's fair value measurement by investigating the differences between our estimate and that of Morgan Stanley, including; comparing the fair value estimate with similar transactions; and, evaluating management's assumptions associated with the unobservable input. - Assessment of financial statement disclosures related to financial instruments measured at fair value, to include the aspects of this which provide information on the sensitivity of fair value measurements to key inputs and assumptions. |

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

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|-------------------------|---|
| Key observations | Based on our audit procedures performed, we concluded that the valuation of Level 3 financial instruments are not materially misstated. |
|-------------------------|---|

| The completeness and accuracy of intercompany transactions | |
|---|---|
| Relevant references in the financial statements | Group financial statements: <ul style="list-style-type: none"> Note 36 – Related party disclosures |
| Key audit matter description | <p>As part of its normal business operations, the Group transacts extensively with other legal entities within the Morgan Stanley Group. These transactions include bilateral trading transactions with other legal entities, funding arrangements entered into with other group entities and Morgan Stanley Group transfer pricing allocations where revenues and related costs are attributed to the business activities undertaken at a legal entity level.</p> <p>Given the large volume and nature of intercompany transactions which the Group is a party to, there is an inherent complexity in determining the completeness and accuracy of intercompany transactions impacting both the balance sheet and the income statement of the Group which may result in misstatements in the financial statements.</p> |
| How the scope of our audit responded to the key audit matter | <p>Our procedures over the completeness and accuracy of intercompany transactions included the following control and substantive procedures:</p> <ul style="list-style-type: none"> We assessed and tested the design and operating effectiveness of key controls over intercompany transactions. This included controls over the performance of intercompany reconciliations and the identification and subsequent investigation of intercompany breaks. Specifically for Morgan Stanley Group transfer pricing allocations, we tested the design and operating effectiveness of the initial set-up of the transfer pricing policies and for the determination of the calculations of transfer pricing entries at a legal entity level. For a sample of intercompany transactions, we independently re-performed the calculations of the related intercompany charge to assess whether they reflected the agreed contractual arrangements and they had been correctly recorded in the underlying accounting books and records. We assessed the adequacy of the disclosure in the Group financial statements. |
| Key observations | Based on our audit procedures performed, we concluded that the intercompany transactions are not materially misstated. |

INDEPENDENT AUDITOR’S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

| The appropriateness of provisions for uncertain tax positions | |
|--|--|
| Relevant references in the financial statements | <p>Group financial statements:</p> <ul style="list-style-type: none"> • Note 2 – Basis of preparation – Critical judgements and key sources of estimation uncertainty • Note 3 – Summary of significant accounting policies – (p) Provisions • Note 20 – Provisions – tax related provisions <p>Parent company financial statements:</p> <ul style="list-style-type: none"> • Note 1 – Basis of preparation - Critical judgements and key sources of estimation uncertainty • Note 15 – Provisions |
| Key audit matter description | <p>The Group operates in multiple tax jurisdictions and is subject to complex tax laws. These laws can be subject to changes in interpretation by the relevant governmental taxing authorities.</p> <p>Disputes over the interpretation of tax laws may be settled with the taxing authorities by mutual agreement or, in certain circumstances, following litigation.</p> <p>Management evaluate the likelihood of tax assessments arising in each taxing jurisdiction as a result of current examinations, prospective submissions and changing interpretation of tax laws. Where a provision is required in respect of an uncertain tax position, management make judgements on the applicability of the relevant tax law in order to determine the appropriate amount of the provision. Management then periodically review the need for and quantification of provisions held.</p> <p>Significant judgements are involved in the recognition and valuation of provisions for uncertain tax positions and related disclosures made by the Group. Evaluating these judgements is subjective and complex, and requires the auditor to possess certain skills and expertise to effectively challenge the significant judgements made by management.</p> |
| How the scope of our audit responded to the key audit matter | <p>Our procedures to assess the appropriateness and quantification of provisions for uncertain tax positions included the following control and substantive procedures:</p> <ul style="list-style-type: none"> • We assessed and tested the design and operating effectiveness of key controls over the identification and determination of the amounts of provisions for uncertain tax positions on initial recognition and subsequent re-measurement events. • With assistance from our tax specialists, we reviewed: <ul style="list-style-type: none"> - Management’s correspondence with Her Majesty’s Revenue and Customs (“HMRC”) and other tax authorities; - Advice received from the Group’s professional tax advisers, where obtained; and - Materials available from management regarding transactions and re-organisations undertaken in the current year in order to evaluate whether (i) relevant factors were included as assumptions in the determination of provisions made, and (ii) there were any other matters in respect of which a provision could be required. |

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

| | |
|-------------------------|--|
| | <ul style="list-style-type: none"> • With the assistance from our tax specialists, we performed an independent assessment of the assumptions used in determining the quantification of a sample of the Group's provisions for uncertain tax positions, in evaluating the reasonableness of the assumptions and the accuracy of the calculation made on the basis of those assumptions. • We assessed the adequacy of the disclosure in the Group financial statements. |
| Key observations | Based on the audit procedures performed, we concluded that the valuation of provisions for uncertain tax positions are not materially misstated. |

Our application of materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

| | Group financial statements | Parent company financial statements |
|--|---|--|
| Materiality | \$100 million (2017: \$275 million) | \$99 million (2017: \$273 million) |
| Basis for determining materiality | The Group materiality of \$100 million represents 0.5% (2017: 1.5%) of Total Equity | The parent company materiality of \$99 million represents 0.5% (2017: 1.5%) of Total Equity |
| Rationale for the benchmark applied | <p>We have considered Total Equity to be the most appropriate benchmark as the Group is wholly owned by the ultimate parent entity Morgan Stanley and is a regulated entity where its capital position is of importance to the key users of the financial statements. These key users include regulators, external rating agencies and the ultimate parent entity.</p> <p>We reassess the appropriateness of the materiality basis and benchmark used on an ongoing basis.</p> <p>As a result, we have revised the benchmark percentage used for the determination of materiality from 1.5% in the prior year to 0.5% of Total Equity for the current year.</p> | We considered it appropriate to maintain the same benchmark as that for the Group as the parent company is the most significant member of the Group and its solo capital position is of importance to the key users of the financial statements who are common with those for the Group. |

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of \$5 million (2017: \$5.5 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

An overview of the scope of our audit

Morgan Stanley is a globally managed business with a global operating model in which major classes of transactions are subject to a common control processing environment irrespective of product, region or legal entity. Given this global operating model for the Group, we audit certain controls, financial reporting processes and balances utilising component auditors in New York.

We instructed our component auditor, Deloitte & Touche LLP, US to perform their audit procedures at a materiality level of \$85 million (2017: \$234 million) being 85% of our Group materiality.

Involvement with component auditor

We exercised oversight over the work of our component auditor by remaining in active dialogue at regular intervals throughout the duration of the audit. We attended the audit planning meetings in New York, involved our component auditor in our team briefing and issued a set of instructions setting out the audit work and the specified audit procedures we requested them to undertake. We undertook visits to our component auditor during the interim and final stages of our audit to discuss key findings arising from their work and to review their audit work papers. We also formally received audit clearance documentation confirming that they had performed the audit and the specified audit procedures in accordance with our instructions.

Audit procedures undertaken at the Group level

We designed our audit approach for the Group based on our understanding of the business undertaken by the Group and our independent assessment of the risks of material misstatement arising in the financial statements. These procedures included, amongst others, auditing the consolidation of the Group's results and the preparation of the financial statements as well as testing the design, implementation and operating effectiveness of the internal controls over financial reporting.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information, except to the extent otherwise explicitly stated in our report, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

Responsibilities of the directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, our procedures included the following:

- enquiring of management, internal audit, in-house legal counsel and the audit committee, including obtaining and reviewing supporting documentation, concerning the Group's policies and procedures relating to:
 - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
 - the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations;
- discussing among the engagement team including the significant component audit team and involving relevant internal specialists, including valuation specialists, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. As part of this discussion we identified potential for fraud in the area of valuation of Level 3 financial instruments due to the subjectivity of assumptions used in determining their fair value; and
- obtaining an understanding of the legal and regulatory framework that the Group operates in, focusing on those laws and regulations that had a direct effect on the financial statements or that had a fundamental effect on the operations of the Group. The key laws and regulations we considered in this context included the UK Companies Act 2006, the rules of the Prudential Regulation Authority ("PRA") and the Financial Conduct Authority ("FCA"), and the relevant tax legislations. In addition, compliance with terms of the Group's regulatory liquidity and capital requirements were fundamental to the Group's ability to continue as a going concern.

Audit response to risks identified

As a result of performing the above, we identified 'valuation of Level 3 financial instruments' as a key audit matter. The key audit matters section of our report explains the matter in more detail and also describes the specific procedures we performed in response to that key audit matter.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

In addition to the above, our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with relevant laws and regulations discussed above;
- enquiring of management, the audit committee and in-house and external legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with HMRC and other regulatory authorities including the PRA and the FCA; and
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit team, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of an audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and of the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

Matters on which we are required to report by exception

Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made.

We have nothing to report in respect of this matter.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF MORGAN STANLEY & CO. INTERNATIONAL plc

Other matters

Auditor tenure

Following the recommendation of the Audit Committee of the Group, we were appointed by the Board of Directors on 17 November 1997 to audit the financial statements for the year ended 31 December 1997 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is 22 years, covering the years ended 30 November 1997 to 31 December 2018.

Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's 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 and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

A handwritten signature in black ink, appearing to be 'M Rana', is written over a horizontal line that extends across the width of the page.

Manbinder Rana, FCA (Senior Statutory Auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, United Kingdom

18 April 2019

MORGAN STANLEY & CO. INTERNATIONAL plc**CONSOLIDATED INCOME STATEMENT**
Year ended 31 December 2018

| | Note | 2018 \$millions | 2017 \$millions |
|--|-------------|----------------------------------|----------------------------------|
| Net trading income | | 4,825 | 4,934 |
| Net income from other financial instruments held at fair value | | 335 | (258) |
| Fee and commission income | 5 | 2,496 | 2,402 |
| Other revenue | | 35 | 31 |
| Interest income | 6 | 1,195 | 174 |
| Interest expense | 6 | (3,076) | (1,581) |
| Net interest expense | | (1,881) | (1,407) |
| Net revenues | | <u>5,810</u> | <u>5,702</u> |
| Net loss on investments in subsidiaries, associates and joint ventures | 15 | (66) | - |
| Operating expense | 7 | (4,681) | (4,425) |
| Net impairment (loss)/reversal on financial assets | 8 | (7) | 1 |
| PROFIT BEFORE TAX | | <u>1,056</u> | <u>1,278</u> |
| Income tax expense | 9 | (359) | (414) |
| PROFIT FOR THE YEAR | | <u>697</u> | <u>864</u> |
| Attributable to: | | | |
| Owners of the parent | | 696 | 864 |
| Non-controlling interest | | 1 | - |
| PROFIT FOR THE YEAR | | <u>697</u> | <u>864</u> |

All operations were continuing in the current and prior year.

The notes on pages 60 to 170 form an integral part of the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
Year ended 31 December 2018

| | Note | 2018 \$millions | 2017 \$millions |
|---|-------|--------------------|--------------------|
| PROFIT FOR THE YEAR | | 697 | 864 |
| OTHER COMPREHENSIVE INCOME, NET OF TAX | | | |
| Items that will not be reclassified subsequently to profit or loss: | | | |
| Remeasurement of net defined benefit liability | 9 | (1) | - |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | 9, 10 | 171 | (73) |
| Items that may be reclassified subsequently to profit or loss: | | | |
| Currency translation reserve: | | | |
| Foreign currency translation differences arising on foreign operations | | (58) | 111 |
| Net amount reclassified to consolidated income statement upon transfer of subsidiary | | 66 | - |
| Available-for-sale reserve: | | | |
| Net change in fair value of the available-for-sale financial assets | 9 | - | 68 |
| OTHER COMPREHENSIVE INCOME AFTER INCOME TAX FOR THE YEAR | | 178 | 106 |
| | | <hr/> | <hr/> |
| TOTAL COMPREHENSIVE INCOME FOR THE YEAR | | <u>875</u> | <u>970</u> |
| Attributable to: | | | |
| Owners of the parent | | 877 | 963 |
| Non-controlling interest | | (2) | 7 |
| TOTAL COMPREHENSIVE INCOME FOR THE YEAR | | <u>875</u> | <u>970</u> |

The notes on pages 60 to 170 form an integral part of the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2018

| | Note | Equity instruments \$millions | Share premium \$millions | Currency translation reserve \$millions | Available -for-sale reserve \$millions | Capital contribution reserve \$millions | Capital redemption reserve \$millions | Pension reserve \$millions | Debt valuation adjustment reserve \$millions | Retained earnings \$millions | Attributable to owners of the parent \$millions | Non-controlling interests \$millions | Total equity \$millions |
|---|------|----------------------------------|-----------------------------|--|---|--|--|-------------------------------|---|---------------------------------|--|---|----------------------------|
| Balance at 1 January 2017 | | 12,765 | 513 | (6) | (5) | 3 | 1,400 | - | (45) | 2,126 | 16,751 | 52 | 16,803 |
| Impact of change in accounting policy for fair value gains and losses on inception | 3 | - | - | - | - | - | - | - | - | 37 | 37 | - | 37 |
| Profit for the year | | - | - | - | - | - | - | - | - | 864 | 864 | - | 864 |
| Other comprehensive income for the period: | | | | | | | | | | | | | |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | 9 | - | - | - | - | - | - | - | (73) | - | (73) | - | (73) |
| Foreign currency translation differences arising on foreign operations | 9 | - | - | 104 | - | - | - | - | - | - | 104 | 7 | 111 |
| Net change in fair value on available-for-sale financial assets | 9 | - | - | - | 68 | - | - | - | - | - | 68 | - | 68 |
| Total comprehensive income/(loss) | | - | - | 104 | 68 | - | - | - | (73) | 864 | 963 | 7 | 970 |
| Transactions with owners: | | | | | | | | | | | | | |
| Issue of ordinary share capital | 23 | 1,000 | - | - | - | - | - | - | - | - | 1,000 | - | 1,000 |
| Dividends | 24 | - | - | - | - | - | - | - | - | (86) | (86) | - | (86) |
| Balance at 31 December 2017 | | 13,765 | 513 | 98 | 63 | 3 | 1,400 | - | (118) | 2,941 | 18,665 | 59 | 18,724 |
| Impact of adoption of new accounting standards | 4 | - | - | - | (63) | - | - | - | - | 67 | 4 | - | 4 |
| Profit for the year | | - | - | - | - | - | - | - | - | 696 | 696 | 1 | 697 |
| Other comprehensive income for the period: | | | | | | | | | | | | | |
| Remeasurement of defined benefit liability | 9 | - | - | - | - | - | - | (1) | - | - | (1) | - | (1) |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | 9 | - | - | - | - | - | - | - | 171 | - | 171 | - | 171 |
| Foreign currency translation differences arising during the year | 9 | - | - | (55) | - | - | - | - | - | - | (55) | (3) | (58) |
| Recycling of currency translation reserve upon disposal of subsidiary | 9 | - | - | 66 | - | - | - | - | - | - | 66 | - | 66 |
| Total comprehensive income/(loss) | | - | - | 11 | - | - | - | (1) | 171 | 696 | 877 | (2) | 875 |
| Transactions with owners: | | | | | | | | | | | | | |
| Issue of Additional Tier 1 capital | 23 | 2,200 | - | - | - | - | - | - | - | - | 2,200 | - | 2,200 |
| Dividends | 24 | - | - | - | - | - | - | - | - | (529) | (529) | - | (529) |
| Difference recognised in equity upon dividend in specie of MS France Group | 15 | - | - | - | - | - | - | - | - | (157) | (157) | - | (157) |
| Balance at 31 December 2018 | | 15,965 | 513 | 109 | - | 3 | 1,400 | (1) | 53 | 3,018 | 21,060 | 57 | 21,117 |

The notes on pages 60 to 170 form an integral part of the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

Registered number: 2068222

CONSOLIDATED STATEMENT OF FINANCIAL POSITION**As at 31 December 2018**

| | Note | 2018 \$millions | 2017 \$millions |
|---|------|--------------------|--------------------|
| ASSETS | | | |
| Cash and short term deposits | 25 | 30,829 | 25,461 |
| Trading financial assets (of which \$38,499 million (2017: \$58,785 million) were pledged to various parties) | 11 | 253,188 | 264,793 |
| Secured financing | | 95,643 | 99,345 |
| Loans and advances | 13 | 836 | 476 |
| Investment securities | | 132 | 161 |
| Trade and other receivables | 14 | 65,197 | 70,864 |
| Current tax assets | | 350 | 139 |
| Deferred tax assets | 21 | 5 | 107 |
| Property, plant and equipment | 17 | 10 | 8 |
| Other assets | | 9 | 8 |
| TOTAL ASSETS | | <u>446,199</u> | <u>461,362</u> |
| LIABILITIES AND EQUITY | | | |
| Bank loans and overdrafts | 25 | 4 | 123 |
| Trading financial liabilities | 11 | 217,093 | 217,977 |
| Secured borrowing | | 78,927 | 87,186 |
| Trade and other payables | 18 | 91,758 | 97,220 |
| Debt and other borrowings | 19 | 37,115 | 39,938 |
| Provisions | 20 | 3 | 54 |
| Current tax liabilities | | 55 | 28 |
| Deferred tax liabilities | 21 | 33 | - |
| Accruals and deferred income | | 87 | 144 |
| Post employment benefit obligations | 34 | 7 | 5 |
| TOTAL LIABILITIES | | <u>425,082</u> | <u>442,675</u> |
| EQUITY | | | |
| Share capital | 23 | 15,965 | 13,765 |
| Share premium account | 23 | 513 | 513 |
| Currency translation reserve | 23 | 109 | 98 |
| Available-for-sale reserve | 23 | - | 63 |
| Capital contribution reserve | 23 | 3 | 3 |
| Capital redemption reserve | 23 | 1,400 | 1,400 |
| Pension reserve | 23 | (1) | - |
| Debt valuation reserve | 23 | 53 | (118) |
| Retained earnings | | 3,018 | 2,904 |
| Equity attributable to the owners of the parent | | <u>21,060</u> | <u>18,628</u> |
| Non-controlling interests | | <u>57</u> | <u>59</u> |
| TOTAL EQUITY | | <u>21,117</u> | <u>18,687</u> |
| TOTAL LIABILITIES AND EQUITY | | <u>446,199</u> | <u>461,362</u> |

These consolidated financial statements were approved by the Board and authorised for issue on 18 April 2019.

Signed on behalf of the Board



K Lazaroo, Director

The notes on pages 60 to 170 form an integral part of the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

CONSOLIDATED STATEMENT OF CASH FLOWS
Year ended 31 December 2018

| | Note | 2018 \$millions | 2017 \$millions |
|--|------|----------------------|----------------------|
| NET CASH FLOWS FROM OPERATING ACTIVITIES | 25b | 1,986 | 3,436 |
| INVESTING ACTIVITIES | | | |
| Purchase of property, plant and equipment | 17 | (6) | (3) |
| Purchase of investment securities | | - | (65) |
| Proceeds from disposal of investment securities | | - | 1 |
| Changes in ownership interest in subsidiaries | 15 | (1,347) | - |
| NET CASH FLOWS USED IN INVESTING ACTIVITIES | | <u>(1,353)</u> | <u>(67)</u> |
| FINANCING ACTIVITIES | | | |
| Issue of ordinary share capital | 23 | - | 1,000 |
| Issue of Additional Tier 1 capital | 23 | 2,200 | - |
| Dividends paid | 24 | (119) | (119) |
| Issue of subordinated loan liabilities | | - | 5,000 |
| Repayments of subordinated loan liabilities | 19 | (2,000) | (5,906) |
| Issue of senior subordinated loan liabilities | 19 | 6,000 | - |
| Interest on subordinated loan liabilities | | (237) | (220) |
| Interest on senior subordinated loan liabilities | | (11) | - |
| NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES | | <u>5,833</u> | <u>(245)</u> |
| NET INCREASE IN CASH AND CASH EQUIVALENTS | | 6,466 | 3,124 |
| Currency translation differences on foreign currency cash balances | | (979) | 1,893 |
| CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR | 25a | <u>25,338</u> | <u>20,321</u> |
| CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR | 25a | <u><u>30,825</u></u> | <u><u>25,338</u></u> |

The notes on pages 60 to 170 form an integral part of the consolidated financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

1. CORPORATE INFORMATION

The Company is incorporated and domiciled in England and Wales, at the following address: 25 Cabot Square, Canary Wharf, London, E14 4QA.

The Group's immediate parent undertaking is MSIUK which is registered in England and Wales. Copies of its financial statements can be obtained from the Registrar of Companies for England and Wales, Companies House, Crown Way, Cardiff CF14 3UZ.

The Group's ultimate parent undertaking and controlling entity is Morgan Stanley which, together with the Group and Morgan Stanley's other subsidiary undertakings, form the Morgan Stanley Group. Morgan Stanley is incorporated in the State of Delaware, the United States of America. Copies of its financial statements can be obtained from www.morganstanley.com/investorrelations.

2. BASIS OF PREPARATION

Statement of compliance

The Group has prepared its annual consolidated financial statements in accordance with IFRSs issued by the IASB as adopted by the EU, Interpretations issued by the IFRS Interpretations Committee ("IFRIC") and the Companies Act 2006.

New standards and interpretations adopted during the year

The following standards, amendments to standards and interpretation relevant to the Group's operations were adopted during the year. Except where otherwise stated, these standards, amendments to standards and interpretations did not have a material impact on the Group's consolidated financial statements.

IFRS 9 was issued by the IASB in November 2009, reissued in October 2010, amended in November 2013, and revised and reissued by the IASB in July 2014. IFRS 9 is applicable retrospectively, except where otherwise prescribed by transitional provisions of the standard, and is effective for accounting periods beginning on or after 1 January 2018. The Group early adopted the requirements relating to the presentation of fair value movements due to changes in credit risk on financial liabilities designated at fair value through profit or loss ("FVPL"), and has adopted the remaining requirements of IFRS 9 from 1 January 2018.

The main aspects of IFRS 9 which impact the Group are its requirements relating to:

- Classification and measurement of financial assets

The classification and measurement of financial assets is determined based upon how these financial assets are managed and their contractual cash flow characteristics. Measurement will be either at amortised cost, fair value through other comprehensive income ("FVOCI") or FVPL.

- Impairment of financial instruments

The impairment requirements are based on expected credit losses ("ECL") and apply to financial assets measured at amortised cost and FVOCI, and lease receivables and certain loan commitments and financial guarantee contracts.

The Group has completed a project to implement IFRS 9. As part of this project, the Group performed an evaluation of its business models and a review of the contractual terms of financial assets.

As a result of this evaluation, certain financial assets have moved from amortised cost and designated at FVPL under IAS 39 '*Financial Instruments: Recognition and Measurement*' ("IAS 39") to mandatorily at FVPL under IFRS 9. Equity investments previously held as available-for-sale have moved to FVPL with a consequent transfer of the accumulated available-for-sale reserve to retained earnings. Additionally, certain financial liabilities have changed classification from amortised cost to being designated at FVPL as they are part of a group of financial assets and financial liabilities which are managed on a fair value basis. The impact of these changes on retained earnings as at 1 January 2018 was \$68 million, refer to note 4.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

2. BASIS OF PREPARATION (CONTINUED)

New standards and interpretations adopted during the year (continued)

For lending products and other debt financial instruments, a model-based approach has been adopted, the key aspects of which are:

- The impairment allowance is based on ECL associated with the lifetime cash shortfalls that will result if a default occurs in the twelve months after the reporting date (the ‘twelve month ECL’), unless there has been a significant increase in credit risk (“SICR”) since origination, in which case the ECL is based on all possible defaults over the total expected life of the instrument (the ‘lifetime ECL’);
- Identifying whether assets have experienced a SICR since origination. When determining whether credit risk has increased significantly since initial recognition, the Group considers both quantitative and qualitative information and analysis, based on the Group’s historical experience and expert credit risk assessment, including forward-looking information;
- Estimating ECL, reflecting an unbiased and the probability-weighted impact of multiple future economic scenarios. ECL are calculated using three main components: probability of default (“PD”), the expected loss given default (“LGD”) and an estimated exposure at default (“EAD”). These parameters are generally derived from internally-developed statistical models, combined with historical, current and forward-looking customer and macroeconomic data.

For trade receivables from contracts with customers and contract assets, a simplified approach has been adopted as permitted by IFRS 9, whereby an allowance is recognised for the lifetime ECL of the instrument. Practical expedients have been employed to calculate the ECL for trade receivables. For some portfolios of financial assets, ECL have been estimated to be close to zero, reflecting the short term nature of the portfolio and the benefit of collateral or other credit mitigants.

The impact of the implementation of the ECL impairment approach on retained earnings as at 1 January 2018 was not material to the Group.

The impact to the Company’s Tier 1 capital as at 1 January 2018 as a result of the transition to IFRS 9 was not material. The Group did not make use of the transitional arrangements introduced by Regulation (EU) 2017/2395 relating to the effects of ECL for mitigating the impact of the introduction of IFRS 9 on own funds and the treatment of certain large exposures.

Under the transitional provisions of the Standard, the Group’s opening balance sheet at the date of initial application (1 January 2018) has been restated, with no restatement of comparative periods. However, the Group has updated the presentation of its primary statements on transition to IFRS 9 to provide more relevant information to the users of the consolidated financial statements. The comparative period has been re-presented to align to the new format in the consolidated financial statements.

Note 3 provides the new accounting policies under IFRS 9 applicable from 1 January 2018.

To reflect the differences between IFRS 9 and IAS 39, IFRS 7 ‘*Financial Instruments: Disclosures*’ was updated by the IASB and the Group adopted the updated IFRS 7 for the year beginning 1 January 2018. The updated requirements include transition disclosures shown in note 4, in addition to qualitative and quantitative information about the ECL as set out in note 28.

An amendment to IFRS 2 ‘*Classification and Measurement of Share-based Payment Transactions*’ was issued by the IASB in June 2016, for application in accounting periods beginning on or after 1 January 2018. The amendment was endorsed by the EU in February 2018.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

2. BASIS OF PREPARATION (CONTINUED)

New standards and interpretations adopted during the year (continued)

IFRS 15 '*Revenue from Contracts with Customers*' ("IFRS 15") was issued by the IASB in May 2014 for retrospective application in accounting periods beginning on or after 1 January 2018. In addition, amendments relating to clarifications to IFRS 15 were issued by the IASB in April 2016 requiring application in accounting periods beginning on or after 1 January 2018. The standard and amendments were endorsed by the EU in October 2016. Refer to note 4 for further information.

As part of the 2014-2016 Annual Improvements Cycle published in December 2016, the IASB made amendments to IAS 28 '*Investments in Associates*' that are relevant to the Group's operations, for application in accounting periods beginning on or after 1 January 2018. The amendments were endorsed by the EU in February 2018.

IFRIC 22 '*Foreign Currency Transactions and Advance Consideration*' was issued by the IASB in December 2016 for application in accounting periods beginning on or after 1 January 2018 and was endorsed by the EU in April 2018.

There were no other standards, amendments to standards or interpretations relevant to the Group's operations which were adopted during the year.

New standards and interpretations not yet adopted

At the date of authorisation of these consolidated financial statements, the following standards, amendments to standards and interpretations relevant to the Group's operations were issued by the IASB but not mandatory for accounting periods beginning 1 January 2018. Except where otherwise stated, the Group does not expect that the adoption of the following standards, amendments to standards and interpretations will have a material impact on the Group's consolidated financial statements.

IFRS 16 '*Leases*' ("IFRS 16") was issued by the IASB in January 2016, for modified retrospective application in accounting periods beginning on or after 1 January 2019. The principal impact of adopting IFRS 16 is the recognition of additional right of use assets and lease liabilities for leases that were previously accounted for as operating leases under IAS 17 '*Leases*' ("IAS 17"). The consolidated income statement will also be affected because the total expense is typically higher in the earlier years of a lease and lower in later years, whereas under IAS 17, expense was recognised on a straight-line basis over the life of the lease. These impacts are not expected to be material to the Group. The standard was endorsed by the EU in November 2017.

An amendment to IAS 19 '*Plan Amendment, Curtailment or Settlement*' was issued by the IASB in February 2018, for retrospective application to plan amendments, curtailments or settlements occurring on or after 1 January 2019. The amendment was endorsed by the EU in March 2019.

As part of the 2015-2017 Annual Improvements Cycle published in December 2017, the IASB made amendments to the following standards that are relevant to the Group's operations: IAS 12 '*Income Taxes*' and IAS 23 '*Borrowing Costs*', for application in accounting periods beginning on or after 1 January 2019. The amendment to IAS 12 will affect the presentation of tax benefits relating to the coupon payments on the Additional Tier 1 capital instruments, which will be presented within the income tax expense in the consolidated income statement rather than in the consolidated statement of changes in equity. As such payments are tax deductible, this presentation will reduce the income tax expense presented in the consolidated statement in future periods. The amendments were endorsed by the EU in March 2019.

IFRIC 23 '*Uncertainty over Income Tax Treatments*' was issued by the IASB in June 2017 for application in accounting periods beginning on or after 1 January 2019. The interpretation was endorsed by the EU in October 2018.

Amendments to IAS 1 '*Presentation of Financial Statements*' and IAS 8 '*Accounting Policies, Changes in Accounting Estimates and Errors*' were issued by the IASB in October 2018, for application in accounting periods beginning on or after 1 January 2020.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

2. BASIS OF PREPARATION (CONTINUED)

Basis of measurement

The consolidated financial statements of the Group are prepared under the historical cost basis, except for certain financial instruments that have been measured at fair value as explained in the accounting policies below.

Critical accounting judgements and sources of estimation uncertainty

In preparing the consolidated financial statements, the Group makes judgements and estimates that affect the application of accounting policies and reported amounts.

Critical accounting judgements are key decisions made by management in the application of the Group's accounting policies, other than those involving estimations, which have the most significant effects on the amounts recognised in the financial statements. Critical accounting estimates represent assumptions and estimations made by management that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year.

The critical judgements in applying the Group's accounting policies are as follows:

- *Recognition and measurement of tax balances:* judgements are used in determining what tax-deductible losses are to be surrendered to other members of the Morgan Stanley UK tax group and whether there will be sufficient taxable profits in future years to recognise deferred tax assets. See accounting policy note 3(n) and note 21.
- *Consolidation of structured entities:* the Group determines whether it controls, and therefore should consolidate a structured entity upon its initial involvement and reassess on an ongoing basis for as long as it has any continuing involvement with the structured entity. See note 16.

The critical sources of estimation uncertainty are as follows:

- *Valuation of Level 3 financial instruments:* Valuation techniques used to measure the fair value of instruments categorised in Level 3 of the fair value hierarchy are dependent on unobservable parameters, and as such require the application of judgement, involving estimations and assumptions. The fair value for these financial instruments has been determined using parameters appropriate for the valuation methodology based on prevailing market evidence. It is recognised that the unobservable parameters could have a range of reasonable possible alternate values. See accounting policy note 3(d) and note 32 'Sensitivity of fair values to changing significant assumptions to reasonable possible alternatives'.
- *Measurement of property, litigation and taxation provisions:* Estimates are used in the calculation of provisions, which are calculated based on the net present value of expected future cash flows, although the Group recognises that it is inherently difficult to estimate the amount of the future losses in certain instances. See accounting policy note 3(p) and note 20.

The Group evaluates the critical accounting judgements and accounting estimates on an ongoing basis and believes that these are reasonable.

Change in accounting policy

During the year, the Group changed its accounting policy with respect to fair value gains and losses arising upon initial recognition of financial instruments which use unobservable market data. Previously the Group recognised such gains or losses deferred upon initial recognition when the unobservable market data became observable or on maturity or disposal of the instrument. Now the Group recognises such gains or losses deferred upon initial recognition over the life of the instrument or the earlier of when the unobservable market data become observable, maturity or disposal of the instrument.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

2. BASIS OF PREPARATION (CONTINUED)

Change in accounting policy (continued)

The Group believes that the new policy better reflects the time profile by which inputs driving the valuation of a financial instrument become observable and is more consistent with market practice and as such, provides more relevant information.

The impact of this voluntary change in accounting policy, which has been applied retrospectively, on the consolidated financial statements, is as follows:

| | 1 January 2017 and 1 January 2018 | 31 December 2018 | Cumulative Impact |
|--------------------------|---|---------------------|----------------------|
| | \$millions | \$millions | \$millions |
| Assets: | | | |
| Trading financial assets | 50 | 10 | 60 |
| Liabilities: | | | |
| Current tax liabilities | - | 4 | 4 |
| Deferred tax liabilities | 13 | (1) | 12 |
| Equity: | | | |
| Retained earnings | 37 | 7 | 44 |

Basis of consolidation

The consolidated financial statements of the Group comprise the financial statements of the Company and its subsidiaries as at 31 December 2018. 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 financial statements for the subsidiaries are prepared for the same reporting year as the Group, using consistent accounting policies. The financial statements of non-US dollar reporting currency subsidiaries are translated into US dollars as described in note 3(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 management 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 financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

2. BASIS OF PREPARATION (CONTINUED)

Basis of consolidation (continued)

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.

Details of the Group's interests in other entities are given in note 16 to these financial statements.

The going concern assumption

The Group's business activities, together with the factors likely to affect its future development, performance and position, and the Group's objectives, policies and processes for managing its capital; its financial risk management objectives; and its exposures to credit risk and liquidity risk, are reflected in the Strategic report on pages 3 to 39. The specific impact of Brexit on business of the Group has also been considered as part of the going concern analysis on page 39. In addition, the notes to the consolidated financial statements include the details of its financial instruments and additional detail, not included in the Strategic Report, on its credit risk and liquidity risk.

As set out in the Strategic report, retaining sufficient liquidity and capital to withstand market pressures remains central to the Morgan Stanley Group's and the Group's strategy.

Taking the above factors into consideration, the Directors believe it is reasonable to assume that the Group will have access to adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Functional currency

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

All currency amounts in the consolidated financial statements, Strategic report and Directors' report are rounded to the nearest million US dollars (unless otherwise stated).

b. 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. Until 31 December 2017, foreign exchange differences on available-for-sale financial assets were 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 were recognised through the consolidated income statement. Assets and liabilities of foreign operations are translated into US dollars using the closing rate method. Translation differences arising from the net investment(s) in the foreign operations are taken to the 'currency translation reserve'. As a result of the adoption of IFRS 9 the 'Available-for-sale reserve' was transferred to 'Retained earnings'.

The amount of change in the fair value of financial liabilities designated at FVPL that is attributable to changes in the credit risk of these liabilities ("DVA") includes foreign exchange differences thereon. 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 'Operating expense', except where noted in 3(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 gains/(losses) on investments in subsidiaries, associates and joint ventures'.

c. Financial instruments

i) Financial instruments mandatorily at fair value through profit and loss

Trading financial instruments (applicable both prior to and from 1 January 2018)

Trading financial instruments include government debt securities, corporate and other debt, traded loans, corporate equities where the Group acquires the financial asset or financial liability for the purpose of selling or repurchasing in the near term or is part of a portfolio for which there is evidence of short-term profit taking, and all derivative contracts.

Purchases and sales of non-derivative financial instruments classified as trading are initially recognised on settlement date at fair value, including regular way securities transactions. For purchases of non-derivative financial instruments classified as 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 'Trading financial instruments' with corresponding profit or loss recognised within the consolidated income statement in 'Net trading income'. 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 recorded on trade date at fair value (see note 3(d) below). All subsequent changes in fair value are reflected in the consolidated income statement in 'Net trading income'.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

i) Financial instruments mandatorily at fair value through profit and loss (continued)

Trading financial instruments (applicable both prior to and from 1 January 2018) (continued)

All changes in fair value, foreign exchange differences, interest and dividends are reflected in the consolidated income statement in 'Net trading income'. When interest is included as a component of an instrument's fair value, interest is also reflected in the income statement in 'Net trading income', otherwise, it is included within 'Interest income' or 'Interest expense'.

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial instrument. For all trading financial instruments, transaction costs are excluded from the initial fair value measurement of the financial instrument. These costs are recognised in the consolidated income statement in 'Operating expense'.

Non-trading financial assets at fair value through profit or loss

Non-trading financial assets at FVPL are principally financial assets where the Group makes decisions based upon the assets' fair values and are generally recognised on settlement date at fair value (see note 3(d) below), since they are neither regular way nor are they derivatives. From the date the terms are agreed (trade date), until the financial asset is funded (settlement date), the Group recognises any unrealised fair value changes in the financial asset as non-trading financial assets at FVPL. On settlement date, the fair value of consideration given is recognised as a non-trading financial asset at FVPL.

All subsequent changes in fair value, foreign exchange differences and unrealised interest are reflected in the consolidated income statement in 'Net income from other financial instruments held at fair value'. Realised interest is included within 'Interest income' or 'Interest expense'. All subsequent changes in fair value and foreign exchange differences are reflected in the consolidated income statement in 'Net income from other financial instruments held at fair value'. When interest is included as a component of an instrument's fair value, interest is also reflected in the consolidated income statement in 'Net income from other financial instruments held at fair value', otherwise it is included within 'Interest income' or 'Interest expense'.

For all non-trading financial assets at FVPL, transaction costs are excluded from the initial fair value measurement of the financial assets. These costs are recognised in the consolidated income statement in 'Operating expense'.

Non-trading financial assets at FVPL include secured financing transactions such as cash collateral on securities borrowed and securities purchased under agreements to resell, prepaid OTC contracts and financial assets arising upon consolidation of certain special purpose entities as well as certain investment securities (unlisted equities).

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

Applicable from 1 January 2018

The Group has designated certain financial instruments at FVPL when the designation at fair value eliminates or significantly reduces an accounting mismatch which would otherwise arise. The Group has also designated certain financial liabilities at FVPL where:

- the financial liability forms part of a group of financial assets or financial liabilities or both which are managed, evaluated and reported internally on a fair value basis; or
- the financial liability contains an embedded derivative that significantly modifies the cash flows that would otherwise be required under the contract.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

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

Applicable until 31 December 2017

The Group designated certain financial instruments at FVPL when:

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

Applicable until 31 December 2017 and from 1 January 2018

From the date the transaction in a financial instrument designated at FVPL is entered into (trade date) until settlement date, the Group recognises any unrealised fair value changes in the contract as financial instruments designated at FVPL in the consolidated statement of financial position. On settlement date, the fair value of consideration given or received is recognised as a financial instrument designated at FVPL (see note 3(d) below).

All subsequent changes in fair value, foreign exchange differences and dividends are reflected in the consolidated income statement in 'Net income from other financial instruments held at fair value' other than DVA on financial liabilities designated at FVPL which is recognised in the Debt valuation adjustment reserve where those changes do not create or enlarge an accounting mismatch. When interest is included as a component of an instrument's fair value, interest is also reflected in the consolidated income statement in 'Net income from other financial instruments held at fair value', otherwise it is included within 'Interest income' or 'Interest expense'. DVA presented within other comprehensive income is not subject to reclassification to the consolidated income statement, but is transferred to retained earnings when realised.

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

See note 10 for an analysis of financial assets and financial liabilities designated at FVPL.

iii) Available-for-sale financial assets

Applicable until 31 December 2017

Financial assets classified as available-for-sale included certain investment in unlisted equity securities.

Financial assets classified as available-for-sale were non-derivative financial assets that were either designated in this category, or not classified in any of the other categories applicable until 31 December 2017. Financial assets classified as available-for-sale were recorded on trade date and were initially recognised and subsequently measured at fair value (see note 3(d) below).

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

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

iv) Financial assets and financial liabilities at amortised cost

Applicable from 1 January 2018

Financial assets at amortised cost include cash and short-term deposits, certain trade and other receivables and certain loans and advances.

Financial assets are recognised at amortised cost when the Group's business model objective is to collect the contractual cash flows of the assets and where these cash flows are Solely Payments of Principal and Interest ("SPPI") on the principal amount outstanding until maturity. Such assets are recognised when the Group becomes a party to the contractual provisions of the instrument. The instruments are initially measured at fair value (see note 3(d) below) and subsequently measured at amortised cost less ECL allowance. Interest is recognised in the consolidated income statement in 'Interest income', using the EIR method as described below. Transaction costs that are directly attributable to the acquisition of the financial asset are added to the fair value on initial recognition. ECL and reversals thereof are recognised in the consolidated income statement in 'Net impairment (loss)/reversal on financial assets'.

Applicable until 31 December 2017

Financial assets classified as loans and receivables were recognised when the Group became a party to contractual provisions of the instrument. They were initially measured at fair value (see note 3(d) below) and subsequently measured at amortised cost less allowance for impairment. Interest was recognised in the consolidated income statement in 'Interest income', using the effective interest rate ("EIR") method as described below. Transaction costs that were directly attributable to the acquisition of the financial asset were added to the fair value on initial recognition. Impairment losses and reversals of impairment losses on financial assets classified as loans and receivables were recognised in the consolidated income statement in 'Operating expense'.

Financial assets classified as loans and receivables included cash and short-term deposits, cash collateral on securities borrowed, securities purchased under agreements to resell, trade receivables, loans and advances and other receivables.

Applicable until 31 December 2017 and from 1 January 2018

Financial liabilities classified at amortised cost include bank loans and overdrafts, certain secured borrowings, certain trade and other payables, and certain debt and other borrowings.

Financial liabilities are classified as being subsequently measured at amortised cost, except where they are held for trading or are designated as measured at FVPL. They are recognised when the Group becomes a party to the contractual provisions of the instrument and are initially measured at fair value (see note 3(d) below) and subsequently measured at amortised cost. Interest is recognised in the consolidated income statement in 'Interest expense' using the EIR method as described below. Transaction costs that are directly attributable to the issue of a financial liability are deducted from the fair value on initial recognition.

The EIR 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 EIR 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 EIR is established on initial recognition of the financial instrument. The calculation of the EIR includes all fees and commissions paid or received, transaction costs, and discounts or premiums that are an integral part of the EIR.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

v) Secured financing and secured borrowings

In the course of financing its business and 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.

Securities received by the Group under resale arrangements and securities borrowing arrangements are generally not recognised on the consolidated statement of financial position, and securities pledged or sold by the Group under sale and repurchase agreements and securities lending arrangements are generally not derecognised from the consolidated statement of financial position.

Applicable from 1 January 2018

Cash collateral balances receivable and accrued interest arising under resale agreements and cash collateralised securities borrowing arrangements are classified as 'Non-trading at FVPL' as they are managed on a fair value basis.

Where cash collateralised, cash collateral balances repayable and accrued interest arising under repurchase agreements and cash collateralised securities lending arrangements are designated at FVPL where the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed, evaluated and reported internally of a fair value basis; or at amortised cost if not so designated. The related securities, where owned by the Group, were included in 'Financial assets classified as held for trading'.

Applicable until 31 December 2017

Cash collateral balances receivable and accrued interest arising under resale agreements and cash collateralised securities borrowing arrangements were classified as 'Loans and receivables'.

Cash collateral balances repayable and accrued interest arising under repurchase agreements and cash collateralised securities lending arrangements were classified as 'Financial liabilities at amortised cost' and the related securities, where owned by the Group, were included in 'Financial assets classified as held for trading'.

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.

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, assumptions are set to reflect those that the Group believes market participants would use in pricing the asset or liability 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 risks 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 FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

Fair value measurement (continued)

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

The fair value hierarchy is broken down into three levels based on the observability of inputs as follows, with Level 1 being the highest and Level 3 being the lowest level:

- Level 1 - Quoted prices (unadjusted) in an active market for identical assets or liabilities
Valuations based on quoted prices in active markets that the Morgan Stanley Group has the ability to access for identical assets or liabilities. 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, 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 certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the total fair value amount is disclosed in the level appropriate for the lowest level input that is significant to the total fair value of the asset or liability.

The Group incorporates Funding Valuation Adjustment (“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, the 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 FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

Fair value measurement(continued)

For assets and liabilities that are transferred between levels in the fair value hierarchy during the period, fair values are ascribed as if the assets or liabilities had been transferred as of the beginning of the period.

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. The Group carries positions at the point within the bid-ask range that meets its 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, 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.

The Group applies credit-related valuation adjustments (“CVA”) to its Borrowings (primarily structured notes) which are designated at FVPL and to OTC derivatives. The Group considers the impact of changes in own credit spreads based upon observations of the secondary bond market spreads when measuring the fair value for Borrowings. For OTC derivatives, the impact of changes in both the Group’s and the counterparty’s credit rating 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, 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 its 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 may apply concentration adjustments 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.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

Valuation process

Valuation Control (“VC”) within the Financial Control Group (“FCG”) is responsible for the Group’s fair value valuation policies, processes and procedures. VC is independent of the business units and reports to the Chief Financial Officer of the Morgan Stanley Group (“CFO”), who has final authority over the valuation of the Group’s financial instruments. VC implements valuation control processes designed to validate the fair value of the Group’s financial instruments measured at fair value including those derived from pricing models.

- *Model Review.* VC, in conjunction with the Model Risk Management Department (“MRM”), which reports to the Chief Risk Officer of the Morgan Stanley Group (“CRO”), independently reviews valuation models’ theoretical soundness, the appropriateness of the valuation methodology and calibration techniques developed by the business units using observable inputs. Where inputs are not observable, VC reviews the appropriateness of the proposed valuation methodology to determine that it is consistent with how a market participant would arrive at the unobservable input. The valuation methodologies utilised in the absence of observable inputs may include extrapolation techniques and the use of comparable observable inputs. As part of the review, VC develops a methodology to independently verify the fair value generated by the business unit’s valuation models. The Group generally subjects valuations and models to a review process initially and on a periodic basis thereafter.
- *Independent Price Verification.* The business units are responsible for determining the fair value of financial instruments using approved valuation models and valuation methodologies. Generally on a monthly basis, VC independently validates the fair values of financial instruments determined using valuation models by determining the appropriateness of the inputs used by the business units and by testing compliance with the documented valuation methodologies approved in the model review process described above.

The results of this independent price verification and any adjustments made by VC to the fair value generated by the business units are presented to management of the MSI Group’s business segments (i.e. Institutional Securities and Investment Management), the CFO and the CRO on a regular basis.

VC uses recently executed transactions, other observable market data such as exchange data, broker/ dealer quotes, third-party pricing vendors and aggregation services for validating the fair values of financial instruments generated using valuation models. VC assesses the external sources and their valuation methodologies to determine if the external providers meet the minimum standards expected of a third-party pricing source. Pricing data provided by approved external sources are evaluated using a number of approaches; for example, by corroborating the external sources’ prices to executed trades, by analysing the methodology and assumptions used by the external source to generate a price and/ or by evaluating how active the third-party pricing source (or originating sources used by the third-party pricing source) is in the market. Based on this analysis, VC generates a ranking of the observable market data designed to ensure that the highest-ranked market data source is used to validate the business unit’s fair value of financial instruments.

VC reviews the models and valuation methodology used to price new material Level 2 and Level 3 transactions and both FCG and MRM must approve the fair value of the trade that is initially recognised.

- *Level 3 Transactions.* VC reviews the business unit’s valuation techniques to assess whether these are consistent with market participant assumptions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

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.

During the year, the Group voluntarily changed its accounting policy with respect to fair value gains and losses on inception. 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, but is deferred and recognised over the life of the instrument or at the earlier of when the unobservable market data become observable, maturity, or disposal of the instrument.

For further information, see notes 2 and 32.

Assets and liabilities measured at fair value on a non-recurring basis

Certain of the Group's assets and liabilities are measured at fair value on a non-recurring basis. The Group incurs losses or gains for any adjustments of these assets or liabilities to fair value.

For assets and liabilities measured at fair value on a non-recurring basis, fair value is determined by using various valuation approaches. The same hierarchy for inputs as described above, which requires that the observable inputs be used when available, is used in measuring fair value for these items.

e. Derecognition of financial assets and liabilities

Applicable until 31 December and from 1 January 2018

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.

If the asset has been transferred, and the Group neither transfers nor retains substantially all of the risks and rewards of the asset, then the Group determines whether it has retained control of the asset.

If the Group has retained control of the asset, it continues to recognise the financial asset to the extent of its continuing involvement in the financial asset. If the Group has not retained control of the asset, it derecognises the asset and separately recognises any rights or obligation created or retained in the transfer.

Upon derecognition of a financial asset, the difference between the previous carrying amount and the sum of any consideration received, together with the transfer of any cumulative gain/ loss previously recognised in equity, are recognised in the consolidated income statement within 'Net gains/ (losses) on derecognition of financial assets measured at amortised cost and FVOCI'.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments

Applicable from 1 January 2018

The Group recognises ECL for the following financial instruments that are not measured at FVPL:

- financial assets measured at amortised cost;
- loan commitments, except those that can be net settled in cash or with another financial instrument; and
- financial guarantees

Measurement of ECL

For financial assets, ECL are the present value of cash shortfalls (i.e. the difference between contractual and expected cash flows) over the expected life of the financial instrument, discounted at the asset's EIR.

Where a financial asset is credit-impaired at the reporting date, the ECL is measured as the difference between the asset's gross carrying amount and the present value of future cash flows, discounted at the original EIR.

For in-scope loan commitments, ECL are the present value of the cash shortfalls (i.e. the difference between contractual and expected cash flows), assuming that the loan will be drawn down.

For a financial guarantee contract, the ECL are the present value of the cash shortfalls based on the expected payments to reimburse the holder for a credit loss that it may incur when a debtor fails to make payment when due.

The Group applies a three-stage approach to measuring ECL based on the change in credit risk since initial recognition:

- Stage 1: if the credit risk of the financial instrument at the reporting date has not increased significantly since initial recognition, then the loss allowance is calculated as the lifetime cash shortfalls that will result if a default occurs in the next 12 months, weighted by the probability of that default occurring.
- Stage 2: if there has been a SICR since initial recognition, the loss allowance is calculated as the ECL over the remaining life of the financial instrument. If it is subsequently determined that there has no longer been a SICR since initial recognition, then the loss allowance reverts to reflecting 12 month expected losses.
- Stage 3: if there has been a SICR since initial recognition and the financial instrument is deemed credit-impaired (see below for definition of credit-impaired), the loss allowance is calculated as the ECL over the remaining life of the financial instrument. If it is subsequently determined that there has no longer been a SICR since initial recognition, then the loss allowance reverts to reflecting 12 month expected losses.

Notwithstanding the above, for trade receivables, a lifetime ECL is always calculated, without considering whether a SICR has occurred.

Assessment of SICR

When assessing SICR, the Company considers both quantitative and qualitative information and analysis based on the Group's historical experience and expert credit risk assessment, including forward-looking information.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Applicable from 1 January 2018(continued)

Assessment of SICR (continued)

The PD is derived from internal credit rating grades (based on available information about the borrower) and multiple forward-looking macroeconomic scenarios which are probability weighted. Credit risk is considered to have increased significantly if the PD has significantly increased at the reporting date relative to the PD of the facility, at the date of initial recognition. The assessment of whether a change in PD is “significant” is based both on a consideration of the relative change in PD and on qualitative indicators of the credit risk of the facility, which indicate whether a loan is performing or in difficulty. In addition, as a backstop, the Company considers that SICR has occurred in all cases when an asset is more than 30 days past due.

The Group’s accounting policy is to not use the ‘low’ credit risk practical expedient. As a result, the Group monitors all financial instruments subject to impairment for SICR. In general, ECL are measured so that they reflect:

- A probability-weighted range of possible outcomes;
- The time value of money; and
- Relevant information relating to past, current and future economic conditions.

Calculation of ECL

ECL is calculated using three main components:

- PD: for accounting purposes, the 12 month and lifetime PD represent the expected point-in-time probability of a default over the next 12 months and over the remaining lifetime of the financial instrument respectively, based on conditions existing at the balance sheet date and future economic conditions.
- LGD: the LGD represents expected loss conditional on default, taking into account the mitigating effect of collateral, including the expected value of the collateral when realised and the time value of money.
- EAD: this represents the expected EAD, taking into account the expected repayment of principal and interest from the balance sheet date to the default event together with any expected drawdowns of the facility over that period.

These parameters are generally derived from internally developed statistical models, incorporating historical, current and forward-looking macro-economic data and country risk expert judgement. The macro-economic scenarios are reviewed quarterly.

The 12 month ECL is equal to the sum over the next 12 months of quarterly PD multiplied by LGD and EAD, with such expected losses being discounted at the effective interest rate. Lifetime ECL is calculated using the discounted present value of total quarterly PDs multiplied by LGD and EAD, over the full remaining life of the facility.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Applicable from 1 January 2018(continued)

Calculation of ECL (continued)

When measuring ECL, the Group considers multiple scenarios, except where practical expedients are used to determine ECL. Practical expedients are used where they are consistent with the principles described above. ECL on certain trade receivables are calculated using a 'matrix' approach which reflects the previous history of credit losses on these financial assets, applying different provision levels based on the age of the receivable. Alternatively where there is a history of no credit losses, and where this is expected to persist into the future for structural or other reasons, such as collateral or other credit enhancement, it may be determined that the ECL for a financial instrument is *de minimis* (highly immaterial) and it may not be necessary to recognise the ECL.

The Group measures ECL on an individual asset basis and has no purchased or originated credit-impaired financial assets.

If a financial asset has been the subject of modification which does not lead to its derecognition, SICR is assessed by comparing the risk of default of the financial instrument, based on the modified terms at the reporting date, with the risk of default of the financial instrument at inception, based on the financial instrument's original, unmodified, terms.

Where the modification of contractual cash flows of a financial asset leads to its derecognition and the recognition of a new asset, the date of modification is treated as the date of initial recognition for the new financial asset when determining whether a SICR has occurred for that modified financial asset. In rare circumstances, after modification, the new asset is considered to be credit impaired, in which case it is treated as an asset which was credit-impaired at origination.

Presentation of ECL

ECL is recognised in the consolidated income statement within 'Net impairment (loss)/reversal on financial instruments'. ECL on financial assets measured at amortised cost, lease receivables and contract assets are presented as an ECL allowance. The allowance reduces the net carrying amount on the face of the consolidated statement of financial position. ECL on loan commitments and financial guarantee contracts are presented as a provision in the consolidated statement of financial position, i.e. as a liability.

Credit-impaired financial instruments

In assessing the impairment of financial instruments under the ECL model, the Group defines credit-impaired financial instruments in accordance with Credit Risk Management Department's policies and procedures. A financial instrument is credit-impaired when, based on current information and events, it is probable that the Group will be unable to collect all scheduled payments of principal or interest when due according to the contractual terms of the agreement.

Definition of default

In assessing the impairment of financial instruments under the ECL model, the Group defines default in accordance with Credit Risk Management Department's policies and procedures. This considers whether the borrower is unlikely to pay its credit obligations to the Group in full and takes into account qualitative indicators, such as breaches of covenants. The definition of default also includes a presumption that a financial asset which is more than 90 days past due has defaulted.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Applicable from 1 January 2018 (continued)

Write-offs

Loans and debt securities are written off (either partially or in full) when they are deemed uncollectible which generally occurs when all commercially-reasonable means of recovering the loan balance have been exhausted. Such determination is based on an indication that the borrower can no longer pay the obligation, or that the proceeds from collateral will not be sufficient to pay the loan. Partial write-offs are made when a portion of the loan is uncollectable. Financial assets that are written off could still be subject to enforcement activities for recoveries of amounts due. If the amount to be written off is greater than the accumulated loss allowance, the difference is reflected directly in the consolidated income statement within 'Net impairment loss/reversal on financial instruments' and is not recognised in the loss allowance account. Any subsequent recoveries are credited to 'Net impairment (loss)/reversal on financial instruments' within the consolidated income statement.

Applicable until 31 December 2017

At each reporting date, an assessment was made as to whether there was any objective evidence of impairment in the value of a financial asset classified as either available-for-sale, loans and receivables or investments in subsidiaries, associates and joint ventures. Impairment losses were recognised if an event had occurred which would have had an adverse impact on the expected future cash flows of an asset and the expected impact could be reliably estimated.

Impairment losses on available-for-sale financial assets were measured as the difference between cost (net of any principal repayment and amortisation) and the current fair value (see note 3(d)). Where there was evidence that the available-for-sale financial asset was impaired, the cumulative loss that had been previously recognised in other comprehensive income was reclassified from the 'Available-for-sale reserve' and recognised in the consolidated income statement.

Impairment losses on loans and receivables were 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 EIR. Such impairment losses were recognised in the consolidated income statement within 'Operating expense' and were recognised against the carrying amount of the impaired asset on the consolidated statement of financial position. Interest on the impaired asset continued to be accrued on the reduced carrying amount based on the original EIR of the asset.

Subsequent increases in the fair value of previously-impaired equity available-for-sale financial assets were 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 decreased because of an event occurring after the impairment was recognised, the previously recognised impairment loss was reversed as described for the relevant categories of financial asset in note 3(c)(iii) and (iv). Any reversal was limited to the extent that the value of the asset would not exceed the original amortised cost of the asset had no impairment occurred.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

g. Revenue recognition and contract assets and liabilities

Revenues are recognised when the promised goods or services are delivered to the Group's customers, in an amount that is based on the consideration the Group expects to receive in exchange for those goods or services when such amounts are not probable of significant reversal.

Investment banking

Revenue from investment banking activities consists of revenues earned from underwriting primarily equity and fixed income securities and advisory fees for mergers, acquisitions, restructuring and advisory assignments.

Underwriting revenues are generally recognised on trade date, if there is no uncertainty or contingency related to the amount to be paid. Underwriting costs are deferred and recognised when the related underwriting revenues are recorded.

Advisory fees are recognised as advice is provided to the client, based on the estimated progress of work and when the revenue is not probable of a significant reversal. Advisory expenses are recognised as incurred, including when reimbursed.

Fee and commission income

Fee and commission income results from transaction-based arrangements in which the client is charged a fee for the execution of transactions. Such revenues primarily arise from transactions in equity securities; services related to sales and trading activities; futures, insurance products and options. Fee and commission income is recognised on trade date when the performance obligation is satisfied.

Fee and commission income in the consolidated income statement includes investment management fees, sales commissions, placement fees, advisory fees and syndication fees.

Other items

Receivables from contracts with customers are recognised within 'Trade and other receivables' in the consolidated statement of financial position when the underlying performance obligations have been satisfied and the Group has the right per the contract to bill the customer. Contract assets are recognised when the Group has satisfied its performance obligations, however, customer payment is conditional, and are presented within 'Prepayments and accrued income'. Contract liabilities are recognised when the Group has collected payment from a customer based on the terms of the contract, but the underlying performance obligations are not yet satisfied, and are presented within 'Accruals and deferred income'.

Incremental costs to obtain the contract are expensed as incurred if the contract duration is one year or less. Revenues are not discounted when payment is expected within one year.

h. Fees and commission expense

Fees and commission expense in the consolidated income statement includes transaction and service fees. Amounts are recognised as the related services are received.

i. Property, plant and equipment

Property, plant and equipment are stated at cost net of depreciation and any provision for impairment in value (see note 3(l)), which are included within 'Operating expense' in the consolidated income statement.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

i. Property, plant and equipment (continued)

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 the 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 'Operating 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 | - 1 to 8 years |

j. Combination of businesses under common control

Business combinations involving entities under common control, where all combining entities are ultimately controlled by the same entity before and after the business combination, are accounted for using the predecessor values method of accounting. This involves recognising assets and liabilities of the acquired business at the predecessors' book value, without any change to reflect fair value of those assets and liabilities. Any difference between the cost of acquisition and the aggregate book value of the assets and liabilities as of the date of the transfer of the acquired entity is recorded as an adjustment to equity within 'Retained earnings'. No additional goodwill is created by the business combination.

Post-acquisition, income received and expenses incurred by the entity or entities acquired are included in the consolidated income statement.

A non-controlling interest is recognised by the Group in respect of any portion of the total assets less total liabilities of an acquired entity or entities that is not owned by the Group.

When subsidiaries are sold or transferred to another entity under common control, any difference between the consideration received and the aggregate book value of the assets and liabilities of the disposed of business is recorded as an adjustment to equity within 'Retained earnings'. Where the consideration for the transfer is received in the form of shares, these are recorded at the aggregate book value of the assets and liabilities disposed of.

Where the disposal or loss of control over an entity includes a foreign operation, all foreign exchange differences accumulated in the 'Currency translation reserve' attributable to the equity holders of the Company are reclassified to the consolidated income statement within 'Net gains/(losses) on investments in subsidiaries, associates and joint ventures'.

k. Intangible assets

Intangible assets are not amortised when their useful lives are assessed to be indefinite. Intangible assets are assessed to have an indefinite useful life when there are no contractual, economic or other factors that limit the useful lives. Intangible assets with indefinite useful lives owned by the Group are stated at cost less accumulated impairment losses (see note 3(l) below).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

l. Impairment of non-financial assets

Non-financial assets that are subject to depreciation or 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. Such impairment losses are recognised in the consolidated income statement within 'Operating expense' and are recognised against the carrying amount of the impaired asset on the consolidated statement of financial position. 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.

m. Cash and cash equivalents

For the purposes of the consolidated statement of cash flows, cash and cash equivalents comprise cash and demand deposits with banks, net of outstanding bank overdrafts, along with highly liquid investments, with original maturities of three months or less, that are readily convertible to known amounts of cash and subject to insignificant risk of change in value. This may include segregated client money, held in accordance with the FCA's Client Money Rules or is not available for use by the Group.

n. 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/(loss) 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 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 financial statements 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 and associates, 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.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

n. Income tax (continued)

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.

o. Operating leases

Rentals payable under operating leases are charged to 'Operating expense' 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 as a reduction to rental expense.

p. 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.

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.

Effective from 1 January 2018, the ECL allowance on loan commitments and financial guarantees is presented in the consolidated statement of financial position within 'Provisions'.

q. Employee compensation plans

Morgan Stanley maintains various equity-settled share-based and cash-based deferred compensation plans for the benefit of employees.

i) Equity-settled share-based compensation plans

Morgan Stanley issues awards in the form of restricted stock units ("RSUs") to employees of the Morgan Stanley Group for services rendered to the Group. Awards are equity-settled and the cost of the equity-based transactions with employees is measured based on the fair value of the equity instruments at grant date. The fair value of RSUs is based on the market price of Morgan Stanley common stock on the date the award is granted, measured as the volume-weighted average price on the date of grant.

Awards generally contain clawback and cancellation provisions. Certain awards provide Morgan Stanley the discretion to cancel all or a portion of the award under specified circumstances. Compensation expense for these awards is adjusted for changes in the fair value of the Morgan Stanley's common stock until conversion.

The Group recognises compensation cost over the relevant vesting period for each separately vesting portion of the award. An estimation of awards that will be forfeited prior to vesting due to the failure to satisfy service conditions is considered in calculating the total compensation cost to be amortised over the relevant vesting period.

Under Group chargeback arrangements, the Group pays Morgan Stanley for the procurement of shares. The Group pays Morgan Stanley the grant date fair value and any subsequent movement in fair value up to the time of delivery to the employees.

Share based compensation expense is recorded within 'Operating expense' in the statement of comprehensive income.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

q. Employee compensation plans (continued)

ii) Deferred cash-based compensation plans

Morgan Stanley awards deferred cash-based compensation on behalf of the Group for the benefit of employees, providing a return to the participating employees based upon the performance of various referenced investments. Compensation expense for deferred cash-based compensation awards is calculated based on the notional value of the award granted, adjusted for changes in the fair value of the referenced investments.

The Group recognises compensation cost over the relevant vesting period for each separately vesting portion of the award. Forfeitures due to failure to satisfy service conditions are accounted for as they occur.

Deferred cash-based compensation expense is recorded within 'Operating expense' in the statement of comprehensive income. The liability for the awards is measured at fair value and is included within 'Accruals and deferred income' in the statement of financial position.

The Group enters into a variety of derivative contracts with other Morgan Stanley Group undertakings to economically hedge the exposure created by these deferred compensation plans. The derivatives are recognised within 'Trading financial instruments' in the statement of financial position and the related gains and losses are recorded within 'Net trading income' in the income statement.

Although changes in compensation expense resulting from changes in the fair value of the referenced investments will generally be offset by changes in the fair value of derivative transactions entered into by the Group, there is typically a timing difference between the immediate recognition of gains and losses on the derivatives and the deferred recognition of the related compensation expense over the vesting period.

r. 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 plan are recognised in 'Operating expense' in the consolidated income statement when payable.

For the Group's defined benefit post-employment plan, the plan 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 'Operating 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.

Details of the plans are given in note 35 to these consolidated financial statements.

s. 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 is 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.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

4. TRANSITION TO IFRS 9 AND IFRS 15

As discussed at note 2, the Group adopted two new standards from 1 January 2018, IFRS 9 and IFRS 15, which have resulted in a cumulative adjustment to retained earnings at the date of adoption of \$67 million. Of the total cumulative adjustment, \$63 million was due to the transfer of the balance of the available-for-sale reserve to retained earnings as set out in the Consolidated statement of changes in equity.

The disclosures below set out the impact of adopting IFRS 9 on the consolidated statement of financial position and retained earnings, including the effect of replacing IAS 39's incurred credit loss models with the ECL framework under IFRS 9.

The following table shows the original measurement categories in accordance with IAS 39 and the new measurement categories under IFRS 9 for the Group's financial assets and financial liabilities as at 1 January 2018, in accordance with the Group's updated accounting policies on the classification and impairment of financial instruments under IFRS 9 as set out in note 2.

| 1 January 2018 | Note | Original classification under IAS 39 | New classification under IFRS 9 | Original carrying amount under IAS 39 \$ millions | New carrying amount under IFRS 9 \$ millions |
|-------------------------------------|------|---|------------------------------------|---|--|
| Financial assets | | | | | |
| Cash and short term deposits | | Loans and receivables | Financial assets at amortised cost | 25,461 | 25,461 |
| Trading financial assets | | FVPL | FVPL (trading) | 264,793 | 264,793 |
| Secured financing | a | Loans and receivables | FVPL (non-trading) | 88,567 | 88,572 |
| Secured financing | a | FVPL (designated) | FVPL (non-trading) | 10,778 | 10,778 |
| Loans and advances | b | Loans and receivables | Financial assets at amortised cost | 472 | 472 |
| Loans and advances | b | Loans and receivables | FVPL (non-trading) | 4 | 2 |
| Investment securities | c | Available for sale | FVPL (non-trading) | 161 | 161 |
| Trade and other receivables | a | FVPL (designated) | FVPL (non-trading) | 718 | 718 |
| Trade and other receivables | a | Loans and receivables | FVPL (non-trading) | 9 | 9 |
| Trade and other receivables | | Loans and receivables | Financial assets at amortised cost | 70,036 | 70,036 |
| Total financial assets | | | | 460,999 | 461,002 |

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4. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

| 1 January 2018 | Note | Original classification under IAS 39 | New classification under IFRS 9 | Original carrying amount under IAS 39 | New carrying amount under IFRS 9 |
|--------------------------------------|-------------|---|---|--|---|
| | | | | \$ millions | \$ millions |
| Financial liabilities | | | | | |
| Bank loans and overdrafts | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 123 | 123 |
| Trading financial liabilities | | FVPL | FVPL (trading) | 217,977 | 217,977 |
| Secured borrowing | d | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 49,207 | 49,207 |
| Secured borrowing | d | Financial liabilities at amortised cost | FVPL (designated) | 20,436 | 20,434 |
| Secured borrowing | d | FVPL (designated) | FVPL (designated) | 17,543 | 17,543 |
| Trade and other payables | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 96,087 | 96,087 |
| Trade and other payables | | FVPL (designated) | FVPL (designated) | 898 | 898 |
| Trade and other payables | | Financial liabilities at amortised cost | FVPL (designated) | 6 | 6 |
| Debt and other borrowings | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 36,080 | 36,080 |
| Debt and other borrowings | | FVPL (designated) | FVPL (designated) | 3,858 | 3,858 |
| Total financial liabilities | | | | 442,215 | 442,213 |

The application of these policies resulted in the reclassifications set out in the table above and explained below.

- a. Secured financing transactions and certain other financial assets are reclassified as FVPL non-trading as they are held within a business model in which they are managed and their performance is evaluated on a fair value basis.
- b. Loans and advances to customers are classified as either:
 - Financial assets at amortised cost where they are in a held to collect business model and their contractual terms are SPPI; or
 - FVPL non-trading when they are held within a business model in which they are managed and their performance is evaluated on a fair value basis. Unfunded loan commitments related to these loans are designated at FVPL.
- c. Equity investments are required to be FVPL non-trading
- d. Secured borrowing transactions are classified either as:
 - Designated at FVPL where the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed, evaluated and reported internally on a fair value basis; or
 - Financial liabilities at amortised cost.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

4. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

The following table reconciles the carrying amount under IAS 39 to the carrying amounts under IFRS 9 on transition to IFRS 9 on 1 January 2018 by showing where there has been a presentation reclassification and/or a carrying amount remeasurement.

| | IAS 39 carrying amount 31 December 2017 \$ millions | Reclass- ification \$ millions | Remeas- urement \$ millions | IFRS 9 carrying amount 1 January 2018 \$ millions | Retained earnings effect 1 January 2018 \$ millions |
|--------------------------------------|--|---|--|--|--|
| Financial assets | | | | | |
| Amortised cost | | | | | |
| Cash and short term deposits: | 25,461 | - | - | 25,461 | - |
| Secured financing: | | | | | |
| To FVPL (non-trading) | 88,567 | (88,567) | - | - | - |
| Loans and advances: | | | | | |
| To FVPL (non-trading) | 476 | (4) | - | 472 | - |
| Trade and other receivables: | | | | | |
| To FVPL (non-trading) | 70,045 | (9) | - | 70,036 | - |
| Total amortised cost | <u>184,549</u> | <u>(88,580)</u> | <u>-</u> | <u>95,969</u> | <u>-</u> |
| Available for sale | | | | | |
| Investment securities: | | | | | |
| To FVPL (non-trading) | 161 | (161) | - | - | - |
| Financial assets at FVPL | | | | | |
| FVPL (trading) | <u>264,793</u> | <u>-</u> | <u>-</u> | <u>264,793</u> | <u>-</u> |
| FVPL (non-trading) | | | | | |
| Secured financing: | | | | | |
| From amortised cost | - | 88,567 | 5 | 88,572 | 5 |
| From FVPL (designated) | - | 10,778 | - | 10,778 | - |
| | <u>-</u> | <u>99,345</u> | <u>5</u> | <u>99,350</u> | <u>5</u> |
| Loans and advances: | | | | | |
| From amortised cost | - | 4 | (2) | 2 | (2) |
| Trade and other receivables: | | | | | |
| From FVPL (designated) | - | 718 | - | 718 | - |
| From amortised cost | - | 9 | - | 9 | - |
| | <u>-</u> | <u>731</u> | <u>(2)</u> | <u>729</u> | <u>(2)</u> |
| Investment securities: | | | | | |
| From available-for-sale | - | 161 | - | 161 | - |
| Total FVPL (non-trading) | <u>-</u> | <u>100,237</u> | <u>3</u> | <u>100,240</u> | <u>3</u> |
| FVPL (designated) | | | | | |
| Trade and other receivables: | | | | | |
| To FVPL (non-trading) | 718 | (718) | - | - | - |
| Secured financing: | | | | | |
| To FVPL (non-trading) | 10,778 | (10,778) | - | - | - |
| Total FVPL (designated) | <u>11,496</u> | <u>(11,496)</u> | <u>-</u> | <u>-</u> | <u>-</u> |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

4. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

| | IAS 39 carrying amount 31 December 2017 \$ millions | Reclass- ification \$ millions | Remeas- urement \$ millions | IFRS 9 carrying amount 1 January 2018 \$ millions | Retained earnings effect 1 January 2018 \$ millions |
|--------------------------------------|--|--------------------------------------|-----------------------------------|--|--|
| Financial liabilities | | | | | |
| Amortised cost | | | | | |
| Bank loans and overdrafts | 123 | - | - | 123 | - |
| Secured borrowing: | | | | | |
| To FVPL (designated) | 69,643 | (20,436) | - | 49,207 | - |
| Debt and other borrowings: | 36,080 | - | - | 36,080 | - |
| Trade and other payables: | | | | | |
| To FVPL (designated) | 96,093 | (6) | - | 96,087 | - |
| Total amortised cost | <u>201,939</u> | <u>(20,442)</u> | <u>-</u> | <u>181,497</u> | <u>-</u> |
| Financial liabilities at FVPL | | | | | |
| FVPL (trading) | <u>217,977</u> | <u>-</u> | <u>-</u> | <u>217,977</u> | <u>-</u> |
| FVPL (designated) | | | | | |
| Debt and other borrowings: | 3,858 | - | - | 3,858 | - |
| Trade and other payables: | 898 | 6 | - | 904 | - |
| Secured financing: | | | | | |
| Opening balance | 17,543 | - | - | 17,543 | - |
| From amortised cost | - | 20,436 | (2) | 20,434 | 2 |
| Total FVPL (designated) | <u>22,299</u> | <u>20,442</u> | <u>(2)</u> | <u>42,739</u> | <u>2</u> |

The following table analyses the impact, net of tax, of transition to IFRS 9 on reserves and retained earnings. The impact relates to the available-for-sale reserve and retained earnings. There is no impact on other components of equity.

| Impact of adopting IFRS 9 \$millions | Available-for-sale reserve | Retained Earnings |
|--|---------------------------------------|--------------------------|
| Closing balance under IAS 39 (31 December 2017) | 63 | 2,941 |
| Reclassification of investment securities (equity) from available-for-sale to FVPL | (63) | 63 |
| Remeasurement of secured financing and loans and advances from amortised cost to FVPL and secured borrowing balances from amortised cost to FVPL (designated) | - | 5 |
| Recognition of ECL under IFRS 9 | - | - |
| Opening balance under IFRS 9 (1 January 2018) | <u>-</u> | <u>3,009</u> |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

4. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

IFRS 9: Expected credit losses

The closing impairment allowance for financial assets in accordance with IAS 39 and the opening ECL allowance determined in accordance with IFRS 9 as at 1 January 2018 were both \$41 million. The total provisions for loan commitments and financial guarantee contracts in accordance with IAS 37 as at 31 December 2017 and in accordance with IFRS 9 as at 1 January 2018 were both \$nil. There was no reclassification or remeasurement impact on ECL as a result of the adoption of IFRS 9.

IFRS 15

At 1 January 2018, the Group adopted IFRS 15. The Group has applied the provisions of IFRS 15 retrospectively only to contracts that were not completed as at 1 January 2018, the date of initial application. Prior periods have not been restated. A cumulative loss, net of tax, of \$1 million was recorded as of 1 January 2018, reflecting the deferral of the recognition of Investment Banking revenues. As a result of adopting IFRS 15, the accounting for certain transactions has changed, resulting in certain transaction costs, which were previously offset against income, now being presented on a gross basis within both 'Fee and commission income' and 'Operating expense' of \$96 million.

5. FEE AND COMMISSION INCOME

| | Year ended 31 December 2018 | Year ended 31 December 2017 |
|--|-----------------------------------|-----------------------------------|
| | \$millions | \$millions |
| Trust and other fiduciary activities | 175 | 100 |
| Investment banking ⁽¹⁾ | 1,195 | 1,224 |
| Commission income | 868 | 827 |
| Other fee and commission income | 258 | 251 |
| Total fee and commission income | <u>2,496</u> | <u>2,402</u> |
| <i>Of which, revenue from contracts with customers</i> | <u>2,598</u> | <u>2,467</u> |

Total fee and commission income is stated after the transfer of revenues totalling \$106 million (2017: \$68 million) to other Morgan Stanley Group undertakings. These transfers do not relate to revenue from contracts with customers.

Revenue from contracts with customers

The following table presents revenues in the current period.

| | Current contract revenues 31 December 2018 \$millions |
|--|---|
| Investment banking ⁽¹⁾ | 1,301 |
| Trust and other fiduciary activities | 175 |
| Commission income | 864 |
| Other revenue from contracts with customers | 258 |
| Total revenue from contracts with customers | <u><u>2,598</u></u> |

(1) Includes advisory and underwriting revenues.

The Group had no unsatisfied performance obligations from contracts with customers with original expected durations exceeding 1 year.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

6. INTEREST INCOME AND INTEREST EXPENSE

The table below presents interest income and expense by accounting classification. Interest income and expense is calculated using the effective interest rate method for financial assets and financial liabilities measured at amortised cost.

| | Year ended 31 December 2018 \$millions | Year ended 31 December 2017 \$millions |
|--|--|--|
| Financial assets measured at amortised cost⁽¹⁾ | 1,275 | 160 |
| Trading financial assets | 109 | 14 |
| Non-trading financial assets at FVPL ⁽²⁾ | (189) | - |
| Financial assets measured at FVPL | <u>(80)</u> | <u>14</u> |
| Total interest income | <u>1,195</u> | <u>174</u> |
| | | |
| Financial liabilities measured at amortised cost | 3,043 | 1,581 |
| Financial liabilities designated at FVPL ⁽²⁾ | 33 | - |
| Total interest expense | <u>3,076</u> | <u>1,581</u> |

(1) In the prior year, 'Financial assets measured at amortised cost' were included in the classification 'Loans and receivables'.

(2) Relates to interest on secured financing and borrowing transactions which were classified as loans and receivables and financial liabilities measured at amortised cost under IAS 39. The equivalent figures for the year ended 31 December 2017 are an expense of \$478 million and expense of \$617 million, respectively.

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

- (a) when interest is included as a component of the financial instruments fair value, interest is reflected in 'Net trading income'; and
- (b) interest expense otherwise arising on trading financial liabilities is reported as a reduction in 'Interest income'.

'Interest income' 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.

Certain currencies, in which the Group's trades are denominated, may at times have negative interest rates, of which a current example is the Euro. When financial assets and financial liabilities are denominated in such currencies with negative interest rates, this results in negative 'Interest income' and positive 'Interest expense' being recognised.

No gains or losses have been recognised in respect of financial assets measured at amortised cost other than those disclosed as 'Interest income', impairment losses and reversals of impairment losses disclosed in 'Net impairment loss/reversal on financial instruments', and foreign exchange differences included within 'Other revenue'.

No gains or losses have been recognised in respect of financial liabilities measured at amortised cost other than those disclosed as 'Interest expense', and foreign exchange differences included within 'Other revenue'.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

7. OPERATING EXPENSE

| | 2018 \$millions | 2017 \$millions |
|---|--------------------|--------------------|
| Direct staff costs | 137 | 139 |
| Management charges from other Morgan Stanley Group undertakings relating to staff costs | 1,622 | 1,594 |
| Staff related expenses | 1,759 | 1,733 |
| Management charges from other Morgan Stanley Group undertakings relating to other services | 1,178 | 1,039 |
| Brokerage fees | 670 | 678 |
| Administration and corporate services | 105 | 92 |
| Professional services | 156 | 162 |
| UK Bank levy | 64 | 120 |
| Other taxes | 631 | 546 |
| Auditor's remuneration: | | |
| Fees payable to the Company's auditor and its associates for the audit of the Company's annual financial statements | 4 | 4 |
| Fees payable to the Company's auditor and its associates for other services to the Group ⁽¹⁾ | 1 | 1 |
| Other | 113 | 50 |
| Non-staff related expenses | 2,922 | 2,692 |
| Total operating expense | 4,681 | 4,425 |

(1) Fees payable to the Company's auditor for other services in 2018 comprise \$179,000 for the audit of the Company's subsidiaries (2017: \$237,000) and \$1,012,000 for other assurance services (2017: \$749,000).

The Group employs staff directly and also utilises the services of staff who are employed by other Morgan Stanley Group undertakings.

Further information regarding employee compensation plans is provided in note 34.

Staff related expenses increased by 2% from \$1,733 million to \$1,759 million in 2018. The increase was primarily driven by an increase in base salaries and discretionary compensation as a result of higher headcount and higher ISG revenues. This was offset by a decrease on mark-to-market on deferred compensation.

The impact of IFRS 15 resulted in the recognition within 'Professional services' and 'Other' of certain costs, amounting to \$96 million for the year, which had previously been shown as a reduction in income, (refer to note 4).

Non-staff related expenses increased by 9% from \$2,692 million in 2017 to \$2,922 million in 2018. Excluding the impact of IFRS 15, expenses increased by 5% driven by higher volume related expenses including brokerage and transaction taxes.

During 2017 the Morgan Stanley Group updated its Global Transfer Pricing Policy. For 2018, this resulted in an increase in 'Management charges from other Morgan Stanley Group undertakings relating to other services' offset by a decrease in 'Professional services' and 'Brokerage fees' as compared to 2017. The decrease in 'Professional services' and 'Brokerage fees' was partially offset by an increase in costs from higher volumes.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

7. OPERATING EXPENSE (CONTINUED)

The UK Bank Levy (the “Levy”) is an annual charge on a bank’s balance sheet. It is applied to chargeable liabilities and equity of the Group and other Morgan Stanley UK tax-resident entities and their overseas subsidiaries. The Levy is non-deductible for UK corporation tax purposes and will impact the effective tax rate for the year (see Note 9 for further details).

In Finance (No 2) Act 2015, the rate at which the Levy is applied was reduced from 0.21% to 0.10% for the period 2016-2021. The rates for 2017 and 2018 were 0.17% and 0.16%, respectively. The Levy for 2018 is lower than 2017 due a reduction in liabilities subject to bank levy and this reduction in rate.

The average number of direct employees of the Group is analysed below:

| | Number | |
|--|-------------------|-------------------|
| | 2018 | 2017 |
| Support Services | 124 | 105 |
| Institutional Securities and Investment Management | 220 | 222 |
| | <u>344</u> | <u>327</u> |
| | 2018 | 2017 |
| | \$millions | \$millions |
| Wages and salaries | 116 | 122 |
| Social security costs | 16 | 13 |
| Pension costs | 5 | 4 |
| | <u>137</u> | <u>139</u> |

The Group paid no remuneration to its Directors during the current or prior year but incurred management recharges in respect of Directors’ qualifying services provided to the Group which are included within ‘Management charges from other Morgan Stanley Group undertakings relating to staff costs’. The amount of remuneration received by Directors in respect of their qualifying services to the Group is disclosed in note 35.

8. NET IMPAIRMENT LOSS/REVERSAL ON FINANCIAL INSTRUMENTS

The following table shows the net ECL charge and write-offs for the year. The 2017 charges were calculated under IAS 39:

| | 2018 | 2017 |
|------------------------------|------------|----------------|
| | Net ECL | Net impairment |
| | \$millions | \$millions |
| Trade and other receivables: | | |
| Contracts with customers | <u>7</u> | <u>(1)</u> |
| | <u>7</u> | <u>(1)</u> |

During the year, there were no write-offs greater than the accumulated loss allowance taken directly to the income statement (2017: \$nil).

All of the above impairment losses were calculated on an individual basis. No collective impairment assessments were made during the year or prior year.

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9. INCOME TAX

| | 2018 | 2017 |
|---|-------------------|-------------------|
| | \$millions | \$millions |
| Current tax | | |
| United Kingdom corporation tax charge | | |
| - current year | 254 | 355 |
| - adjustments in respect of prior years | (18) | (2) |
| Double taxation relief | | |
| - current year | (136) | (115) |
| Overseas tax | | |
| - current year | 203 | 178 |
| - adjustments in respect of prior years | (2) | 4 |
| | <u>301</u> | <u>420</u> |
| Deferred tax/ (benefit) | | |
| Origination and reversal of temporary differences | 58 | (7) |
| Adjustment in respect of prior years | - | 1 |
| | <u>58</u> | <u>(6)</u> |
| Income tax | <u><u>359</u></u> | <u><u>414</u></u> |

Reconciliation of effective tax rate

The Group's tax rate is sensitive to the geographic mix of profits and tax rates in non UK jurisdictions, the additional 8% UK banking surcharge, as well as the non deductibility of certain expenses for tax purposes. The UK statutory rate, excluding the banking surcharge, fell to 19% with effect from 1 April 2017 and will fall to 17% with effect from 1 April 2020. The current year income tax expense is higher (2017: higher) than that resulting from applying the average standard rate of corporation tax for banking companies in the UK for the year of 27% (2017: 27.25%). The main differences are explained below:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Profit before income tax | <u>1,056</u> | <u>1,278</u> |
| Income tax expense using the average standard rate of corporation tax for banking companies in the UK of 27.00% (2017: 27.25%) | 285 | 348 |
| Impact on tax of: | | |
| Non deductible UK Bank Levy | 17 | 33 |
| Other Expenses: | | |
| Other permanent differences | 32 | 9 |
| Movement in tax reserves | 11 | 15 |
| Group relief surrendered for no cash consideration | 13 | - |
| Effect of tax rates in foreign jurisdictions | 13 | 9 |
| Under/(over) provided in prior years | (20) | 2 |
| Other | 8 | (2) |
| Total income tax expense in the consolidated income statement | <u><u>359</u></u> | <u><u>414</u></u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

9. INCOME TAX (CONTINUED)

The Group has a policy of surrendering tax-deductible losses (“group relief”) for no cash consideration to other members of the Morgan Stanley UK tax group, which consists of entities within the Group and the wider Morgan Stanley Group. Within the Group, a number of subsidiary companies generate tax-deductible losses which are surrendered to Morgan Stanley companies outside the Group.

Finance Act 2016 enacted a reduction in the UK corporation tax main rate to 17% with effect from 1 April 2020. This reduction impacts the current tax charge in future periods. In addition, Finance (No. 2) Act 2015 introduced an 8% corporation tax surcharge on the profits of banking companies with effect from 1 January 2016 which impacts the current tax charge in the current and comparative periods.

As described in note 2 as a result of an amendment to IAS 12, the tax benefits of coupon payments made on the Additional Tier 1 capital instrument will be presented within income tax expense for accounting periods beginning on or after 1 January 2019. As such payments are tax deductible, this presentation will reduce the income tax expense presented in the consolidated income statement in future periods.

In addition to the amount charged to the consolidated income statement, the aggregate amount of current and deferred tax relating to each component of other comprehensive income was as follows:

| | 2018 | | | 2017 | | |
|--|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
| | Before tax \$millions | Tax expense \$millions | Net of tax \$millions | Before tax \$millions | Tax expense \$millions | Net of tax \$millions |
| Foreign currency translation reserve: | | | | | | |
| Foreign currency translation differences on foreign operations | 8 | - | 8 | 111 | - | 111 |
| Debt valuation adjustment reserve: | | | | | | |
| Changes in fair value of liabilities designated at fair value through profit or loss due to changes in the Group’s own credit risk | 228 | (57) | 171 | (99) | 26 | (73) |
| Available-for-sale reserve: | | | | | | |
| Net change in fair value of available-for-sale financial assets | - | - | - | 68 | - | 68 |
| Pension reserve: | | | | | | |
| Remeasurement of net defined benefit liability | (1) | - | (1) | - | - | - |
| Other comprehensive income | 235 | (57) | 178 | 80 | 26 | 106 |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

10. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY

The following table analyses financial assets and financial liabilities as at 31 December 2018 presented in the consolidated statement of financial position by IFRS 9 classifications.

| 2018 | FVPL \$millions | FVPL (designated) \$millions | Amortised cost \$millions | Total \$millions |
|--|--------------------|------------------------------------|---------------------------------|---------------------|
| Cash and short term deposits | - | - | 30,829 | 30,829 |
| Trading financial assets | 253,188 | - | - | 253,188 |
| Secured financing: | | | | |
| Cash collateral on securities borrowed | 23,122 | - | - | 23,122 |
| Securities purchased under agreements to resell | 64,872 | - | - | 64,872 |
| Other secured financing | 7,649 | - | - | 7,649 |
| Loans and advances | 11 | - | 825 | 836 |
| Investment securities | 132 | - | - | 132 |
| Trade and other receivables | 780 | - | 64,314 | 65,094 |
| Total financial assets | 349,754 | - | 95,968 | 445,722 |
| Bank loans and overdrafts | - | - | 4 | 4 |
| Trading financial liabilities | 217,093 | - | - | 217,093 |
| Secured borrowings: | | | | |
| Cash collateral on securities loaned | - | 366 | 20,737 | 21,103 |
| Securities sold under agreements to repurchase | - | 15,868 | 25,608 | 41,476 |
| Other financial liabilities | - | 16,348 | - | 16,348 |
| Trade and other payables | - | 897 | 90,636 | 91,533 |
| Debt and other borrowings | - | 5,664 | 31,451 | 37,115 |
| Total financial liabilities | 217,093 | 39,143 | 168,436 | 424,672 |

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10. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY
(CONTINUED)

The following table analyses financial assets and financial liabilities as at 31 December 2017 presented in the consolidated statement of financial position by IAS 39 classifications.

| 2017 | FVPL (trading) \$millions | FVPL (designated) \$millions | Available-for- sale \$millions | Loans and receivables \$millions | Financial liabilities at amortised cost \$millions | Total \$millions |
|---|--|---|---|---|---|-----------------------------|
| Cash and short term deposits | - | - | - | 25,461 | - | 25,461 |
| Trading financial assets | 264,793 | - | - | - | - | 264,793 |
| Secured financing: | | | | | | |
| Cash collateral on securities borrowed | - | - | - | 17,828 | - | 17,828 |
| Securities purchased under agreements to resell | - | - | - | 70,739 | - | 70,739 |
| Other secured financing | - | 10,778 | - | - | - | 10,778 |
| Loans and advances | - | - | - | 476 | - | 476 |
| Investment securities | - | - | 161 | - | - | 161 |
| Trade and other receivables | - | 718 | - | 70,045 | - | 70,763 |
| Total financial assets | 264,793 | 11,496 | 161 | 184,549 | - | 460,999 |
| Bank loans and overdrafts | - | - | - | - | 123 | 123 |
| Trading financial liabilities | 217,977 | - | - | - | - | 217,977 |
| Secured borrowings: | | | | | | |
| Cash collateral on securities loaned | - | - | - | - | 17,486 | 17,486 |
| Securities sold under agreements to repurchase | - | - | - | - | 52,155 | 52,155 |
| Other financial liabilities | - | 17,545 | - | - | - | 17,545 |
| Trade and other payables | - | 898 | - | - | 96,093 | 96,991 |
| Debt and other borrowings | - | 3,858 | - | - | 36,080 | 39,938 |
| Total financial liabilities | 217,977 | 22,301 | - | - | 201,937 | 442,215 |

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

10. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY
(CONTINUED)

Financial assets and financial liabilities designated at FVPL

The financial assets and financial liabilities shown in the tables above which are designated at FVPL consist primarily of the following financial assets and financial liabilities:

Corporate loans: Until 31 December 2017, certain loans to customers were designated at FVPL because either the risks of the loans have been matched with other financial instrument contracts accounted for at fair value and such a designation reduces an accounting mismatch; or as part of a documented risk management strategy the risks of the loan were managed on a fair value basis as part of the Group's trading portfolio and the risk was reported to key management personnel on this basis; or because the loan contract itself contains an embedded derivative that must otherwise be separated and measured at fair value. Refer to note 13 for more information. From 1 January 2018, these loans to customers are designated at FVPL because the designation at FVPL eliminates or significantly reduces an accounting mismatch which would otherwise arise.

Prepaid OTC contracts: The risk on these financial instruments, both financial assets and financial liabilities, is primarily hedged using trading financial instruments including equity securities and interest rate swaps. Until 31 December 2017, these prepaid OTC contracts were designated at FVPL as such contracts, as well as the financial instruments with which they are hedged, were risk managed on a fair value basis as part of the Group's trading portfolio and the risk is reported to key management personnel on this basis. Refer to note 18. From 1 January 2018, prepaid OTC contract assets are classified at FVPL as they are held in a business model in which they are managed and their performance is evaluated on a fair value basis and prepaid contract liabilities continue to be designated at FVPL as they continue to form part of a group of financial assets and liabilities which are managed, evaluated and reported internally on a fair value basis.

Cash collateral on securities loaned and securities sold under agreements to repurchase: Until 31 December 2017, cash collateral balances repayable and accrued interest arising under repurchase agreements and certain 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'. From 1 January 2018, these balances are classified as 'Designated at FVPL' where the financial liability forms part of a group of financial assets or financial liabilities or both, which are managed, evaluated and reported internally on a fair value basis; otherwise, they are classified as 'Financial liabilities at amortised cost'.

Issued structured notes: Until 31 December 2017 and from 1 January 2018, these relate to financial liabilities which arise from selling structured products generally in the form of notes or certificates. The structured notes are designated at FVPL as the risks to which the Group is a contractual party are risk managed on a fair value basis as part of the Group's trading portfolio and the risk is reported to key management personnel on this basis. Refer to note 19 for more information.

Other financial assets and liabilities: These include:

- financial assets and liabilities such as those that arise upon the consolidation of certain special purpose entities;
- those that arise as a result of continuing recognition of certain financial assets and the simultaneous recognition of an associated financial liability; and

Until 31 December 2017 and from 1 January 2018, these financial assets and liabilities were designated at FVPL as the risks to which the Group was a contractual party were risk managed on a fair value basis as part of the Group's trading portfolio and the risk was reported to key management personnel on this basis.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

10. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY (CONTINUED)

Financial assets and financial liabilities designated at FVPL (continued)

| | 2018 | | 2017 | |
|--|----------------------|---------------------------|----------------------|---------------------------|
| | Assets \$millions | Liabilities \$millions | Assets \$millions | Liabilities \$millions |
| Secured financing | | | | |
| Other secured financing | - | - | 10,778 | - |
| Trade and other receivables | | | | |
| Corporate loans | | | 276 | |
| Prepaid OTC contracts | - | - | 442 | - |
| Secured borrowing | | | | |
| Cash collateral on securities loaned | - | 366 | - | - |
| Securities sold under agreements to repurchase | - | 15,868 | - | - |
| Other financial liabilities | - | 16,348 | - | 17,545 |
| Trade and other payables | | | | |
| Prepaid OTC contracts | - | 887 | - | 898 |
| Unfunded loan commitments | - | 10 | - | - |
| Debt and other borrowings | | | | |
| Issued structured notes | - | 5,664 | - | 3,858 |
| | - | 39,143 | 11,496 | 22,301 |

As discussed at note 4, from 1 January 2018 the Group adopted the new IFRS 9 standard, which has resulted in all financial assets that had been designated at FVPL in accordance with IAS 39 changing measurement category to being mandatorily at FVPL. At 31 December 2017 corporate loans were designated at FVPL and had a maximum exposure to credit risk of \$276 million. Corporate loans were fully collateralised with securities received by the Group.

The cumulative change in fair value recognised through other comprehensive income attributable to own credit risk for financial liabilities designated at FVPL at 31 December 2018 is a gain of \$70 million (2017: loss of \$160 million). During the year, \$nil (2017: \$nil) was realised as a result of the derecognition of such financial liabilities.

The Group determines the amount of changes in fair value attributable to changes in counterparty credit risk or own credit risk, as relating to financial liabilities designated at FVPL, by first determining the fair value including the impact of counterparty credit or own credit risk, and then deducting those changes in fair value representing managed market risk. In determining fair value, the Group considers the impact of changes in own credit spreads based upon observations of the secondary bond market spreads when measuring the fair value for issued structured notes. The Group considers that this approach most faithfully represents the amount of change in fair value due to both counterparty credit risk and the Group's own credit risk.

The carrying amount of financial liabilities designated at FVPL for which the effect of changes in those liabilities' credit risk is presented within other comprehensive income was \$226 million lower than the contractual amount due at maturity (2017: \$28 million lower).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

11. TRADING FINANCIAL ASSETS AND LIABILITIES

| | 2018 | | 2017 | |
|----------------------------|----------------------|---------------------------|----------------------|---------------------------|
| | Assets \$millions | Liabilities \$millions | Assets \$millions | Liabilities \$millions |
| Government debt securities | 14,775 | 17,935 | 11,956 | 22,834 |
| Corporate and other debt | 11,252 | 4,593 | 9,756 | 2,864 |
| Corporate equities | 47,850 | 20,452 | 76,073 | 23,053 |
| Derivatives (see note 12) | 179,311 | 174,113 | 167,008 | 169,226 |
| | <u>253,188</u> | <u>217,093</u> | <u>264,793</u> | <u>217,977</u> |

12. DERIVATIVES

| | 2018 | | | |
|-------------------------------------|--------------------------------|------------------------------|---|---------------------|
| | Bilateral OTC \$millions | Cleared OTC \$millions | Listed derivative contracts \$millions | Total \$millions |
| Derivative assets: | | | | |
| Interest rate contracts | 62,650 | 1,980 | 8 | 64,638 |
| Credit contracts | 3,885 | 93 | - | 3,978 |
| Foreign exchange and gold contracts | 70,972 | 1,328 | 9 | 72,309 |
| Equity contracts | 28,441 | - | 6,911 | 35,352 |
| Commodity contracts | 3,002 | - | 32 | 3,034 |
| | <u>168,950</u> | <u>3,401</u> | <u>6,960</u> | <u>179,311</u> |
| Derivative liabilities: | | | | |
| Interest rate contracts | 58,372 | 848 | 9 | 59,229 |
| Credit contracts | 3,751 | 74 | - | 3,825 |
| Foreign exchange and gold contracts | 71,258 | 1,325 | 12 | 72,595 |
| Equity contracts | 27,962 | - | 7,612 | 35,574 |
| Commodity contracts | 2,800 | - | 90 | 2,890 |
| | <u>164,143</u> | <u>2,247</u> | <u>7,723</u> | <u>174,113</u> |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

12. DERIVATIVES (CONTINUED)

| | 2017 | | | Total \$millions |
|-------------------------------------|--------------------------------|------------------------------|---|---------------------|
| | Bilateral OTC \$millions | Cleared OTC \$millions | Listed derivative contracts \$millions | |
| Derivative assets: | | | | |
| Interest rate contracts | 71,726 | 1,143 | 7 | 72,876 |
| Credit contracts | 4,227 | 94 | - | 4,321 |
| Foreign exchange and gold contracts | 54,731 | 801 | - | 55,532 |
| Equity contracts | 26,590 | - | 5,301 | 31,891 |
| Commodity contracts | 2,224 | - | 164 | 2,388 |
| | <u>159,498</u> | <u>2,038</u> | <u>5,472</u> | <u>167,008</u> |
| Derivative liabilities: | | | | |
| Interest rate contracts | 65,223 | 654 | 3 | 65,880 |
| Credit contracts | 4,608 | 53 | - | 4,661 |
| Foreign exchange and gold contracts | 56,287 | 1,007 | - | 57,294 |
| Equity contracts | 34,063 | - | 4,953 | 39,016 |
| Commodity contracts | 2,353 | - | 22 | 2,375 |
| | <u>162,534</u> | <u>1,714</u> | <u>4,978</u> | <u>169,226</u> |

13. LOANS AND ADVANCES

| | 2018 \$millions | 2017 \$millions |
|---|--------------------|--------------------|
| Loans and advances at amortised cost: | | |
| Amounts due from Morgan Stanley Group undertakings ⁽¹⁾ | 804 | 465 |
| Other | 21 | 11 |
| | <u>825</u> | <u>476</u> |
| Loans and advances at FVPL | 11 | - |
| Total | <u>836</u> | <u>476</u> |

(1) There was no IFRS 9 ECL or IAS 39 impairment allowance at 31 December 2018 or 31 December 2017, respectively.

See note 3, accounting policy (f) Impairment of financial instruments, for an explanation of ECL under IFRS 9 and impairment under IAS 39.

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14. TRADE AND OTHER RECEIVABLES

The following table provides an analysis of trade and other receivables by measurement classification:

| | 2018 \$millions | 2017 \$millions |
|---|--------------------|--------------------|
| Trade and other receivables (amortised cost)⁽¹⁾ | | |
| Trade receivables | | |
| Contracts with customers | 290 | 251 |
| Amounts due from other Morgan Stanley Group undertakings | 30,826 | 32,607 |
| Trading receivables | 31,766 | 36,044 |
| Less: ECL (IFRS 9) | (37) | - |
| Less: Impairment allowance (IAS 39) | - | (41) |
| | 62,845 | 68,861 |
| Other receivables | | |
| Amounts held at exchanges | 863 | 928 |
| Amounts due from other Morgan Stanley Group undertakings | 605 | 256 |
| Other amounts receivable | 104 | 101 |
| | 1,572 | 1,285 |
| Total trade and other receivables (amortised cost) | 64,417 | 70,146 |
| Trade and other receivables (FVPL) | | |
| Prepaid OTC contracts | 622 | 442 |
| Margin loans | 141 | 276 |
| Amounts held at exchanges | 17 | - |
| Total trade and other receivables (FVPL) | 780 | 718 |
| Total | 65,197 | 70,864 |

(1) In the prior year, 'Trade and other receivables (amortised cost)' were included in the classification 'Loans and receivables'.

15. INTERESTS IN SUBSIDIARIES

Composition of the Group

Details of all subsidiary undertakings are provided in the Appendix to the financial statements, including changes in holdings of subsidiaries.

On 4 July 2018, 1 €1 ordinary share in Morgan Stanley Investment Management (Ireland) Limited was transferred from the Company to MSIUK by way of a dividend in specie of \$1. This represented 100% of the Company's investment in Morgan Stanley Investment Management (Ireland) Limited and subsequently the Company no longer had any interest in Morgan Stanley Investment Management (Ireland) Limited.

On 1 November 2018, 401,072,825 €1 ordinary shares in Morgan Stanley France Holdings I S.A.S. were transferred from the Company to MSIUK by way of a dividend in specie of \$442,154,006. This represented 100% of the Company's investment in the MS France Group and subsequently the Company no longer had any interest in the MS France Group.

All subsidiaries are included in the Group's consolidated financial statements.

Information regarding interests in structured entities is included in note 16.

The Group has not provided financial support to, or otherwise agreed to be responsible for supporting any subsidiary of the Group financially.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

15. INTERESTS IN SUBSIDIARIES (CONTINUED)

Disposal of subsidiary

The carrying value of the net assets of Morgan Stanley Investment Management (Ireland) Limited was \$1 at date of disposal (2017: \$1). The carrying value of the net assets of Morgan Stanley France Holdings I S.A.S at the date of transfer and at 31 December 2017 was as follows:

| | At date of transfer \$millions | 31 December 2017 \$millions |
|--|---|--|
| ASSETS | | |
| Cash and short term deposits | 1,347 | 540 |
| Trade and other receivables | 452 | 583 |
| Trading financial assets | 7,133 | 10,509 |
| Secured financing | 3,650 | 3,384 |
| Other | 13 | 14 |
| TOTAL ASSETS | 12,595 | 15,030 |
| LIABILITIES | | |
| Trading financial liabilities | 4,438 | 4,089 |
| Secured borrowing | 5,401 | 7,892 |
| Trade and other payables | 1,643 | 1,771 |
| Accruals and deferred income | 23 | 28 |
| Other | 491 | 664 |
| TOTAL LIABILITIES | 11,996 | 14,444 |
| NET ASSETS | 599 | 586 |
| Dividend in specie | 442 | |
| Difference recognised in equity upon dividend in specie of MS France Group | (157) | |

Reclassification of Currency translation reserve

At the date of transfer, the MS France Group had an accumulated 'Currency translation reserve' of \$(66) million. Upon transfer out of the Group, this loss was reclassified to the consolidated income statement within 'Net loss on investments in subsidiaries, associates and joint ventures'.

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16. INTERESTS IN STRUCTURED ENTITIES

The Group is involved with various special purpose entities in the normal course of business. In most cases, these entities are deemed to be structured entities.

A structured entity is an entity that has been designed such that voting or similar rights are not the dominant factor in deciding who controls the entity. The party that consolidates the structured entity is the investor that controls the structured entity. An investor controls a structured entity when it is exposed, or has the rights, to variable returns from its involvement with the structured entity and has the ability to affect those returns through its power over the structured entity.

The Group's interests in structured entities include certain debt and equity interests, commitments, guarantees, derivative instruments and certain fees arrangements. The Group's involvement with structured entities arises primarily from:

- Loans made to and investments in structured entities that hold debt, equity, real estate or other assets;
- Interests purchased in connection with market-making activities and retained interests held as a result of securitisation activities, including re-securitisation transactions;
- Structuring of Credit Linked Notes ("CLNs") or other asset-repackaged notes designed to meet the investment objectives of clients; and
- Certain derivatives entered into with structured entities.

The Group determines whether it controls, and therefore should consolidate, a structured entity upon its initial involvement with the structured entity and reassesses whether it should continue to consolidate on an ongoing basis as long as it has any continuing involvement with the structured entity. This determination is based upon an analysis of the design of the structured entity, including the structured entity's structure and activities; assessment of the significance of the powers to make economic decisions which are held by the Group and its related parties and whether such powers may be used to affect its investor returns; and consideration of the significance of direct and indirect interests in the structured entity which are held by the Group and its related parties.

The power to make the most significant economic decisions may take a number of different forms. The Group considers servicing or collateral management decisions as generally representing the power to make the most significant economic decisions in transactions such as securitisations or collateralised debt obligations ("CDOs"). As a result, the Group does not consolidate securitisations or CDOs for which it does not act as the servicer or collateral manager unless it holds certain other rights to replace the servicer or collateral manager or to require the liquidation of the entity. In fund structures, the power to appoint or direct the fund manager is generally the most significant power.

For certain structured entities, such as entities which issued CLNs and other asset-repackaged notes, there are no significant economic decisions made on an ongoing basis. In these cases, the Group focuses its analysis on decision making powers relating to liquidation of the entity or unwinding or termination of the transaction structure. Based upon factors, which include an analysis of the nature of the assets, including whether the assets were issued in a transaction sponsored by the Group and the extent of the information available to the Group and to investors, the number, nature and involvement of investors, other rights held by the Group and investors, the standardisation of the legal documentation and the level of the continuing involvement by the Group, including the amount and type of interests owned by the Group and by other investors, the Group concluded in some of these transactions that decisions made prior to the initial closing were shared between the Group and the initial investors. The Group focused its control decision on any right held by the Group or investors related to the termination of the structured entity. Many CLNs and other asset repackaged notes have no such termination rights.

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Year ended 31 December 2018

16. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)

The assets owned by many consolidated structured entities cannot be removed unilaterally by the Group and are not generally available to the Group. The related liabilities issued by many consolidated structured entities are non-recourse to the Group. In certain other consolidated structured entities, the Group has the unilateral right to remove assets or provide additional recourse through derivatives such as total return swaps, guarantees or other forms of involvement.

The Group accounts for the assets held by structured entities primarily in 'Trading financial assets' and the liabilities of the structured entities as 'Trading financial liabilities' in the consolidated statement of financial position.

The usage of structured entities is described below.

Securitisation Activities. In a securitisation transaction, the Group transfers assets (generally commercial or residential mortgage loans) to a structured entity, sells to investors most of the beneficial interests, such as notes or certificates, issued by the structured entity, and in many cases, retains other beneficial interests. The purchase of the transferred assets by the structured entity is financed through the sale of these interests. In many securitisations, particularly those involving residential mortgage loans, the Group also enters into derivative transactions, primarily interest rate swaps or interest rate caps with a senior payment priority, with the structured entity.

Collateralised Loan and Debt Obligations. Securitization transactions generally involve structured entities. Primarily as a result of its secondary market-making activities, the Group owns structured entity assets. These assets were either retained in connection with transfer of assets by the Group or acquired in connection with secondary market making activities.

A collateralised loan obligation ("CLO") or a CDO is a structured entity that purchases a pool of assets, consisting of corporate loans, corporate bonds, asset-backed securities or synthetic exposures on similar assets through derivatives, and issues multiple tranches of debt and equity securities to investors. The purchase of the assets by the structured entity is financed through the issuance of the tranches of securities. The Group underwrites the securities issued in CLO transactions on behalf of unaffiliated sponsors and provides advisory services to these unaffiliated sponsors. The Group sells corporate loans to many of these structured entities, in some cases representing a significant portion of the total assets purchased. If necessary, the Group may retain unsold securities issued in these transactions. Although not obligated, the Group generally makes a market in the securities issued by structured entities in these transactions and may retain unsold securities. These beneficial interests are included in 'Trading financial assets'.

Fund Investments. In a fund investment structure the Group provides clients with indirect access to specified underlying investments through total return swaps. The investments are purchased and held by a structured entity in which the Group holds an interest. The structured entity is financed through the sale of notes to investors.

Consolidated structured entities

As at 31 December 2018 the Group did not have any structured entities that it consolidated (2017: nil).

Unconsolidated structured entities

The Group has interests in structured entities that the Group does not control and which are therefore not consolidated.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

16. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)

Unconsolidated structured entities (continued)

The Group's transactions with unconsolidated structured entities primarily include securitisations, credit protection purchased through CLNs, other structured financings and collateralised loan and debt obligations. The Group's interests in structured entities that it does not consolidate can include ownership of retained interests in Group-sponsored transactions, interests purchased in the secondary market (both for Group-sponsored transactions and transactions sponsored by third parties), and certain derivatives with securitisation structured entities. The risks associated with derivatives entered into with structured entities are essentially the same as similar derivatives with non-structured entity counterparties and are managed as part of the Group's overall derivative exposure.

The table below shows certain non-consolidated structured entities in which the Group had an interest at 31 December 2018 and at 31 December 2017. The tables include all structured entities in which the Group has determined that its maximum exposure to loss is greater than specific thresholds or meets certain other criteria. The majority of the structured entities included in the tables below are sponsored by unrelated parties; the Group's involvement generally is the result of the Group's secondary market-making activities.

The Group's maximum exposure to loss does not include the offsetting benefit of hedges or any reductions associated with the amount of collateral held as part of a transaction with the structured entity or any party to the structured entity directly against a specific exposure to loss.

| | Mortgage and asset-backed securitisations \$millions | Collateralised debt obligations \$millions | Fund investments \$millions | Other \$millions | Total \$millions |
|--|---|---|-----------------------------------|---------------------|---------------------|
| 31 December 2018 | | | | | |
| Assets of the structured entity | 3,698 | 6,660 | 2,153 | 1,577 | 14,088 |
| Maximum exposure to loss: | | | | | |
| Debt and equity interests | 341 | 207 | 2,036 | 1 | 2,585 |
| Derivative and other contracts | - | - | 117 | 1,575 | 1,692 |
| Total maximum exposure to loss | 341 | 207 | 2,153 | 1,576 | 4,277 |
| Carrying value of exposure to loss - assets ⁽¹⁾ : | | | | | |
| Debt and equity interests | 341 | 207 | 2,036 | 1 | 2,585 |
| Derivative and other contracts | - | - | 54 | 13 | 67 |
| Total carrying value of exposure to loss - assets | 341 | 207 | 2,090 | 14 | 2,652 |
| Carrying value of exposure to loss - liabilities ⁽¹⁾ : | | | | | |
| Derivative and other contracts | - | - | 63 | 66 | 129 |
| Total carrying value of exposure to loss - liabilities | - | - | 63 | 66 | 129 |

⁽¹⁾ Amounts are recognised in the consolidated statement of financial position in trading financial assets or liabilities – derivatives or trading financial assets or liabilities – corporate and other debt.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

16. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)

Unconsolidated structured entities (continued)

| | Mortgage and asset-backed securitisations \$millions | Collateralised debt obligations \$millions | Fund investments \$millions | Other \$millions | Total \$millions |
|--|---|---|-----------------------------------|---------------------|---------------------|
| 31 December 2017 | | | | | |
| Assets of the structured entity | 6,998 | 5,365 | 856 | 2,302 | 15,521 |
| Maximum exposure to loss: | | | | | |
| Debt and equity interests | 441 | 142 | 755 | - | 1,338 |
| Derivative and other contracts | - | - | 101 | 1,450 | 1,551 |
| Total maximum exposure to loss | 441 | 142 | 856 | 1,450 | 2,889 |
| Carrying value of exposure to loss - assets ⁽¹⁾ : | | | | | |
| Debt and equity interests | 441 | 142 | 755 | - | 1,338 |
| Derivative and other contracts | - | - | 40 | 132 | 172 |
| Total carrying value of exposure to loss - assets | 441 | 142 | 795 | 132 | 1,510 |
| Carrying value of exposure to loss - liabilities ⁽¹⁾ : | | | | | |
| Derivative and other contracts | - | - | 61 | 4 | 65 |
| Total carrying value of exposure to loss - liabilities | - | - | 61 | 4 | 65 |

(1) Amounts are recognised in the consolidated statement of financial position in trading financial assets or liabilities – derivatives or trading financial assets or liabilities – corporate and other debt.

The Group's maximum exposure to loss often differs from the carrying value of the interests held by the Group. The maximum exposure to depends on the nature of the Group's interest in the structured entities and is limited to the notional amounts of certain liquidity facilities, other credit support, total return swaps, written put options, and the fair value of certain other derivatives and investments the Group has made in the structured entities. Liabilities issued by structured entities generally are non-recourse to the Group. Where notional amounts are utilised in quantifying maximum exposure related to derivatives, such amounts do not reflect fair value write downs already recorded by the Group.

Securitisation transactions generally involve structured entities. Primarily as a result of its secondary market-making activities, the Group owned additional securities issued by securitisation structured entities for which the maximum exposure to loss is less than the specific thresholds noted earlier. These additional securities which were retained in connection with transfers of assets by the Group totalled \$379 million at 31 December 2018 (2017: \$392 million). Details of the type of securities retained are shown in the table on the next page.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

16. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)

Unconsolidated structured entities (continued)

| | 2018 | 2017 |
|------------------------------|------------|------------|
| | \$millions | \$millions |
| <i>Securities backed by:</i> | | |
| Residential mortgage loans | 169 | 222 |
| Commercial mortgage loans | 7 | 26 |
| CDOs or other CLOs | 146 | 106 |
| Other consumer loans | 57 | 38 |
| | <u>379</u> | <u>392</u> |

The Group's primary risk exposure is to the securities issued by the structured entity owned by the Group, with the risk highest on the most subordinate class of beneficial interests. These securities generally are included in Financial assets classified as held for trading – corporate and other debt. The Group does not provide additional support in these transactions through contractual facilities, such as liquidity facilities, guarantees or similar derivatives. The Group's maximum exposure to loss generally equals the fair value of the securities owned.

The Group has not provided financial support to, or otherwise agreed to be responsible for supporting financially, any unconsolidated structured entity.

Sponsored unconsolidated structured entities

The Group considers itself the sponsor of certain non-consolidated structured entities where it was primarily involved in the establishment of a structured entity and where, additionally, the Group has been involved in the transfer of assets; servicer of the assets; ability to access the assets; marketing; managing activities; purchasing protection or providing explicit guarantees; when Morgan Stanley's name is associated with the structured entity or where market participants may generally expect Morgan Stanley to be associated with the structured entity.

In some sponsored entities, the Group has been involved with the structured entity through establishing the structured entity, marketing of products associated with the structured entity in its own name, and/ or through involvement in the design of the structured entity. The Group has no interest in these entities as at 31 December 2018 (2017: \$nil).

The gain related to sponsored entities during 2018 was \$167 million (2017: loss of \$1.5 million). Gains or losses are reported under 'Net trading income' in the consolidated income statement. During 2018 there were \$921 million (2017:\$nil) of assets transferred to sponsored structured entities. It is the investors in the SPV rather than the Group that are exposed to carrying value of assets transferred. The Group's exposure to the SPV is limited to net amounts receivable from swap transactions with the entity and is not directly linked to the transferred assets themselves.

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17. PROPERTY, PLANT AND EQUIPMENT

2018

| | Leasehold improvements \$millions | Fixtures, fittings and equipment \$millions | Total \$millions |
|------------------------------|--|--|-----------------------------|
| Cost | | | |
| At 1 January 2018 | 25 | 26 | 51 |
| Additions | 2 | 4 | 6 |
| Foreign exchange revaluation | - | (1) | (1) |
| Disposals | (1) | (2) | (3) |
| Transfer of subsidiary | (9) | (9) | (18) |
| At 31 December 2018 | <u>17</u> | <u>18</u> | <u>35</u> |
| Depreciation | | | |
| At 1 January 2018 | 22 | 21 | 43 |
| Charge for the year | 2 | 1 | 3 |
| Disposals | (1) | (2) | (3) |
| Transfer of subsidiary | (9) | (9) | (18) |
| At 31 December 2018 | <u>14</u> | <u>11</u> | <u>25</u> |
| Carrying amount | | | |
| At 31 December 2018 | <u>3</u> | <u>7</u> | <u>10</u> |

2017

| | Leasehold improvements \$millions | Fixtures, fittings and equipment \$millions | Total \$millions |
|------------------------------|--|--|-----------------------------|
| Cost | | | |
| At 1 January 2017 | 22 | 21 | 43 |
| Additions | 1 | 2 | 3 |
| Foreign exchange revaluation | 2 | 3 | 5 |
| At 31 December 2017 | <u>25</u> | <u>26</u> | <u>51</u> |
| Depreciation | | | |
| At 1 January 2017 | 19 | 18 | 37 |
| Charge for the year | 1 | 1 | 2 |
| Foreign exchange revaluation | 2 | 2 | 4 |
| At 31 December 2017 | <u>22</u> | <u>21</u> | <u>43</u> |
| Carrying amount | | | |
| At 31 December 2017 | <u>3</u> | <u>5</u> | <u>8</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

18. TRADE AND OTHER PAYABLES

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Trade and other payables (amortised cost) | | |
| Trade payables | 89,020 | 94,376 |
| Other Payables | | |
| Amounts due to other Morgan Stanley Group undertakings | 1,625 | 1,742 |
| Other amounts payable | 216 | 204 |
| | <u>90,861</u> | <u>96,322</u> |
| Trade and other payables (designated at FVPL) | | |
| Prepaid OTC contracts | 887 | 898 |
| Unfunded loan commitments | 10 | - |
| | <u>897</u> | <u>898</u> |
| Total | <u>91,758</u> | <u>97,220</u> |

19. DEBT AND OTHER BORROWINGS

| | 2018 | 2017 |
|---|-------------------|-------------------|
| | \$millions | \$millions |
| Debt and other borrowings (amortised cost) | | |
| Senior subordinated debt | 6,000 | - |
| Subordinated debt | 5,000 | 7,000 |
| Other borrowings ⁽¹⁾ | 20,451 | 29,080 |
| | <u>31,451</u> | <u>36,080</u> |
| Debt and other borrowings (designated at FVPL) | | |
| Issued structured notes | 5,664 | 3,858 |
| Total | <u>37,115</u> | <u>39,938</u> |

(1) During the year the Group has granted a floating charge over a pool of assets in favour of MSIUK to secure certain intercompany loans which MSIUK has provided to the Group and are presented within Other borrowings. The value of assets subject to this charge at 31 December 2018 was \$16,129 million.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

19. DEBT AND OTHER BORROWINGS (CONTINUED)

The amounts subject to subordinated loan agreements are wholly repayable as shown below:

| Counterparty | Repayment Date | Interest Rate | 2018 | | 2017 | |
|---|------------------|----------------------------------|--------------------------------|-----------------------|--------------------------------|-----------------------|
| | | | Accrued Interest \$millions | Balance \$millions | Accrued Interest \$millions | Balance \$millions |
| MSIUK | 21 December 2025 | OBFR ⁽¹⁾ plus 2.3% | 39 | 5,000 | 30 | 5,000 |
| Morgan Stanley International Finance S.A. | 31 October 2025 | LIBOR ⁽²⁾ plus 1.475% | - | - | 10 | 2,000 |
| | | | <u>39</u> | <u>5,000</u> | <u>40</u> | <u>7,000</u> |

(1) Overnight Bank Funding Rate ("OBFR")

(2) London Interbank Offered Rate ("LIBOR")

The amounts subject to senior subordinated loan agreements are wholly repayable as shown below:

| Counterparty | Repayment Date | Interest Rate | 2018 | | 2017 | |
|--------------|--------------------------------|-------------------------|--------------------------------|-----------------------|--------------------------------|-----------------------|
| | | | Accrued Interest \$millions | Balance \$millions | Accrued Interest \$millions | Balance \$millions |
| MSIUK | 30 January 2020 ⁽³⁾ | MS Proxy ⁽⁴⁾ | 1 | 6,000 | - | - |
| | | | <u>1</u> | <u>6,000</u> | <u>-</u> | <u>-</u> |

(3) The repayment date can be extended by 395 days on each business day but no later than 49 years from utilisation date, and unless a term-out notice is sent

(4) Interest rate at which Morgan Stanley is offering loans, in the relevant currency, to members of the Morgan Stanley Group on such day, which counterparties have acknowledged and agreed to apply to any loan, acting on an arm's length basis

All amounts outstanding under subordinated loan agreements are repayable on the repayment date. Any repayment of subordinated debt prior to contractual maturity would require mutual agreement between the Company and the Lender and prior supervisory consent.

The senior subordinated loan, including accrued interest, may be bailed in by the Bank of England following the exercise of their statutory powers in certain circumstances.

The Group has not defaulted on principal, interest or breached any terms of its subordinated loans or senior subordinated loans during the year.

On 24 May 2018 the subordinated loan of \$2,000 million from Morgan Stanley International Finance S.A. was repaid.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

20. PROVISIONS

| | Property \$millions | Litigation \$millions | Taxes and levies \$millions | Total \$millions |
|------------------------------|------------------------|--------------------------|-----------------------------------|---------------------|
| At 1 January 2018 | 4 | 2 | 48 | 54 |
| Additional provisions | 1 | 7 | 9 | 17 |
| Provisions utilised | - | (3) | (25) | (28) |
| Unused provisions reversed | - | (6) | (32) | (38) |
| Foreign exchange revaluation | - | - | 1 | 1 |
| Transfer of entity | (3) | - | - | (3) |
| At 31 December 2018 | 2 | - | 1 | 3 |

Property

Property provisions represent the net present value of expected future costs of excess office space (net of expected sublease income) and the net present value of expected future costs of reinstating leasehold improvements at the end of the lease term. Lease reinstatement provisions are released when the reinstatement obligations have been fulfilled. The related asset for lease reinstatement provisions is included in 'Leasehold improvements' within 'Property, plant and equipment' (note 17).

Litigation matters

In addition to the matters described below, in the normal course of business, the Group has been named, from time to time, as a defendant in various legal actions, including arbitrations, class actions and other litigation, arising in connection with its activities as a global diversified financial services institution. Certain of the actual or threatened legal actions include claims for substantial compensatory and/or punitive damages or claims for indeterminate amounts of damages. In some cases, the entities that would otherwise be the primary defendants in such cases are bankrupt or are in financial distress.

The Group is also involved, from time to time, in other reviews, investigations and proceedings (both formal and informal) by governmental and self-regulatory agencies regarding the Group's business, and involving, among other matters, sales and trading activities, financial products or offerings sponsored, underwritten or sold by the Group, and accounting and operational matters, certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief.

The Group contests liability and/or the amount of damages as appropriate in each pending matter. Where available information indicates that it is probable a liability had been incurred at the date of the financial statements and the Group can reasonably estimate the amount of that loss, the Group accrues the estimated loss by a charge to income. The Group's future legal expenses may fluctuate from period to period, given the current environment regarding government investigations and private litigation affecting global financial services firms, including the Group.

In many proceedings and investigations, however, it is inherently difficult to determine whether any loss is probable or even possible, or to estimate the amount of any loss. The Group cannot predict with certainty if, how or when such proceedings or investigations will be resolved or what the eventual settlement, fine, penalty or other relief, if any, may be, particularly for proceedings and investigations where the factual record is being developed or contested or where plaintiffs or government entities seek substantial or indeterminate damages, restitution, disgorgement or penalties. Numerous issues may need to be resolved, including through potentially lengthy discovery and determination of important factual matters, determination of issues related to class certification and the calculation of damages or other relief, and by addressing novel or unsettled legal questions relevant to the proceedings or investigations in question, before a loss or additional loss or range of loss or additional loss can be reasonably estimated for a proceeding or investigation.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

20. PROVISIONS (CONTINUED)

Subject to the foregoing, the Group believes, based on current knowledge and after consultation with counsel, that the outcome of such proceedings and investigations will not have a material adverse effect on the financial condition of the Group, although the outcome of such proceedings or investigations could be material to the Group's operating results and cash flows for a particular period depending on, among other things, the level of the Group's revenues or income for such period.

While the Group has identified below certain proceedings that the Group believes to be material, individually or collectively, there can be no assurance that additional material losses will not be incurred from claims that have not yet been asserted or are not yet determined to be material.

On 15 July 2010, China Development Industrial Bank ("CDIB") filed a complaint against the Group and another Morgan Stanley Group affiliate, styled *China Development Industrial Bank v. Morgan Stanley & Co. Incorporated et al.*, which is pending in the Supreme Court of the State of New York, New York County. The complaint relates to a \$275 million credit default swap ("CDS") referencing the super senior portion of the STACK 2006-1 collateralised debt obligation ("CDO"). The complaint asserts claims for common law fraud, fraudulent inducement and fraudulent concealment and alleges that the Group and another Morgan Stanley Group affiliate misrepresented the risks of the STACK 2006-1 CDO to CDIB, and that the Group and another Morgan Stanley Group affiliate knew that the assets backing the CDO were of poor quality when it entered into the CDS with CDIB. The complaint seeks compensatory damages related to the approximately \$228 million that CDIB alleges it has already lost under the CDS, rescission of CDIB's obligation to pay an additional \$12 million, punitive damages, equitable relief, pre- and post-judgment interest, fees and costs. On 28 February 2011, the court denied the Group's and another Morgan Stanley Group affiliate's motion to dismiss the complaint. On 21 December 2018, the court denied the Group's and another Morgan Stanley Group affiliate's motion for summary judgment and granted in part the Group's and another Morgan Stanley Group affiliate's motion for sanctions related to the spoliation of evidence. On 18 January 2019, CDIB filed a motion to clarify and resettle the portion of the court's 21 December 2018 order granting spoliation sanctions. On 24 January 2019, CDIB filed a notice of appeal from the court's 21 December 2018 order, and on 25 January 2019, the Group and another Morgan Stanley Group affiliate filed a notice of appeal from the same order.

On 1 April 2016, the California Attorney General's Office filed an action against certain Morgan Stanley Group affiliates in California state court styled *California v. Morgan Stanley, et al.*, on behalf of California investors, including the California Public Employees' Retirement System and the California Teachers' Retirement System. The complaint alleges that the Morgan Stanley Group affiliates made misrepresentations and omissions regarding residential mortgage backed securities and notes issued by the Cheyne SIV, and asserts violations of the California False Claims Act and other state laws and seeks treble damages, civil penalties, disgorgement, and injunctive relief. On 30 September 2016, the court granted the Morgan Stanley Group affiliates' demurrer, with leave to replead. On 21 October 2016, the California Attorney General filed an amended complaint. On 25 January 2017, the court denied the Morgan Stanley Group affiliates' demurrer with respect to the amended complaint.

On 11 October 2011, an Italian financial institution, Banco Popolare Società Cooperativa ("Banco Popolare"), filed a civil claim against the Group and another Morgan Stanley Group affiliate in the Milan courts, styled *Banco Popolare Società Cooperativa v Morgan Stanley & Co. International plc & others*, related to its purchase of €100 million of bonds issued by Parmalat. The claim asserted by Banco Popolare alleges, among other things, that the Group and another Morgan Stanley Group affiliate was aware of Parmalat's impending insolvency and conspired with others to deceive Banco Popolare into buying bonds by concealing both Parmalat's true financial condition and certain features of the bonds from the market and Banco Popolare. Banco Popolare seeks damages of €76 million (approximately \$87 million) plus damages for loss of opportunity and moral damages. The Group and another Morgan Stanley Group affiliate filed its answer on 20 April 2012. On 11 September 2018, the court dismissed in full the claim against the Group and another Morgan Stanley Group affiliate. On 11 March 2019, the plaintiff filed an appeal against the court's decision.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

20. PROVISIONS (CONTINUED)

On 22 June 2017, the public prosecutor for the Court of Accounts for the Republic of Italy filed a claim against the Firm styled Case No. 2012/00406/MNV, which is pending in the Regional Prosecutor's Office at the Judicial Section of the Court of Auditors for Lazio, Italy. The claim relates to certain derivative transactions between the Republic of Italy and the Group and another Morgan Stanley Group affiliate. The transactions were originally entered into between 1999 and 2005, and were restructured (and certain of the transactions were terminated) in December 2011 and January 2012. The claim alleges, inter alia, that the Group effectively acted as an agent of the state in connection with these transactions and asserts claims related to, among other things, whether the Ministry of Finance was authorised to enter into these transactions, whether the transactions were appropriate and whether the Group's conduct related to the termination of certain transactions was proper. The prosecutor is seeking damages through an administrative process against the Group for €2.76billion (approximately \$3.2 billion). On 30 March 2018, the Group filed its defence to the claim. On 15 June 2018, the Court issued a decision declining jurisdiction and dismissing the claim against the Group. A hearing of the public prosecutor's appeal was held on 10 January 2019. On 7 March 2019, the Appellate Division of the Court issued a decision declining jurisdiction and dismissing the claim against the Group.

In matters styled *Case number 15/3637* and *Case number 15/4353*, the Dutch Tax Authority ("Dutch Authority") has challenged in the District Court in Amsterdam the prior set-off by a subsidiary undertaking of the Group of approximately €124 million (approximately \$142 million) plus accrued interest of withholding tax credits against the subsidiary undertaking of the Group's corporation tax liabilities for the tax years 2007 to 2013. The Dutch Authority alleges that the subsidiary undertaking of the Group was not entitled to receive the withholding tax credits on the basis, inter alia, that the subsidiary undertaking of the Group subsidiary did not hold legal title to certain securities subject to withholding tax on the relevant dates. The Dutch Authority has also alleged that the subsidiary undertaking of the Group failed to provide certain information to the Dutch Authority and keep adequate books and records. On 26 April 2018, the District Court in Amsterdam issued a decision dismissing the Dutch Authority's claims. On 4 June 2018, the Dutch Authority filed an appeal before the Court of Appeal in Amsterdam in matters re-styled *Case number 18/00318* and *Case number 18/00319*. A hearing of the Dutch Authority's appeal has been scheduled for 26 June 2019.

On 5 October 2017, various institutional investors filed a claim against the Group and another bank in a matter now styled *Case number B-803-18 (previously BS 99-6998/2017)*, in the City Court of Copenhagen, Denmark concerning their roles as underwriters of the initial public offering ("IPO") in March 2014 of the Danish company OW Bunker A/S. The claim seeks damages of DKK 534,270,456 (approximately \$82 million) plus interest in respect of alleged losses arising from investing in shares in OW Bunker, which entered into bankruptcy in November 2014. Separately, on 29 November 2017, another group of institutional investors joined the Group and another bank as defendants to pending proceedings in the High Court of Eastern Denmark against various other parties involved in the IPO in a matter styled *Case number B-2073-16*. The claim brought against the Group and the other bank has been given its own *Case number B-2564-17*. The investors claim damages of DKK 767,235,885 (approximately \$118 million) plus interest, from the Group and the other bank on a joint and several basis with the defendants to these proceedings. Both claims are based on alleged prospectus liability; the second claim also alleges professional liability of banks acting as financial intermediaries. On 8 June 2018, the City Court of Copenhagen, Denmark ordered that the matters now styled *Case number B-803-18*, *B-2073-16* and *Case number B-2564-17* be heard together before the High Court of Eastern Denmark. On 29 June 2018, the Group filed its defence to the matter now styled *Case number B-2564-17*. On 4 February 2019, the Group filed its defence to the matter now styled *Case number B-803-18*.

The Group and other financial institutions are responding to a number of governmental investigations and civil litigation matters related to allegations of anticompetitive conduct in various aspects of the financial services industry, including the matter described on the next page.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

20. PROVISIONS (CONTINUED)

Beginning in February of 2016, the Group and certain Morgan Stanley Group affiliates were named as a defendant in multiple purported antitrust class actions now consolidated into a single proceeding in the United States District Court for the Southern District of New York styled *In Re: Interest Rate Swaps Antitrust Litigation*. Plaintiffs allege, inter alia, that the Group and certain Morgan Stanley Group affiliates, together with a number of other financial institution defendants, violated United States and New York state antitrust laws from 2008 through December of 2016 in connection with their alleged efforts to prevent the development of electronic exchange-based platforms for interest rates swaps trading. Complaints were filed both on behalf of a purported class of investors who purchased interest rates swaps from defendants, as well as on behalf of two swap execution facilities that allegedly were thwarted by the defendants in their efforts to develop such platforms. The consolidated complaints seek, among other relief, certification of the investor class of plaintiffs and treble damages. On 28 July 2017, the court granted in part and denied in part the defendants' motion to dismiss the complaints.

Tax related provisions

The Group is subject to tax laws which are complex and subject to different interpretations by the taxpayer and the relevant governmental taxing authorities. Management makes judgements and interpretations about the application of these inherently complex tax laws when determining the provision for taxes. Disputes over interpretations of the tax laws may be settled with the taxing authority upon examination or audit. The Group periodically evaluates the likelihood of assessments in each taxing jurisdiction resulting from current and subsequent years' examinations. Provisions related to potential losses that may arise from tax audits are established in accordance with the guidance on accounting for uncertain tax items. The Group has established provisions that it believes are adequate in relation to the potential for additional assessments. Whilst a range of outcomes is foreseeable, management considers the amount of the provision to be a reasonable estimate of expected future liabilities after consideration of all pertinent facts, based on the status of inquiries at the balance sheet date.

In 2017 the Group self-identified an issue regarding VAT on intercompany services provided by certain overseas affiliates to the Group and engaged with Her Majesty's Revenue and Customs ("HMRC") to resolve the issue. During the period and following further discussions with HMRC, the matter was resolved. At the balance sheet date no provision is held (2017: \$25 million).

21. DEFERRED TAX ASSETS AND LIABILITIES

Deferred taxes are calculated on all temporary differences under the liability method. The movement in the deferred tax account is as follows:

| | 2018 | | 2017 | |
|---|----------------------------------|--------------------------------------|----------------------------------|--------------------------------------|
| | Deferred tax asset \$millions | Deferred tax liability \$millions | Deferred tax asset \$millions | Deferred tax liability \$millions |
| At 1 January | 107 | (13) | 84 | (11) |
| Adjustment in respect of prior years | - | - | (2) | 3 |
| Amount recognised in the consolidated income statement | (58) | - | (1) | 8 |
| Amount recognised in other comprehensive income | (40) | (20) | 26 | (13) |
| Impact of changes in tax rates recognised in other comprehensive income | 3 | - | - | - |
| Transfer of entity | (7) | - | - | - |
| At 31 December | 5 | (33) | 107 | (13) |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

21. DEFERRED TAX ASSETS AND LIABILITIES (CONTINUED)

The transfer of entity impact on the deferred tax asset relates to the transfer of the MS France Group out of the Group. Refer to note 15.

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The deferred tax included in the consolidated statement of financial position and changes recorded in 'Income tax expense' are as follows:

| | Deferred tax asset 2018 \$millions | Deferred tax liability 2018 \$millions | Consolidated income statement 2018 \$millions | Deferred tax asset 2017 \$millions | Deferred tax liability 2017 \$millions | Consolidated income statement 2017 \$millions |
|--|---|---|--|---|---|--|
| Accelerated capital allowances | - | 2 | - | 2 | - | - |
| Deferred compensation | 4 | 2 | (2) | 13 | - | 1 |
| Transitional adjustments | - | (12) | - | - | (13) | - |
| Temporary differences arising in respect of changes in the Group's own credit risk | - | (17) | - | 42 | - | - |
| Deferred interest | - | - | (48) | 48 | - | (3) |
| Unrealised gains/ (losses) | - | (8) | (8) | - | - | 8 |
| Other temporary differences | 1 | - | - | 2 | - | 1 |
| | <u>5</u> | <u>(33)</u> | <u>(58)</u> | <u>107</u> | <u>(13)</u> | <u>7</u> |

Finance Act 2016 enacted reductions in the UK corporation tax main rate to 17% with effect from 1 April 2020. This reduction in the tax rate impacts the deferred tax charge for the current period. In addition, Finance (No. 2) Act 2015 introduced an 8% corporation tax surcharge on the profits of banking companies with effect from 1 January 2016 which impacts the deferred tax charge in the current period.

The deferred tax assets recognised are based on management assessment that it is probable that the Group will have taxable profits against which the temporary differences can be utilised.

Deferred tax liability of \$12 million on transitional adjustment relates to the impact of the change in accounting policy with respect to fair value gains and losses arising upon initial recognition of financial instruments which use unobservable market data, as discussed in note 2.

Deferred tax assets have not been recognised in respect of the following items (amounts shown are as at the end of the reporting period):

| | 2018 \$millions | 2017 \$millions |
|-------------------|----------------------------|----------------------------|
| Unused tax losses | <u>41</u> | <u>40</u> |

The aggregate amount of temporary differences associated with investments in subsidiaries and branches for which deferred tax liabilities have not been recognised is \$nil (2017: \$nil).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

22. COMMITMENTS AND CONTINGENCIES

Leases

The Group has entered into non-cancellable commercial leases on premises and equipment. These leases have lives ranging from one to seven years. The leases on the premises include renewal options and escalation clauses in line with general rental market conditions and rent adjustments based on price indices. The lease agreements do not contain contingent rent payment clauses or purchase options and they do not impose any restrictions on the Group's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements. Future minimum payments and receivables decreased from 2017 as a result of the transfer of the MS France Group to MSIUK.

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Lease payments under non-cancellable operating leases recognised as an expense in the year | | |
| - Minimum lease payments | <u>7</u> | <u>6</u> |

Future minimum lease payments under non-cancellable operating leases at 31 December are due as follows:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Within one year | 3 | 9 |
| In the second to fifth years inclusive | 8 | 16 |
| After five years | <u>1</u> | <u>2</u> |
| | <u>12</u> | <u>27</u> |

Future minimum sub-lease receivables under non-cancellable operating leases at 31 December are due as follows:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Within one year | - | 1 |
| In the second to fifth years inclusive | <u>-</u> | <u>2</u> |
| | <u>-</u> | <u>3</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

22. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Other commitments and contingent liabilities

At 31 December, the Group had the following outstanding commitments and contingent liabilities arising from off-balance sheet financial instruments:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| <i>Contingent liabilities</i> | | |
| Financial guarantees | - | 1 |
| <i>Commitments⁽¹⁾</i> | | |
| | 2018 | 2017 |
| | \$millions | \$millions |
| Loan commitments | 2,308 | 2,177 |
| Underwriting commitments | 687 | 336 |
| Guarantees | 405 | 575 |
| Letters of credit | 2 | 2 |
| Unsettled securities purchased under agreements to resell ⁽²⁾ | 34,623 | 28,480 |
| Unsettled securities sold under agreements to repurchase ⁽²⁾ | 26,225 | 13,740 |
| Other commitments | 22 | 13 |

(1) On balance sheet commitments include standby loan commitments, forward starting securities sold under agreements to repurchase and guarantees.

(2) Unsettled securities purchased under agreements to resell and sold under agreements to repurchase have a trade date at or prior to 31 December 2018 and settle subsequent to period end.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

23. EQUITY INSTRUMENTS

| | Ordinary shares of \$1 each \$millions | Ordinary shares of £1 each \$millions | Class A ordinary shares of \$1 each \$millions | Additional Tier 1 capital \$millions | Total equity instruments \$millions |
|--|---|--|--|--|---|
| Issued and fully paid: | | | | | |
| At 1 January 2017 | 9,935 | 30 | 1,500 | 1,300 | 12,765 |
| Ordinary shares of \$1 each issued | 1,000 | | | | 1,000 |
| At 1 January 2018 | 10,935 | 30 | 1,500 | 1,300 | 13,765 |
| Additional Tier 1 capital issued | | | | 2,200 | 2,200 |
| At 31 December 2018 | 10,935 | 30 | 1,500 | 3,500 | 15,965 |
| Voting rights at 31 December 2018 | 99.9% ⁽¹⁾ | 0.1% ⁽¹⁾ | Non-voting | Non-voting | 100% |

(1) Ordinary shares are pari passu with each other regardless of currency and together carry 100% of the voting rights (2017: 100%)

Equity instruments

At 1 January 2018 the total equity instruments in issue of the Company equated to \$13,765 million (1 January 2017: \$12,765 million) comprising 10,935,105,148 ordinary shares of \$1 each (1 January 2017: 9,935,105,148), 17,615,107 ordinary shares of £1 each, 1,500,000,000 Class A Non-voting ordinary shares of \$1 each (1 January 2017: 1,500,000,000) and AT1 capital instruments of \$1,300,000,000 (1 January 2017: \$1,300,000,000). All equity instruments are fully paid.

On 23 August 2018, the Company issued Additional Tier 1 capital instruments (the “Instruments”) with a value of \$2,200,000,000 to Morgan Stanley International Limited, a UK-incorporated indirect parent of the Company.

Ordinary shares

The holders of the ordinary shares are entitled to receive dividends as declared from time to time and are entitled, on a show of hands, to one vote and, on a poll, one vote per share at meetings of the shareholders of the Company. All shares rank equally with regard to the Company’s residual net assets.

All ordinary shares are recorded at the rates of exchange ruling at the date the shares were paid up.

Additional Tier 1 capital

The Instruments include a trigger mechanism whereby, if the Common Equity Tier 1 capital ratio of the Company or MSI Group falls below a pre-determined level, the Group will write-down the outstanding principal amount of the Instruments, together with any accrued interest coupon. In this situation, Morgan Stanley International Limited, the purchaser of the AT1, would have no further rights against the Group in respect of the AT1.

The Instruments have no defined maturity, and are subordinated to senior creditors and subordinated loan creditors of the Group. The Instruments are not entitled to any participation in the residual net assets of the Group. The Instruments are callable at the Group’s discretion, from 30 November 2023 for those issued on 23 August 2018, and after five years from their date of issuance of 15 December 2014 for those Instruments previously issued.

Coupons on the Instruments are non-cumulative and payable at a fixed rate of 7.5% per annum for those Instruments issued on 23 August 2018, and 9% per annum for those Instruments previously issued. Payment of the coupon is wholly at the discretion of the Group.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

23. EQUITY INSTRUMENTS (CONTINUED)

Additional Tier 1 capital (continued)

A payment of coupon interest was approved by the Board of Directors on 31 May 2018 and paid on the same day (see note 24).

Reserves

Share premium

The 'Share premium account' comprises the capital raised in an issue of shares that exceeds the nominal value of the shares.

Currency translation reserve

The 'Currency translation reserve' comprises all foreign exchange differences arising from the translation of the total assets less total liabilities of foreign operations. The tax effect of these movements is also included in the 'currency translation reserve'.

Available-for-sale reserve

The 'Available-for-sale reserve' of \$nil (2017: \$63 million) includes the cumulative net change in the fair value of available-for-sale financial assets held at the reporting date. The tax effect of these movements was also included in the 'Available-for-sale reserve'. As a result of the adoption of IFRS 9, at 1 January 2018 the 'Available-for-sale' reserve was transferred to 'Retained earnings'.

Capital contribution reserve

The 'Capital contribution reserve' comprises contributions of capital from the Group's parent company to subsidiaries of the Group.

Capital redemption reserve

The 'Capital redemption reserve' represents transfers in prior years from retained earnings in accordance with relevant legislation.

Pension reserve

The 'Pension reserve' comprises cumulative actuarial gains or losses on scheme assets and obligations net of current tax and the impact of the asset surplus ceiling (see note 35).

Debt valuation adjustment reserve

The 'Debt valuation adjustment reserve' includes the cumulative change in fair value of certain financial liabilities designated at fair value through profit or loss that is attributable to changes in the credit risk of those liabilities at the reporting date. The tax effect of these movements is also included in the 'Debt valuation adjustment reserve'.

24. DIVIDENDS

On 31 May 2018, the Directors approved a coupon payment on the Instruments of \$118,625,000 (31 December 2017: \$118,625,000) out of reserves available for distribution at 31 December 2017. The coupon was paid on 31 May 2018 and has a related tax benefit of \$32,028,750 (2017: \$33,121,579).

On 4 July 2018, one €1 ordinary share in Morgan Stanley Investment Management (Ireland) Limited was transferred from the Company to MSIUK by way of a dividend in specie of \$1.

On 1 November 2018, 401,072,825 €1 ordinary shares in Morgan Stanley France Holdings I S.A.S. were transferred from the Company to MSIUK by way of a dividend in specie of \$442,154,006.

The Directors have not proposed the payment of a final dividend out of reserves available at 31 December 2018 (2017: \$nil).

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25. ADDITIONAL CASH FLOW INFORMATION

a. Cash and cash equivalents

For the purposes of the consolidated statement of cash flows, cash and cash equivalents comprise the following balances, which have less than three months maturity from the date of acquisition:

| | 2018 | 2017 |
|------------------------------|-------------------|-------------------|
| | \$millions | \$millions |
| Cash and short term deposits | 30,829 | 25,461 |
| Bank loans and overdrafts | (4) | (123) |
| | <u>30,825</u> | <u>25,338</u> |

Included within 'Cash and short term deposits' is \$13,483 million (2017: \$12,007 million) of segregated client money, held in accordance with the FCA's Client Money Rules, and an amount of \$126 million (2017: \$133 million) which represents other client money, that is not available for use by the Group. The corresponding payable is recognised and included in 'Trade payables' within 'Financial liabilities at amortised cost'.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
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25. ADDITIONAL CASH FLOW INFORMATION (CONTINUED)

b. Reconciliation of cash flows from operating activities

| | Note | 2018 \$millions | 2017 \$millions |
|---|------|---------------------|---------------------|
| Profit for the year | | 697 | 864 |
| <i>Adjustments for:</i> | | | |
| Impairment loss on financial instruments | 8 | 7 | (1) |
| Depreciation on property, plant and equipment | 17 | 3 | 2 |
| Provisions | 20 | (20) | - |
| Interest income | | (1,195) | (174) |
| Interest expense | | 3,076 | 1,581 |
| Income tax expense | 9 | 359 | 414 |
| Operating cash flows before changes in operating assets and liabilities | | <u>2,927</u> | <u>2,686</u> |
| Changes in operating assets | | | |
| Net decrease in secured financing | | 56 | 952 |
| (Increase)/decrease in loans and advances | | (364) | 182 |
| (Increase)/decrease in trade and other receivables | | 5,247 | (17,401) |
| Net decrease in investment securities | | 29 | - |
| (Increase)/decrease in trading financial assets | | 4,509 | (16,613) |
| Net increase in other assets | | <u>(166)</u> | <u>(117)</u> |
| | | <u>9,311</u> | <u>(32,997)</u> |
| Changes in operating liabilities | | | |
| Increase/(decrease) in secured borrowing | | (2,856) | 14,881 |
| Increase/(decrease) in trade and other payables | | (3,802) | 8,484 |
| Increase/(decrease) in debt and other borrowings | | (6,168) | 21,822 |
| Increase/(decrease) in trading financial liabilities | | 3,554 | (8,210) |
| Increase/(decrease) in other liabilities | | 28 | (42) |
| Net decrease in provisions | | <u>(28)</u> | <u>(31)</u> |
| | | <u>(9,272)</u> | <u>36,904</u> |
| Interest received | | 1,156 | 254 |
| Interest paid | | (2,845) | (1,365) |
| Income taxes paid | | (281) | (264) |
| Effect of foreign exchange movements | | 990 | (1,782) |
| Net cash flows from operating activities | | <u><u>1,986</u></u> | <u><u>3,436</u></u> |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

25. ADDITIONAL CASH FLOW INFORMATION (CONTINUED)

c. Reconciliation of liabilities arising from financing activities

| | Balance at 1 January 2018 | Cash flows | Balance at 31 December 2018 |
|--|--------------------------------------|-------------------|--|
| | \$millions | \$millions | \$millions |
| Senior subordinated loans | - | 6,000 | 6,000 |
| Subordinated loans | 7,000 | (2,000) | 5,000 |
| Total liabilities from financing activities | 7,000 | 4,000 | 11,000 |

For further information on subordinated debt cash flows during the year refer to Note 19.

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26. EXPECTED MATURITY OF ASSETS AND LIABILITIES

The table below shows an analysis of assets and liabilities analysed according to when they are expected to be recovered, realised or settled.

At 31 December 2018

| | Less than or equal to twelve months \$millions | More than twelve months \$millions | Total \$millions |
|-------------------------------------|--|---|---------------------|
| ASSETS | | | |
| Cash and short-term deposits | 30,829 | - | 30,829 |
| Trading financial assets | 253,188 | - | 253,188 |
| Secured financing | 95,577 | 66 | 95,643 |
| Loans and advances | 712 | 124 | 836 |
| Investment securities | - | 132 | 132 |
| Trade and other receivables | 63,574 | 1,623 | 65,197 |
| Current tax assets | 350 | - | 350 |
| Deferred tax assets | - | 5 | 5 |
| Property, plant and equipment | - | 10 | 10 |
| Other assets | 7 | 2 | 9 |
| | 444,237 | 1,962 | 446,199 |
| LIABILITIES | | | |
| Bank loans and overdrafts | 4 | - | 4 |
| Trading financial liabilities | 217,093 | - | 217,093 |
| Secured borrowing | 74,952 | 3,975 | 78,927 |
| Trade and other payables | 91,187 | 571 | 91,758 |
| Debt and other borrowings | 4,908 | 32,207 | 37,115 |
| Provisions | 3 | - | 3 |
| Current tax liabilities | 55 | - | 55 |
| Deferred tax liabilities | - | 33 | 33 |
| Accruals and deferred income | 87 | - | 87 |
| Post-employment benefit obligations | - | 7 | 7 |
| | 388,289 | 36,793 | 425,082 |

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Year ended 31 December 2018

26. EXPECTED MATURITY OF ASSETS AND LIABILITIES (CONTINUED)

| At 31 December 2017 | Less than or equal to twelve months \$millions | More than twelve months \$millions | Total \$millions |
|-------------------------------------|--|---|---------------------|
| ASSETS | | | |
| Cash and short-term deposits | 25,461 | - | 25,461 |
| Trading financial assets | 264,793 | - | 264,793 |
| Secured financing | 99,336 | 9 | 99,345 |
| Loans and advances | 476 | - | 476 |
| Investment securities | - | 161 | 161 |
| Trade and other receivables | 69,132 | 1,732 | 70,864 |
| Current tax assets | 139 | - | 139 |
| Deferred tax assets | 9 | 98 | 107 |
| Property, plant and equipment | - | 8 | 8 |
| Other assets | 6 | 2 | 8 |
| | <u>459,352</u> | <u>2,010</u> | <u>461,362</u> |
| LIABILITIES | | | |
| Bank loans and overdrafts | 123 | - | 123 |
| Trading financial liabilities | 217,977 | - | 217,977 |
| Secured borrowing | 81,000 | 6,186 | 87,186 |
| Trade and other payables | 96,837 | 383 | 97,220 |
| Debt and other borrowings | 2,005 | 37,933 | 39,938 |
| Provisions | 54 | - | 54 |
| Current tax liabilities | 28 | - | 28 |
| Accruals and deferred income | 144 | - | 144 |
| Post-employment benefit obligations | - | 5 | 5 |
| | <u>398,168</u> | <u>44,507</u> | <u>442,675</u> |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

27. SEGMENT REPORTING

Segment information is presented in respect of the Group's business and geographical segments. The business segments and geographical segments are based on the Group's management and internal reporting structure. Transactions between business segments are on normal commercial terms and conditions.

Business segment

Morgan Stanley structures its business segments primarily based upon the nature of the financial products and services provided to customers and Morgan Stanley's internal management structure. The Group's own business segments are consistent with those of Morgan Stanley.

The Group has one reportable business segment, Institutional Securities, which includes capital raising and financial advisory services; corporate lending; sales, trading, financing and market-making activities in equity and fixed income securities and related products, including global macro, credit and commodities products and investment activities.

Geographical segments

The Group operates in three geographic regions, being Europe, Middle East and Africa ("EMEA"), the Americas and Asia.

The following table presents selected consolidated income statement and consolidated statement of financial position information of the Group's operations by geographic area. The external revenues (net of interest expense) and total assets disclosed in the following table reflect the regional view of the Group's operations, on a managed basis. The attribution of external revenues (net of interest expense) and total assets is determined by a combination of client and trading desk location.

| | EMEA | | Americas | | Asia | | Total | |
|-----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| | \$millions |
| External revenues net of interest | 4,611 | 4,508 | 167 | 255 | 1,032 | 941 | 5,810 | 5,703 |
| Profit / (loss) before income tax | 831 | 981 | (3) | 85 | 228 | 212 | 1,056 | 1,278 |
| Total assets | 325,762 | 337,863 | 67,681 | 58,299 | 52,756 | 65,200 | 446,199 | 461,362 |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT

28.1 Risk management procedures

Risk is an inherent part of the Group's business activity. The Group seeks to identify, assess, monitor and manage each of the various types of risk involved in its business activities in accordance with defined policies and procedures. The Group has developed its own risk management policy framework, which is consistent with and leverages the risk management policies and procedures of the Morgan Stanley Group and which include escalation to the Group's Board of Directors and to appropriate senior management personnel of the Group.

Significant risks faced by the Group resulting from its trading, financing and investment activities are set out below.

28.2 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 market liquidity, will result in losses for a position or portfolio.

Additional information on primary market risk exposures, market risk management as well as VaR methodology, assumptions and limitations is presented in the Strategic Report and forms part of the audited financial statements.

VaR for the year ended 31 December 2018

The table below presents the Management VaR for the Group's trading portfolio on a year-end, average and annual high and low basis for 31 December 2018 and 31 December 2017.

The Credit Portfolio VaR is disclosed as a separate category from the Primary Risk Categories and includes loans that are carried at fair value and associated hedges as well as counterparty credit valuation adjustments and related hedges.

| | 95%/ one-day VaR for the year ended 31 December 2018 | | | | 95%/ one-day VaR for the year ended 31 December 2017 | | | |
|---|---|-----------------------|--------------------|-------------------|---|-----------------------|--------------------|-------------------|
| | Period end | 31 December 2018 | | | Period end | 31 December 2017 | | |
| | \$millions | Average \$millions | High \$millions | Low \$millions | \$millions | Average \$millions | High \$millions | Low \$millions |
| <i>Market risk category:</i> | | | | | | | | |
| Interest rate and credit spread | 13 | 15 | 21 | 11 | 15 | 15 | 22 | 10 |
| Equity price | 7 | 11 | 25 | 7 | 9 | 12 | 18 | 8 |
| Foreign exchange rate | 5 | 4 | 8 | 2 | 2 | 5 | 9 | 2 |
| Commodity price | 2 | 1 | 2 | 1 | 1 | 1 | 2 | - |
| Less diversification benefit ⁽¹⁾⁽²⁾ | (10) | (12) | N/A | N/A | (7) | (12) | N/A | N/A |
| Primary Risk Categories | 17 | 19 | 31 | 15 | 20 | 21 | 29 | 15 |
| Credit Portfolio ⁽³⁾ | 4 | 4 | 6 | 3 | 5 | 6 | 8 | 4 |
| Less diversification benefit ⁽¹⁾⁽²⁾ | (3) | (2) | N/A | N/A | (3) | (4) | N/A | N/A |
| Total Management VaR | 18 | 21 | 31 | 15 | 22 | 23 | 31 | 16 |

(1) Diversification benefit equals the difference between total trading VaR and the sum of the VaRs for the four risk categories. This benefit arises because the simulated one-day losses for each of the four primary market risk categories occur on different days; similar diversification benefits also are taken into account within each category.

(2) N/A - Not Applicable. The minimum and maximum VaR values for the total VaR and each of the component VaRs might have occurred on different days during the year and therefore the diversification benefit is not an applicable measure.

(3) The Credit Portfolio VaR is disclosed as a separate category from the Primary Risk Categories and includes loans that are carried at fair value and associated hedges as well as counterparty credit valuation adjustments and related hedges.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.2 Market risk (continued)

The Group's average VaR for Primary Risk Categories for 2018 was \$19 million compared with \$21 million for 2017. The decrease in average VaR for Primary Risk Categories is due to risk reduction across equity and foreign exchange.

The average Credit Portfolio VaR for 2018 was \$4 million compared with \$6 million for 2017. The decrease in the average VaR over the year was driven by exposure changes during 2018.

The average total VaR for 2018 was \$21 million compared with \$23 million for 2017.

Non-trading risks for the year ended 31 December 2018

The Group believes that sensitivity analysis is an appropriate representation of the Group's non-trading risks. Reflected below is this analysis, which covers substantially all of the non-trading risks in the Group's portfolio, with the exception of counterparty credit valuation adjustments, which are covered in the previous section.

Interest rate risk

The Group's VaR excludes certain funding liabilities and money market transactions. The application of a parallel shift in interest rates of 200 basis points increase or decrease to these positions would result in a net gain or loss, respectively, of approximately \$130.0 million as at 31 December 2018, compared to a net loss or gain of \$20.8 million as at 31 December 2017.

Funding liabilities

The credit spread risk sensitivity of the Group's mark-to-market funding liabilities corresponds to an increase in value of approximately \$4.3 million and \$1.8 million for each 1 basis point widening in the Group's credit spread level at 31 December 2018 and 31 December 2017 respectively.

Equity investments price risk

The Group is exposed to equity price risk as a result of changes in the fair value of its investments in listed and private equities classified as FVPL financial assets. These investments are predominantly equity positions with long investment horizons, the majority of which are for business facilitation purposes. The market risk related to these investments is measured by estimating the potential reduction in net revenues associated with a 10% decline in asset values as shown in the table below.

| | 31 December 2018 | 31 December 2017 |
|-----------------------|-------------------------|-------------------------|
| | 10% sensitivity | 10% sensitivity |
| | \$millions | \$millions |
| Investment securities | <u>13</u> | <u>16</u> |

Currency risk

The Group has foreign currency exposure arising from foreign operations. The majority of this foreign currency risk has been hedged by other members of the Morgan Stanley Group, primarily Morgan Stanley, by utilising forward foreign currency exchange contracts.

The Group also has foreign currency exposure arising from its trading activities in currencies other than US dollars. It actively manages this exposure by hedging with other Morgan Stanley Group undertakings.

The analysis below details the foreign currency exposure for the Group, by foreign currency, relating to the retranslation of its non-US dollar denominated branches and subsidiaries. The analysis calculates the impact on total comprehensive income of a reasonably possible parallel shift of the foreign currency in relation to the US dollar, with all other variables held constant. This analysis does not take into account the effect of the foreign currency hedges held by other members of the Morgan Stanley Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.2 Market risk (continued)

Currency risk (continued)

| | 2018 | | | 2017 | | |
|-------------------|--|-----------------------------|---------------------------------------|--|-----------------------------|---------------------------------------|
| | Sensitivity to applied percentage change in currency (+/-) | | | Sensitivity to applied percentage change in currency (+/-) | | |
| | Foreign currency exposure \$millions | Percentage change applied % | Other comprehensive income \$millions | Foreign currency exposure \$millions | Percentage change applied % | Other comprehensive income \$millions |
| Euro | 579 | 14% | 81 | 648 | 14% | 91 |
| Taiwan New Dollar | 128 | 8% | 10 | 82 | 8% | 7 |
| Polish Zloty | 5 | 17% | 1 | 5 | 17% | 1 |
| South Korean Won | 246 | 11% | 27 | 234 | 11% | 26 |
| Swedish Krona | - | 21% | - | 13 | 21% | 3 |
| Swiss Franc | 21 | 12% | 3 | 17 | 12% | 2 |
| | <u>979</u> | | <u>122</u> | <u>999</u> | | <u>130</u> |

The reasonably possible percentage change in the currency rate in relation to US dollars has been calculated based on the greatest annual percentage change over the 5 year period from 1 January 2014 to 31 December 2018 (2016: 1 January 2013 to 31 December 2017). Thus, the percentage change applied may not be the same percentage as the actual change in the currency rate for the relevant year.

The Group also has foreign currency exposure arising from its trading activities and assets and liabilities in currencies other than US dollars, which it actively manages by hedging with other Morgan Stanley Group undertakings.

28.3 Credit risk

Credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to the Group. Credit risk includes country risk, which is further described below.

Additional information on credit risk monitoring, control and mitigation is presented in the Strategic report and forms part of the audited financial statements.

28.3.1 Exposure to credit risk

The maximum exposure to credit risk (“gross credit exposure”) of the Group as at 31 December 2018 is disclosed below, based on the carrying amounts of the financial assets and the maximum amount that the Group could have to pay in relation to unrecognised financial instruments, which the Group believes are subject to credit risk. Within the table on the next page, financial instruments subject to accounting ECL are distinguished from those that are not. Those financial instruments that bear credit risk but are not subject to ECL are subsequently measured at fair value. Exposure arising from financial instruments not recognised on the consolidated statement of financial position is measured as the maximum amount that the Group could have to pay, which may be significantly greater than the amount that would be recognised as a liability. Where the Group enters into credit enhancements, including receiving cash and security as collateral and master netting agreements, to manage the credit exposure on these financial instruments the financial effect of the credit enhancements is disclosed below. The net credit exposure represents the credit exposure remaining after the effect of the credit enhancements.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.3 Credit risk (continued)

28.3.1 Exposure to credit risk (continued)

Trading financial assets are subject to traded credit risk through exposure to the issuer of the financial asset; the Group manages this issuer credit risk through its market risk management infrastructure and this traded credit risk is incorporated within the VaR based risk measures included in the market risk disclosure.

Exposure to credit risk by class

| Class | 2018 | | |
|--|--|-----------------------------------|--|
| | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure ⁽²⁾ \$millions |
| Subject to ECL: | | | |
| Cash and short-term deposits | 30,829 | - | 30,829 |
| Loans and advances | 825 | - | 825 |
| Trade and other receivables ⁽³⁾ | 64,314 | - | 64,314 |
| FVPL, not subject to ECL⁽⁴⁾: | | | |
| Trading financial assets: | | | |
| Derivatives | 179,311 | (173,250) | 6,061 |
| Secured financing | 95,643 | (94,546) | 1,097 |
| Loans and advances | 11 | - | 11 |
| Trade and other receivables ⁽³⁾ | 780 | (370) | 410 |
| | 371,713 | (268,166) | 103,547 |
| Unrecognised financial instruments | | | |
| Subject to ECL: | | | |
| Loan commitments | 1,556 | - | 1,556 |
| Letters of credit | 1 | - | 1 |
| FVPL, not subject to ECL⁽⁴⁾: | | | |
| Loan commitments | 752 | (84) | 668 |
| Letters of credit | 1 | - | 1 |
| Unsettled securities purchased under agreements to resell ⁽⁴⁾ | 34,623 | - | 34,623 |
| Total unrecognised financial instruments | 36,933 | (84) | 36,849 |
| | 408,646 | (268,250) | 140,396 |

(1) The carrying amount recognised in the consolidated statement of financial position best represents the Group's maximum exposure to credit risk.

(2) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$4,392 million of an available \$29,892 million (2017: \$5,364 million of an available \$29,930 million) to be offset in the event of default by certain Morgan Stanley counterparties.

(3) Trade and other receivables primarily include cash collateral pledged against the payable on OTC derivative positions. These derivative liabilities are included within trading financial liabilities in the consolidated statement of financial position.

(4) Financial instruments measured at FVPL are not subject to ECL.

(5) For unsettled securities purchased under agreements to resell, collateral in the form of securities will be received at the point of settlement. Since the value of collateral is determined at a future date, it is currently unquantifiable and not included in the table.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.3 Credit risk (continued)

Exposure to credit risk by class (continued)

| Class | 2017 | | |
|--|--|-----------------------------------|--|
| | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure ⁽²⁾ \$millions |
| Loans and receivables: | | | |
| Cash and short term deposits | 25,461 | - | 25,461 |
| Trading financial assets: | | | |
| Derivatives | 167,008 | (159,176) | 7,832 |
| Secured Financing | 99,345 | (95,075) | 4,270 |
| Loans and advances | 476 | - | 476 |
| Trade and other receivables ⁽³⁾ | 69,835 | (520) | 69,315 |
| | 362,125 | (254,771) | 107,354 |
| Unrecognised financial instruments | | | |
| Loan commitments | 2,177 | (105) | 2,072 |
| Unsettled securities purchased under agreements to resell ⁽⁴⁾ | 28,480 | - | 28,480 |
| Letters of credit | 2 | - | 2 |
| Total unrecognised financial instruments | 30,659 | (105) | 30,554 |
| | 392,784 | (254,876) | 137,908 |

(1) The carrying amount recognised in the consolidated statement of financial position best represents the Group's maximum exposure to credit risk.

2) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$5,364 million of an available \$29,930 million to be offset in the ordinary course of business and/or in the event of default.

(3) Trade receivables primarily include cash collateral pledged against the payable on OTC derivative positions. These derivative liabilities are included within trading financial liabilities in the consolidated statement of financial position.

(4) For unsettled securities purchased under agreements to resell, collateral in the form of securities will be received at the point of settlement. Since the value of collateral is determined at a future date it is currently unquantifiable and not included in the table.

The impact of master netting arrangements and similar agreements on the Group's ability to offset financial assets and financial liabilities is disclosed in note 31.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.3 Credit risk (continued)

Exposure to credit risk by internal rating grades

Internal credit ratings are derived using methodologies generally consistent with those used by external agencies.

a. Recognised and unrecognised financial instruments subject to ECL

The following table provides an analysis of the credit risk exposure by ECL stage per class of recognised and unrecognised financial instrument subject to ECL, based on the following internal credit rating grades:

Investment grade: internal grades AAA - BBB

Non-investment grade: internal grades BB - CCC

Default: internal grades D

| | ECL staging | | | Total |
|---|-------------|-------------|-------------|-------------|
| | Stage 1 | Stage 2 | Stage 3 | |
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| 31 December 2018 | \$ millions | \$ millions | \$ millions | \$ millions |
| Cash: | | | | |
| Credit grade | | | | |
| Investment grade | 30,673 | - | - | 30,673 |
| Non-investment grade | 156 | - | - | 156 |
| Gross carrying and carrying amount ⁽¹⁾ | 30,829 | - | - | 30,829 |
| Loans and Advances: | | | | |
| Credit grade | | | | |
| Investment grade | 803 | - | - | 803 |
| Non-investment grade | 22 | - | - | 22 |
| Gross carrying and carrying amount ⁽¹⁾ | 825 | - | - | 825 |
| Trade and other receivables⁽²⁾⁽³⁾ | | | | |
| Credit grade | | | | |
| Investment grade | 604 | 52,864 | 42 | 53,510 |
| Non-investment grade | - | 6,907 | 1 | 6,908 |
| Default | - | - | 10 | 10 |
| Unrated | - | 3,913 | 10 | 3,923 |
| Gross carrying amount | 604 | 63,684 | 63 | 64,351 |
| Loss allowance | - | - | 37 | 37 |
| Carrying amount | 604 | 63,684 | 26 | 64,314 |

(1) ECL is de minimus, therefore, gross carrying amount is equal to carrying amount

(2) The \$604 million in stage 1 relates entirely to other receivables. There are no trade receivables at stage 1, as the Group's accounting policy is to measure lifetime credit losses on trade receivables under the simplified approach. Refer to note 3 for further detail on the accounting policy.

(3) For the unrated stage 2 trade receivables, all lifetime ECL is always calculated without considering whether a SICR has occurred.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.3 Credit risk (continued)

Exposure to credit risk by internal rating grades (continued)

| | ECL staging | | | Total |
|---------------------------------------|-------------|-------------|-------------|-------------|
| | Stage 1 | Stage 2 | Stage 3 | |
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| 31 December 2018 | \$ millions | \$ millions | \$ millions | \$ millions |
| Loan Commitments⁽²⁾ | | | | |
| Credit grade | | | | |
| Investment grade | 1,412 | - | - | 1,412 |
| Non-investment grade | 117 | 29 | - | 146 |
| Total amount committed | 1,529 | 29 | - | 1,558 |

(2) Loan commitments including letters of credit

b. Financial assets measured at FVPL

Maximum exposure to credit risk by credit rating⁽¹⁾

| | Gross credit exposure | |
|---------|-----------------------|--|
| | 31 December 2018 | |
| | \$ millions | |
| AAA | 8,497 | |
| AA | 32,166 | |
| A | 157,163 | |
| BBB | 60,105 | |
| BB | 11,881 | |
| B | 4,839 | |
| CCC | 440 | |
| Unrated | 654 | |
| Total | 275,745 | |

(1) The above table excludes \$73,877 million of trading corporate debt and equities as well as \$132 million of investment securities. For debt instruments, credit risk is managed through the market risk management infrastructure and incorporated into VaR.

c. Unrecognised financial instruments measured at fair value

Maximum exposure to credit risk by credit rating

| Credit rating | Gross credit exposure | |
|---------------|-----------------------|--|
| | 31 December 2018 | |
| | \$ millions | |
| AA | 17,304 | |
| A | 7,978 | |
| BBB | 8,782 | |
| BB | 1,181 | |
| B | 125 | |
| Unrated | 6 | |
| Total | 35,376 | |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

28.3 Credit risk (continued)

28.3.2 Loss allowance

This table summarises the loss allowance by class subject to ECL

| | 2018 | | | 2017 | | |
|------------------------------------|---------------|-----------|---------------|---------------|---------------------------|---------------|
| | Gross | ECL | Net | Gross | Impairment ⁽¹⁾ | Net |
| | \$million | \$million | \$million | \$million | \$million | \$million |
| Loans and advances | 825 | - | 825 | 476 | - | 476 |
| Trade and other receivables | 64,351 | 37 | 64,314 | 70,086 | 41 | 70,045 |
| Loan commitments ⁽²⁾⁽³⁾ | 1,558 | - | 1,558 | 2,179 | - | 2,179 |
| | <u>66,734</u> | <u>37</u> | <u>66,697</u> | <u>72,741</u> | <u>41</u> | <u>72,700</u> |

(1) Impairment under IAS 39

(2) Loan commitments including letters of credit

(3) There is no gross carrying value for loan commitments. The numbers in this table reflect gross exposure.

At 31 December 2018, the carrying amount of financial assets on which no ECL were recognised because of collateral held was \$41,558 million.

In relation to the trade receivables with an ECL of \$37 million, the related gross carrying amount is \$4,456 million. An analysis of the changes in gross carrying amount and corresponding ECL is shown below. For all other trade and other receivables, ECL has been assessed as de minimis based on a variety of factors including the short dated nature of the assets and a lack of historical credit losses.

| Trade and other receivables at amortised cost | Stage 1 | Stage 2 | Stage 3 | Total |
|--|-----------------|-----------------|-----------------|--------------|
| | 12-month ECL | Lifetime ECL | Lifetime ECL | |
| | \$ millions | \$ millions | \$ millions | \$ millions |
| Gross carrying amount as at 1 January 2018 | 13 | 2,260 | 49 | 2,322 |
| Transfers: | | | | |
| Transfers to Stage 3 | - | (192) | 192 | - |
| New financial assets originated or purchased | 5 | 4,822 | - | 4,827 |
| Financial assets derecognised during the period other than write-offs | - | (2,520) | (165) | (2,685) |
| Write-offs | - | - | (11) | (11) |
| FX and other movements | - | 3 | - | 3 |
| Gross carrying amount as at 31 December 2018 | <u>18</u> | <u>4,373</u> | <u>65</u> | <u>4,456</u> |
| Loss allowance as at 31 December 2018 | <u>-</u> | <u>-</u> | <u>37</u> | <u>37</u> |
| Carrying amount as at 31 December 2018 | <u>18</u> | <u>4,373</u> | <u>28</u> | <u>4,419</u> |

As at 31 December 2018, there is no collateral held against credit-impaired assets.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit risk (continued)

Loss allowance (continued)

Trade and other receivables at amortised cost

| | Stage 1 | Stage 2 | Stage 3 | Total |
|--|--------------------|--------------------|--------------------|--------------------|
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| | \$ millions | \$ millions | \$ millions | \$ millions |
| Loss allowance as at 1 January 2018 | - | - | 41 | 41 |
| Changes in credit risk | - | - | 6 | 6 |
| FX and other movements | - | - | 1 | 1 |
| Total net consolidated income statement charge during the year | - | - | 7 | 7 |
| Write-offs | - | - | (11) | (11) |
| Loss allowance as at 31 December 2018 | - | - | 37 | 37 |

Changes in estimation techniques or significant assumptions

There have been no changes made to estimation techniques or significant assumptions for estimating impairment, during the year.

28.3.3 Write-offs

The Group may write-off financial assets that are still subject to enforcement activity. The outstanding contractual amounts of such assets written off during the year ended 31 December 2018 was \$11 million. The Group still seeks to recover in full amounts it is legally owed, but which have been written off due to there being no reasonable expectation of full recovery.

28.3.4 Modification of financial assets

There were no modifications to financial assets during the year or since origination and therefore modifications have not impacted ECL staging.

28.4 Liquidity and funding risk

Liquidity and funding risk refers to the risk that the Group will be unable to finance its operations due to a loss of access to the capital markets or difficulty in liquidating its assets. Liquidity and funding risk also encompasses the Group's ability to meet its financial obligations without experiencing significant business disruption or reputational damage that may threaten its viability as a going concern.

Additional information on liquidity and funding risk management is presented in the Strategic Report and forms part of the audited financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity and funding risk (continued)

Maturity analysis

In the following maturity analysis of financial liabilities, derivative contracts and other financial liabilities held as part of the Group's trading activities are presented at fair value, consistent with how these financial liabilities are managed, and are disclosed as on demand. Derivatives not held as part of the Group's trading activities and financial liabilities designated at fair value through profit or loss which contain an embedded derivative are disclosed according to their earliest contractual maturity; all such amounts are presented at their fair value, consistent with how these financial liabilities are managed. All other amounts represent undiscounted cash flows payable by the Group arising from its financial liabilities to their earliest contractual maturities as at 31 December 2018 and 31 December 2017. Repayments of financial liabilities that are subject to immediate notice are treated as if notice were given immediately and are classified as on demand. This presentation is considered by the Group to appropriately reflect the liquidity risk arising

from those financial liabilities, and is consistent with how the liquidity risk on these financial liabilities is managed by the Group.

| | On demand | Less than 1 month | Equal to or more than 1 month but less than 3 months | Equal to or more than 3 months but less than 1 year | Equal to or more than 1 year but less than 5 years | Equal to or more than 5 years | Total |
|--|----------------|-------------------|--|---|--|-------------------------------|----------------|
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| 31 December 2018 | | | | | | | |
| Financial liabilities | | | | | | | |
| Bank loans and overdrafts | 4 | - | - | - | - | - | 4 |
| Trading financial liabilities: | | | | | | | |
| Derivatives | 174,113 | - | - | - | - | - | 174,113 |
| Other | 42,980 | - | - | - | - | - | 42,980 |
| Secured borrowing | 54,579 | 7,737 | 7,026 | 5,629 | 4,018 | - | 78,989 |
| Trade and other payables | 90,610 | - | 267 | 100 | 11 | 560 | 91,548 |
| Debt and other borrowings | 1,629 | 95 | 3,451 | 1,099 | 21,281 | 13,362 | 40,917 |
| Total financial liabilities | 363,915 | 7,832 | 10,744 | 6,828 | 25,310 | 13,922 | 428,551 |
| Unrecognised financial instruments | | | | | | | |
| Guarantees | 405 | - | - | - | - | - | 405 |
| Letters of credit | - | - | - | - | 2 | - | 2 |
| Loan commitments | 2,308 | - | - | - | - | - | 2,308 |
| Underwriting commitments | - | - | - | 687 | - | - | 687 |
| Unsettled securities purchased under agreements to resell ⁽¹⁾ | 31,955 | 1,689 | - | 979 | - | - | 34,623 |
| Other commitments | 22 | - | - | - | - | - | 22 |
| Total unrecognised financial instruments | 34,690 | 1,689 | - | 1,666 | 2 | - | 38,047 |

(1) The Group enters into forward-starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2018 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount outstanding at 31 December 2018, \$31,955 million settled within three business days.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

28. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity and funding risk (continued)

Maturity analysis (continued)

| | On demand | Less than 1 month | Equal to or more than 1 month but less than 3 months | Equal to or more than 3 months but less than 1 year | Equal to or more than 1 year but less than 5 years | Equal to or more than 5 years | Total |
|--|----------------|-------------------|--|---|--|-------------------------------|----------------|
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| 31 December 2017 | | | | | | | |
| Financial liabilities | | | | | | | |
| Bank loans and overdrafts | 123 | - | - | - | - | - | 123 |
| Trading financial liabilities: | | | | | | | |
| Derivatives | 169,226 | - | - | - | - | - | 169,226 |
| Other | 48,752 | - | - | - | - | - | 48,752 |
| Secured borrowing | 54,191 | 15,145 | 4,603 | 7,088 | 6,205 | - | 87,232 |
| Trade and other payables | 96,043 | 298 | 9 | 221 | 75 | 373 | 97,019 |
| Debt and other borrowings | 1,875 | 34 | 75 | 618 | 26,864 | 14,144 | 43,610 |
| Total financial liabilities | 370,210 | 15,477 | 4,687 | 7,927 | 33,144 | 14,517 | 445,962 |
| Unrecognised financial instruments | | | | | | | |
| Guarantees | 575 | - | - | - | - | - | 575 |
| Letters of credit | - | - | - | - | 2 | - | 2 |
| Financial guarantees | - | - | - | - | 1 | - | 1 |
| Loan commitments | 2,177 | - | - | - | - | - | 2,177 |
| Underwriting commitments | - | - | - | 336 | - | - | 336 |
| Unsettled securities purchased under agreements to resell ⁽¹⁾ | 28,246 | 234 | - | - | - | - | 28,480 |
| Other commitments | 13 | - | - | - | - | - | 13 |
| Total unrecognised financial instruments | 31,011 | 234 | - | 336 | 3 | - | 31,584 |

(1) The Group enters into forward-starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2017 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount outstanding at 31 December 2017, \$28,246 million settled within three business days.

The Group does not expect that all of the potential cash flows associated with financial guarantees, letters of credits and loan commitments will be required.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

29. TRANSFERS OF FINANCIAL ASSETS, INCLUDING PLEDGES OF COLLATERAL

Transferred financial assets that are not derecognised in their entirety

In the ordinary course of business, the Group enters into various arrangements, including selling securities under agreements to repurchase, purchasing securities under agreements to resell, securities borrowed and securities loaned to, amongst other things, acquire securities to cover short positions and settle other securities obligations, to accommodate customers' needs and to finance the Group's inventory positions.

The Group pledges certain financial instruments to collateralise repurchase agreements and other securities financings. Pledged financial instruments that can be sold or repledged by the secured party are identified as trading financial instruments (pledged to various parties) in the consolidated statement of financial position. The Group has determined that it retains substantially all the risks and rewards of these financial instruments including credit risk, settlement risk, country risk and market risk, and therefore has not derecognised them. In addition, it recognises a financial liability in respect of the consideration received.

Other financial assets transferred that continue to be recognised for accounting purposes include pledges of securities as collateral for derivative transactions or otherwise, as well as certain sales of securities with related transactions, such as derivatives, that result in the Group retaining substantially all the risks and rewards of the financial assets transferred. In addition, it recognises a financial liability in respect of the consideration received.

These transactions are generally conducted under standard agreements used by financial market participants and are undertaken with counterparties subject to the Group's normal credit risk control processes. The resulting credit exposures are controlled by daily monitoring and collateralisation of the positions. The carrying amount of the associated financial liabilities related to financial assets transferred that continue to be recognised is \$42,423 million (2017: \$70,487 million).

The following table presents those financial assets which have been sold or otherwise transferred, but which for accounting purposes remain recognised on the consolidated statement of financial position. Positions presented below show long positions gross of short positions in the same security, whilst the consolidated statement of financial position presents long and short positions in the same security on a net basis.

| | 2018 | 2017 |
|---------------------------------|-------------------|-------------------|
| | \$millions | \$millions |
| Trading financial assets | | |
| Debt securities | 22,203 | 17,613 |
| Equity instruments | 40,413 | 62,762 |
| | <u>62,616</u> | <u>80,375</u> |

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

30. FINANCIAL ASSETS ACCEPTED AS COLLATERAL

The Group's policy is generally to take possession of securities received as collateral, securities purchased under agreements to resell and securities borrowed. The Group monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and, as necessary, requests additional collateral to ensure such transactions are adequately collateralised. Where deemed appropriate, the Group's agreements with third parties specify its rights to request additional collateral. These transactions are generally conducted under standard documentation used by financial market participants.

The fair value of collateral accepted under these arrangements as at 31 December 2018 was \$341,971 million (2017: \$290,046 million). Of this amount \$307,379 million (2017: \$261,224 million) has been sold or repledged to third parties in connection with financing activities, or to comply with commitments under short sale transactions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

31. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING

To manage credit exposure arising from its business activities, the Group applies various credit risk management policies and procedures, see note 28 for further details. Primarily in connection with securities purchased under agreements to resell and securities sold under agreements to repurchase, securities borrowed and securities loaned transactions and derivative transactions, the Group enters into master netting arrangements and collateral arrangements with its counterparties. These agreements provide the Group with the right, in the ordinary course of business and/ or in the event of a counterparty default (such as bankruptcy or a counterparty's failure to pay or perform), to net a counterparty's rights and obligations under such agreement and, in the event of counterparty default, set off collateral held by the Group against the net amount owed by the counterparty. In certain circumstances, the Group may not have such an agreement in place; the relevant insolvency regime (which is based on type of counterparty entity and the jurisdiction of organisation of the counterparty) may not support the enforceability of the agreement; or the Group may not have sought legal advice to support the enforceability of the agreement. In cases where the Group has not determined an agreement to be enforceable, the related amounts are not offset.

The Group's policy is generally to take possession of securities purchased or borrowed in connection with securities purchased under agreements to resell and securities borrowed transactions, respectively, and to receive cash and securities delivered under securities sold under agreements to repurchase or securities loan transactions (with rights of rehypothecation). In certain cases the Group may be permitted to post collateral to a third party custodian under a tri-party arrangement that enables the Group to take control of such collateral in the event of a counterparty default. The enforceability of the master netting agreement is taken into account in the Group's risk management practices and application of counterparty credit limits. The Group also monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and, as necessary, requests additional collateral as provided under the applicable agreement to ensure such transactions are adequately collateralised, or the return of excess collateral.

The risk related to a decline in the market value of collateral (pledged or received) is managed by setting appropriate market-based haircuts. Increases in collateral margin calls on secured financing due to market value declines may be mitigated by increases in collateral margin calls on securities purchased under agreements to resell and securities borrowed transactions with similar quality collateral. Additionally, the Group may request lower quality collateral pledged be replaced with higher quality collateral through collateral substitution rights in the underlying agreements.

The Group actively manages its secured financing in a manner that reduces the potential refinancing risk of secured financings of less liquid assets. The Group considers the quality of collateral when negotiating collateral eligibility with counterparties, as defined by its fundability criteria. The Group utilises shorter-term secured financing for highly liquid assets and has established longer tenor limits for less liquid assets, for which funding may be at risk in the event of a market disruption.

In the consolidated statement of financial position, financial assets and financial liabilities are offset and presented on a net basis only where there is a current 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. In the absence of such conditions, financial assets and financial liabilities are presented on a gross basis.

The following tables present information about the offsetting of financial instruments and related collateral amounts. The tables do not include information about financial instruments that are subject only to a collateral agreement. The effect of master netting arrangements, collateral agreements and other credit enhancements, on the Group's exposure to credit risk is disclosed in note 28.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

31. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)

| | Gross amounts ⁽¹⁾ | Amounts offset in the consolidated statement of financial position ^{(2) (3)} | Net amounts presented in the consolidated statement of financial position | Amounts not offset in the consolidated statement of financial position ^{(4) (5) (6) (7)} | | Net exposure ⁽⁸⁾ |
|--|------------------------------|---|---|---|-----------------|-----------------------------|
| | | | | Financial instruments | Cash collateral | |
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| 31 December 2018 | | | | | | |
| Assets | | | | | | |
| Secured Financing: | | | | | | |
| Cash collateral on securities borrowed | 32,353 | (9,231) | 23,122 | (22,566) | - | 556 |
| Securities purchased under agreement to resell | 177,283 | (112,411) | 64,872 | (64,331) | - | 541 |
| Trading financial assets: | | | | | | |
| Derivatives | 231,328 | (52,017) | 179,311 | (149,608) | (23,531) | 6,172 |
| TOTAL | 440,964 | (173,659) | 267,305 | (236,505) | (23,531) | 7,269 |
| Liabilities | | | | | | |
| Secured borrowing: | | | | | | |
| Cash collateral on securities loaned | 30,334 | (9,231) | 21,103 | (20,767) | - | 336 |
| Securities sold under agreement to repurchase | 153,887 | (112,411) | 41,476 | (39,622) | - | 1,854 |
| Trading financial liabilities: | | | | | | |
| Derivatives | 225,677 | (51,564) | 174,113 | (144,279) | (19,509) | 10,325 |
| TOTAL | 409,898 | (173,206) | 236,692 | (204,668) | (19,509) | 12,515 |

(1) Amounts include \$240 million of cash collateral on securities borrowed, \$533 million of securities purchased under agreements to resell, \$1,287 million of trading financial assets - derivatives, \$336 million of cash collateral on securities loaned, \$1,009 million of securities sold under agreements to repurchase and \$1,760 million of trading financial liabilities - derivatives which are either not subject to master netting agreements or collateral agreements or are subject to such agreements but the Group has not determined the agreements to be legally enforceable.

(2) Amounts are reported on a net basis in the consolidated statement of financial position when there is a legally enforceable master netting arrangement that provides for the current right of offset and there is an intention to either settle on a net basis or to realise the asset and liability simultaneously.

(3) Amounts include \$4,422 million and \$3,969 million of cash collateral related to trading financial assets - derivatives and trading financial liabilities - derivatives, respectively, recognised in amounts offset in the consolidated statement of financial position.

(4) Amounts relate to master netting arrangements and collateral arrangements which have been determined by the Group to be legally enforceable, but do not meet all criteria required for net presentation within the consolidated statement of financial position.

(5) The cash collateral not offset is recognised in the consolidated statement of financial position within secured financing and secured borrowing respectively.

(6) In addition to the balances disclosed in the table above, certain secured financing and secured borrowing have legally enforceable master netting arrangements in place. As a result, \$2,686 million of netting is included within the consolidated statement of financial position.

(7) In addition to the balances disclosed in the table above, \$8 million not presented net of certain trade and other receivables and trade and other payables have legally enforceable master netting arrangements in place and can be offset in the ordinary course of business and/ or in the event of default.

(8) Intercompany cross-product legally enforceable netting arrangements are in place which would allow for an additional \$4,392 million of the total consolidated statement of financial position, to be offset in the ordinary course of business and/ or in the event of default. The additional amounts for offset would include a portion of the residual net exposure.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

31. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)

| | Gross amounts ⁽¹⁾ \$millions | Amounts offset in the consolidated statement of financial position ^{(2) (3)} \$millions | Net amounts presented in the consolidated statement of financial position \$millions | Amounts not offset in the consolidated statement of financial position ^{(4) (5) (6)} Financial instruments \$millions | Cash collateral \$millions | Net exposure ⁽⁷⁾ \$millions |
|--|---|--|---|--|----------------------------------|--|
| 31 December 2017 | | | | | | |
| Assets | | | | | | |
| Secured Financing: | | | | | | |
| Cash collateral on securities borrowed | 28,639 | (10,811) | 17,828 | (17,410) | - | 418 |
| Securities purchased under agreement to resell | 140,530 | (69,791) | 70,739 | (66,887) | - | 3,852 |
| Trading financial assets: | | | | | | |
| Derivatives | 216,599 | (49,591) | 167,008 | (136,287) | (22,844) | 7,877 |
| TOTAL | 385,768 | (130,193) | 255,575 | (220,584) | (22,844) | 12,147 |
| Liabilities | | | | | | |
| Secured borrowing: | | | | | | |
| Cash collateral on securities loaned | 28,299 | (10,812) | 17,487 | (17,208) | - | 279 |
| Securities sold under agreement to repurchase | 121,947 | (69,792) | 52,155 | (48,380) | - | 3,775 |
| Trading financial liabilities: | | | | | | |
| Derivatives | 215,199 | (45,973) | 169,226 | (133,480) | (24,038) | 11,708 |
| TOTAL | 365,445 | (126,577) | 238,868 | (199,068) | (24,038) | 15,762 |

- (1) Amounts include \$134 million of cash collateral on securities borrowed, \$3,581 million of securities purchased under agreements to resell, \$2,103 million of trading financial assets classified - derivatives, \$271 million of cash collateral on securities loaned, \$3,362 million of securities sold under agreements to repurchase and \$2,465 million of trading financial liabilities – derivatives which are either not subject to master netting agreements or collateral agreements or are subject to such agreements but the Group has not determined the agreements to be legally enforceable.
- (2) Amounts are reported on a net basis in the consolidated statements of financial position when there is a legally enforceable master netting arrangement that provides for a current right of offset and there is an intention to either settle on a net basis or to realise the asset and liability simultaneously.
- (3) Amounts include \$6,418 million and \$2,800 million of cash collateral related to trading financial assets – derivatives recognised in amounts offset in the consolidated statement of financial positions for assets and liabilities respectively.
- (4) Amounts relate to master netting arrangements and collateral arrangements which have been determined by the Group to be legally enforceable but do not meet all criteria required for net presentation within the consolidated statement of financial position.
- (5) The cash collateral not offset is recognised in the consolidated statement of financial position within trade receivables and payables respectively.
- (6) In addition to the balances disclosed in the table certain financial assets and financial liabilities designated at fair value through profit or loss have legally enforceable master netting arrangements in place. As a result, \$1,760 million of netting is included within the consolidated statement of financial position. \$32 million not presented net within the consolidated statement of financial position have legally enforceable netting arrangements in place and can be offset in the ordinary course of business and/ or in the event of default.
- (7) Intercompany cross-product legally enforceable netting arrangements are in place which would allow for an additional \$5,364 million of the total consolidated statement of financial position, to be offset in the ordinary course of business and/ or in the event of default. The additional amounts for offset would include a portion of the residual net exposure.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

a. Financial assets and liabilities recognised at fair value on a recurring basis

The following tables present the carrying value of the Group's financial assets and financial liabilities recognised at fair value on a recurring basis, classified according to the fair value hierarchy. See transition note 4 for an analysis of financial assets and liabilities which have moved from amortised cost to FVPL as at 1 January 2018 on transition to IFRS 9.

2018

| | Quoted prices in active market (Level 1) \$millions | Valuation techniques using observable inputs (Level 2) \$millions | Valuation with significant observable inputs (Level 3) \$millions | Total \$millions |
|---|--|---|---|---------------------|
| Trading financial assets: | | | | |
| Government debt securities | 12,093 | 2,669 | 13 | 14,775 |
| Corporate and other debt | - | 10,934 | 318 | 11,252 |
| Corporate equities | 47,407 | 410 | 33 | 47,850 |
| Derivatives: | | | | |
| Interest rate contracts | 26 | 63,633 | 979 | 64,638 |
| Credit contracts | - | 3,827 | 151 | 3,978 |
| Foreign exchange and gold contracts | 1 | 72,259 | 49 | 72,309 |
| Equity contracts | 764 | 32,730 | 1,858 | 35,352 |
| Commodity contracts | 8 | 3,001 | 25 | 3,034 |
| Total trading financial assets | 60,299 | 189,463 | 3,426 | 253,188 |
| Secured financing: | | | | |
| Cash collateral on securities borrows | - | 23,122 | - | 23,122 |
| Securities purchased under agreements to resell | - | 64,555 | 317 | 64,872 |
| Other | - | 7,649 | - | 7,649 |
| Total secured financing | - | 95,326 | 317 | 95,643 |
| Loans and advances: | | | | |
| Corporate loans | - | 11 | - | 11 |
| Investment securities: | | | | |
| Corporate equities | 14 | 33 | 85 | 132 |
| Trade and other receivables: | | | | |
| Prepaid OTC contracts | - | 499 | 123 | 622 |
| Margin loans | - | 11 | 130 | 141 |
| Other | - | - | 17 | 17 |
| Total trade and other receivables | - | 510 | 270 | 780 |
| Total financial assets measured at fair value | 60,313 | 285,343 | 4,098 | 349,754 |
| Trading financial liabilities: | | | | |
| Government debt securities | 16,640 | 1,295 | - | 17,935 |
| Corporate and other debt | - | 4,593 | - | 4,593 |
| Corporate equities | 20,385 | 58 | 9 | 20,452 |
| Derivatives: | | | | |
| Interest rate contracts | 21 | 58,784 | 424 | 59,229 |
| Credit contracts | - | 3,659 | 166 | 3,825 |
| Foreign exchange and gold contracts | - | 72,521 | 74 | 72,595 |
| Equity contracts | 523 | 32,819 | 2,232 | 35,574 |
| Commodity contracts | 106 | 2,745 | 39 | 2,890 |
| Total trading financial liabilities | 37,675 | 176,474 | 2,944 | 217,093 |
| Secured borrowing: | | | | |
| Cash collateral on securities loaned | - | 366 | - | 366 |
| Securities sold under agreements to repurchase | - | 15,868 | - | 15,868 |
| Other secured borrowing | - | 16,348 | - | 16,348 |
| Total secured borrowing | - | 32,582 | - | 32,582 |
| Trade and other payables: | | | | |
| Prepaid OTC contracts | - | 628 | 259 | 887 |
| Unfunded loan commitments | - | 10 | - | 10 |
| Total trade and other payables | - | 638 | 259 | 897 |
| Debt and other borrowings: | | | | |
| Issued structured notes | - | 5,217 | 447 | 5,664 |
| Total debt and other borrowings: | - | 5,217 | 447 | 5,664 |
| Total financial liabilities measured at fair value | 37,675 | 214,911 | 3,650 | 256,236 |

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Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)
a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

2017

| | Quoted prices in active market (Level 1) \$millions | Valuation techniques using observable inputs (Level 2) \$millions | Valuation techniques with significant non - observable inputs (Level 3) \$millions | Total \$millions |
|---|--|---|--|---------------------|
| Trading financial assets: | | | | |
| Government debt securities | 8,150 | 3,805 | 1 | 11,956 |
| Corporate and other debt | - | 9,355 | 401 | 9,756 |
| Corporate equities | 75,722 | 274 | 77 | 76,073 |
| Derivatives: | | | | |
| Interest rate contracts | 6 | 71,701 | 1,169 | 72,876 |
| Credit contracts | - | 4,155 | 166 | 4,321 |
| Foreign exchange and gold contracts | - | 55,469 | 63 | 55,532 |
| Equity contracts | 297 | 29,726 | 1,868 | 31,891 |
| Commodity contracts | 104 | 2,273 | 11 | 2,388 |
| Total trading financial assets | 84,279 | 176,758 | 3,756 | 264,793 |
| Secured financing | - | 10,778 | - | 10,778 |
| Investment securities: | | | | |
| Corporate equities | 26 | 42 | 93 | 161 |
| Trade and other receivables: | | | | |
| Prepaid OTC contracts | - | 336 | 106 | 442 |
| Margin loans | - | 47 | 229 | 276 |
| Total trade and other receivables | - | 383 | 335 | 718 |
| Total financial assets measured at fair value | 84,305 | 187,961 | 4,184 | 276,450 |
| Trading financial liabilities: | | | | |
| Government debt securities | 21,231 | 1,603 | - | 22,834 |
| Corporate and other debt | - | 2,864 | - | 2,864 |
| Corporate equities | 22,966 | 72 | 15 | 23,053 |
| Derivatives: | | | | |
| Interest rate contracts | 4 | 65,218 | 658 | 65,880 |
| Credit contracts | - | 4,474 | 187 | 4,661 |
| Foreign exchange and gold contracts | - | 57,210 | 84 | 57,294 |
| Equity contracts | 384 | 36,196 | 2,436 | 39,016 |
| Commodity contracts | 13 | 2,355 | 7 | 2,375 |
| Total trading financial liabilities | 44,598 | 169,992 | 3,387 | 217,977 |
| Secured borrowing: | - | 17,545 | - | 17,545 |
| Trade and other payables: | | | | |
| Prepaid OTC contracts | - | 729 | 169 | 898 |
| Debt and other borrowings: | | | | |
| Issued structured notes | - | 3,497 | 361 | 3,858 |
| Total financial liabilities measured at fair value | 44,598 | 191,763 | 3,917 | 240,278 |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

The Group's valuation approach and fair value hierarchy categorisation for certain significant classes of financial instruments recognised at fair value on a recurring basis is as follows:

| Asset and Liability / Valuation Technique | Valuation Hierarchy Classification |
|---|---|
| Government debt securities | |
| US Treasury Securities | |
| <ul style="list-style-type: none"> Fair value is determined using quoted market prices. | <ul style="list-style-type: none"> Generally Level 1 |
| Non US Government Obligations | |
| <ul style="list-style-type: none"> Fair value is determined using quoted prices in active markets when available. | <ul style="list-style-type: none"> Generally Level 1 Level 2—if the market is less active or prices are dispersed Level 3—in instances where the prices are unobservable |
| Corporate and Other Debt and Corporate loans | |
| Residential Mortgage-Backed Securities ("RMBS"), Commercial Mortgage-Backed Securities ("CMBS") and other Asset-Backed Securities ("ABS") (collectively known as Mortgage- and Asset-backed securities ("MABS")) | |
| <ul style="list-style-type: none"> Mortgage- and asset-backed securities may be valued based on price or spread data obtained from observed transactions or independent external parties such as vendors or brokers. When position-specific external price data are not observable, the fair value determination may require benchmarking to comparable instruments, and/or analysing ECL, default and recovery rates, and/or applying discounted cash flow techniques. When evaluating the comparable instruments for use in the valuation of each security, security collateral-specific attributes, including payment priority, credit enhancement levels, type of collateral, delinquency rates and loss severity, are considered. In addition, for RMBS borrowers, Fair Isaac Corporation scores and the level of documentation for the loan are considered. Market standard models, such as Intex, Trepp or others, may be deployed to model the specific collateral composition and cash flow structure of each transaction. Key inputs to these models are market spreads, forecasted credit losses, and default and prepayment rates for each asset category. Valuation levels of RMBS and CMBS indices are used as an additional data point for benchmarking purposes or to price outright index positions. | <ul style="list-style-type: none"> Generally Level 2 – if value based on observable market data for comparable instruments Level 3 - if external prices or significant spread inputs are unobservable or if the comparability assessment involves significant subjectivity related to property type differences, cash flows, performance and other inputs |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

| Asset and Liability / Valuation Technique | Valuation Hierarchy Classification |
|---|--|
| <p>Corporate Bonds</p> <ul style="list-style-type: none"> Fair value is determined using recently executed transactions, market price quotations, bond spreads, CDS spreads, or at the money volatility and/or volatility skew obtained from independent external parties such as vendors and brokers adjusted for any basis difference between cash and derivative instruments The spread data used are for the same maturity as the bond. If the spread data do not reference the issuer, then data that reference a comparable issuer are used. When position-specific external price data are not observable, fair value is determined based on either benchmarking to comparable instruments or cash flow models with yield curves, bond or single name CDS spreads and recovery rates as significant inputs. | <ul style="list-style-type: none"> Generally Level 2 – if value based on observable market data for comparable instruments Level 3 - in instances where prices, or significant spread inputs are unobservable |
| <p>Collateralised Debt Obligations (“CDO”)</p> <ul style="list-style-type: none"> The Group holds cash CDOs/CLOs that typically reference a tranche of an underlying synthetic portfolio of single name CDS spreads collateralised by corporate bonds (“credit-linked notes”) or cash portfolio of asset-backed securities/loans (“asset-backed CDOs/CLOs”). Credit correlation, a primary input used to determine the fair value of credit-linked notes, is usually unobservable and derived using a benchmarking technique. Other model inputs such as credit spreads, including collateral spreads, and interest rates are typically observable. Asset-backed CDOs/CLOs are valued based on an evaluation of the market and model input parameters sourced from comparable instruments as indicated by market activity. Each asset-backed CDO/CLO position is evaluated independently taking into consideration available comparable market levels, underlying collateral performance and pricing, deal structures and liquidity. | <ul style="list-style-type: none"> Level 2 - when either comparable market transactions are observable or credit correlation input is insignificant Level 3 - when either comparable market transactions are unobservable or the credit correlation input is significant |
| <p>Loans and Lending Commitments</p> <ul style="list-style-type: none"> Fair value of corporate loans is determined using recently executed transactions, market price quotations (where observable), implied yields from comparable debt, market observable CDS spread levels obtained from independent external parties adjusted for any basis difference between cash and derivative instruments, along with proprietary valuation models and default recovery analysis where such transactions and quotations are unobservable Fair value of contingent corporate lending commitments is determined by using executed transactions on comparable loans and the anticipated market price based on pricing indications from syndicate banks and customers. The valuation of loans and lending commitments also takes into account fee income that is considered an attribute of the contract. | <ul style="list-style-type: none"> Level 2 - if value based on observable market data for comparable instruments Level 3 - in instances where prices or significant spread inputs are unobservable |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

| Asset and Liability / Valuation Technique | Valuation Hierarchy Classification |
|--|--|
| <i>Corporate Equities and Equity investments</i> | |
| <ul style="list-style-type: none"> Exchange traded equity securities are generally valued based on quoted prices from the exchange. To the extent these securities are actively traded, valuation adjustments are not applied. Unlisted equity securities are generally valued based on an assessment of each security, considering rounds of financing and third-party transactions, discounted cash flow analyses and market-based information, including comparable transactions, trading multiples and changes in market outlook, among other factors Listed fund units are generally marked to the exchange-traded price, that are actively traded or Net Asset Value (“NAV”) if note. Unlisted fund units are generally marked to NAV. | <ul style="list-style-type: none"> Level 1 – exchange-traded securities (including direct equity investments) and fund units if actively traded Level 2 – exchange-traded securities (including direct equity investments) if not actively traded or if undergoing a recent mergers and acquisitions event or corporate action; non-exchange-traded direct equity investments and investments in various investment management funds if valued based on rounds of financing or third-party transactions Level 3- exchange-traded securities if not actively traded or if undergoing an aged mergers and acquisitions event or corporate action, and non-exchange-traded direct equity investments and investments in various investment management funds where round of financing or third party transactions are not available |
| <i>Derivatives</i> | |
| Listed Derivative Contracts | |
| <ul style="list-style-type: none"> Listed derivatives that are actively traded are valued based on quoted prices from the exchange. Listed derivatives that are not actively traded are valued using the same techniques as those applied to OTC derivatives. | <ul style="list-style-type: none"> Level 1 - listed derivatives that are actively traded Level 2 - listed derivatives that are not actively traded |
| OTC Derivative Contracts | |
| <ul style="list-style-type: none"> OTC derivative contracts include forward, swap and option contracts related to interest rates, foreign currencies, credit standing of reference entities, equity prices or commodity prices Depending on the product and the terms of the transaction, the fair value of OTC derivative products can be modeled using a series of techniques, including closed-form analytic formulas, such as the Black-Scholes option-pricing model, simulation models or a combination thereof. Many pricing models do not entail material subjectivity as the methodologies employed do not necessitate significant judgement, since model inputs may be observed from actively quoted markets, as is the case for generic interest rate swaps, many equity, commodity and foreign currency option contracts and certain credit default swaps. In the case of more established derivative products, the pricing models used by the Group are widely accepted by the financial services industry. More complex OTC derivative products are typically less liquid and require more judgement in the implementation of the valuation technique since direct trading activity or quotes are unobservable. This includes certain types of interest rate derivatives with both volatility and correlation exposure, equity, commodity or foreign currency derivatives that are either longer-dated or include exposure to multiple underlyings and credit derivatives, including credit default swaps on certain mortgage or asset-backed securities, basket CDS. Where required inputs are unobservable, relationships to observable data points, based on historical and/or implied observations, may be employed as a technique to estimate the model input values. | <ul style="list-style-type: none"> Generally Level 2 - OTC derivative products valued using observable inputs, or where the unobservable input is not deemed significant Level 3 - OTC derivative products for which the unobservable input is deemed significant |

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

| Asset and Liability / Valuation Technique | Valuation Hierarchy Classification |
|--|--|
| <i>Securities purchased under agreements to resell, Securities sold under agreements to repurchase, Cash collateral on securities borrowed/securities loaned and other secured financing</i> | |
| <ul style="list-style-type: none"> • Fair value is computed using a standard cash flow discounting methodology. • The inputs to the valuation include contractual cash flows and collateral funding spreads, which are the incremental spread over the overnight indexed swap (“OIS”) rate for a specific collateral rate (which refers to the rate applicable to a specific type of security pledged as collateral). | <ul style="list-style-type: none"> • Generally Level 2 • Level 3 – in instances where the unobservable inputs are deemed significant |
| <i>Prepaid OTC contracts and issued structured notes</i> | |
| <ul style="list-style-type: none"> • The Group issues structured notes and trades prepaid OTC contracts which are primarily composed of instruments whose payments and redemption values are linked to the performance of a specific index, a basket of stocks, a specific security, a commodity, a credit exposure or basket of credit exposures, and instruments with various interest-rate-related features including step-ups, step-downs, and zero coupons. • Fair value of structured notes and traded prepaid OTC contracts is determined using valuation models for the derivative and debt portions of the notes and traded prepaid OTC contracts. These models incorporate observable inputs referencing identical or comparable securities, including prices to which the notes are linked, interest rate yield curves, option volatility and currency rates, and commodity or equity prices. • Independent, external and traded prices for the notes are also considered as the impact of the Group’s own credit spreads which are based on observed secondary bond market spreads. | <ul style="list-style-type: none"> • Generally Level 2 • Level 3 – in instances where the unobservable inputs are deemed significant |

b. Transfers between Level 1 and Level 2 of the fair value hierarchy for financial assets and liabilities recognised at fair value on a recurring basis

There were no material transfers between Level 1 and Level 2 of the fair value hierarchy during the year to 31 December 2018. During 2017, the Group reclassified approximately \$1,200 million of European government debt securities assets and \$968 million of European government debt securities liabilities from Level 2 to Level 1, reflecting due to increased market activity in these instruments.

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis

The following tables present the changes in the fair value of the Group’s Level 3 financial assets and financial liabilities for the years ended 31 December 2018 and 31 December 2017. Level 3 instruments may be hedged with instruments classified in Level 1 and Level 2. The realised and unrealised gains/ (losses) for assets and liabilities within the Level 3 category presented in the following tables do not reflect the related realised and unrealised gains/ (losses) on hedging instruments that have been classified by the Group within the Level 1 and/ or Level 2 categories.

Unrealised gains/ (losses) during the period for assets and liabilities within the Level 3 category presented in the following tables may include changes in fair value during the period that were attributable to both observable and unobservable inputs.

The Morgan Stanley Group operates a number of intra-group policies to ensure that, where possible, revenues and related costs are matched. Where the trading positions included in the below table are risk managed using financial instruments held by other Morgan Stanley Group undertakings, these policies potentially result in the recognition of offsetting gains or losses in the Group.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED) c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued) 2018

| | Balance at 1 January 2018 \$millions | Impact of adopting IFRS 9 \$millions | Total gains/ (losses) recognised in consolidated income statement ⁽¹⁾ \$millions | Total gains/ (losses) recognised in consolidated statement of comprehensive income ⁽¹⁾ \$millions | Purchases \$millions | Sales & Issuances ⁽²⁾ \$millions | Settlements \$millions | Net transfers in and/or (out) of Level 3 ⁽³⁾ \$millions | Balance at 31 December 2018 \$millions | Unrealised gains/ (losses) for Level 3 assets/ liabilities outstanding as at 31 December 2018 ⁽⁴⁾ \$millions |
|---|---|---|--|--|-------------------------|---|---------------------------|---|---|--|
| Trading financial assets: | | | | | | | | | | |
| Government debt securities | 1 | - | - | - | 11 | - | - | 1 | 13 | - |
| Corporate and other debt | 401 | (17) | 75 | - | 227 | (201) | - | (167) | 318 | (5) |
| Corporate equities | 77 | - | 2 | - | 9 | (21) | - | (34) | 33 | 4 |
| Total trading financial assets | 479 | (17) | 77 | - | 247 | (222) | - | (200) | 364 | (1) |
| Secured financing: | | | | | | | | | | |
| Securities purchased under agreements to resell | - | - | - | - | 317 | - | - | - | 317 | - |
| Total secured financing | - | - | - | - | 317 | - | - | - | 317 | - |
| Loans and advances: | | | | | | | | | | |
| Corporate loans | - | 17 | - | - | - | (17) | - | - | - | - |
| Investment securities: | | | | | | | | | | |
| Corporate equities | 93 | - | (3) | - | - | (5) | - | - | 85 | (3) |
| Trade and other receivables: | | | | | | | | | | |
| Prepaid OTC contracts | 106 | - | (6) | - | 25 | (2) | - | - | 123 | - |
| Margin loans | 229 | - | (45) | - | - | (48) | - | (6) | 130 | (45) |
| Other | - | 9 | - | - | 8 | - | - | - | 17 | - |
| Total trade and other receivables | 335 | 9 | (51) | - | 33 | (50) | - | (6) | 270 | (45) |
| Total financial assets measured at fair value | 907 | 9 | 23 | - | 597 | (294) | - | (206) | 1,036 | (49) |
| Trading financial liabilities: | | | | | | | | | | |
| Corporate equities | 15 | - | 4 | - | (7) | 5 | - | - | 9 | 3 |
| Net derivative contracts ⁽⁵⁾ | 95 | - | 360 | - | (735) | 1,276 | (113) | (290) | (127) | 352 |
| Total trading financial liabilities | 110 | - | 364 | - | (742) | 1,281 | (113) | (290) | (118) | 355 |
| Trade and other payables: | | | | | | | | | | |
| Prepaid OTC contracts | 169 | - | 4 | - | (24) | 118 | - | - | 259 | 4 |
| Debt and other borrowings: | | | | | | | | | | |
| Issued structured notes | 361 | - | 14 | 26 | - | 99 | (39) | 66 | 447 | 38 |
| Total financial liabilities measured at fair value | 640 | - | 382 | 26 | (766) | 1,498 | (152) | (224) | 588 | 397 |

(1) The total gains or (losses) are recognised in the consolidated income statement and the consolidated statement of comprehensive income as detailed in the financial instruments accounting policy (note 3c).

(2) Amounts related to entering into net derivative contracts, issued structured notes and prepaid OTC contracts (within trade and other payables) represent issuances. Amounts for other line items represent sales.

(3) For financial assets and financial liabilities that were transferred into or out of Level 3 during the year, gains or (losses) are presented as if the assets or liabilities had been transferred into or out of Level 3 as at the beginning of the year.

(4) Amounts represent unrealised gains or (losses) for the year ended 31 December 2018 related to assets and liabilities still outstanding at 31 December 2018. The unrealised gains or (losses) are recognised in the consolidated income statement or consolidated statement of comprehensive income as detailed in the financial instruments accounting policy (note 3c).

(5) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| 2017 | Total gains/ (losses) recognised in consolidated income statement (1) | Total gains/ (losses) recognised in consolidated statement of comprehensive income (1) | Purchases | Sales & Issuances(2) | Settlements | Net transfers in and/or (out) of Level 3 (3) | Balance at 31 December 2017 | Unrealised gains/ (losses) for Level 3 assets/ liabilities outstanding as at 31 December 2017(4) | \$millions | \$millions |
|---|---|---|-------------|-------------------------|--------------|--|--------------------------------------|--|--------------|------------|
| Balance at 1 January 2017 | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| Trading financial assets: | | | | | | | | | | |
| Government debt securities | 4 | - | - | - | (3) | - | - | 1 | - | - |
| Corporate and other debt | 218 | 14 | - | 329 | (146) | - | (14) | 401 | - | - |
| Corporate equities | 61 | (6) | - | 45 | (53) | - | 30 | 77 | (5) | - |
| Total trading financial assets | 283 | 8 | - | 374 | (202) | - | 16 | 479 | (5) | - |
| Secured financing: | 15 | - | - | - | (15) | - | - | - | - | - |
| Investment securities: | | | | | | | | | | |
| Corporate equities | 29 | - | 40 | 40 | - | - | (16) | 93 | 40 | - |
| Trade and other receivables: | | | | | | | | | | |
| Prepaid OTC contracts | 11 | 4 | - | 94 | - | - | (3) | 106 | 4 | - |
| Margin loans | 152 | 26 | - | - | (60) | - | 111 | 229 | 25 | - |
| Total Trade and other receivables | 163 | 30 | - | 94 | (60) | - | 108 | 335 | 29 | - |
| Total financial assets measured at fair value | 490 | 38 | 40 | 508 | (277) | - | 108 | 907 | 64 | - |
| Trading financial liabilities | | | | | | | | | | |
| Corporate and other debt | 5 | - | - | (5) | - | - | - | - | - | - |
| Corporate equities | 28 | 1 | - | (8) | 4 | - | (8) | 15 | - | - |
| Net derivative contracts(5) | 804 | (162) | - | (705) | 928 | (1,171) | 77 | 95 | (100) | - |
| Total trading financial liabilities | 837 | (161) | - | (718) | 932 | (1,171) | 69 | 110 | (100) | - |
| Secured borrowing: | 15 | - | - | - | - | (15) | - | - | - | - |
| Trade and other payables: | | | | | | | | | | |
| Prepaid OTC contracts | 11 | 5 | - | - | 154 | (2) | 11 | 169 | 5 | - |
| Debt and other borrowings: | | | | | | | | | | |
| Issued structured notes | 242 | (16) | (12) | - | 181 | (42) | (48) | 361 | (16) | - |
| Total financial liabilities measured at fair value | 1,105 | (172) | (12) | (718) | 1,267 | (1,230) | 32 | 640 | (111) | - |

(1) The total gains or (losses) are recognised in the consolidated income statement and the consolidated statement of comprehensive income as detailed in the financial instruments accounting policy (note 3c).

(2) Amounts related to entering into Net derivative contracts and Financial Liabilities designated at fair value through profit or loss represent issuances. Amounts for other line items represent sales.

(3) For financial assets and financial liabilities that were transferred into and out of Level 3 during the year, gains or (losses) are presented as if the assets or liabilities had been transferred into or out of Level 3 as at the beginning of the year.

(4) Amounts represent unrealised gains or (losses) for the year ended 31 December 2017 related to assets and liabilities still outstanding at 31 December 2016. The unrealised gains or (losses) are recognised in the consolidated income statement or consolidated statement of comprehensive income as detailed in the financial instruments accounting policy (note 3c).

(5) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

There were no material transfers from Level 2 to Level 3 or from Level 3 to Level 2 of the fair value hierarchy during the year (2017: \$nil).

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Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis

The following disclosures provide information on the sensitivity of fair value measurements to key inputs and assumptions.

i. Quantitative information about and qualitative sensitivity of significant unobservable inputs

The following table provides information on the valuation techniques, significant unobservable inputs and their ranges and averages for each material category of assets and liabilities measured at fair value on a recurring basis with a significant Level 3 balance.

The level of aggregation and breadth of products cause the range of inputs to be wide and not evenly distributed across the inventory. Further, the range of unobservable inputs may differ between different groups in the financial services industry because of diversity in the types of products included in each group's inventory. The following disclosures include qualitative information on the sensitivity of the fair value measurements to changes in the significant unobservable inputs. There are no predictable relationships between multiple significant unobservable inputs attributable to a given valuation technique. A single amount is disclosed when there is no significant difference between the minimum, maximum and average (weighted average or similar average / median).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| 31 December 2018 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|---|--------------------------|---|---|
| ASSETS | | | |
| Trading financial assets: | | | |
| - Corporate and other debt: | | | |
| - Mortgage- and asset-backed securities | 140 | Comparable pricing Comparable bond price | 3 to 99.5 pts (78 pts) |
| - Corporate bonds | 120 | Comparable pricing Comparable bond price | 65 to 119 pts (91 pts) |
| - Loans and lending commitments | 58 | Comparable pricing Comparable loan price | 49 to 100 pts (72.56 pts) |
| - Corporate equities | 33 | Comparable pricing Comparable equity price | 100% (100%) |
| Investment securities: | | | |
| - Corporate equities | 85 | Comparable pricing Comparable equity price | 95.75% to 100% (96%) |
| Trade and other receivables: | | | |
| -Prepaid OTC contracts | 123 | Discounted Cash Flow Recovery Rate | 22% (22%) |
| - Margin loans | 130 | Option Model Volatility skew | -1% (-1%) |
| Securities Borrowings: | | | |
| - Securities purchased under agreements to resell | 317 | Risk based valuation Comparable collateral price | 33 to 119 (76) |
| LIABILITIES | | | |
| Trading financial liabilities: | | | |
| - Net derivatives contracts: ⁽¹⁾⁽⁴⁾⁽⁵⁾ | | | |
| - Interest rate | 555 | Option Model | |
| | | Inflation Volatility | 23% to 65% (44%/40%) |
| | | Interest rate – Foreign exchange correlation | 53% to 56% (55%/55%) |
| | | Interest Rate Curve Correlation | 41% to 97% (71%/73%) |
| | | Inflation Curve | 1.23% to 1.27% (1.25%/1.25%) |
| | | Interest rate volatility skew | 10% to 95% (48%/50%) |
| | | Foreign exchange volatility skew | -0.3% to -0.18% (-0.24%/-0.24%) |
| | | Interest rate – Inflation correlation | -75% to -5% (-36%/-43%) |
| | | Interest rate quanto correlation | -8% to -8% (-8%/-8%) |
| - Credit | (15) | Comparable pricing | |
| | | Credit Spread | 150bps to 499bps (353bps) |
| | | Comparable bond price | 10 to 87 pts (46 pts) |
| | | Funding Spread | 69.44bps to 98.23bps (82.38bps) |
| | | Correlation Model | |
| | | Credit Correlation | 37% to 69% (44%) |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| 31 December 2018 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|-----------------------------------|--------------------------|---|---|
| - Foreign exchange and gold | (25) | Option Model | |
| | | Interest rate – Foreign exchange correlation | 53% to 56% (55%/55%) |
| | | Interest rate volatility skew | 10% to 66% (29%/27%) |
| | | Deal Execution Probability | 90% to 95% (95%/95%) |
| | | Foreign exchange volatility skew | -0.3% to -0.18% (-0.24%-0.24%) |
| - Equity | (374) | Option Model | |
| | | At the money volatility | 6% to 63% (26%) |
| | | Volatility skew | -2% to 0% (-1%) |
| | | Equity equity correlation | 5% to 98% (70%) |
| | | Equity FX correlation | -95% to 55% (-46%) |
| - Commodity | (14) | Comparable pricing | |
| | | Comparable price | \$449 to \$1,440 (\$1,086) |
| Debt and other borrowings: | | | |
| - Issued structured notes | (447) | Option Model | |
| | | At the money volatility | 6% to 35% (23%) |
| | | Volatility skew | -2% to 0% (0%) |
| | | Equity equity correlation | 45% to 98% (91%) |
| | | Equity FX correlation | -72% to 13% (-37%) |
| Trade and other payables: | | | |
| - Prepaid OTC contracts | (259) | Option Model | |
| | | At the money volatility | 4% to 30% (12%) |

(1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(2) The ranges of significant unobservable inputs are represented in points, percentages or basis points. Points are a percentage of par; for example, 100 points would be 100% of par. A basis point equals 1/100th of 1%; for example, 353 basis points would equal 3.53%.

(3) Amounts represent weighted averages except where simple averages and the median of the inputs are provided when more relevant.

(4) CVA and FVA are included in fair value, but excluded from the valuation techniques and significant unobservable inputs in the previous table. CVA is a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.

(5) Includes derivative contracts with multiple risks (i.e. hybrid products).

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring

d. basis (continued)

| 31 December 2017 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|---|--------------------------|---|--|
| ASSETS | | | |
| Trading financial assets: | | | |
| - Corporate and other debt: | | | |
| - Mortgage and asset-backed securities | 151 | Comparable pricing Comparable bond price | 0 to 100 pts (35 pts) |
| - Corporate bonds | 214 | Comparable pricing Comparable bond price | 65 to 134 pts (70 pts) |
| - Loans and lending commitments | 36 | Comparable pricing Comparable loan price | 78.5 to 100 pts (92.59 pts) |
| - Corporate equities | 77 | Comparable pricing Comparable equity price | 100% (100%) |
| Trade and other receivables: | | | |
| - Margin loans | 229 | Option model Volatility skew | -1% (-1%) |
| - Prepaid OTC contracts | 106 | Discounted cash flow Recovery rate | 15% (15%) |
| Investment securities: | | | |
| - Corporate equities | 93 | Comparable pricing Comparable equity price | 100% (100%) |
| 31 December 2017 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range (2) (Weighted averages or simple averages/median)(3) |
| LIABILITIES | | | |
| Trading financial liabilities: | | | |
| - Net derivatives contracts: ⁽¹⁾⁽⁴⁾⁽⁵⁾ | | | |
| - Interest rate | 511 | Option model Inflation volatility Interest rate-foreign exchange correlation Interest rate curve correlation Inflation curve Interest rate volatility skew | 23% to 63% (44%/41%) 54% to 57% (56%/56%) 55% to 90% (75%/76%) 2% to 2% (2%/2%) 31% to 99% (42%/45%) |
| - Credit | (21) | Comparable pricing Funding spreads Comparable bond price Credit spreads | 93bps to 96bps (96bps) 1 to 140 pts (40 pts) 150bp (150 bp) |
| - Foreign exchange and gold | (21) | Option model Interest rate-foreign exchange correlation Interest rate volatility skew Deal execution probability | 54% to 57% (56%/56%) 31% to 99% (42%/45%) 95% to 100% (96%/95%) |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring

d. basis (continued)

| 31 December 2017 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|-----------------------------------|--------------------------|--|--|
| - Equity | (568) | Option model | |
| | | At the money volatility | 5% to 53% (32%) |
| | | Volatility skew | -2% to 0% (-1%) |
| | | Equity-equity correlation | 25% to 99% (73%) |
| | | Equity-foreign exchange Correlation | -60% to 40% (26%) |
| - Commodity | 4 | Comparable pricing | |
| | | Comparable price | \$557 to \$1,552 (\$1,233) |
| Debt and other borrowings: | | | |
| - Issued structured notes | (361) | Option model | |
| | | At the money volatility | 5% to 35% (25%) |
| | | Volatility skew | -1% to 0% (0%) |
| | | Equity-equity correlation | 46% to 86% (68%) |
| | | Equity-foreign exchange correlation | -60% to 10% (4%) |
| - Prepaid OTC contracts | (169) | Discounted cash flow | |
| | | Recovery rate | 15% (15%) |

- (1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.
(2) The ranges of significant unobservable inputs are represented in points, percentages or basis points. Points are a percentage of par; for example, 100 points would be 100% of par. A basis point equals 1/100th of 1%; for example, 353 basis points would equal 3.53%.
(3) Amounts represent weighted averages except where simple averages and the median of the inputs are provided when more relevant.
(4) CVA and FVA are included in fair value, but excluded from the valuation techniques and significant unobservable inputs in the previous table. CVA is a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.
(5) Includes derivative contracts with multiple risks (i.e. hybrid products).

| Significant Unobservable Inputs — Description | Sensitivity |
|---|---|
| <p><i>Comparable bond price</i>—A pricing input used when prices for the identical instrument are not available. Significant subjectivity may be involved when fair value is determined using pricing data available for comparable instruments. Valuation using comparable instruments can be done by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable bond, then adjusting that yield (or spread) to derive a value for the bond. The adjustment to yield (or spread) should account for relevant differences in the bonds such as maturity or credit quality.</p> <p>Alternatively, a price-to-price basis can be assumed between the comparable instrument and the bond being valued in order to establish the value of the bond. Additionally, as the probability of default increases for a given bond (i.e., as the bond becomes more distressed), the valuation of that bond will increasingly reflect its expected recovery level assuming default. The decision to use price-to-price or yield/spread comparisons largely reflects trading market convention for the financial instruments in question. Price-to-price comparisons are primarily employed for RMBS, CMBS, ABS, CDOs, CLOs, Other debt, interest rate contracts, foreign exchange contracts, Other secured financings and distressed corporate bonds. Implied yield (or spread over a liquid benchmark) is utilized predominately for non-distressed corporate bonds, loans and credit contracts.</p> | <p>In general, an increase (decrease) to the comparable bond price for an asset would result in a higher (lower) fair value.</p> |
| <p><i>Comparable equity price</i>—A price derived from equity raises, share buybacks and external bid levels, etc. A discount or premium may be included in the fair value estimate.</p> | <p>In general, an increase (decrease) to the comparable equity price of an asset would result in a higher (lower) fair value.</p> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| Significant Unobservable Inputs — Description | Sensitivity |
|---|---|
| <i>Correlation</i> —A pricing input where the payoff is driven by more than one underlying risk. Correlation is a measure of the relationship between the movements of two variables (<i>i.e.</i> , how the change in one variable influences a change in the other variable). Credit correlation, for example, is the factor that describes the relationship between the probability of individual entities to default on obligations and the joint probability of multiple entities to default on obligations. | In general, an increase (decrease) to the correlation would result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Group is long or short the exposure. |
| <i>Credit spread</i> —The difference in yield between different securities due to differences in credit quality. The credit spread reflects the additional net yield an investor can earn from a security with more credit risk relative to one with less credit risk. The credit spread of a particular security is often quoted in relation to the yield on a credit risk-free benchmark security or reference rate, typically either U.S. Treasury or London Interbank Offered Rate (“LIBOR”). | In general, an increase (decrease) to the credit spread of an asset would result in a lower (higher) fair value. |
| <i>Interest rate curve</i> —The term structure of interest rates (relationship between interest rates and the time to maturity) and a market’s measure of future interest rates at the time of observation. An interest rate curve is used to set interest rate and foreign exchange derivative cash flows and is a pricing input used in the discounting of any OTC derivative cash flow. | In general, an increase (decrease) to the interest rate curve would result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Group is long or short the exposure. |
| <i>Volatility</i> —The measure of the variability in possible returns for an instrument given how much that instrument changes in value over time. Volatility is a pricing input for options, and, generally, the lower the volatility, the less risky the option. The level of volatility used in the valuation of a particular option depends on a number of factors, including the nature of the risk underlying that option (<i>e.g.</i> , the volatility of a particular underlying equity security may be significantly different from that of a particular underlying commodity index), the tenor and the strike price of the option. | In general, an increase (decrease) to the volatility would result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Group is long or short the exposure. |
| <i>Volatility skew</i> —The measure of the difference in implied volatility for options with identical underliers and expiry dates but with different strikes. The implied volatility for an option with a strike price that is above or below the current price of an underlying asset will typically deviate from the implied volatility for an option with a strike price equal to the current price of that same underlying asset. | In general, an increase (decrease) to the volatility skew would result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Group is long or short the exposure. |

ii. Sensitivity of fair values to changing significant assumptions to reasonably possible alternatives

As detailed in note 2, the valuation of Level 3 financial instruments requires the application of critical accounting judgement, involving estimations and assumptions and it is recognised that there could be a range of reasonably-possible alternative values.

The Group has reviewed the unobservable parameters to identify those which would change the fair value measurement significantly if replaced by a reasonably possible alternative assumption.

In estimating the potential variability, the unobservable parameters were varied individually using statistical techniques and historic data. The potential variability estimated is likely to be greater than the actual uncertainty relating to the financial instruments as any diversification effect has been excluded.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring

d. basis (continued)

The following table presents the potential impact of both favourable and unfavourable changes, both of which would be reflected in the income statement¹. The Group has updated the presentation and methodology of this L3 sensitivity disclosure to provide more relevant information to the users of the consolidated financial statements. The comparative year disclosure has been re-presented to align to the new format and methodology in the annual consolidated financial statements.

| | 31 December 2018 | | 31 December 2017 | |
|---------------------------------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|
| | Favourable changes \$millions | Unfavourable changes \$millions | Favourable changes \$millions | Unfavourable changes \$millions |
| Trading financial assets: | | | | |
| Corporate and other debt | 11 | (11) | 15 | (19) |
| Corporate equities | 2 | (7) | 5 | (15) |
| Investment securities: | | | | |
| Corporate equities | 36 | (30) | 32 | (45) |
| Trading financial liabilities: | | | | |
| Net derivatives contracts(1)(2) | 17 | (21) | 37 | (40) |
| | <u>66</u> | <u>(69)</u> | <u>89</u> | <u>(119)</u> |

(1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(2) CVA and FVA are included in the fair value, but excluded from the effect of reasonably possible alternative assumptions in the table above. CVA is deemed to be a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is deemed to be a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.

e. Financial instruments valued using unobservable market data

The amounts not recognised in the consolidated income statement relating to the difference between the fair value at initial recognition (the transaction price) and the amounts determined at initial recognition using valuation techniques are as follows:

| | 2018 \$millions | 2017 \$millions |
|---|--------------------|--------------------|
| At 1 January | 280 | 245 |
| Impact of change in accounting policy (see note 2) | - | (50) |
| At 1 January (restated) | <u>280</u> | <u>195</u> |
| New transactions | 134 | 211 |
| Amounts recognised in the consolidated income statement during the year | <u>(124)</u> | <u>(126)</u> |
| At 31 December | <u><u>290</u></u> | <u><u>280</u></u> |

The balance above predominately relates to derivatives.

¹ All changes would be reflected in the consolidated income statement, other than the change relating to investment securities – corporate equities in the prior year which would have been recognised in OCI as those financial assets were classified as available-for-sale financial assets in 2017 under IAS 39.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

32. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

e. Financial instruments valued using unobservable market data (continued)

The consolidated statement of financial position categories ‘Trading financial assets and Trading financial liabilities’, ‘Trade and other receivables’, and ‘Investment securities’ include financial instruments whose fair value is based on valuation techniques using unobservable market data.

f. Assets and liabilities measured at fair value on a non-recurring basis

Non-recurring fair value measurements of assets and liabilities are those which are required or permitted in the consolidated statement of financial position in particular circumstances. There were no assets or liabilities measured at fair value on a non-recurring basis during the current or prior year.

33. ASSETS AND LIABILITIES NOT MEASURED AT FAIR VALUE

At 31 December 2018, for all financial instruments not measured at fair value, the carrying value is considered to be a reasonable approximation of fair value.

The table below presents the carrying value, fair value and fair value hierarchy category of certain financial assets and financial liabilities that are not measured at fair value in the consolidated statement of financial position as at 31 December 2017.

Financial assets and financial liabilities not measured at fair value for which the carrying value is considered a reasonable approximation of fair value are excluded from the table below.

| | Carrying value | Fair value | Fair value measurement using: | | |
|--|----------------|------------|--|--|---|
| | | | Quoted prices in active market (Level 1) | Valuation techniques using observable inputs (Level 2) | Valuation techniques with significant unobservable inputs (Level 3) |
| | \$millions | \$millions | \$millions | \$millions | \$millions |
| Financial liabilities | | | | | |
| Subordinated loans at 31 December 2017 | 7,000 | 7,310 | - | 7,310 | - |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

34. EMPLOYEE COMPENSATION PLANS

Morgan Stanley maintains various equity-settled share-based and cash-based deferred compensation plans for the benefit of employees.

The following information relates to plans which have been awarded to direct employees of the Group.

Equity-settled share-based compensation plans

Morgan Stanley has granted RSU awards pursuant to several equity-based compensation plans. The plans provide for the deferral of a portion of certain employees' incentive compensation with awards made in the form of restricted common stock. Awards under these plans are generally subject to vesting over time, generally six months to seven years, and are generally contingent upon continued employment and subject to restrictions on sale, transfer or assignment until conversion to common stock. All or a portion of an award may be cancelled if employment is terminated before the end of the relevant vesting period, and after the vesting period in certain situations. Recipients of equity-based awards may have voting rights at Morgan Stanley's discretion, and generally receive dividend equivalents if the awards vest, unless this is prohibited by regulation.

During the year, Morgan Stanley granted 105,555 units (2017: 213,021 units) of RSU to direct employees of the Group with a weighted average fair value per unit of \$55.51 (2017: \$42.64), based on the market value of Morgan Stanley common stock at grant date.

The equity-based compensation expense recognised in the year is \$10 million (2017: \$13 million). As a result of the Group chargeback agreement described in accounting policy 3q(i), the total amount of equity-based compensation expense recognised in the year included within 'Staff costs' and 'Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expense' was \$10 million (2017: \$18 million). This includes the equity-based compensation expense and the movements in the fair value of the awards granted to employees.

The related liability due to Morgan Stanley at the end of the year, reported within 'Other payables' in the statement of financial position, is \$8 million (2017: \$24 million) and is expected to be settled wholly within one year, other than \$3 million (2017: \$9 million) which is expected to be settled in greater than one year.

The Group has no options outstanding at 31 December 2018 (2017: nil) and Morgan Stanley has not granted stock options in 2018 or 2017.

Deferred cash-based compensation plans

Morgan Stanley has granted deferred cash-based compensation awards to certain employees which defer a portion of the employees' discretionary compensation. The plans generally provide a return based upon the performance of various referenced investments. Awards under these plans are generally subject to a sole vesting condition of service over time, which normally ranges from one to seven years from the date of grant. All, or a portion of an award may be cancelled if employment is terminated before the end of the relevant vesting period. The awards are settled in cash at the end of the relevant vesting period.

Awards with a value of \$4 million (2017: \$6 million) were granted to employees of the Group during the year.

The liability to employees at the end of the year, reported within 'Accruals and deferred income' in the statement of financial position, is \$12 million (2017: \$22 million) and is expected to be settled wholly within one year, other than \$3 million (2017: \$4 million) which is expected to be settled in greater than one year.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

34. EMPLOYEE COMPENSATION PLANS (CONTINUED)

The Group economically hedges the exposure created by these deferred compensation schemes by entering into derivative transactions with other Morgan Stanley Group undertakings. The derivative balance at the end of the year, recognised within 'Trading financial assets' is \$nil (2017: \$nil) and recognised within 'Trading financial liabilities' is \$1 million (2017: \$nil). The related profit recorded within 'Net trading income' for the year is \$1 million (2017: \$nil).

Plans operated by fellow Morgan Stanley undertakings

As described in note 7, the Group utilises the services of staff who are employed by other Morgan Stanley Group undertakings. Management charges are incurred in respect of these employee services which include the cost of equity-settled share-based and deferred cash-based compensation plans.

35. POST EMPLOYMENT BENEFITS

Defined contribution plans

The Group operates several Morgan Stanley defined contribution plans, which require contributions to be made to funds held separately from the assets of the Group, under the control of a trustee.

The defined contribution plans are as follows:

- Morgan Stanley Flexible Company Pension Plan (Amsterdam);
- MSII Offshore Retirement Benefit Plan IV, Dubai Section;
- Morgan Stanley Asia Limited Retirement Benefit Plan (Taiwan);
- Morgan Stanley & Co International plc, Seoul Branch Defined Contribution Plan; and
- Morgan Stanley & Co. International plc Zurich Branch Top-up Plan
- Morgan Stanley Europe SE, BVV Unterstützungskasse

The Group pays fixed contributions to the plans, with no legal or constructive obligation to pay further contributions.

The defined contribution pension charge in relation to the above schemes recognised within 'Direct staff costs' in 'Operating expense' in the consolidated income statement was \$3.6 million for the year (2017: \$4 million) of which \$nil was accrued at 31 December 2018 (2017: \$nil).

Defined benefit plans

The Group also operates several Morgan Stanley defined benefit plans, which provide post-employment benefits that are based on length of service and salary.

The defined benefits plans are as follows:

- Morgan Stanley Asia (Taiwan) Limited Retirement Scheme;
- Morgan Stanley Asia (Taiwan) Limited Book Reserve Plan;
- Morgan Stanley & Co. International plc Zurich Branch Base Plan;
- Morgan Stanley & Co. International plc Dubai Branch End of Service Gratuity; and
- Morgan Stanley Europe SE General Plan

The cumulative amount of actuarial gains and losses recognised in other comprehensive income is a \$2 million gain (2017: \$2 million loss). A net liability of \$4.5 million (2017: \$5 million) is recognised in the Group's consolidated statement of financial position in respect of these plans.

On 1 November 2018, Morgan Stanley & Co. International plc transferred its investment in MS France Holdings I S.A.S to MSIUK. As a result, the defined benefit obligation of \$0.6 million for the Morgan Stanley France (SAS) Leaving Indemnity Plan (Indemnités de Fin de Carrière) transferred out of the Group. \$0.2 million was recognised in the Group's income statement for the period reflecting interest and service cost.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

Plans operated by fellow Morgan Stanley undertakings

In addition to the above, along with a number of other Morgan Stanley Group companies, the Group incurs management charges from fellow Morgan Stanley undertakings in respect of post-employment benefits provided to staff utilised by the Group but employed by other Morgan Stanley entities. These management recharges include post-employment benefit costs related to the Morgan Stanley UK Group Pension Plan ('the Plan') operated by Morgan Stanley UK Limited ("MSUK"). The Plan is a defined contribution scheme with a closed defined benefit section.

Defined contribution section of the Plan

MSUK pays fixed contributions to the plans with no legal or constructive obligation to pay further contributions.

Defined benefit section of the Plan ("DB Plan")

Under contractual group recharging arrangements, the net defined benefit cost for the DB Plan as a whole, whether recognised in the profit for the year or other comprehensive income, measured in accordance with IAS 19, is recharged to the Group and information on the DB Plan is provided below.

The DB Plan has been closed to new members and future accrual since 1996. The DB Plan was previously open to permanent employees of the Morgan Stanley Group employed in the UK, and with the consent of the Trustees, other Morgan Stanley employees located outside of the UK who had previously been employed in the UK and who at some point had been members of the DB Plan.

The DB Plan provides post-employment benefits to members on retirement which are dependent on years of service and salary at the time of closure of the DB Plan in 1996. Additionally, the DB Plan also includes a Guaranteed Minimum Pension ("GMP") underpin in respect of certain defined contribution members who transferred their benefits from the defined benefit section in the past. Under the GMP underpin, if the value of each member's investment at retirement is less than the amount needed to secure the GMP benefits that accrued under the defined benefit section, the shortfall must be covered by the DB Plan.

The DB Plan is administered by the Trustees and the assets are held in a fund which is legally separate from MSUK. The Trustees of the fund are required by law to act in the interest of the members and of all relevant stakeholders in the scheme. The Trustees of the scheme are responsible for the investment policy with regards to the scheme assets.

The DB Plan exposes MSUK to actuarial risks such as: investment risk, interest rate risk, inflation risk, longevity risk, liquidity risk and credit risk. As a result of the DB Plan's investment strategy (outlined on page 164) the interest rate and inflation risks are largely hedged for the majority of the DB liabilities on a funding basis. The GMP underpin liabilities are volatile because they represent the difference between a defined benefit liability and the value of members' defined contribution assets (which depends on how the individual invests) and are only approximately hedged.

A full actuarial valuation of the DB Plan is conducted at least every three years. The most recent full actuarial valuation of the Plan was carried out at 31 December 2015 and updated by a qualified actuary during 2018 to allow for changes in market conditions and actuarial assumptions, with the 31 December 2018 valuation expected to be concluded in late 2019.

On an accounting basis, the DB Plan has a surplus of scheme assets over liabilities. The funding basis is determined using assumptions reflective of the cost of securing the benefits built up in the DB Plan with an insurance company and therefore can be different to the valuation for accounting purposes. The funding position is reviewed each year as part of the annual funding update.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

The obligations under the DB Plan are measured by discounting the best estimate of future cash flows to be paid out by the DB Plan using the projected unit method. Under this method, each participant's benefits under the DB Plan are attributed to years of service, taking into consideration the DB Plan's benefit allocation formula. For the DB Plan, accrual of future benefits ceased in 1996 and no further benefit has been attributed to service during subsequent reporting periods. The accumulated benefit obligation is therefore an actuarial measure of the present value of benefits for service already rendered and includes no assumption for future salary increases. An assumption for revaluation in deferment is built into the valuation of the scheme. This revaluation preserves the benefits accrued and prevents the benefit diminishing over time through the effects of inflation.

There were no contributions payable to the DB Plan during 2018 (2017: \$nil).

The full actuarial valuation at 31 December 2015 indicated a surplus on a funding basis of \$16 million. Accordingly, no new schedule of contributions has been put in place. Future contributions may be agreed between the Trustees and MSUK following the next triennial valuation at 31 December 2018. The expected timeline for completion of the next full valuation falls after the approval of these financial statements.

The management recharge for the year in respect of the DB plan recognised within 'Management charges from other Morgan Stanley Group undertakings relating to 'Direct staff costs' in 'Operating expense' was \$nil (2017: \$nil).

A High Court ruling on 26 October 2018 confirmed that UK defined benefit pension schemes are required to equalise male and female members' GMP benefits. The DB plan rules currently make no allowance for GMP equalisation, therefore an additional liability has been calculated to incorporate the estimated impact of this requirement which is treated as a plan amendment. An estimate of \$15million (5.68% of the gross defined benefit obligation) has been recognised as a past service cost in relation to the GMP equalisation. Given that the DB plan currently has a net accounting surplus which is not recognised under the asset ceiling, the additional GMP liability reduces the surplus previously derecognised in other comprehensive income and therefore does not result in any additional management recharge to the Group in the year to 31 December 2018. If however, following the next funding valuation due in July 2019, a new schedule of contributions is agreed between MSUK and the Trustees this would be recharged to the Group under the management recharge arrangement above.

The following table provides a summary of the present value of the defined benefit obligation and fair value of DB Plan assets included in the consolidated statement of financial position:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Present value of the funded defined benefit obligation | (264) | (285) |
| Fair value of plan assets | 337 | 371 |
| Surplus of the funded defined benefit plan | 73 | 86 |
| Impact of asset ceiling | (73) | (86) |

The Plan has a surplus that is not recognised in the MSUK statement of financial position on the basis that future economic benefits are not available to the entity in the form of reduced contributions or a cash refund.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

Of the defined benefit obligation \$262,547,000 (2017: \$284,129,000) relates to deferred members and \$1,019,000 (2017: \$1,217,115) relates to retired members. Upon reaching retirement, the majority of individual plan holdings have been bought out via an annuity in the name of the retiree with MSUK having no further obligation.

The weighted average duration of the defined benefit obligation at 31 December 2018 is 29 years (2017: 28 years).

Movement in the net defined benefit asset and impact of asset ceiling

The following tables provide a summary of the present value of the obligation, the fair value of the DB Plan assets and the impact of the asset ceiling:

| 2018 | Present value of obligation \$millions | Fair value of plan assets \$millions | Total \$millions | Impact of asset ceiling \$millions | Total \$millions |
|--|---|---|-----------------------------|---|-----------------------------|
| At 1 January 2018 | (285) | 371 | 86 | (86) | - |
| Net interest (expense)/income | (6) | 8 | 2 | (2) | - |
| Past Service Cost | (15) | - | (15) | - | (15) |
| Amounts recognised in the income statement | (21) | 8 | (13) | (2) | (15) |
| Remeasurements: | | | | | |
| The return on scheme assets (excluding amounts included in net interest expense) | - | (11) | (11) | - | (11) |
| Actuarial gain/(loss) arising from changes in demographic assumptions | 18 | - | 18 | - | 18 |
| Actuarial gain/(loss) arising from changes in financial assumptions | (1) | - | (1) | - | (1) |
| Adjustments for restrictions on the defined benefit asset | - | - | - | 9 | 9 |
| Amounts recognised in the statement of comprehensive income | 17 | (11) | 6 | 9 | 15 |
| Foreign exchange rate changes | 14 | (20) | (6) | 6 | - |
| Contributions: | | | | | |
| Benefit payments | 11 | (11) | - | - | - |
| At 31 December 2018 | (264) | 337 | 73 | (73) | - |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

| 2017 | Present value of obligation \$millions | Fair value of plan assets \$millions | Total \$millions | Impact of asset ceiling \$millions | Total \$millions |
|--|---|---|-----------------------------|---|-----------------------------|
| At 1 January 2017 | (262) | 337 | 75 | (75) | - |
| Net interest (expense)/income | (7) | 9 | 2 | (2) | - |
| Amounts recognised in the income statement | (7) | 9 | 2 | (2) | - |
| Remeasurements: | | | | | |
| The return on scheme assets (excluding amounts included in net interest expense) | - | 2 | 2 | - | 2 |
| Actuarial gain/(loss) arising from changes in financial assumptions | (3) | - | (3) | - | (3) |
| Effect of experience adjustments | 3 | - | 3 | - | 3 |
| Adjustments for restrictions on the defined benefit asset | - | - | - | (2) | (2) |
| Amounts recognised in the statement of comprehensive income | - | 2 | 2 | (2) | - |
| Foreign exchange rate changes | (25) | 32 | 7 | (7) | - |
| Contributions: | | | | | |
| Benefit payments | 9 | (9) | - | - | - |
| At 31 December 2017 | (285) | 371 | 86 | (86) | - |

Actuarial assumptions

The following table presents the principal actuarial assumptions used in the valuation of the DB Plan:

| | 2018 | 2017 |
|-------------------------------|-------------|-------------|
| | % | % |
| Pre-retirement discount rate | 2.5 | 2.3 |
| Post-retirement discount rate | 2.0 | 1.9 |
| Inflation | 3.5 | 3.3 |
| Revaluation in deferment | 2.5 | 2.3 |

The mortality assumptions used give the following life expectancy:

| | Life expectancy at age 65 for a male member currently: | | Life expectancy at age 65 for a female member currently: | |
|-------------------------|---|----------------|---|----------------|
| | Aged 65 | Aged 45 | Aged 65 | Aged 45 |
| 31 December 2018 | | | | |
| UK | 89.8 | 92.0 | 91.5 | 93.8 |
| 31 December 2017 | | | | |
| UK | 89.7 | 91.8 | 91.4 | 93.6 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

The sensitivities to the principal assumptions used to measure the defined benefit obligation are as follows:

2018

| Assumption | Change in assumption | Impact on scheme liabilities |
|---|-----------------------------|-----------------------------------|
| Discount rate (Pre-retirement/Post-Retirement combined) | Increase/ decrease by 0.25% | Decrease/ increase by 6.91%/7.40% |
| Inflation assumption (CPI/RPI Combined) | Increase/ decrease by 0.25% | Increase/ decrease by 4.01%/3.87% |
| Life expectancy | Increase by 1 year | Increase by 3.34% |

2017

| Assumption | Change in assumption | Impact on scheme liabilities |
|---|-----------------------------|-----------------------------------|
| Discount rate (Pre-Retirement/Post-Retirement combined) | Increase/ decrease by 0.25% | Decrease/ increase by 7.35%/7.96% |
| Inflation assumption (CPI/RPI Combined) | Increase/ decrease by 0.25% | Increase/ decrease by 4.27%/4.08% |
| Life expectancy | Increase by 1 year | Increase by 3.55% |

The sensitivity analysis presented above has been determined based on reasonably possible changes of the assumptions occurring at 31 December 2018 and 31 December 2017 assuming that all other assumptions are held constant. The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior year.

Plan assets

MSUK and the Trustees, in consultation with their independent investment consultants and actuaries, determine the asset allocation targets based on their assessment of business and financial conditions, demographic and actuarial data, funding characteristics and related risk factors. Other relevant factors, including industry practices and long-term historical and prospective capital market returns, are also considered. The overall investment objective is expected to minimise the volatility of the Plan's surplus or deficit through asset liability matching. The investment strategy is low risk.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
Year ended 31 December 2018

35. POST EMPLOYMENT BENEFITS (CONTINUED)

Plan assets (continued)

Specific risks which are managed through the asset allocation targets include:

- Interest rate and inflation risk – Plan liabilities will change in response to changes in interest rates and inflation. The policy is to hedge this risk as far as possible;
- Asset volatility – investment in asset classes such as equities gives rise to volatility in the value of the assets. The policy is to invest in asset classes which closely match the Plan’s liabilities;
- Credit risk – any default or downgrade in instruments such as corporate bonds and money market instruments may result in losses. The policy is to partially mitigate this risk by investment in a range of different credit instruments via pooled funds;
- Liquidity risk – the liquidity of investments may change over time which may have an impact on the expected transaction costs. The Trustees and MSUK have reviewed the likely cash requirements of the Plan and are satisfied that the investment arrangements provide sufficient liquidity;
- Longevity risk – the longevity experience may differ from expectations and expectations may change over time. The purchase of annuities for pensioners mitigates a substantial portion of this risk.

In line with the above investment objectives, the DB Plan holds investments in a range of pooled investment vehicles of varying maturities intended to broadly reflect the expected liability profile of the Plan. The major categories and fair values of scheme assets at the end of the reporting period are set out below.

| | 2018 | | | 2017 | | |
|---------------------------|--|---------------------|---------------------|--|---------------------|---------------------|
| | Quoted in an active market \$millions | Other \$millions | Total \$millions | Quoted in an active market \$millions | Other \$millions | Total \$millions |
| Cash and cash equivalents | - | 67 | 67 | - | 84 | 84 |
| Corporate bonds | 53 | - | 53 | 58 | - | 58 |
| Government bonds | 217 | - | 217 | 229 | - | 229 |
| | <u>270</u> | <u>67</u> | <u>337</u> | <u>287</u> | <u>84</u> | <u>371</u> |

MSUK and the Trustees conducted a full asset-liability review for the DB plan. The asset-liability review occurs every three years with the next scheduled review due to take place 2019. These studies are used to assist the Trustees and the Company in determining the optimal long-term asset allocation with regard to the structure of liabilities within the scheme.

The main strategic choices formulated in the actuarial and technical policy documents of the scheme are:

- a) Assets should be invested in hedging assets such as gilts, corporate bonds and swap-based hedging funds to hedge liability-related risks.
- b) Interest rate sensitivity caused by the duration of the defined benefit obligation should be reduced by the use of debt instruments such as gilts in combination with interest rate swap-based hedging funds.
- c) In respect of GMP underpin liabilities, investment in long-dated corporate bonds to approximately hedge annuity prices, provide a degree of liquidity and generate a modest degree of excess investment return.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES

Parent and subsidiary relationships

Parent and ultimate controlling entity

The Group's immediate parent undertaking is MSIUK which is registered in England and Wales. Copies of its financial statements can be obtained from the Registrar of Companies for England and Wales, Companies House, Crown Way, Cardiff CF14 3UZ.

The ultimate parent undertaking and controlling entity is Morgan Stanley. This is the largest group of which the Group is a member and for which group financial statements are prepared. Morgan Stanley has its registered office c/o The Corporation Trust Company, The Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801, United States of America and is incorporated in the state of Delaware, in the United States of America. Copies of its financial statements can be obtained from www.morganstanley.com/investorrelations.

Key management compensation

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Group.

The Morgan Stanley Group's corporate governance framework gives consideration to legal, geographical and business lines through a combination of boards of directors, and regional and global management committees. Accordingly, in addition to the Directors of the Company, key management personnel of the Group is considered to include the boards of directors of certain parent companies, including that of Morgan Stanley, certain members of key Morgan Stanley Group management committees, and certain executive officers of Morgan Stanley.

The boards of the Group's parent companies, the management committees and the executive officers cover the full range of the Morgan Stanley Group's business activities. Only those members with responsibility for the Institutional Securities business, being the reportable business segment of the Group, are considered to be key management personnel of the Group. The aggregate compensation below represents the proportion of compensation paid to these key management personnel, including the Directors of the Company, in respect of their services to the Group.

Compensation paid to key management personnel in respect of their services rendered to the Group is:

| | 2018 | 2017 |
|-----------------------------------|-------------|-------------|
| | \$ millions | \$ millions |
| Short-term employee benefits | 66 | 52 |
| Share-based payments | 22 | 29 |
| Other long-term employee benefits | 23 | 22 |
| | <u>111</u> | <u>103</u> |

The share-based payment costs disclosed above reflect the amortisation of equity-based awards granted to key management personnel over the last three years and are therefore not directly aligned with other staff costs in the current year.

Key management personnel compensation is borne by other Morgan Stanley Group undertakings in both the current and prior years. Where these costs are charged to the Group, they are included in 'Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expenses', as disclosed in note 7.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES (CONTINUED)

Directors' remuneration

| | 2018 \$millions: | 2017 \$millions |
|---|---------------------|--------------------|
| Total remuneration of all Directors: | | |
| Aggregate remuneration | 18 | 14 |
| Long term incentive schemes | 3 | 5 |
| | 21 | 19 |
| Disclosures in respect of the highest paid Director: | | |
| Aggregate remuneration | 5 | 4 |
| Long term incentive schemes | 1 | 2 |
| | 6 | 6 |

Directors' remuneration has been calculated as the sum of cash, bonuses and benefits in kind.

All Directors who are employees of the Morgan Stanley Group are eligible for shares and share options of the parent company, Morgan Stanley, awarded under the Morgan Stanley Group's equity-based long term incentive schemes. In accordance with Schedule 5 paragraph 1(3)(a) of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008, the above disclosures include neither the value of shares awarded, nor the gains made on exercise of share options. During the year eight Directors received restricted stock unit awards in respect of qualifying services (2017: six).

The value of assets (other than shares or share options) awarded under other long term incentive schemes has been included in the above disclosures when the awards vest, which is generally within three years from the date of the award.

Two Directors have retirement benefits accruing under a non-UK defined benefits scheme (2017: two). In addition, one Director has benefits accruing under the Alternative Retirement Plan, a defined benefit scheme, operated by Morgan Stanley UK Limited (2017: one).

The Morgan Stanley Group operates a defined contribution pension scheme, the Morgan Stanley UK Group Pension Plan. There are four Directors to whom retirement benefits are accruing under this UK defined contribution scheme (2017: three). Four directors have benefits accruing under a non-UK defined contribution scheme (2017: two).

The Group has not provided any loans or other credit advances to its Directors during the year (2017: nil).

Transactions with related parties

The Morgan Stanley Group conducts business for clients globally through a combination of both functional and legal entity organisational structures. Accordingly, the Group is closely integrated with the operations of the Morgan Stanley Group and enters into transactions with other Morgan Stanley Group undertakings on an arm's length basis for the purposes of utilising financing, trading and risk management, and infrastructure services. The nature of these relationships along with information about the transactions and outstanding balances is given below. The Group has not recognised any expense and has made no provision for impairment relating to the amount of outstanding balances from related parties (2017: \$nil).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES (CONTINUED)

Cash

The Group places cash with other Morgan Stanley Group undertakings. All such transactions are entered into on an arm's length basis.

| | 2018 | | 2017 | |
|---|------------------------|-----------------------|------------------------|-----------------------|
| | Interest \$millions | Balance \$millions | Interest \$millions | Balance \$millions |
| Amounts due from other Morgan Stanley Group undertakings | - | 611 | - | 118 |

Funding

The Group receives funding from and provides funding to other Morgan Stanley Group undertakings in the following forms:

- *General funding*

General funding is undated, unsecured, floating rate lending, other than certain funding which is dated on a rolling 60 or 395 day term. Funding may be received or provided for specific transaction related funding requirements, or for general operational purposes. The interest rates are established by the Morgan Stanley Group Treasury function for all entities within the Morgan Stanley Group and approximate the market rate of interest that the Morgan Stanley Group incurs in funding its business.

Details of the outstanding balances on these funding arrangements and the related interest income or expense recognised in the consolidated income statement during the year are shown in the table below:

| | 2018 | | 2017 | |
|---|------------------------|-----------------------|------------------------|-----------------------|
| | Interest \$millions | Balance \$millions | Interest \$millions | Balance \$millions |
| <i>Undated</i> | | | | |
| Amounts due from the Group's direct and indirect parent undertakings | 3 | 10 | 1 | 32 |
| Amounts due from other Morgan Stanley Group undertakings | 27 | 1,274 | 15 | 635 |
| | <u>30</u> | <u>1,284</u> | <u>16</u> | <u>667</u> |
| <i>Rolling 395 day term</i> | | | | |
| Amounts due from the Group's direct and indirect parent undertakings | 1 | 87 | 1 | - |
| Amounts due from other Morgan Stanley Group undertakings | 1 | 37 | 6 | 53 |
| | <u>2</u> | <u>124</u> | <u>7</u> | <u>53</u> |
| <i>Undated</i> | | | | |
| Amounts due to the Group's direct and indirect parent undertakings | 161 | 3,504 | 513 | 151 |
| Amounts due to other Morgan Stanley Group undertakings | 159 | 4,979 | 104 | 4,947 |
| | <u>320</u> | <u>8,483</u> | <u>617</u> | <u>5,098</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES (CONTINUED)

- *General funding (continued)*

Rolling 395 day term

| | | | | |
|--|------------|---------------|------------|---------------|
| Amounts due to the Group's direct and indirect parent undertakings | 745 | 13,301 | 170 | 25,493 |
| Amounts due to other Morgan Stanley Group undertakings | 30 | 254 | 39 | 230 |
| | <u>775</u> | <u>13,555</u> | <u>209</u> | <u>25,723</u> |

- *Subordinated loans*

The Group has received subordinated loans from other Morgan Stanley Group undertakings. Details of the terms of the loans, including the contractual maturity and the interest rate are shown in note 19.

- *Trading and risk management*

In the course of funding its business, the Group enters into collateralised financing transactions with other Morgan Stanley Group undertakings. All such transactions are entered into on an arm's length basis.

Details of the amount outstanding on such transactions and the related interest income / expense recognised in the consolidated income statement during the year are shown in the table below:

| | 2018 | | 2017 | |
|--|------------------------|-----------------------|------------------------|-----------------------|
| | Interest \$millions | Balance \$millions | Interest \$millions | Balance \$millions |
| Financial assets measured at amortised cost | | | | |
| Amounts due from other Morgan Stanley Group undertakings | - | - | 94 | 18,101 |
| Financial assets measured at fair value | | | | |
| Amounts due from other Morgan Stanley Group undertakings | 202 | 30,565 | - | - |
| Financial liabilities measured at amortised cost | | | | |
| Amounts due to the Group's direct and indirect parent undertakings | 64 | 3,662 | (23) | 3,753 |
| Amounts due to other Morgan Stanley Group undertakings | 346 | 23,298 | 124 | 16,588 |
| | <u>410</u> | <u>26,960</u> | <u>101</u> | <u>20,341</u> |
| Financial liabilities measured at fair value | | | | |
| Amounts due to other Morgan Stanley Group undertakings | 48 | 3,627 | - | - |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES (CONTINUED)

- *Trading and risk management (continued)*

The Group enters into purchases and sales of securities and derivative transactions with other Morgan Stanley Group undertakings to facilitate the provision of financial services to clients on a global basis and to manage the market risks associated with such business. The Group also enters into derivative transactions with other Morgan Stanley Group undertakings to manage the market risks associated with certain of its compensation plans. All such transactions are entered into on an arm's length basis. The total amounts receivable and payable from such transactions not yet settled and the fair value of such derivatives contracts outstanding at the year end were as follows:

| | 2018 \$millions | 2017 \$millions |
|--|--------------------|--------------------|
| Amounts due from the Group's direct and indirect parent undertakings on securities and derivative transactions | 1,729 | 1,101 |
| Amounts due from other Morgan Stanley Group undertakings on securities and derivative transactions | 57,014 | 46,185 |
| | <u>58,743</u> | <u>47,286</u> |
| Amounts due to the Group's direct and indirect parent undertakings on securities and derivative transactions | 1,599 | 1,070 |
| Amounts due to other Morgan Stanley Group undertakings on securities and derivative transactions | 58,470 | 47,704 |
| | <u>60,069</u> | <u>48,774</u> |

The Group has received collateral of \$245 million (2017: \$1,146 million) from the Group's direct and indirect parent undertaking and \$2,554 million (2017: \$2,456 million) from other Morgan Stanley Group undertakings. The Group has pledged collateral of \$5 million (2017: \$19 million) to the Group's direct and indirect parent undertakings and \$24,935 million (2017: \$28,256 million) to other Morgan Stanley Group undertakings. The Group has received and pledged collateral to mitigate credit risk on exposures arising under derivatives contracts between the Group and other Morgan Stanley Group undertakings.

In addition, the management and execution of business strategies on a global basis results in many Morgan Stanley transactions impacting a number of Morgan Stanley Group entities. The Morgan Stanley Group has Global Transfer Pricing Policies in place among the Ultimate Parent and its consolidated subsidiaries to ensure arm's length pricing. These policies are consistent with 2017 OECD transfer pricing guidelines for multinational enterprises and tax administrations. The Firm has also engaged in negotiations of Advanced Pricing Agreements with selected tax authorities in respect of its key transfer pricing methodologies.

For the year ended 31 December 2018, a net loss of \$1,980 million was transferred to the Group from other Morgan Stanley Group undertakings relating to such revenue transfer pricing policies and recognised in the consolidated income statement arising from such policies (2017: net loss of \$1,056 million).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2018

36. RELATED PARTY DISCLOSURES (CONTINUED)

Infrastructure services

The Group incurs management charges from other Morgan Stanley Group undertakings for infrastructure services, including the provision of staff and office facilities. Management recharges received and incurred during the year are as follows:

| | 2018 | | 2017 | |
|--|--------------|--------------|--------------|--------------|
| | Staff costs | Other | Staff costs | Other |
| | \$millions | \$millions | \$millions | \$millions |
| Amounts recharged from the Group's direct and indirect parent undertakings | 23 | - | 64 | 45 |
| Amounts recharged from other Morgan Stanley Group undertakings | <u>1,599</u> | <u>1,178</u> | <u>1,530</u> | <u>994</u> |
| | <u>1,622</u> | <u>1,178</u> | <u>1,594</u> | <u>1,039</u> |

Amounts outstanding at the reporting date are included within the general funding balances disclosed above.

Taxation

The Group has surrendered group relief to other members of the Morgan Stanley UK tax group for no cash consideration (see note 9).

Other related party transactions

The Group has received a guarantee from Morgan Stanley International, to guarantee the obligations under derivative contracts of certain fellow Morgan Stanley Group undertakings to the Company. As at 31 December 2018, no call had been made by the Group under this arrangement.

37. EVENTS AFTER THE REPORTING PERIOD

On 1 March 2019, the Company paid a dividend in specie of \$531 million to MSIUK, transferring its equity interests in Morgan Stanley Europe SE and Morgan Stanley Europe Holding SE.

MORGAN STANLEY & CO. INTERNATIONAL plc
COMPANY FINANCIAL STATEMENTS
31 December 2018

MORGAN STANLEY & CO. INTERNATIONAL plc

COMPANY STATEMENT OF COMPREHENSIVE INCOME

Year ended 31 December 2018

| | Note | 2018 \$millions | 2017 \$millions |
|---|------|--------------------|--------------------|
| PROFIT FOR THE YEAR | 4 | 660 | 821 |
| OTHER COMPREHENSIVE INCOME, NET OF TAX | | | |
| Items that will not be reclassified subsequently to profit or loss: | | | |
| Remeasurement of net defined benefit liability | | (1) | - |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | | 171 | (73) |
| Items that may be reclassified subsequently to profit or loss: | | | |
| Currency translation reserve: | | | |
| Foreign currency translation differences arising on foreign operations | | (12) | 32 |
| Net amount reclassified to consolidated income statement upon transfer of subsidiary | | 74 | |
| Available-for-sale reserve: | | | |
| Net change in fair value of available-for-sale financial assets | | - | 67 |
| OTHER COMPREHENSIVE INCOME AFTER INCOME TAX FOR THE YEAR | | <u>232</u> | <u>26</u> |
| TOTAL COMPREHENSIVE INCOME FOR THE YEAR | | <u><u>892</u></u> | <u><u>847</u></u> |

The notes on pages 175 to 231 form an integral part of the financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

COMPANY STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2018

| Note | Equity instruments | Share premium | Currency translation reserve | Available-for-sale reserve | Capital contribution reserve | Capital redemption reserve | Pension reserve | Debt valuation adjustment reserve | Retained earnings | Total equity |
|---|--------------------|---------------|------------------------------|----------------------------|------------------------------|----------------------------|-----------------|-----------------------------------|-------------------|---------------|
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| Balance at 1 January 2017 | 12,765 | 513 | (134) | (4) | 3 | 1,400 | - | (45) | 2,275 | 16,773 |
| Impact of change in accounting policy for fair value gains and losses on inception | 3 | - | - | - | - | - | - | - | 37 | 37 |
| Profit for the year | - | - | - | - | - | - | - | - | 821 | 821 |
| Other comprehensive income for the period: | | | | | | | | | | |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | - | - | - | - | - | - | - | (73) | - | (73) |
| Foreign currency translation differences arising on foreign operations | - | - | 32 | - | - | - | - | - | - | 32 |
| Net change in fair value on available-for-sale financial assets | - | - | - | 67 | - | - | - | - | - | 67 |
| Total comprehensive income/(loss) | - | - | 32 | 67 | - | - | - | (73) | 821 | 847 |
| Transactions with owners: | | | | | | | | | | |
| Issue of ordinary share capital | 18 | 1,000 | - | - | - | - | - | - | - | 1,000 |
| Dividends | 19 | - | - | - | - | - | - | - | (86) | (86) |
| Balance at 31 December 2017 | <u>13,765</u> | <u>513</u> | <u>(102)</u> | <u>63</u> | <u>3</u> | <u>1,400</u> | <u>-</u> | <u>(118)</u> | <u>3,047</u> | <u>18,571</u> |
| Impact of adoption of new accounting standards (see note 3) | 3 | - | - | (63) | - | - | - | - | 61 | (2) |
| Profit for the year | 4 | - | - | - | - | - | - | - | 660 | 660 |
| Other comprehensive income for the period: | | | | | | | | | | |
| Remeasurement of defined benefit liability | - | - | - | - | - | - | (1) | - | - | (1) |
| Changes in fair value attributable to own credit risk on financial liabilities designated at fair value | - | - | - | - | - | - | - | 171 | - | 171 |
| Foreign currency translation differences arising during the year | - | - | (12) | - | - | - | - | - | - | (12) |
| Recycling of currency translation reserve upon disposal of subsidiary | - | - | 74 | - | - | - | - | - | - | 74 |
| Total comprehensive income/(loss) | - | - | 62 | - | - | - | (1) | 171 | 660 | 892 |
| Transactions with owners: | | | | | | | | | | |
| Issue of Additional Tier 1 capital | 18 | 2,200 | - | - | - | - | - | - | - | 2,200 |
| Dividends | 19 | - | - | - | - | - | - | - | (529) | (529) |
| Balance at 31 December 2018 | <u>15,965</u> | <u>513</u> | <u>(40)</u> | <u>-</u> | <u>3</u> | <u>1,400</u> | <u>(1)</u> | <u>53</u> | <u>3,239</u> | <u>21,132</u> |

The notes on pages 175 to 231 form an integral part of the financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

Registered number: 2068222

COMPANY STATEMENT OF FINANCIAL POSITION**As at 31 December 2018**

| | Note | 2018 \$millions | 2017 \$millions |
|---|------|--------------------|--------------------|
| ASSETS | | | |
| Cash and short-term deposits | 6 | 30,076 | 24,736 |
| Trading financial assets (of which \$38,499 million (2017: \$56,081 million) were pledged to various parties) | 7 | 253,188 | 255,363 |
| Secured financing | 5 | 95,643 | 107,235 |
| Loans and advances | 9 | 832 | 543 |
| Investment securities | | 131 | 160 |
| Trade and other receivables | 10 | 65,292 | 70,643 |
| Current tax assets | | 363 | 133 |
| Deferred tax assets | 16 | 4 | 100 |
| Investment in subsidiaries, associates and joint ventures | 11 | 646 | 524 |
| Property, plant and equipment | 12 | 6 | 4 |
| Other assets | | 10 | 8 |
| TOTAL ASSETS | | <u>446,191</u> | <u>459,449</u> |
| LIABILITIES AND EQUITY | | | |
| Bank loans and overdrafts | 6 | 4 | 122 |
| Trading financial liabilities | 7 | 217,093 | 214,967 |
| Secured borrowing | 5 | 78,927 | 90,775 |
| Trade and other payables | 13 | 91,838 | 95,865 |
| Debt issued and other borrowings | 14 | 37,025 | 38,988 |
| Provisions | 15 | 3 | 50 |
| Current tax liabilities | | 50 | 30 |
| Deferred tax liabilities | 16 | 33 | 1 |
| Accruals and deferred income | | 82 | 113 |
| Post-employment benefit obligations | 30 | 4 | 4 |
| TOTAL LIABILITIES | | <u>425,059</u> | <u>440,915</u> |
| EQUITY | | | |
| Share capital | 18 | 15,965 | 13,765 |
| Share premium account | 18 | 513 | 513 |
| Currency translation reserve | 18 | (40) | (102) |
| Available-for-sale reserve | 18 | - | 63 |
| Debt valuation adjustment reserve | 18 | 53 | (118) |
| Capital contribution reserve | 18 | 3 | 3 |
| Capital redemption reserve | 18 | 1,400 | 1,400 |
| Pension reserve | 18 | (1) | - |
| Retained earnings | | 3,239 | 3,010 |
| TOTAL EQUITY | | <u>21,132</u> | <u>18,534</u> |
| TOTAL LIABILITIES AND EQUITY | | <u>446,191</u> | <u>459,449</u> |

These financial statements were approved by the Board and authorised for issue on 18 April 2019.

Signed on behalf of the Board



K Lazaroo, Director

The notes on pages 175 to 231 form an integral part of the financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

1. BASIS OF PREPARATION

These financial statements contain information about the Company as an individual company and do not contain consolidated financial information as the parent of a group.

Statement of compliance

These financial statements are prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 with a departure from the requirement of Schedule 1 paragraph 40 to The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (“the Regulations”) as described in note 2(c) below for the overriding purpose of giving a true and fair view.

The Company meets the definition of a qualifying entity and is a Financial Institution as defined in FRS 100. The Company has taken advantage of the disclosure exemptions available under FRS 101 in relation to share-based payments, fair value measurements (as applicable to assets and liabilities other than financial instruments), presentation of comparative information in respect of certain assets and shares outstanding, presentation of a cash flow statement, accounting standards not yet adopted and related party transactions.

Where relevant, equivalent disclosures have been provided in the Group accounts in which the Company is consolidated.

New standards and interpretations adopted during the year

The new standards and interpretations adopted during the year were consistent with those adopted by the Group. Refer to note 2 to the Group financial statements for further detail.

As a result of the IFRS 9 evaluation conducted by the Company, certain financial assets have moved from amortised cost and designated at FVPL under IAS 39 to mandatorily at FVPL under IFRS 9. Equity investments previously held as available-for-sale have moved to FVPL with a consequent transfer of the available-for-sale reserve transferring to retained earnings. Additionally, certain financial liabilities have changed classification from amortised cost to being designated at FVPL as they are part of a group of financial assets and financial liabilities which are managed on a fair value basis. The impact of these changes on retained earnings as at 1 January 2018 was \$62 million.

The impact of the implementation of the ECL impairment approach on retained earnings as at 1 January 2018 was not material to the Company.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

1. BASIS OF PREPARATION (CONTINUED)

New standards and interpretations adopted during the year (continued)

- The impairment allowance is based on ECL associated with the lifetime cash shortfalls that will result if a default occurs in the twelve months after the reporting date (the 'twelve month ECL'), unless there has been a SICR since origination, in which case the ECL is based on the lifetime ECL;
- Identifying whether assets have experienced a SICR since origination. When determining whether credit risk has increased significantly since initial recognition, the Company considers both quantitative and qualitative information and analysis, based on the Company's historical experience and expert credit risk assessment, including forward-looking information;
- Estimating ECL, reflecting an unbiased and the probability-weighted impact of multiple future economic scenarios. ECL are calculated using three main components: PD, the expected LGD and an estimated EAD. These parameters are generally derived from internally developed statistical models, combined with historical, current and forward-looking customer and macro-economic data.

For trade receivables, a simplified approach has been adopted as permitted by IFRS 9, whereby an allowance is recognised for the lifetime ECL of the instrument. Practical expedients have been employed to calculate the ECL for trade receivables. For some portfolios of financial assets, ECL have been estimated to be close to zero, reflecting the short term nature of the portfolio and the benefit of collateral or other credit mitigants.

The impact of the implementation of the ECL impairment approach on retained earnings as at 1 January 2018 was not material to the Company.

The impact to the Group's Tier 1 capital as at 1 January 2018 as a result of the transition to IFRS 9 was not material. The Company did not make use of the transitional arrangements introduced by Regulation (EU) 2017/2395 relating to the effects of ECL for mitigating the impact of the introduction of IFRS 9 on own funds and the treatment of certain large exposures.

Under the transitional provisions of the Standard, the Company's opening balance sheet at the date of initial application (1 January 2018) has been restated, with no restatement of comparative periods. However, the Company has updated the presentation of its primary statements on transition to IFRS 9 to provide more relevant information to the users of the consolidated financial statements. The comparative period has been re-presented to align to the new format in the annual consolidated financial statements.

Note 3 provides the new accounting policies under IFRS 9 applicable from 1 January 2018.

To reflect the differences between IFRS 9 and IAS 39, IFRS 7 '*Financial Instruments: Disclosures*' was updated by the IASB and the Company adopted the updated IFRS 7 for the year beginning 1 January 2018. The updated requirements include transition disclosures shown in note 3, in addition to qualitative and quantitative information about the ECL as set out in note 22.

An amendment to IFRS 2 '*Classification and Measurement of Share-based Payment Transactions*' was issued by the IASB in June 2016, for application in accounting periods beginning on or after 1 January 2018. Early application is permitted. The amendment was endorsed by the EU in February 2018.

IFRS 15 '*Revenue from Contracts with Customers*' ("IFRS 15") was issued by the IASB in May 2014 for retrospective application in accounting periods beginning on or after 1 January 2018. In addition, amendments relating to clarifications to IFRS 15 were issued by the IASB in April 2016 requiring application in accounting periods beginning on or after 1 January 2018. The standard and amendments were endorsed by the EU in October 2016. Refer to note 3 for further information.

As part of the 2014-2016 Annual Improvements Cycle published in December 2016, the IASB made amendments to IAS 28 '*Investments in Associates*' that are relevant to the Company's operations: for application in accounting periods beginning on or after 1 January 2018. The amendments were endorsed by the EU in February 2018.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

1. BASIS OF PREPARATION (CONTINUED)

New standards and interpretations adopted during the year (continued)

IFRIC 22 '*Foreign Currency Transactions and Advance Consideration*' was issued by the IASB in December 2016 for application in accounting periods beginning on or after 1 January 2018 and was endorsed by the EU in April 2018.

There were no other standards, amendments to standards or interpretations relevant to the Company's operations which were adopted during the year.

Basis of measurement

The financial statements of the Company are prepared under the historical cost basis, except for certain financial instruments that have been measured at fair value as explained in the accounting policies below.

Critical accounting judgements and sources of estimation uncertainty

In preparing the consolidated financial statements, the Group makes judgements and estimates that affect the application of accounting policies and reported amounts.

Critical accounting judgements are key decisions made by management in the application of the Group's accounting policies, other than those involving estimations, which have the most significant effects on the amounts recognised in the financial statements. Critical accounting estimates represent assumptions and estimations made by management that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year.

The critical judgements in applying the Company's accounting policies are as follows:

- *Recognition and measurement of tax balances:* judgements are used in determining what tax-deductible losses are to be surrendered to other members of the Morgan Stanley UK tax group and whether there will be sufficient taxable profits in future years to recognise deferred tax assets. See note 16.

The critical sources of estimation uncertainty are as follows:

- *Valuation of Level 3 financial instruments:* Valuation techniques used to measure the fair value of instruments categorised in Level 3 of the fair value hierarchy are dependent on unobservable parameters, and as such require the application of judgement, involving estimations and assumptions. The fair value for these financial instruments has been determined using parameters appropriate for the valuation methodology based on prevailing market evidence. It is recognised that the unobservable parameters could have a range of reasonable possible alternate values. See note 26 '*Sensitivity of fair values to changing significant assumptions to reasonable possible alternatives*'.
- *Measurement of property, litigation and taxation provisions:* Estimates are used in the calculation of provisions, which are calculated based on the net present value of expected future cash flows, although the Company recognises that it is inherently difficult to estimate the amount of the future losses in certain instances. See note 15.

The Company evaluates the critical accounting judgements and accounting estimates on an ongoing basis and believes that these are reasonable.

Change in accounting policy

For details of the change in the Company's accounting policy with respect to fair value gains and losses arising upon initial recognition, refer to note 2 to the Group's financial statements.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

1. BASIS OF PREPARATION (CONTINUED)

Change in accounting policy (continued)

The impact of this change in accounting policy, which has been applied retrospectively, on the Company financial statements as at 1 January 2017 and 1 January 2018, is as follows:

| | 1 January 2017 and 1 January 2018 \$millions | 31 December 2018 \$millions | Cumulative Impact \$millions |
|--------------------------|---|-----------------------------------|------------------------------------|
| Assets: | | | |
| Trading financial assets | 50 | 10 | 60 |
| Liabilities: | | | |
| Current tax liabilities | - | 4 | 4 |
| Deferred tax liabilities | 13 | (1) | 12 |
| Equity: | | | |
| Retained earnings | 37 | 7 | 44 |

The going concern assumption

The Company's business activities, together with the factors likely to affect its future development, performance and position, and the Company's objectives, policies and processes for managing its capital; its financial risk management objectives; and its exposures to credit risk and liquidity risk, are reflected in the Strategic report on pages 3 to 39. In addition, the notes to the financial statements include the details of its financial instruments and additional detail, not included in the Strategic Report, on its credit risk and liquidity risk.

As set out in the Group's Strategic report, retaining sufficient liquidity and capital to withstand market pressures remains central to the Morgan Stanley Group's and the Company's strategy.

Taking all of these above factors into consideration, the Directors believe it is reasonable to assume that the Company will have access to adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the annual report and financial statements.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the Company are the same as those of the Group which are set out in note 3 to the consolidated financial statements, except the policy 3(j) on business disposals which is not applicable to the Company. The Group accounting policy 3(c)(ii) on financial instruments designated at fair value through profit or loss is applied by the Company, however, for the Company this represents a departure from the Regulations (see 2(c) below). Investments in subsidiaries held by the Company are carried at historical cost less provision for impairment in accordance with the policy as noted 2(a) and 2(b) below.

a) Investments in subsidiaries

Subsidiaries are entities over which the Company has control. The Company controls an entity when it 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.

In certain cases, the Company 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 Company 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, Management will consider all relevant factors, including in particular

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

Investments in subsidiaries are stated at cost, less provision for any impairment (see note 2(b) below). Dividends, impairment losses and reversals of impairment losses are recognised in total profit or loss. Dividends from investments which would be classified as financial liabilities by the investee are classified as interest and recognised in total profit or loss.

b) Impairment of subsidiaries

Impairment losses on investments in subsidiaries are measured as the difference between cost and the current estimated recoverable amount. When the recoverable amount is less than the cost, an impairment is recognised within profit or loss and is reflected against the carrying amount of the impaired asset on the statement of financial position. Investments in subsidiaries which have suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

c) Financial instruments designated at fair value through profit or loss

The presentation of Debt valuation adjustment within other comprehensive income represents a departure from Schedule 1 paragraph 40 to the Regulations, which requires that changes in the value of financial instruments be included in the profit and loss account. The Directors consider that this departure is necessary in order that the accounts give a true and fair view of the results of the Company. All other subsequent changes in fair value, foreign exchange differences not relating to changes in the credit risk of those liabilities, interest and dividends are reflected in the income statement.

3. TRANSITION TO IFRS 9 AND IFRS 15

As discussed in note 1, the Company adopted two new standards from 1 January 2018, IFRS 9 and IFRS 15, which have resulted in a cumulative adjustments to retained earnings at the date of adoption of \$61 million. Of the total cumulative adjustment, \$63 million was due to the transfer of the balance of the available-for-sale reserve to retained earnings. An analysis is shown in the statement of changes in equity.

The disclosures below set out the impact of adopting IFRS 9 on the statement of financial position and retained earnings, including the effect of replacing IAS 39's incurred credit loss models with the ECL framework under IFRS 9.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

3. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

The following table shows the original measurement categories in accordance with IAS 39 and the new measurement categories under IFRS 9 for the Group's financial assets and financial liabilities as at 1 January 2018, in accordance with the Group's updated accounting policies on the classification of financial instruments under IFRS 9 as set out in note 1.

| 1 January 2018 | Note | Original classification under IAS 39 | New classification under IFRS 9 | Original carrying amount under IAS 39 \$millions | New carrying amount under IFRS 9 \$millions |
|---|-------------|---|--|---|--|
| Financial assets | | | | | |
| Cash and short term deposits | | Loans and receivables | Financial assets at amortised cost | 24,736 | 24,736 |
| Trading financial assets | | FVPL | FVPL (trading) | 255,363 | 255,363 |
| Secured financing | a | Loans and receivables | FVPL (non-trading) | 94,895 | 94,894 |
| Secured financing | a | FVPL (designated) | FVPL (non-trading) | 12,340 | 12,340 |
| Loans and advances | b | Loans and receivables | Financial assets at amortised cost | 539 | 539 |
| Loans and advances | b | Loans and receivables | FVPL (non-trading) | 4 | 2 |
| Investment securities | c | Available-for-sale | FVPL (non-trading) | 160 | 160 |
| Trade and other receivables | a | FVPL (designated) | FVPL (non-trading) | 718 | 718 |
| Trade and other receivables | a | Loans and receivables | FVPL (non-trading) | 9 | 9 |
| Trade and other receivables | | Loans and receivables | Financial assets at amortised cost | 69,826 | 69,826 |
| Total financial assets | | | | 458,590 | 458,587 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

3. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

| 1 January 2018 | Note | Original classification under IAS 39 | New classification under IFRS 9 | Original carrying amount under IAS 39 \$millions | New carrying amount under IFRS 9 \$millions |
|--------------------------------------|------|---|---|---|--|
| Financial liabilities | | | | | |
| Bank loans and overdrafts | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 123 | 123 |
| Trading financial liabilities | | FVPL | FVPL (trading) | 214,967 | 214,967 |
| Secured borrowing | d | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 51,999 | 51,999 |
| Secured borrowing | d | Financial liabilities at amortised cost | at FVPL (designated) | 21,029 | 21,027 |
| Secured borrowing | d | FVPL (designated) | FVPL (designated) | 17,748 | 17,748 |
| Trade and other payables | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 94,770 | 94,770 |
| Trade and other payables | | FVPL (designated) | FVPL (designated) | 898 | 898 |
| Trade and other payables | | Financial liabilities at amortised cost | at FVPL (designated) | 6 | 6 |
| Debt and other borrowings | | Financial liabilities at amortised cost | Financial liabilities at amortised cost | 35,335 | 35,335 |
| Debt and other borrowings | | FVPL (designated) | FVPL (designated) | 3,653 | 3,653 |
| Total financial liabilities | | | | 440,528 | 440,526 |

The application of these policies resulted in the reclassifications set out in the table above and explained below.

- a. Secured financing transactions and certain other financial assets are reclassified as FVPL non-trading as they are held within a business model in which they are managed and their performance is evaluated on a fair value basis.
- b. Loans and advances to customers are classified as either:
 - Financial assets at amortised cost, where they are in a held to collect business model and their contractual terms are SPPI; or
 - FVPL non-trading when they are held within a business model in which they are managed and their performance is evaluated on a fair value basis. Unfunded loan commitments related to these loans are designated at FVPL.
- c. Equity investments are required to be FVPL non-trading
- d. Secured borrowing transactions are classified either as:
 - Designated at FVPL where the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed, evaluated and reported internally on a fair value basis; or
 - Financial liabilities at amortised cost.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

3. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

| | IAS 39 carrying amount 31 December 2017 \$millions | Reclass- ification \$millions | Remeas- urement \$millions | IFRS 9 carrying amount 1 January 2018 \$millions | Retained earnings effect 1 January 2018 \$millions |
|---|---|-------------------------------------|----------------------------------|---|---|
| Financial assets | | | | | |
| Amortised cost | | | | | |
| Cash and short term deposits: | 24,736 | - | - | 24,736 | - |
| Secured financing: | | | | | |
| To FVPL (non-trading) | 94,895 | (94,895) | - | - | - |
| Loans and advances: | | | | | |
| To FVPL (non-trading) | 543 | (4) | - | 539 | - |
| Trade and other receivables: | | | | | |
| To FVPL | 69,835 | (9) | - | 69,826 | - |
| Total amortised cost | <u>190,009</u> | <u>(94,908)</u> | <u>-</u> | <u>95,101</u> | <u>-</u> |
| Available-for-sale | | | | | |
| Investment securities: | | | | | |
| To FVPL (non-trading mandatorily) | 160 | (160) | - | - | - |
| Financial assets at FVPL (trading) | | | | | |
| FVPL (trading) | <u>255,363</u> | <u>-</u> | <u>-</u> | <u>255,363</u> | <u>-</u> |
| FVPL (non-trading) | | | | | |
| Secured financing: | | | | | |
| From amortised cost | - | 94,895 | (1) | 94,894 | (1) |
| From FVPL designated | - | 12,340 | - | 12,340 | - |
| Closing balance | - | 107,235 | (1) | 107,234 | (1) |
| Loans and advances: | | | | | |
| From amortised cost | - | 4 | (2) | 2 | (2) |
| Trade and other receivables: | | | | | |
| From FVPL (designated) | - | 718 | - | 718 | - |
| From amortised cost | - | 9 | - | 9 | - |
| Closing balance | - | 727 | - | 727 | - |
| Investment securities: | | | | | |
| From available-for-sale | - | 160 | - | 160 | - |
| Total FVPL (non-trading) | <u>-</u> | <u>108,126</u> | <u>(3)</u> | <u>108,123</u> | <u>(3)</u> |
| FVPL (designated) | | | | | |
| Trade and other receivables: | | | | | |
| To FVPL (non-trading) | 718 | (718) | - | - | - |
| Secured financing: | | | | | |
| To FVPL (non-trading) | 12,340 | (12,340) | - | - | - |
| Total FVPL (designated) | <u>13,058</u> | <u>(13,058)</u> | <u>-</u> | <u>-</u> | <u>-</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

3. TRANSITION TO IFRS 9 AND IFRS 15 (CONTINUED)

| | IAS 39 carrying amount 31 December 2017 \$millions | Reclass- ification \$millions | Remeas- urement \$millions | IFRS 9 carrying amount 1 January 2018 \$millions | Retained earnings effect 1 January 2018 \$millions |
|--------------------------------------|---|-------------------------------------|----------------------------------|---|--|
| Financial liabilities | | | | | |
| Amortised cost | | | | | |
| Bank loans and overdrafts | 123 | - | - | 123 | - |
| Secured borrowing: | | | | | |
| To FVPL (designated) | 73,028 | (21,029) | - | 51,999 | - |
| Debt and other borrowings: | 35,335 | - | - | 35,335 | - |
| Trade and other payables: | 94,776 | (6) | - | 94,770 | - |
| Total amortised cost | <u>203,262</u> | <u>(21,035)</u> | <u>-</u> | <u>182,227</u> | <u>-</u> |
| Financial liabilities at FVPL | | | | | |
| FVPL (trading) | <u>214,967</u> | <u>-</u> | <u>-</u> | <u>214,967</u> | <u>-</u> |
| FVPL (designated) | | | | | |
| Debt and other borrowings: | 3,653 | - | - | 3,653 | - |
| Trade and other payables: | 898 | 6 | - | 904 | - |
| Secured borrowing: | | | | | |
| Opening balance | 17,748 | - | - | 17,748 | - |
| From amortised cost | - | 21,029 | (2) | 21,027 | 2 |
| Total FVPL (designated) | <u>22,299</u> | <u>21,035</u> | <u>(2)</u> | <u>43,332</u> | <u>2</u> |

The following table analyses the impact, net of tax, of transition to IFRS 9 on reserves and retained earnings. The impact relates to the available-for-sale reserve and retained earnings. There is no impact on other components of equity.

| Impact of adopting IFRS 9 | Available-for-sale reserve \$millions | Retained earnings \$millions |
|---|--|---|
| Closing balance under IAS 39 (31 December 2017) | 63 | 3,047 |
| Reclassification of investment securities (equity) from available-for-sale to FVPL | (63) | 63 |
| Remeasurement of secured financing and loans and advances from amortised cost to FVPL and secured borrowing balances from amortised cost to FVPL (designated) | - | (1) |
| Recognition of ECL under IFRS 9 | - | - |
| Opening balance under IFRS 9 (1 January 2018) | <u>-</u> | <u>3,109</u> |

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

3. TRANSITION TO IFRS 9 AND IFRS 15

IFRS 9: Expected credit losses

The closing impairment allowance for financial assets in accordance with IAS 39 and the opening ECL allowance determined in accordance with IFRS 9 as at 1 January 2018 were both \$41 million. The total provisions for loan commitments and financial guarantee contracts in accordance with IAS 37 as at 31 December 2017 and in accordance with IFRS 9 as at 1 January 2018 were both nil. There was no reclassification or remeasurement impact on ECL as a result of the adoption of IFRS 9.

IFRS 15

At 1 January 2018, the Group adopted IFRS 15, in accordance with the transition provisions therein. The Group has applied the provisions of IFRS 15 retrospectively only to contracts that were not completed as at 1 January 2018, the date of initial application. Prior periods have not been restated. A cumulative loss, net of tax, of \$1 million was recorded as of 1 January 2018, reflecting the deferral in timing of the recognition of certain Investment Banking revenues. As a result of adopting IFRS 15, the accounting for certain transactions has changed, resulting in certain costs now being presented on a gross basis within both 'fee and commission income' and 'operating expense' of \$96 million.

4. PROFIT OR LOSS FOR THE YEAR

As permitted by section 408 of the Companies Act 2006, the Company has elected not to present its own income statement for the period. The Company reported a profit after tax of \$660 million for the year ended 31 December 2018 (2017: \$821 million).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

5. FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY

The following table analyses financial assets and financial liabilities as at 31 December 2018 presented in the consolidated statement of financial position by IFRS 9 classifications.

| 31 December 2018 | FVPL (mandatorily) \$millions | FVPL (designated) \$millions | Amortised cost \$millions | Total \$millions |
|--|-------------------------------------|------------------------------------|---------------------------------|---------------------|
| Cash and short term deposits | - | - | 30,076 | 30,076 |
| Trading financial assets | 253,188 | - | - | 253,188 |
| Secured financing: | | | | |
| Cash collateral on securities borrowed | 23,122 | - | - | 23,122 |
| Securities purchased under agreements to resell | 64,872 | - | - | 64,872 |
| Other secured financing | 7,649 | - | - | 7,649 |
| Loans and advances | 11 | - | 821 | 832 |
| Investment securities | 131 | - | - | 131 |
| Trade and other receivables | 780 | - | 64,408 | 65,188 |
| Total financial assets | 349,753 | - | 95,305 | 445,058 |
| Bank loans and overdrafts | - | - | 4 | 4 |
| Trading financial liabilities | 217,093 | - | - | 217,093 |
| Secured borrowings: | | | | |
| Cash collateral on securities loaned | - | 366 | 20,737 | 21,103 |
| Securities sold under agreements to repurchase | - | 15,868 | 25,608 | 41,476 |
| Other financial liabilities | - | 16,348 | - | 16,348 |
| Trade and other payables | - | 897 | 90,716 | 91,613 |
| Debt and other borrowings | - | 5,664 | 31,361 | 37,025 |
| Total financial liabilities | 217,093 | 39,143 | 168,426 | 424,662 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

5. FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY (CONTINUED)

| 31 December 2017 | FVPL (trading) \$millions | FVPL (designated) \$millions | Available- for -sale \$millions | Loans and receivables \$millions | Financial liabilities at amortised cost \$millions | Total \$millions |
|--|--|---|--|---|---|-----------------------------|
| Cash and short term deposits | - | - | - | 24,736 | - | 24,736 |
| Trading financial assets | 255,363 | - | - | - | - | 255,363 |
| Secured financing: | | | | | | |
| Cash collateral on securities borrowed | - | - | - | 24,156 | - | 24,156 |
| Securities purchased under agreements to resell | - | - | - | 70,739 | - | 70,739 |
| Other secured financing | - | 12,340 | - | - | - | 12,340 |
| Loans and advances | - | - | - | 543 | - | 543 |
| Investment securities | - | - | 160 | - | - | 160 |
| Trade and other receivables | - | 718 | - | 69,835 | - | 70,553 |
| Total financial assets | 255,363 | 13,058 | 160 | 190,009 | - | 458,590 |
| Bank loans and overdrafts | - | - | - | - | 122 | 122 |
| Trading financial liabilities | 214,967 | - | - | - | - | 214,967 |
| Secured borrowing: | | | | | | |
| Cash collateral on securities loaned | - | - | - | - | 20,761 | 20,761 |
| Securities sold under agreements to repurchase | - | - | - | - | 52,266 | 52,266 |
| Other financial liabilities | - | 17,748 | - | - | - | 17,748 |
| Trade and other payables | - | 898 | - | - | 94,776 | 95,674 |
| Debt and other borrowings | - | 3,653 | - | - | 35,335 | 38,988 |
| Total financial liabilities | 214,967 | 22,299 | - | - | 203,260 | 440,526 |

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

5. FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY (CONTINUED)

Financial assets and financial liabilities designated at FVPL

The financial assets and financial liabilities shown in the tables above which are designated at FVPL consist primarily of the following financial assets and financial liabilities:

Corporate loans: Until 31 December 2017, certain loans to customers were designated at FVPL because either the risks of the loans have been matched with other financial instrument contracts accounted for at fair value and such a designation reduces an accounting mismatch; or as part of a documented risk management strategy the risks of the loan were managed on a fair value basis as part of the Company's trading portfolio and the risk was reported to key management personnel on this basis; or because the loan contract itself contains an embedded derivative that must otherwise be separated and measured at fair value. Refer to note 9 for more information. From 1 January 2018, these loans to customers are designated at FVPL because the designation at FVPL eliminates or significantly reduces an accounting mismatch which would otherwise arise.

Prepaid OTC contracts: The risk on these financial instruments, both financial assets and financial liabilities, is primarily hedged using trading financial instruments including equity securities and interest rate swaps. Until 31 December 2017, these prepaid OTC contracts were designated at FVPL as such contracts, as well as the financial instruments with which they are hedged, were risk managed on a fair value basis as part of the Company's trading portfolio and the risk is reported to key management personnel on this basis. Refer to note 13 for more information. From 1 January 2018, prepaid OTC contract assets are classified at FVPL as they are held in a business model in which they are managed and their performance is evaluated on a fair value basis and prepaid contract liabilities continue to be designated at FVPL as they continue to form part of a group of financial assets and liabilities which are managed, evaluated and reported internally on a fair value basis.

Cash collateral on securities loaned and securities sold under agreements to repurchase: Until 31 December 2017, cash collateral balances repayable and accrued interest arising under repurchase agreements and certain securities lending arrangements are classified as 'Financial liabilities at amortised cost' and the related securities, where owned by the Company, are included in 'Financial assets classified as held for trading'. From 1 January 2018, these balances are classified as 'Designated at FVPL' where the financial liability forms part of a group of financial assets or financial liabilities or both, which are managed, evaluated and reported internally on a fair value basis; otherwise, they are classified as 'Financial liabilities at amortised cost'.

Issued structured notes: Until 31 December 2017 and from 1 January 2018, these relate to financial liabilities which arise from selling structured products generally in the form of notes or certificates. The structured notes are designated at FVPL as the risks to which the Company is a contractual party are risk managed on a fair value basis as part of the Company's trading portfolio and the risk is reported to key management personnel on this basis. Refer to note 14 for more information.

Other financial assets and liabilities: These include

- financial assets and liabilities such as those that arise upon the consolidation of certain special purpose entities;
- those that arise as a result of continuing recognition of certain financial assets and the simultaneous recognition of an associated financial liability; and
- those that arise as a result of not meeting recognition criteria for a financial asset purchase.

Until 31 December 2017 and from 1 January, these financial assets and liabilities were designated at FVPL as the risks to which the Company was a contractual party were risk managed on a fair value basis as part of the Company's trading portfolio and the risk was reported to key management personnel on this basis.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

5. FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORY (CONTINUED)

Financial assets and financial liabilities designated at FVPL

| | 2018 | | 2017 | |
|--|----------------------|---------------------------|----------------------|---------------------------|
| | Assets \$millions | Liabilities \$millions | Assets \$millions | Liabilities \$millions |
| Secured financing | | | | |
| Other secured financing | - | - | 12,340 | - |
| Loans and advances | | | | |
| Corporate loans | - | - | 276 | - |
| Trade and other receivables | | | | |
| Prepaid OTC contracts | - | - | 442 | - |
| Secured borrowing | | | | |
| Cash collateral on securities loaned | - | 366 | - | - |
| Securities sold under agreements to repurchase | - | 15,868 | - | - |
| Other financial liabilities | - | 16,348 | - | 17,543 |
| Trade and other payables | | | | |
| Prepaid OTC contracts | - | 887 | - | 898 |
| Unfunded loan commitments ⁽¹⁾ | - | 10 | - | - |
| Debt and other borrowings | | | | |
| Issued structured notes | - | 5,664 | - | 3,858 |
| | <u>-</u> | <u>39,143</u> | <u>13,058</u> | <u>22,299</u> |

(1) Related to loans which are on balance sheet as non-trading at FVPL.

As discussed at note 2, from 1 January 2018 the Company adopted the new IFRS 9 standard, which has resulted in all financial assets that had been designated at FVPL in accordance with IAS 39 changing measurement category to being mandatorily at FVPL. At 31 December 2017 corporate loans were designated at FVPL and had a maximum exposure to credit risk of \$276 million. Corporate loans were fully collateralised with securities received by the Company. As a result of IFRS 9 implementation, at 31 December 2018 corporate loans are mandatorily FVPL.

The cumulative change in fair value recognised through other comprehensive income attributable to own credit risk for financial liabilities designated at FVPL at 31 December 2018 is a gain of \$70 million (2017: loss of \$160 million). During the year, \$nil (2017: \$nil) was realised as a result of the derecognition of such financial liabilities.

The Company determines the amount of changes in fair value attributable to changes in counterparty credit risk or own credit risk, as relating to financial liabilities designated at FVPL, by first determining the fair value including the impact of counterparty credit or own credit risk, and then deducting those changes in fair value representing managed market risk. In determining fair value, the Company considers the impact of changes in own credit spreads based upon observations of the secondary bond market spreads when measuring the fair value for issued structured notes. The Company considers that this approach most faithfully represents the amount of change in fair value due to both counterparty credit risk and the Company's own credit risk.

The carrying amount of financial liabilities designated at FVPL for which the effect of changes in those liabilities' credit risk is presented within other comprehensive income was \$226 million lower than the contractual amount due at maturity (2017: \$28 million lower).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

6. CASH AND SHORT TERM DEPOSITS

Included within 'Cash and short term deposits' is \$13,483 million (2017: \$12,007 million) of segregated client money, held in accordance with the FCA's Client Money Rules, and an amount of \$64 million (2017: \$74 million) which represents other client money that is not available for use by the Company. The corresponding payable is recognised and included in 'Trade and other payables'.

7. TRADING FINANCIAL ASSETS AND LIABILITIES

| | 2018 | | 2017 | |
|----------------------------|----------------------|---------------------------|----------------------|---------------------------|
| | Assets \$millions | Liabilities \$millions | Assets \$millions | Liabilities \$millions |
| Government debt securities | 14,775 | 17,935 | 11,956 | 22,835 |
| Corporate and other debt | 11,252 | 4,593 | 9,756 | 2,864 |
| Corporate equities | 47,850 | 20,452 | 67,043 | 20,461 |
| Derivatives (see note 8) | 179,311 | 174,113 | 166,608 | 168,807 |
| | <u>253,188</u> | <u>217,093</u> | <u>255,363</u> | <u>214,967</u> |

There are no terms and conditions of any financial asset or liability classified as held for trading that may individually significantly affect the amount, timing and certainty of future cash flows for the Company.

8. DERIVATIVES

| | 2018 | | | |
|-------------------------------------|--------------------------------|------------------------------|--|---------------------|
| | Bilateral OTC \$millions | Cleared OTC \$millions | Listed derivative contracts \$millions | Total \$millions |
| Derivative assets: | | | | |
| Interest rate contracts | 62,650 | 1,980 | 8 | 64,638 |
| Credit contracts | 3,885 | 93 | - | 3,978 |
| Foreign exchange and gold contracts | 70,972 | 1,328 | 9 | 72,309 |
| Equity contracts | 28,441 | - | 6,911 | 35,352 |
| Commodity contracts | 3,002 | - | 32 | 3,034 |
| | <u>168,950</u> | <u>3,401</u> | <u>6,960</u> | <u>179,311</u> |
| Derivative liabilities: | | | | |
| Interest rate contracts | 58,372 | 848 | 9 | 59,229 |
| Credit contracts | 3,751 | 74 | - | 3,825 |
| Foreign exchange and gold contracts | 71,258 | 1,325 | 12 | 72,595 |
| Equity contracts | 27,962 | - | 7,612 | 35,574 |
| Commodity contracts | 2,800 | - | 90 | 2,890 |
| | <u>164,143</u> | <u>2,247</u> | <u>7,723</u> | <u>174,113</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

8. DERIVATIVES (CONTINUED)

| | 2017 | | | |
|-------------------------------------|--------------------------|------------------------|--|-------------------|
| | Bilateral OTC | Cleared OTC | Listed derivative contracts | Total |
| | \$millions | \$millions | \$millions | \$millions |
| Derivative assets: | | | | |
| Interest rate contracts | 71,426 | 1,143 | 7 | 72,576 |
| Credit contracts | 4,227 | 94 | - | 4,321 |
| Foreign exchange and gold contracts | 54,338 | 801 | - | 55,139 |
| Equity contracts | 26,883 | - | 5,301 | 32,184 |
| Commodity contracts | 2,224 | - | 164 | 2,388 |
| | 159,098 | 2,038 | 5,472 | 166,608 |
| | 159,098 | 2,038 | 5,472 | 166,608 |
| Derivative liabilities: | | | | |
| Interest rate contracts | 64,933 | 654 | 3 | 65,590 |
| Credit contracts | 4,608 | 53 | - | 4,661 |
| Foreign exchange and gold contracts | 55,895 | 1,007 | - | 56,902 |
| Equity contracts | 34,327 | - | 4,953 | 39,280 |
| Commodity contracts | 2,352 | - | 22 | 2,374 |
| | 162,115 | 1,714 | 4,978 | 168,807 |
| | 162,115 | 1,714 | 4,978 | 168,807 |

9. LOANS AND ADVANCES

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Loans and advances at amortised cost: | | |
| Amounts due from Morgan Stanley Group undertaking ⁽¹⁾ | 800 | 532 |
| Other | 21 | 11 |
| | 821 | 543 |
| Loans and advances at FVPL | 11 | - |
| Total | 832 | 543 |

(1) There was no IFRS 9 ECL or IAS 39 impairment allowance at 31 December 2018 or 31 December 2017, respectively

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

10. TRADE AND OTHER RECEIVABLES

| | 2018 \$millions | 2017 \$millions |
|--|--------------------|--------------------|
| Trade and other receivables (amortised cost) ⁽¹⁾ | | |
| Trade receivables | | |
| Contracts with customers | 290 | 251 |
| Amounts due from other Morgan Stanley Group undertakings | 30,930 | 32,622 |
| Other | 31,756 | 35,818 |
| Less: ECL (IFRS 9) | (37) | - |
| Less: Impairment allowance (IAS 39) | - | (41) |
| | 62,939 | 68,650 |
| Other receivables | | |
| Amounts held at exchanges | 839 | 928 |
| Amounts due from other Morgan Stanley Group undertakings | 629 | 258 |
| Other amounts receivable | 105 | 89 |
| | 1,573 | 1,275 |
| | 64,512 | 69,925 |
| Trade and other receivables (FVPL non-trading) | | |
| Prepaid OTC contracts | 622 | 442 |
| Margin loans | 141 | 276 |
| Amounts held at exchanges | 17 | - |
| | 780 | 718 |
| | 65,292 | 70,643 |
| Total | | |

(1) In the prior year, the 'Trade and other receivables (amortised cost)' were included in the classification 'Loans and receivables'.

11. INVESTMENTS IN SUBSIDIARIES

| | Subsidiary undertakings \$millions |
|------------------------------|--|
| Cost | |
| At 1 January 2018 | 1,520 |
| Additions | 576 |
| Disposals | (442) |
| Capital reduction | (12) |
| At 31 December 2018 | 1,642 |
| Impairment provisions | |
| At 1 January 2018 | (996) |
| At 31 December 2018 | (996) |
| Carrying amounts | |
| At 31 December 2017 | 524 |
| At 31 December 2018 | 646 |

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NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

11. INVESTMENTS IN SUBSIDIARIES (CONTINUED)

On 4 July 2018, the Company paid a dividend in specie of \$1 (2017: \$nil) to MSIUK, transferring its equity interest in Morgan Stanley Investment Management (Ireland) Limited.

On 1 November 2018, the Company paid a dividend in specie of \$442 million (2017: \$nil) to MSIUK, transferring its equity interest in Morgan Stanley France Holdings I S.A.S.

In 2018, the Company invested capital of \$530 million (2017: \$1 million) in Morgan Stanley Europe SE and \$46 million (2017: nil) in Morgan Stanley Taiwan Limited.

Details of all subsidiary undertakings (including indirect subsidiaries) of the Company at 31 December 2018 and 31 December 2017 are provided in the Appendix to the financial statements (see pages 230 to 231).

12. PROPERTY, PLANT AND EQUIPMENT

| | Leasehold improvement \$millions | Fixtures, fittings and equipment \$millions | Total \$millions |
|------------------------|--|--|---------------------|
| Cost | | | |
| At 1 January 2018 | 12 | 10 | 22 |
| Additions | 2 | 2 | 4 |
| Disposals | (1) | (1) | (2) |
| At 31 December 2018 | 13 | 11 | 24 |
| Depreciation | | | |
| At 1 January 2018 | 11 | 7 | 18 |
| Charge for the year | 1 | 1 | 2 |
| Disposals | (1) | (1) | (2) |
| At 31 December 2018 | 11 | 7 | 18 |
| Carrying amount | | | |
| At 31 December 2018 | 2 | 4 | 6 |

13. TRADE AND OTHER PAYABLES

| | 2018 \$millions | 2017 \$millions |
|--|--------------------|--------------------|
| Trade and other payables (amortised cost) | | |
| Trade payables | 89,054 | 93,022 |
| Other Payables | | |
| Amounts due to other Morgan Stanley Group undertakings | 1,671 | 1,760 |
| Other amounts payable | 216 | 185 |
| | 90,941 | 94,967 |
| Trade and other payables (designated at FVPL) | | |
| Prepaid OTC contracts | 887 | 898 |
| Unfunded loan commitments | 10 | - |
| | 897 | 898 |
| Total | 91,838 | 95,865 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

14. DEBT AND OTHER BORROWINGS

| | 2018 \$'millions | 2017 \$'millions |
|---|---------------------|---------------------|
| Debt and other borrowings (amortised cost) | | |
| Senior subordinated debt | 6,000 | - |
| Subordinated debt | 5,000 | 7,000 |
| Other borrowings ⁽¹⁾ | 20,361 | 28,335 |
| | <u>31,361</u> | <u>35,335</u> |
| Debt and other borrowings (designated at FVPL) | | |
| Issued structured notes | 5,664 | 3,653 |
| | <u>37,025</u> | <u>38,988</u> |

(1) During the period, the Company has granted a floating charge over a pool of assets in favour of MSIUK to secure certain intercompany loans which MSIUK has provided to the Company and are presented within Other borrowings. The value of assets subject to this charge at 31 December 2018 was \$16,129 million.

The amounts subject to senior subordinated loan agreements are wholly repayable as shown below:

| Counterparty | Repayment Date | Interest Rate | 2018 | | 2017 | |
|---|------------------|-------------------------------------|-----------------------------|--------------------|-----------------------------|--------------------|
| | | | Accrued Interest \$millions | Balance \$millions | Accrued Interest \$millions | Balance \$millions |
| Morgan Stanley Investments (UK) | 21 December 2025 | OBFR ⁽¹⁾ plus 2.3% | 39 | 5,000 | 30 | 5,000 |
| Morgan Stanley International Finance S.A. | 31 October 2025 | LIBOR ⁽²⁾ plus 1.475% | - | - | 10 | 2,000 |
| | | | <u>39</u> | <u>5,000</u> | <u>40</u> | <u>7,000</u> |

⁽¹⁾ Overnight Bank Funding Rate ("OBFR")

⁽²⁾ London Interbank Offered Rate ("LIBOR")

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

14. DEBT AND OTHER BORROWINGS (CONTINUED)

The amounts subject to senior subordinated loan agreements are wholly repayable as shown below:

| Counterparty | Repayment Date | Interest Rate | 2018 | | 2017 | |
|--------------|--------------------------------|-------------------------|--------------------------------|-----------------------|--------------------------------|-----------------------|
| | | | Accrued Interest \$millions | Balance \$millions | Accrued Interest \$millions | Balance \$millions |
| MSIUK | 30 January 2020 ⁽³⁾ | MS Proxy ⁽⁴⁾ | 1 | 6,000 | - | - |
| | | | 1 | 6,000 | - | - |

(3) The repayment date can be extended by 395 days on each business day but no later than 49 years from utilisation date, and unless a term-out notice is sent

(4) Interest rate at which Morgan Stanley is offering loans, in the relevant currency, to members of the Morgan Stanley Group on such day, which counterparties have acknowledged and agreed to apply to any loan, acting on an arm's length basis

All amounts outstanding under subordinated loan agreements are repayable on the repayment date. Any repayment of subordinated debt prior to contractual maturity would require mutual agreement between the Company and the Lender and prior supervisory consent.

The senior subordinated loan, including accrued interest, may be bailed in by the Bank of England following the exercise of their statutory powers in certain circumstances.

The Company has not defaulted on principal, interest or breached any terms of its subordinated loans during the year.

On 24 May 2018 the subordinated loan of \$2,000 million from Morgan Stanley International Finance S.A. was repaid.

15. PROVISIONS

| | Property \$millions | Litigation \$millions | Taxes and levies \$millions | Total \$millions |
|------------------------------|------------------------|--------------------------|-----------------------------------|---------------------|
| At 1 January 2018 | 2 | - | 48 | 50 |
| Additional provisions | - | 8 | 9 | 17 |
| Provisions utilised | - | (3) | (25) | (28) |
| Unused provisions reversed | - | (5) | (32) | (37) |
| Foreign exchange revaluation | - | - | 1 | 1 |
| At 31 December 2018 | 2 | - | 1 | 3 |

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

15. PROVISIONS (CONTINUED)

Property

Property provisions represent the net present value of expected future costs of excess office space (net of sublease income) and the net present value of expected future costs of reinstating leasehold improvements at the end of the lease term. Lease reinstatement provisions are released when the reinstatement obligations have been fulfilled. The related asset for lease reinstatement provisions is included in 'Leasehold improvements' within 'Property, plant and equipment' (note 12).

Litigation matters and other provisions

Litigation matters and other provisions related to the Company are largely the same as the Group. Refer to note 20 of the consolidated financial statements for a description of these matters and provisions.

16. DEFERRED TAX ASSETS AND LIABILITIES

Deferred taxes are calculated on all temporary differences under the liability method. The movement in the deferred tax account is as follows:

| | 2018 | | 2017 | |
|--|---------------------------|-------------------------------|---------------------------|-------------------------------|
| | Deferred tax asset | Deferred tax liability | Deferred tax asset | Deferred tax liability |
| | \$millions | \$millions | \$millions | \$millions |
| At 1 January | 100 | (14) | 79 | (3) |
| Adjustments in respect of prior years | - | - | (5) | 2 |
| Amount recognised in income statement | (58) | - | - | - |
| Amount recognised in other comprehensive income | (40) | (19) | 26 | (13) |
| Impact of change in tax rates recognised in other comprehensive income | 2 | - | - | - |
| At 31 December | <u>4</u> | <u>(33)</u> | <u>100</u> | <u>(14)</u> |

| | 2018 | | 2017 | |
|--|---------------------------|-------------------------------|---------------------------|-------------------------------|
| | Deferred tax asset | Deferred tax liability | Deferred tax asset | Deferred tax liability |
| | \$millions | \$millions | \$millions | \$millions |
| Accelerated capital allowances | - | 2 | 3 | - |
| Deferred compensation | 3 | 2 | 7 | - |
| Transitional adjustment | - | (12) | - | (14) |
| Temporary differences arising in respect of changes in the Company's own credit risk | - | (17) | 42 | - |
| Deferred interest | - | - | 48 | - |
| Unrealised gains/ (losses) | - | (8) | - | - |
| Other temporary differences | 1 | - | - | - |
| At 31 December | <u>4</u> | <u>(33)</u> | <u>100</u> | <u>(14)</u> |

Finance Act 2016 enacted a reduction in the UK corporation tax main rate to 17% with effect from 1 April 2020. This reduction in the tax rate impacts the deferred tax charge for the current period. In addition, Finance (No. 2) Act 2015 introduced an 8% corporation tax surcharge on the profits of banking companies with effect from 1 January 2016 which impacts the deferred tax charge in the current period.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

16. DEFERRED TAX ASSETS AND LIABILITIES (CONTINUED)

The deferred asset recognised is based on management assessment that it is probably that the Group will have taxable profits against which the temporary differences can be utilised.

Deferred tax liability of \$12 million on transitional adjustment relates to the impact of change in accounting policy with respect to fair value gains and losses arising upon initial recognition of financial instruments which use unobservable market data, as discussed in note 1.

17. COMMITMENTS AND CONTINGENCIES

Leases

The Company has entered into non-cancellable commercial leases on premises and equipment. These leases have an average life of between three and five years. The leases on the premises include renewal options and escalation clauses in line with general rental market conditions and rent adjustments based on price indices. The lease agreements do not contain contingent rent payment clauses or purchase options and they do not impose any restrictions on the Company's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

Future minimum lease payments under non-cancellable operating leases at 31 December are due as follows:

| | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Within one year | 2 | 3 |
| In the second to fifth years inclusive | 7 | 4 |
| After five years | 1 | 2 |
| | <u>10</u> | <u>9</u> |

Other commitments and contingent liabilities

At 31 December, the Company had the following outstanding commitments arising from off-balance sheet financial instruments:

| <i>Commitments</i> ⁽¹⁾ | 2018 | 2017 |
|--|-------------------|-------------------|
| | \$millions | \$millions |
| Loan commitments | 2,308 | 2,177 |
| Underwriting commitments | 687 | 336 |
| Guarantees | 405 | 575 |
| Letters of credit | 2 | 2 |
| Unsettled securities purchased under agreements to resell ⁽²⁾ | 34,623 | 28,480 |
| Unsettled securities sold under agreements to repurchase ⁽²⁾ | 26,225 | 13,740 |
| Other commitments | 22 | 13 |

(1) On balance sheet commitments include standby loan commitments, forward starting securities sold under agreements to repurchase and guarantees.

(2) Unsettled securities purchased under agreements to resell and sold under agreements to repurchase have a trade date at or prior to 31 December 2018 and settle subsequent to period end.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

18. EQUITY INSTRUMENTS

| | Ordinary shares of \$1 each \$millions | Ordinary shares of £1 each \$millions | Class A ordinary shares of \$1 each \$millions | Additional Tier 1 capital \$millions | Total equity instruments \$millions |
|--|---|--|--|--|---|
| Issued and fully paid: | | | | | |
| At 1 January 2017 | 9,935 | 30 | 1,500 | 1,300 | 12,765 |
| Ordinary shares of \$1 each issued | 1,000 | | | | 1,000 |
| At 1 January 2018 | 10,935 | 30 | 1,500 | 1,300 | 13,765 |
| Additional Tier 1 capital issued | | | | 2,200 | 2,200 |
| At 31 December 2018 | 10,935 | 30 | 1,500 | 3,500 | 15,965 |
| Voting rights at 31 December 2018 | 99.9% ⁽¹⁾ | 0.1% ⁽¹⁾ | Non-voting | Non-voting | 100% |

(1) Ordinary shares are pari passu with each other regardless of currency and together carry 100% of the voting rights (2017: 100%)

Equity instruments

At 1 January 2018, the total equity instruments in issue of the Company equated to \$13,765 million (1 January 2017: \$12,765 million) comprising 10,935,105,148 ordinary shares of \$1 each (1 January 2017: 9,935,105,148), 17,615,107 ordinary shares of £1 each, 1,500,000,000 Class A Non-voting ordinary shares of \$1 each (1 January 2017: 1,500,000,000) and Additional Tier 1 capital instruments of \$1,300,000,000. (1 January 2017: \$1,300,000,000). All equity instruments are fully paid.

On 23 August 2018, the Company issued Additional Tier 1 capital instruments (the “Instruments”) with a value of \$2,200,000,000 to Morgan Stanley International Limited, a UK-incorporated indirect parent of the Company.

Ordinary shares

The holders of the ordinary shares are entitled to receive dividends as declared from time to time and are entitled, on a show of hands, to one vote and, on a poll, one vote per share at meetings of the shareholders of the Company. All shares rank equally with regard to the Company’s residual net assets.

All ordinary shares are recorded at the rates of exchange ruling at the date the shares were paid up.

Additional Tier 1 capital

The “Instruments include a trigger mechanism whereby if the Common Equity Tier 1 capital ratio of the Company or the Group falls below a pre-determined level, the Company will write-down the outstanding principal amount of the Instruments, together with any unpaid interest coupon. In this situation, Morgan Stanley International Limited, the holder of the Instruments, would have no further rights against the Company in respect of the Instruments.

The Instruments have no defined maturity, are callable at the Company’s discretion after five years from their date of issuance of 15 December 2014, and are subordinated to senior creditors and subordinated loan creditors of the Company. The Instruments are not entitled to any participation in the residual net assets of the Company. Coupons on the Instruments are non-cumulative and payable at a fixed rate of 9% per annum. Payment of the coupon is wholly at the discretion of the Company.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

18. EQUITY INSTRUMENTS (CONTINUED)

Additional Tier 1 capital (continued)

The Instruments issued on 23 August 2018 have no defined maturity and are subordinated to senior creditors and subordinated loan creditors of the Company. The Instruments are not entitled to any participation in the residual net assets of the Company. The Instruments are callable at the Company's discretion, from 30 November 2023 for those issued on 23 August 2018, and after five years from their date of issuance of 15 December 2014 for those Instruments previously issued.

Coupons on the Instruments are non-cumulative and payable at a fixed rate of 7.5% per annum for those Instruments issued on 23 August 2018, and 9% per annum for those Instruments previously issued. Payment of the coupon is wholly at the discretion of the Company.

A payment of coupon interest was approved by the Board of Directors on 31 May 2018 and paid on the same day (see note 19).

Reserves

Details of each reserve are provided in note 23 of the consolidated financial statements.

19. DIVIDENDS

On 31 May 2018, the Directors approved a coupon payment on the Additional Tier 1 capital instruments of \$118,625,000 (31 December 2017: \$118,625,000) out of reserves available for distribution at 31 December 2017. The coupon was paid on 31 May 2018 and has a related tax benefit of \$32,028,750 (2017: \$33,121,579).

On 4 July 2018, one €1 ordinary share in Morgan Stanley Investment Management (Ireland) Limited was transferred from the company to MSIUK by way of a dividend in specie of \$1.

On 1 November 2018, 401,072,825 €1 ordinary shares in Morgan Stanley France Holdings I S.A.S. were transferred from the Company to MSIUK by way of a dividend in specie of \$442,154,006.

The Directors have not proposed the payment of a final dividend out of reserves available at 31 December 2018 (2017: \$nil).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

20. EXPECTED MATURITY OF ASSETS AND LIABILITIES

The table below shows an analysis of assets and liabilities analysed according to when they are expected to be recovered, realised or settled.

At 31 December 2018

| | Less than or equal to twelve months \$millions | More than twelve months \$millions | Total \$millions |
|--|--|---|---------------------|
| ASSETS | | | |
| Cash and short-term deposits | 30,076 | - | 30,076 |
| Trading financial assets | 253,188 | - | 253,188 |
| Secured financing | 95,577 | 66 | 95,643 |
| Loans and advances | 820 | 12 | 832 |
| Investment securities | - | 131 | 131 |
| Trade and other receivables | 63,694 | 1,598 | 65,292 |
| Current tax assets | 363 | - | 363 |
| Deferred tax assets | - | 4 | 4 |
| Investments in subsidiaries, associates and joint ventures | - | 646 | 646 |
| Property, plant and equipment | - | 6 | 6 |
| Other assets | 8 | 2 | 10 |
| | 443,726 | 2,465 | 446,191 |
| LIABILITIES | | | |
| Bank loans and overdrafts | 4 | - | 4 |
| Trading financial liabilities | 217,093 | - | 217,093 |
| Secured borrowing | 74,952 | 3,975 | 78,927 |
| Trade and other payables | 91,267 | 571 | 91,838 |
| Debt issued and other borrowings | 4,818 | 32,207 | 37,025 |
| Provisions | 3 | - | 3 |
| Current tax liability | 50 | - | 50 |
| Deferred tax liability | - | 33 | 33 |
| Accruals and deferred income | 82 | - | 82 |
| Post-employment benefit obligations | - | 4 | 4 |
| | 388,269 | 36,790 | 425,059 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

20. EXPECTED MATURITY OF ASSETS AND LIABILITIES (CONTINUED)

At 31 December 2017

| | Less than or equal to twelve months \$millions | More than twelve months \$millions | Total \$millions |
|---|---|---|-----------------------------|
| ASSETS | | | |
| Cash and short-term receivables | 24,736 | - | 24,736 |
| Trading financial assets | 255,363 | - | 255,363 |
| Secured financing | 107,226 | 9 | 107,235 |
| Loans and advances | 543 | - | 543 |
| Investment securities | - | 160 | 160 |
| Trade and other receivables | 68,918 | 1,725 | 70,643 |
| Current tax assets | 133 | - | 133 |
| Deferred tax assets | - | 100 | 100 |
| Investments in subsidiaries associates and joint ventures | - | 524 | 524 |
| Property, plant and equipment | - | 4 | 4 |
| Other assets | 6 | 2 | 8 |
| | <u>456,925</u> | <u>2,524</u> | <u>459,449</u> |
| LIABILITIES | | | |
| Bank loans and overdrafts | 122 | - | 122 |
| Trading financial liabilities | 214,967 | - | 214,967 |
| Secured borrowing | 84,384 | 6,391 | 90,775 |
| Trade and other payables | 95,491 | 374 | 95,865 |
| Debt issued and other borrowings | 1,260 | 37,728 | 38,988 |
| Provisions | 50 | - | 50 |
| Current tax liabilities | 30 | - | 30 |
| Deferred tax liabilities | - | 1 | 1 |
| Accruals and deferred income | 113 | - | 113 |
| Post-employment benefit obligations | - | 4 | 4 |
| | <u>396,417</u> | <u>44,498</u> | <u>440,915</u> |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

21. SEGMENT REPORTING

Segment information is presented in respect of the Company's business and geographical segments. The Company operates in the same business and geographical segments as the Group. Refer to note 27 of the consolidated financial statements for details of business and geographical segments.

Business segments

In 2018 and 2017, the Company had one reportable business segment, Institutional Securities.

Geographical segments

The Company operates in three geographical regions being, EMEA, the Americas and Asia. The following table presents total assets of the Company's operations by geographic area.

| | EMEA | | Americas | | Asia | | Total | |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| | \$millions |
| Total assets | 325,817 | 329,592 | 67,775 | 66,433 | 52,599 | 63,424 | 446,191 | 459,449 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT

22.1 Risk management procedures

The Company's risk management procedures are consistent with those of the Group. This disclosure is limited to quantitative data for each risk category and should be read in conjunction with the risk management procedures detailed in the Strategic report from pages 3 to 39.

22.2 Market risk

VaR

VaR for the year ended 31 December 2018

The table below presents the Management VaR for the Company's Trading portfolio on a year-end, average and annual high and low basis for 31 December 2018 and 31 December 2017.

The Credit Portfolio VaR is disclosed as a separate category from the Primary Risk Categories and includes loans that are carried at fair value and associated hedges as well as counterparty CVA and related hedges.

| | 95%/ one-day VaR for the year ended 31 December 2018 | | | | 95%/ one-day VaR for the year ended 31 December 2017 | | | |
|--|---|------------|------------|------------|---|------------|------------|------------|
| | Period end | Average | High | Low | Period end | Average | High | Low |
| <i>Market risk category:</i> | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| Interest rate and credit spread | 13 | 15 | 21 | 11 | 15 | 15 | 22 | 10 |
| Equity price | 7 | 11 | 25 | 7 | 9 | 12 | 18 | 8 |
| Foreign exchange rate | 5 | 4 | 8 | 2 | 2 | 5 | 9 | 2 |
| Commodity price | 2 | 1 | 2 | 1 | 1 | 1 | 2 | - |
| Less diversification benefit ⁽¹⁾⁽²⁾ | (10) | (12) | N/A | N/A | (7) | (12) | N/A | N/A |
| Primary Risk Categories VaR | 17 | 19 | 31 | 15 | 20 | 21 | 29 | 15 |
| Credit Portfolio VaR | 4 | 4 | 6 | 3 | 5 | 6 | 8 | 4 |
| Less diversification benefit ⁽¹⁾⁽²⁾ | (3) | (2) | N/A | N/A | (3) | (4) | N/A | N/A |
| Total Management VaR | 18 | 21 | 31 | 15 | 22 | 23 | 31 | 16 |

(1) Diversification benefit equals the difference between total Management VaR and the sum of the VaRs for the four risk categories. This benefit arises because the simulated one-day losses for each of the four primary market risk categories occur on different days; similar diversification benefits also are taken into account within each category.

(2) N/A - Not Applicable. The minimum and maximum VaR values for the total VaR and each of the component VaRs might have occurred on different days during the year and therefore the diversification benefit is not an applicable measure.

(3) The Credit Portfolio VaR is disclosed as a separate category from the Primary Risk Categories and includes loans that are carried at fair value and associated hedges as well as counterparty credit valuation adjustments and related hedges.

The Company's average VaR for Primary Risk Categories for 2018 was \$19 million compared with \$21 million for 2017. The decrease in average VaR for Primary Risk Categories is due to risk reduction across equity and foreign exchange.

The average Credit Portfolio VaR for 2018 was \$4 million compared with \$6 million for 2017. The decrease in the average VaR over the year was driven by exposure changes during 2018.

The average total VaR for 2018 was \$21 million compared with \$23 million for 2017.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.2 Market risk (continued)

Non trading risks for the year ended 31 December 2018

The Company believes that sensitivity analysis is an appropriate representation of the Company's non-trading risks. Reflected below is this analysis, which covers substantially all of the non-trading risks in the Company's portfolio, with the exception of counterparty credit valuation adjustments, covered in the previous section.

Interest rate risk

The Company's VaR excludes certain funding liabilities and money market transactions. The application of a parallel shift in interest rates of 200 basis points increase or decrease to these positions would result in a net gain or loss, respectively, of approximately \$130.0 million as at 31 December 2018, compared to a net loss or gain of \$20.8 million as at 31 December 2017.

Funding liabilities

The credit spread risk sensitivity of the Company's mark-to-market funding liabilities corresponds to an increase in value of approximately \$4.3 million and \$1.8 million for each 1 basis point widening in the Company's credit spread level for both 31 December 2018 and 31 December 2017.

Equity investments price risk

The Company is exposed to equity price risk as a result of changes in the fair value of its investments in listed equity securities and private equities classified as FVPL. These investments are predominantly equity positions with long investment horizons, the majority of which are for business facilitation purposes. The market risk related to these investments is measured by estimating the potential reduction in net revenues associated with a 10% decline in asset values as shown in the table below.

| | 31 December 2018 | 31 December 2017 |
|-----------------------|-------------------------|-------------------------|
| | 10% sensitivity | 10% sensitivity |
| | \$millions | \$millions |
| Investment securities | <u>13</u> | <u>16</u> |

Currency risk

The Company has foreign currency exposure arising from foreign operations. The majority of this foreign currency risk has been hedged by other members of the Morgan Stanley Group, primarily Morgan Stanley, by utilising forward foreign currency exchange contracts.

The Company also has foreign currency exposure arising from its trading activities in currencies other than US dollars. It actively manages this exposure by hedging with other Morgan Stanley Group undertakings.

The analysis below details the foreign currency exposure for the Company, by foreign currency, relating to the retranslation of its non-US dollar denominated branches. The analysis calculates the impact on total comprehensive income of a reasonably possible parallel shift of the foreign currency in relation to the US dollar, with all other variables held constant. This analysis does not take into account the effect of the foreign currency hedges held by other members of the Morgan Stanley Group.

| | 2018 | | | 2017 | | |
|------------------|--|--------------------------------------|---|--|--------------------------------------|---|
| | Foreign currency exposure | Percentage change applied | Other comprehensive income | Foreign currency exposure | Percentage change applied | Other comprehensive income |
| | \$millions | % | \$millions | \$millions | % | \$millions |
| Euro | 6 | 14% | 1 | 5 | 14% | 1 |
| Polish Zloty | 5 | 17% | 1 | 5 | 17% | 1 |
| South Korean Won | 246 | 11% | 27 | 234 | 11% | 26 |
| Swiss Franc | 21 | 12% | 3 | 17 | 12% | 2 |
| | <u>278</u> | | <u>32</u> | <u>261</u> | | <u>30</u> |

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.2 Market risk (continued)

Currency risk (continued)

The reasonably possible percentage change in the currency rate in relation to US dollars has been calculated based on the greatest annual percentage change over the 5 year period from 1 January 2014 to 31 December 2018 (2016: from 1 January 2013 to 31 December 2017). Thus, the percentage change applied may not be the same percentage as the actual change in the currency rate for the relevant year.

22.3 Credit risk

22.3.1 Exposure to credit risk

The maximum exposure to credit risk (“gross credit exposure”) of the Company as at 31 December 2018 is disclosed below, based on the carrying amounts of the financial assets the Company believes are subject to credit risk. Within the table financial instruments subject to ECL are distinguished from those that are not. Those financial instruments that bear credit risk but are not subject to ECL are subsequently measured at fair value. Exposure arising from financial instruments not recognised on the consolidated statement of financial position is measured as the maximum amount that the Company could have to pay, which may be significantly greater than the amount that would be recognised as a liability. Where the Company enters into credit enhancements, including receiving cash and security as collateral and master netting agreements, to manage the credit exposure on these financial instruments the financial effect of the credit enhancements is also disclosed below. The net credit exposure represents the credit exposure remaining after the effect of the credit enhancements.

Trading financial assets are subject to traded credit risk through exposure to the issuer of the financial asset; the Company manages this issuer credit risk through its market risk management infrastructure and this traded credit risk is incorporated within the VaR based risk measures included in the market risk disclosure.

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NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.1 Exposure to credit risk (continued)

Exposure to credit risk by class

| Class | 2018 | | |
|--|--|-----------------------------------|--|
| | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure ⁽²⁾ \$millions |
| Subject to ECL: | | | |
| Cash and short-term deposits | 30,076 | - | 30,076 |
| Loans and advances | 821 | - | 821 |
| Trade and other receivables ⁽³⁾ | 64,408 | - | 64,408 |
| Not subject to ECL⁽⁴⁾: | | | |
| Trading financial assets: | | | |
| Derivatives | 179,311 | (173,250) | 6,061 |
| Secured financing | 95,643 | (94,546) | 1,097 |
| Loans and advances | 11 | - | 11 |
| Trade and other receivables ⁽³⁾ | 780 | (370) | 410 |
| | <u>371,050</u> | <u>(268,166)</u> | <u>102,884</u> |
| Unrecognised financial instruments | | | |
| Subject to ECL: | | | |
| Loan commitments | 1,556 | - | 1,556 |
| Letters of credit | 1 | - | 1 |
| Not subject to ECL⁽⁴⁾: | | | |
| Loan commitments | 752 | (84) | 668 |
| Letters of credit | 1 | - | 1 |
| Unsettled securities purchased under agreements to resell ⁽⁵⁾ | 34,623 | - | 34,623 |
| Total unrecognised financial instruments | <u>36,933</u> | <u>(84)</u> | <u>36,849</u> |
| | <u><u>407,983</u></u> | <u><u>(268,250)</u></u> | <u><u>139,733</u></u> |

(1) The carrying amount recognised in the statement of financial position best represents the Company's maximum exposure to credit risk.

(2) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$4,364 million of an available \$29,885 million (2017: \$5,193 million of an available \$29,907 million) to be offset in the event of default by certain Morgan Stanley counterparties.

(3) Trade and other receivables primarily include cash collateral pledged against the payable on OTC derivative positions. These derivative liabilities are included within trading financial liabilities in the condensed consolidated statement of financial position.

(4) Financial instruments measured at FVPL are not subject to ECL.

(5) For unsettled securities purchased under agreement to resell, collateral in the form of securities will be received at the point of settlement. Since the value of collateral is determined at a future date it is currently unquantifiable and not included in the table.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.1 Exposure to credit risk (continued)

| Class | 2017 | | |
|--|--|-----------------------------------|--|
| | Gross credit exposure ⁽¹⁾ \$millions | Credit enhancements \$millions | Net credit exposure ⁽²⁾ \$millions |
| Cash and short-term deposits | 24,736 | - | 24,736 |
| Trading financial assets: | | | |
| Derivatives | 166,608 | (158,829) | 7,779 |
| Secured financing | 107,235 | (102,968) | 4,267 |
| Loans and advances | 543 | - | 543 |
| Trade and other receivables ⁽³⁾ | 69,626 | (520) | 69,106 |
| | <u>368,748</u> | <u>(262,317)</u> | <u>106,431</u> |
| Unrecognised financial instruments | | | |
| Loan commitments | 2,177 | (105) | 2,072 |
| Unsettled securities purchased under agreements to resell ⁽⁴⁾ | 28,480 | - | 28,480 |
| Letters of credit | 2 | - | 2 |
| Total unrecognised financial instruments | <u>30,659</u> | <u>(105)</u> | <u>30,554</u> |
| | <u>399,407</u> | <u>(262,422)</u> | <u>136,985</u> |

(1) The carrying amount recognised in the statement of financial position best represents the Company's maximum exposure to credit risk.

(2) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$5,193 million of an available \$29,907 million to be offset in the ordinary course of business and/or in the event of default.

(3) Trade receivables primarily include cash collateral pledged against the payable on OTC derivative positions. These derivative liabilities are included within financial liabilities classified as held for trading in the statement of financial position.

(4) For unsettled securities purchased under agreements to resell, collateral in the form of securities will be received at the point of settlement. Since the value of collateral is determined at a future date it is currently unquantifiable and not included in the table.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.1 Exposure to credit risk (continued)

Exposure to credit risk by internal rating grades

Internal credit ratings are derived using methodologies generally consistent with those used by external agencies.

a. Recognised and unrecognised financial instruments subject to ECL

The following table provides an analysis of the credit risk exposure by ECL stage per class of recognised and unrecognised financial instrument subject to ECL, based on the following internal credit rating grades:

Investment grade: internal grades AAA - BBB

Non-investment grade: internal grades BB - CCC

Default: internal grades D

ECL Staging

| | Stage 1 | Stage 2 | Stage 3 | Total |
|---|-------------------|-------------------|-------------------|--------------|
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| 31 December 2018 | \$millions | \$millions | \$millions | |
| Cash: | | | | |
| Credit grade | | | | |
| Investment grade | 29,920 | - | - | 29,920 |
| Non-investment | 156 | - | - | 156 |
| Gross carrying amount ⁽¹⁾ | 30,076 | - | - | 30,076 |
| Loans and Advances: | | | | |
| Credit Grade | | | | |
| Investment grade | 799 | - | - | 799 |
| Non-investment grade | 22 | - | - | 22 |
| Gross carrying amount ⁽¹⁾ | 821 | - | - | 821 |
| Trade and other receivables⁽²⁾: | | | | |
| Credit Grade | | | | |
| Investment grade | 581 | 52,959 | 43 | 53,583 |
| Non-investment grade | - | 6,892 | 1 | 6,893 |
| Default | - | - | 10 | 10 |
| Unrated ⁽³⁾ | 48 | 3,901 | 10 | 3,959 |
| Gross carrying amount | 629 | 63,752 | 64 | 64,445 |
| Loss allowance | - | - | 37 | 37 |
| Carrying amount | 629 | 63,752 | 27 | 64,408 |

(1) ECL is de minimus, therefore, gross carrying amount is equal to carrying amount

(2) The \$629 million in stage 1 relates entirely to other receivables. There are no trade receivables at stage 1, as the Group's accounting policy is to measure lifetime credit losses on trade receivables under the simplified approach. Refer to note 3 of the Group financial statements for further detail on the accounting policy.

(3) For the unrated stage 2 trade receivables, all lifetime ECL is always calculated without considering whether a SICR has occurred.

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NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.1 Exposure to credit risk (continued)

ECL Staging

| | Stage 1 | Stage 2 | Stage 3 | Total |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| 31 December 2018 | \$millions | \$millions | \$millions | \$millions |
| Loan Commitments⁽²⁾ | | | | |
| Credit grade | | | | |
| Investment grade | 1,412 | - | - | 1,412 |
| Non-investment grade | 117 | 29 | - | 146 |
| Total amount committed | 1,529 | 29 | - | 1,558 |

(2) Loan commitments including letters of credit

b. Financial assets measured at FVPL

Maximum exposure to credit risk by credit rating⁽¹⁾

| | Gross credit exposure |
|--------------|------------------------------|
| | 31 December 2018 |
| | \$millions |
| AAA | 8,497 |
| AA | 32,166 |
| A | 157,163 |
| BBB | 60,105 |
| BB | 11,881 |
| B | 4,839 |
| CCC | 440 |
| Unrated | 654 |
| Total | 275,745 |

(1) The above table excludes \$73,877 million of trading corporate debt and equities as well as \$131 million of investment securities. For debt instruments, credit risk is managed through the market risk management infrastructure and incorporated into VaR.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.1 Exposure to credit risk (continued)

c. Unrecognised financial instruments measured at fair value

Maximum exposure to credit risk by credit rating

| Credit Rating | Gross credit exposure 31 December 2018 \$millions |
|---------------|---|
| AA | 17,304 |
| A | 7,978 |
| BBB | 8,782 |
| BB | 1,181 |
| B | 125 |
| Unrated | 6 |
| Total | <u>35,376</u> |

22.3.2 Loss Allowance

This table summarises the loss allowance by class subject to ECL:

| | 2018 | | | 2017 | | |
|------------------------------------|---------------|-----------|---------------|---------------|---------------------------|---------------|
| | Gross | ECL | Net | Gross | Impairment ⁽¹⁾ | Net |
| | \$million | \$million | \$million | \$million | \$million | \$million |
| Loans and advances | 821 | - | 821 | 543 | - | 543 |
| Trade and other receivables | 64,445 | 37 | 64,408 | 69,876 | 41 | 69,835 |
| Loan commitments ⁽²⁾⁽³⁾ | 1,558 | - | 1,558 | 2,179 | - | 2,179 |
| | <u>66,824</u> | <u>37</u> | <u>66,787</u> | <u>72,741</u> | <u>41</u> | <u>72,700</u> |

(1) Impairment under IAS 39

(2) Loan commitments including letters of credit

(3) There is no gross carrying value for loan commitments. The numbers in this table reflect gross exposure.

At 31 December 2018, the carrying amount of financial assets on which no ECL were recognised because of collateral held was \$41,558 million.

In relation to the trade receivables with an ECL of \$37m, the related gross carrying amount is \$4,456m. An analysis of the changes in gross carrying amount and corresponding ECL is shown below. For all other trade and other receivables, ECL has been assessed as de minimis based on a variety of factors including the short dated nature of the assets and a lack of historical credit losses.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.2 Loss allowance (continued)

| Trade and other receivables at amortised cost | Stage 1 | Stage 2 | Stage 3 | Total |
|---|------------|--------------|------------|--------------|
| | 12-month | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| | \$millions | \$millions | \$millions | |
| Gross carrying amount as at 1 January 2018 | 13 | 2,205 | 49 | 2,267 |
| Transfers to Stage 3 | | (192) | 192 | - |
| New financial assets originated or purchased | 5 | 4,822 | - | 4,827 |
| Financial assets derecognised during the year other than write-offs | - | (2,465) | (166) | (2,631) |
| Write-offs | - | - | (11) | (11) |
| FX and other movements | | 4 | - | 4 |
| Gross carrying amount as at 31 December 2018 | 18 | 4,374 | 64 | 4,456 |
| Loss allowance as at 31 December 2018 | - | - | 37 | 37 |
| Carrying amount as at 31 December 2018 | 18 | 4,374 | 27 | 4,419 |

As at 31 December 2018, there is no collateral held against credit-impaired assets.

Trade and other receivables at amortised

| | Stage 1 | Stage 2 | Stage 3 | Total |
|---|-----------|-----------|------------|-------|
| | Lifetime | Lifetime | Lifetime | |
| | ECL | ECL | ECL | |
| | \$million | \$million | \$millions | |
| Loss allowance as at 1 January 2018 | - | - | 41 | 41 |
| Changes in credit risk | - | - | 6 | 6 |
| FX and other movements | - | - | 1 | 1 |
| Total net income statement charge during the year | - | - | 7 | 7 |
| Write-offs | - | - | (11) | (11) |
| Loss allowance as at 31 December 2018 | - | - | 37 | 37 |

Changes in estimation techniques or significant assumptions

There have been no changes made to estimation techniques or significant assumptions for estimating impairment, during the year.

22.3.3 Write-offs

The Group may write-off financial assets that are still subject to enforcement activity. The outstanding contractual amounts of such assets written off during the year ended 31 December 2018 was \$11 million. The Group still seeks to recover in full amounts it is legally owed, but which have been written off due to there being no reasonable expectation of full recovery.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

22.3 Credit risk (continued)

22.3.4 Modification of financial assets

There were no modifications to financial assets during the year or since origination and therefore modifications have not impacted ECL staging.

22.4 Liquidity and funding risk

Maturity analysis

In the following maturity analysis of financial liabilities, derivative contracts and other financial liabilities held as part of the Company's trading activities are presented at fair value, consistent with how these financial liabilities are managed, and are disclosed as on demand. Derivatives not held as part of the Company's trading activities and financial liabilities designated at fair value through profit or loss which contain an embedded derivative are disclosed according to their earliest contractual maturity; all such amounts are presented at their fair value, consistent with how these financial liabilities are managed. All other amounts represent undiscounted cash flows payable by the Company arising from its financial liabilities to their earliest contractual maturities as at 31 December 2018 and 31 December 2017. Repayments of financial liabilities that are subject to immediate notice are treated as if notice were given immediately and are classified as on demand. This presentation is considered by the Company to appropriately reflect the liquidity risk arising from those financial liabilities, and is consistent with how the liquidity risk on these financial liabilities is managed by the Company.

| | On demand | Less than 1 month | Equal to or more than 1 month but less than 3 months | Equal to or more than 3 months but less than 1 year | Equal to or more than 1 year but less than 5 years | Equal to or more than 5 years | Total |
|--|----------------|-------------------|--|---|--|-------------------------------|----------------|
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| 31 December 2018 | | | | | | | |
| Financial liabilities | | | | | | | |
| Bank loans and overdrafts | 4 | - | - | - | - | - | 4 |
| Trading financial liabilities: | | | | | | | |
| Derivatives | 174,113 | - | - | - | - | - | 174,113 |
| Other | 42,981 | - | - | - | - | - | 42,981 |
| Secured borrowings | 54,579 | 7,737 | 7,026 | 5,629 | 4,018 | - | 78,989 |
| Trade and other payables | 90,693 | 1 | 268 | 101 | 12 | 561 | 91,636 |
| Debt and other borrowings | 1,630 | 94 | 3,450 | 1,093 | 21,189 | 13,362 | 40,818 |
| Total financial liabilities | 364,000 | 7,832 | 10,744 | 6,823 | 25,219 | 13,923 | 428,541 |
| Unrecognised financial instruments | | | | | | | |
| Guarantees | 405 | - | - | - | - | - | 405 |
| Letters of credit | - | - | - | - | 2 | - | 2 |
| Loan commitments | 2,308 | - | - | - | - | - | 2,308 |
| Underwriting commitments | - | - | - | 687 | - | - | 687 |
| Unsettled securities purchased under agreements to resell ⁽¹⁾ | 31,955 | 1,689 | - | 979 | - | - | 34,623 |
| Other commitments | 22 | - | - | - | - | - | 22 |
| Total unrecognised financial instruments | 34,690 | 1,689 | - | 1,666 | 2 | - | 38,047 |

(1) The Group enters into forward-starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2018 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount outstanding at 31 December 2018, \$31,955 million settled within three business days.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

22. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity and funding risk (continued)

| 31 December 2017 | On demand \$millions | Less than 1 month \$millions | Equal to or more than 1 month but less than 3 months \$millions | Equal to or more than 3 months but less than 1 year \$millions | Equal to or more than 1 year but less than 5 years \$millions | Equal to or more than 5 years \$millions | Total \$millions |
|--|-------------------------|---------------------------------|--|---|--|---|---------------------|
| Financial liabilities | | | | | | | |
| Bank loans and overdrafts | 122 | - | - | - | - | - | 122 |
| Trading financial liabilities | | | | | | | |
| Derivatives | 168,807 | - | - | - | - | - | 168,807 |
| Other | 46,160 | - | - | - | - | - | 46,160 |
| Secured borrowings | 57,575 | 15,145 | 4,602 | 7,088 | 6,205 | - | 90,615 |
| Trade and other payables | 94,733 | 298 | 9 | 250 | 35 | 373 | 95,698 |
| Debt and other borrowings | 1,124 | 32 | 73 | 575 | 26,902 | 14,134 | 42,840 |
| Total financial liabilities | 368,521 | 15,475 | 4,684 | 7,913 | 33,142 | 14,507 | 444,242 |
| Unrecognised financial instruments | | | | | | | |
| Guarantees | 575 | - | - | - | - | - | 575 |
| Letter of credit | - | - | - | - | 2 | - | 2 |
| Loan commitments | 2,177 | - | - | - | - | - | 2,177 |
| Underwriting commitments | - | - | - | 336 | - | - | 336 |
| Unsettled securities purchased under agreements to resell ⁽¹⁾ | 28,246 | 234 | - | - | - | - | 28,480 |
| Other commitments | 13 | - | - | - | - | - | 13 |
| Total unrecognised financial instruments | 31,011 | 234 | - | 336 | 2 | - | 31,583 |

(1) The Company enters into forward starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2017 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount outstanding at 31 December 2017, \$28,246 million settled within three business days.

23. TRANSFERS OF FINANCIALS ASSETS, INCLUDING PLEDGES OF COLLATERAL

Transferred financial assets that are not derecognised in their entirety

In the ordinary course of business, the Company enters into various arrangements, including selling securities under agreements to repurchase, purchasing securities under agreements to resell, securities borrowed and securities loaned to, amongst other things, acquire securities to cover short positions and settle other securities obligations, to accommodate customers' needs and to finance the Company's inventory positions.

The Company pledges certain financial instruments to collateralise repurchase agreements and other securities financings. Pledged financial instruments that can be sold or repledged by the secured party are identified as trading financial instruments (pledged to various parties) in the statement of financial position. The Company has determined that it retains substantially all the risks and rewards of these financial instruments including credit risk, settlement risk, country risk and market risk, and therefore has not derecognised them. In addition, it recognises a financial liability in respect of the consideration received.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
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23. TRANSFERS OF FINANCIALS ASSETS, INCLUDING PLEDGES OF COLLATERAL
(CONTINUED)

Other financial assets transferred that continue to be recognised for accounting purposes include pledges of securities as collateral for derivative transactions or otherwise, as well as certain sales of securities with related transactions, such as derivatives, that result in the Company retaining substantially all the risks and rewards of the financial assets transferred. In addition, it recognises a financial liability in respect of the consideration received.

These transactions are generally conducted under standard agreements used by financial market participants and are undertaken with counterparties subject to the Company's normal credit risk control processes. The resulting credit exposures are controlled by daily monitoring and collateralisation of the positions. The carrying amount of the associated financial liabilities related to financial assets transferred that continue to be recognised is \$42,423 million (2017: \$67,817 million).

The following table presents those financial assets which have been sold or otherwise transferred, but which, for accounting purposes, remain recognised on the statement of financial position. Positions presented below show long positions in the same security, whilst the consolidated statement of financial position presents long and short positions in the same security on a net basis.

| | 2018 | 2017 |
|---------------------------------|-------------------|-------------------|
| | \$millions | \$millions |
| Trading financial assets | | |
| Debt Securities | 22,203 | 17,613 |
| Equity instruments | 40,413 | 60,058 |
| | <u>62,616</u> | <u>77,671</u> |

24. FINANCIAL ASSETS ACCEPTED AS COLLATERAL

The Company's policy is generally to take possession of securities received as collateral, securities purchased under agreements to resell and securities borrowed. The Company monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and, as necessary, requests additional collateral to ensure such transactions are adequately collateralised. Where deemed appropriate, the Company's agreements with third parties specify its rights to request additional collateral. These transactions are mostly conducted under standard documentation used by financial market participants.

The fair value of collateral accepted under these arrangements as at 31 December 2018 was \$341,971 million (2017: \$297,781 million). Of this amount \$307,379 million (2017: \$269,115 million) has been sold or repledged to third parties in connection with financing activities, or to comply with commitments under short sale transactions.

25. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING

In the statement of financial position, financial assets and financial liabilities are only offset and presented on a net basis where there is a current 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. In the absence of such conditions, financial assets and financial liabilities are presented on a gross basis.

The following tables present information about the offsetting of financial instruments and related collateral amounts. It does not include information about financial instruments that are subject only to a collateral agreement. The effect of master netting arrangements, collateral agreements and other credit enhancements, on the Company's exposure to credit risk is disclosed in note 22.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

25. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)

| | Gross amounts ⁽¹⁾ | Amounts offset in the statement of financial position ^{(2) (3)} | Net amounts presented in the statement of financial position | Amounts not offset in the statement of financial position ^{(4) (5) (6) (7)} | | Net exposure ⁽⁸⁾ |
|--|------------------------------|---|--|--|--------------------|-----------------------------|
| | | | | Financial instruments | Cash collateral | |
| | \$millions | \$millions | \$millions | \$millions | \$millions | \$millions |
| 31 December 2018 | | | | | | |
| Assets | | | | | | |
| Secured financing: | | | | | | |
| Cash collateral on securities borrowed | 32,353 | (9,231) | 23,122 | (22,566) | - | 556 |
| Securities purchased under agreement to resell | 177,283 | (112,411) | 64,872 | (64,331) | - | 541 |
| Trading financial assets: | | | | | | |
| Derivatives | 231,328 | (52,017) | 179,311 | (149,608) | (23,531) | 6,172 |
| TOTAL | 440,964 | (173,659) | 267,305 | (236,505) | (23,531) | 7,269 |
| Liabilities | | | | | | |
| Secured borrowing: | | | | | | |
| Cash collateral on securities loaned | 30,334 | (9,231) | 21,103 | (20,767) | - | 336 |
| Securities sold under agreement to repurchase | 153,887 | (112,411) | 41,476 | (39,622) | - | 1,854 |
| Trading financial liabilities | | | | | | |
| Derivatives | 225,677 | (51,564) | 174,113 | (144,279) | (19,509) | 10,325 |
| TOTAL | 409,898 | (173,206) | 236,692 | (204,668) | (19,509) | 12,515 |

- (1) Amounts include \$240 million of cash collateral on securities borrowed, \$533 million of securities purchased under agreements to resell, \$1,287 million of trading financial assets - derivatives, \$336 million of cash collateral on securities loaned, \$1,009 million of securities sold under agreements to repurchase and \$1,760 million of trading financial liabilities – derivatives which are either not subject to master netting agreements or collateral agreements or are subject to such agreements but the Group has not determined the agreements to be legally enforceable.
- (2) Amounts are reported on a net basis in the statement of financial position when there is a legally enforceable master netting arrangement that provides for the current right of offset and there is an intention to either settle on a net basis or to realise the asset and liability simultaneously.
- (3) Amounts include \$4,422 million and \$3,969 million of cash collateral related to trading financial assets – derivatives and trading financial liabilities – derivatives, respectively, recognised in amounts offset in the statement of financial position.
- (4) Amounts relate to master netting arrangements and collateral arrangements which have been determined by the Group to be legally enforceable, but do not meet all criteria required for net presentation within the statement of financial position.
- (5) The cash collateral not offset is recognised in the statement of financial position within secured financing and secured borrowing respectively.
- (6) In addition to the balances disclosed in the table above, certain secured financing and secured borrowing have legally enforceable master netting arrangements in place. As a result, \$2,686 million of netting is included within the statement of financial position.
- (7) In addition to the balances disclosed in the table above, \$8 million not presented net of certain trade and other receivables and trade and other payables have legally enforceable master netting arrangements in place and can be offset in the ordinary course of business and/ or in the event of default.
- (8) Intercompany cross-product legally enforceable netting arrangements are in place which would allow for an additional \$4,364 million of the total statement of financial position, to be offset in the ordinary course of business and/ or in the event of default. The additional amounts for offset would include a portion of the residual net exposure.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

25. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)

| | Gross amounts (1) | Amounts offset in the statement of financial position (2) (3) | Net amounts presented in the statement of financial position | Amounts not offset in the statement of financial position (4) (5) (6) | | Net exposure ⁽⁷⁾ |
|--|-------------------------|--|--|---|----------------------------------|-----------------------------|
| | \$millions | \$millions | \$millions | Financial instruments \$millions | Cash collateral \$millions | \$millions |
| 31 December 2017 | | | | | | |
| Assets | | | | | | |
| Secured financing: | | | | | | |
| Cash collateral on securities borrowed | 34,969 | (10,813) | 24,156 | (23,740) | - | 416 |
| Securities purchased under agreement to resell | 140,530 | (69,791) | 70,739 | (66,887) | - | 3,852 |
| Trading financial assets | | | | | | |
| Derivatives | 216,199 | (49,591) | 166,608 | (135,934) | (22,850) | 7,824 |
| TOTAL | 391,698 | (130,195) | 261,503 | (226,561) | (22,850) | 12,092 |
| Liabilities | | | | | | |
| Secured borrowing: | | | | | | |
| Cash collateral on securities loaned | 31,574 | (10,813) | 20,761 | (20,485) | - | 276 |
| Securities sold under agreement to repurchase | 122,057 | (69,791) | 52,266 | (48,490) | - | 3,776 |
| Trading financial liabilities | | | | | | |
| Derivatives | 214,779 | (45,972) | 168,807 | (133,324) | (23,956) | 11,527 |
| TOTAL | 368,410 | (126,576) | 241,834 | (202,299) | (23,956) | 15,579 |

(1) Amounts include \$134 million of cash collateral on securities borrowed, \$3,581 million of securities purchased under agreements to resell, \$2,076 million of trading financial assets - derivatives, \$271 million of cash collateral on securities loaned, \$3,362 million of securities sold under agreements to repurchase and \$2,461 million of trading financial liabilities - derivatives which are either not subject to master netting agreements or collateral agreements or are subject to such agreements but the Group has not determined the agreements to be legally enforceable.

(2) Amounts are reported on a net basis in the statement of financial position when there is a legally enforceable master netting arrangement that provides for a current right of offset and there is an intention to either settle on a net basis or to realise the asset and liability simultaneously.

(3) Amounts include \$6,418 million and \$2,800 million of cash collateral related to trading financial assets - derivatives recognised in amounts offset in the statement of financial positions for assets and liabilities respectively.

(4) Amounts relate to master netting arrangements and collateral arrangements which have been determined by the Group to be legally enforceable but do not meet all criteria required for net presentation within the statement of financial position.

(5) The cash collateral not offset is recognised in the statement of financial position within trade receivables and payables respectively.

(6) In addition to the balances disclosed in the table certain secured financing and secured borrowing have legally enforceable master netting arrangements in place. As a result, \$1,760 million of netting is included within the condensed statement of financial position. \$32 million not presented net within the statement of financial position have legally enforceable netting arrangements in place and can be offset in the ordinary course of business and/ or in the event of default.

(7) Intercompany cross-product legally enforceable netting arrangements are in place which would allow for an additional \$5,193 million of the total statement of financial position, to be offset in the ordinary course of business and/ or in the event of default. The additional amounts for offset would include a portion of the residual net exposure.

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

a. Financial assets and liabilities recognised at fair value on a recurring basis

The following tables present the carrying value of the Company's financial assets and financial liabilities recognised at fair value on a recurring basis, classified according to the fair value hierarchy.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis
2018

| | Quoted prices in active market (Level 1) \$millions | Valuation techniques using observable inputs (Level 2) \$millions | Valuation techniques with significant unobservable inputs (Level 3) \$millions | Total \$millions |
|---|--|---|---|---------------------|
| Trading financial assets: | | | | |
| Government debt securities | 12,093 | 2,669 | 13 | 14,775 |
| Corporate and other debt | - | 10,934 | 318 | 11,252 |
| Corporate equities | 47,407 | 410 | 33 | 47,850 |
| Derivatives: | | | | |
| Interest rate contracts | 26 | 63,633 | 979 | 64,638 |
| Credit contracts | - | 3,827 | 151 | 3,978 |
| Foreign exchange and gold contracts | 1 | 72,259 | 49 | 72,309 |
| Equity contracts | 764 | 32,730 | 1,858 | 35,352 |
| Commodity contracts | 8 | 3,001 | 25 | 3,034 |
| Total trading financial assets | 60,299 | 189,463 | 3,426 | 253,188 |
| Secured Financing: | | | | |
| Cash collateral on securities borrowed | - | 23,122 | - | 23,122 |
| Securities purchased under agreements to resell | - | 64,555 | 317 | 64,872 |
| Other secured financing | - | 7,649 | - | 7,649 |
| Total secured financing | - | 95,326 | 317 | 95,643 |
| Loans and advances: | | | | |
| Corporate loans | - | 11 | - | 11 |
| Investment Securities: | | | | |
| Corporate equities | 14 | 33 | 84 | 131 |
| Trade and other receivables: | | | | |
| Prepaid OTC contracts | - | 499 | 123 | 622 |
| Margin loans | - | 11 | 130 | 141 |
| Other | - | - | 17 | 17 |
| Total trade and other receivables | - | 510 | 270 | 780 |
| Total financial assets measured at fair value | 60,313 | 285,343 | 4,097 | 349,753 |
| Trading financial liabilities: | | | | |
| Government debt securities | 16,640 | 1,295 | - | 17,935 |
| Corporate and other debt | - | 4,593 | - | 4,593 |
| Corporate equities | 20,385 | 58 | 9 | 20,452 |
| Derivatives: | | | | |
| Interest rate contracts | 21 | 58,784 | 424 | 59,229 |
| Credit contracts | - | 3,659 | 166 | 3,825 |
| Foreign exchange and gold contracts | - | 72,521 | 74 | 72,595 |
| Equity contracts | 523 | 32,819 | 2,232 | 35,574 |
| Commodity contracts | 106 | 2,745 | 39 | 2,890 |
| Total trading financial liabilities | 37,675 | 176,474 | 2,944 | 217,093 |
| Secured borrowing: | | | | |
| Cash collateral on securities loaned | - | 366 | - | 366 |
| Securities sold under agreements to purchase | - | 15,868 | - | 15,868 |
| Other secured borrowing | - | 16,348 | - | 16,348 |
| Total secured borrowing | - | 32,582 | - | 32,582 |
| Trade and other payables: | | | | |
| Prepaid OTC contracts | - | 628 | 259 | 887 |
| Unfunded loan commitments | - | 10 | - | 10 |
| Total trade and other payables | - | 638 | 259 | 897 |
| Debt and other borrowings: | | | | |
| Issued Structured notes | - | 5,217 | 447 | 5,664 |
| Total financial liabilities measured at fair value | 37,675 | 214,911 | 3,650 | 256,236 |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

2017

| | Quoted prices in active market (Level 1) \$millions | Valuation techniques using observable inputs (Level 2) \$millions | Valuation techniques with significant unobservable inputs (Level 3) \$millions | Total \$millions |
|---|--|---|---|---------------------|
| Trading financial assets | | | | |
| Government debt securities | 8,150 | 3,805 | 1 | 11,956 |
| Corporate and other debt | - | 9,355 | 401 | 9,756 |
| Corporate equities | 66,690 | 276 | 77 | 67,043 |
| Derivatives: | | | | |
| Interest rate contracts | 6 | 71,402 | 1,168 | 72,576 |
| Credit contracts | - | 4,155 | 166 | 4,321 |
| Foreign exchange and gold contracts | - | 55,076 | 63 | 55,139 |
| Equity contracts | 274 | 30,042 | 1,868 | 32,184 |
| Commodity contracts | 104 | 2,273 | 11 | 2,388 |
| Total trading financial assets | 75,224 | 176,384 | 3,755 | 255,363 |
| Secured financing | - | 12,340 | - | 12,340 |
| Investment securities | | | | |
| Corporate equities | 26 | 42 | 92 | 160 |
| Trade and other receivables: | | | | |
| Prepaid OTC contracts | - | 336 | 106 | 442 |
| Margin loans | - | 47 | 229 | 276 |
| Total trade and other receivables | - | 383 | 335 | 718 |
| Total financial assets measured at fair value | 75,250 | 189,149 | 4,182 | 268,581 |
| Trading financial liabilities | | | | |
| Government debt securities | 21,232 | 1,603 | - | 22,835 |
| Corporate and other debt | - | 2,864 | - | 2,864 |
| Corporate equities | 20,374 | 72 | 15 | 20,461 |
| Derivatives: | | | | |
| Interest rate contracts | 4 | 64,929 | 657 | 65,590 |
| Credit contracts | - | 4,474 | 187 | 4,661 |
| Foreign exchange and gold contracts | - | 56,817 | 84 | 56,901 |
| Equity contracts | 384 | 36,460 | 2,436 | 39,280 |
| Commodity contracts | 13 | 2,355 | 7 | 2,375 |
| Total trading financial liabilities | 42,007 | 169,574 | 3,386 | 214,967 |
| Secured borrowing | - | 17,747 | - | 17,747 |
| Trade and other payables: | | | | |
| Prepaid OTC contracts | - | 729 | 169 | 898 |
| Debt and other borrowings: | | | | |
| Issued structured notes | - | 3,293 | 361 | 3,654 |
| Total financial liabilities measured at fair value | 42,007 | 191,343 | 3,916 | 237,266 |

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

The Company's valuation approach and fair value hierarchy categorisation for certain significant classes of financial instruments recognised at fair value on a recurring basis are consistent with those disclosed for the Group. Refer to note 32 to the consolidated financial statements for details.

b. Transfers between Level 1 and Level 2 of the fair value hierarchy for financial assets and liabilities recognised at fair value on a recurring basis

There were no material transfers between Level 1 and Level 2 of the fair value hierarchy during the year to 31 December 2018. During 2017, the Company reclassified approximately \$1,200 million of European government debt securities assets and \$968 million of European government debt securities liabilities from Level 2 to Level 1, reflecting increased market activity in these instruments.

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis

The following tables present the changes in the fair value of the Company's Level 3 financial assets and financial liabilities for the years ended 31 December 2018 and 31 December 2017. Level 3 instruments may be hedged with instruments classified in Level 1 and Level 2. As a result, the realised and unrealised gains/ (losses) for assets and liabilities within the Level 3 category presented in the following tables do not reflect the related realised and unrealised gains/ (losses) on hedging instruments that have been classified by the Company within the Level 1 and/ or Level 2 categories.

Unrealised gains/ (losses) during the period for assets and liabilities within the Level 3 category presented in the following tables may include changes in fair value during the period that were attributable to both observable and unobservable inputs.

The Morgan Stanley Company operates a number of intra-company policies to ensure that, where possible, revenues and related costs are matched. Where the trading positions included in the below table are risk managed using financial instruments held by other Morgan Stanley Company undertakings, these policies potentially result in the recognition of offsetting gains or losses in the Company.

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NOTES TO THE COMPANY FINANCIAL STATEMENTS
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26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

C. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| | Balance at 1 January 2018 \$millions | Impact of adopting IFRS 9 \$millions | Total gains/ (losses) recognised in consolidated income statement ⁽¹⁾ \$millions | Total gains/ (losses) recognised in the statement of comprehensive income ⁽¹⁾ \$millions | Purchases \$millions | Sales & Issuances ⁽²⁾ \$millions | Settlements \$millions | Net transfers in and/or (out) of Level 3 ⁽³⁾ \$millions | Balance at December 2018 \$millions | Unrealised gains/ (losses) for Level 3 assets/ liabilities 31 outstanding as December 2018 ⁽⁴⁾ \$millions |
|---|---|---|---|--|-------------------------|--|---------------------------|---|---|---|
| Trading financial assets: | | | | | | | | | | |
| Government debt securities | 1 | - | - | - | 11 | - | - | 1 | 13 | - |
| Corporate and other debt | 401 | (17) | 75 | - | 227 | (201) | - | (167) | 318 | (5) |
| Corporate equities | 77 | - | 2 | - | 9 | (21) | - | (34) | 33 | 4 |
| Total trading financial assets | 479 | (17) | 77 | - | 247 | (222) | - | (200) | 364 | (1) |
| Secured Financing: | | | | | | | | | | |
| Securities purchased under agreements to resell | - | - | - | - | 317 | - | - | - | 317 | - |
| Total secured financing | - | - | - | - | 317 | - | - | - | 317 | - |
| Loans and advances: | | | | | | | | | | |
| Corporate loans | - | 17 | - | - | - | (17) | - | - | - | - |
| Investment securities: | | | | | | | | | | |
| Corporate equities | 92 | - | (3) | - | - | (5) | - | - | 84 | (3) |
| Trade and other receivables: | | | | | | | | | | |
| Prepaid OTC contracts | 106 | - | (6) | - | 25 | (2) | - | - | 123 | - |
| Margin loans | 229 | - | (45) | - | - | (48) | - | (6) | 130 | (45) |
| Other | - | 9 | - | - | 8 | - | - | - | 17 | - |
| Total trade and other receivables | 335 | 9 | (51) | - | 33 | (50) | - | (6) | 270 | (45) |
| Total financial assets measured at fair value | 907 | 9 | 23 | - | 597 | (294) | - | (206) | 1,036 | (49) |
| Trading financial liabilities: | | | | | | | | | | |
| Corporate equities | 15 | - | 4 | - | (7) | 5 | - | - | 9 | 3 |
| Net derivative contracts ⁽⁵⁾ | 95 | - | 360 | - | (735) | 1,276 | (113) | (290) | (127) | 352 |
| Total trading financial liabilities | 110 | - | 364 | - | (742) | 1,281 | (113) | (290) | (118) | 355 |
| Trade and other payables: | | | | | | | | | | |
| Prepaid OTC contracts | 169 | - | 4 | - | (24) | 118 | - | - | 259 | 4 |
| Debt and other borrowings: | | | | | | | | | | |
| Issued structured notes | 361 | - | 14 | 26 | - | 99 | (39) | 66 | 447 | 38 |
| Total financial liabilities measured at fair value | 640 | - | 382 | 26 | (766) | 1,498 | (152) | (224) | 588 | 397 |

(1) The total gains or (losses) are recognised in the income statement and the statement of comprehensive income as detailed in the financial instruments accounting policy (note 2c).

(2) Amounts related to entering into net derivative contracts, issued structured notes and prepaid OTC contracts (within trade and other payables) represent issuances. Amounts for other line items represent sales.

(3) For financial assets and financial liabilities that were transferred into or out of Level 3 during the year, gains or (losses) are presented as if the assets or liabilities had been transferred into or out of Level 3 as at the beginning of the year.

(4) Amounts represent unrealised gains or (losses) for the year ended 31 December 2018 related to assets and liabilities still outstanding at 31 December 2018. The unrealised gains or (losses) are recognised in the income statement or statement of comprehensive income as detailed in the financial instruments accounting policy (note 2c).

(5) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

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26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

2017

| | Balance at 1 January 2017 \$millions | Total gains/ (losses) recognised in consolidated income statement ⁽¹⁾ \$millions | Total gains/ (losses) recognised in the statement of comprehensive income ⁽¹⁾ \$millions | Purchases \$millions | Sales & Issuances ⁽²⁾ \$millions | Settlements \$millions | Net transfers in and/or (out) of Level 3 ⁽³⁾ \$millions | Balance at 31 December 2018 \$millions | Unrealised gains/ (losses) for Level 3 assets/ liabilities outstanding as at 31 December 2017 ⁽⁴⁾ \$millions |
|---|---|---|---|-------------------------|--|---------------------------|---|---|--|
| Trading financial assets: | | | | | | | | | |
| Government debt securities | 4 | - | - | - | (3) | - | - | 1 | - |
| Corporate and other debt | 218 | 14 | - | 329 | (146) | - | (14) | 401 | - |
| Corporate equities | 61 | (6) | - | 45 | (53) | - | 30 | 77 | (5) |
| Total trading financial assets | 283 | 8 | - | 374 | (202) | - | 16 | 479 | (5) |
| Secured Financing | 15 | - | - | - | (15) | - | - | - | - |
| Investment securities: | | | | | | | | | |
| Corporate equities | 27 | - | 40 | 40 | - | - | (15) | 92 | 40 |
| Trade and other receivables: | | | | | | | | | |
| Prepaid OTC contracts | 11 | 4 | - | 94 | - | - | (2) | 106 | 4 |
| Margin loans | 152 | 26 | - | - | (60) | - | 110 | 229 | 25 |
| Total trade and other receivables | 163 | 30 | - | 94 | (60) | - | 108 | 335 | 29 |
| Total financial assets measured at fair value | 488 | 38 | 40 | 508 | (277) | - | 109 | 906 | 64 |
| Trading financial liabilities: | | | | | | | | | |
| Corporate and other debt | 5 | - | - | (5) | - | - | - | - | - |
| Corporate equities | 28 | 1 | - | (8) | 4 | - | (8) | 15 | - |
| Net derivative contracts ⁽⁵⁾ | 804 | (162) | - | (705) | 928 | (1,171) | 77 | 95 | (99) |
| Total trading financial liabilities | 837 | (161) | - | (718) | 932 | (1,171) | 69 | 110 | (99) |
| Secured borrowing | 15 | - | - | - | - | (15) | - | - | - |
| Trade and other payables: | | | | | | | | | |
| Prepaid OTC contracts | 11 | 5 | - | - | 154 | (2) | 11 | 169 | 5 |
| Debt and other borrowings: | | | | | | | | | |
| Issued structured notes | 271 | (16) | (12) | - | 180 | (42) | (76) | 361 | (16) |
| Total financial liabilities measured at fair value | 1,134 | (172) | (12) | (718) | 1,266 | (1,230) | 4 | 640 | (110) |

(1) The total gains or (losses) are recognised in the income statement and the statement of comprehensive income as detailed in the financial instruments accounting policy (note 2c).

(2) Amounts related to entering into net derivative contracts, issued structured notes and prepaid OTC contracts (within trade and other payables) represent issuances. Amounts for other line items represent sales.

(3) For financial assets and financial liabilities that were transferred into or out of Level 3 during the year, gains or (losses) are presented as if the assets or liabilities had been transferred into or out of Level 3 as at the beginning of the year.

(4) Amounts represent unrealised gains or (losses) for the year ended 31 December 2017 related to assets and liabilities still outstanding at 31 December 2017. The unrealised gains or (losses) are recognised in the consolidated income statement or consolidated statement of comprehensive income as detailed in the financial instruments accounting policy (note 2c).

(5) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

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26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

During the year, there were no material transfers from Level 2 to Level 3 or Level 3 to Level 2 of the fair value hierarchy (2017: \$nil).

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis

The following disclosures provide information on the sensitivity of fair value measurements to key inputs and assumptions.

i) Quantitative information about and qualitative sensitivity of significant unobservable inputs

The following table provides information on the valuation techniques, significant unobservable inputs and their ranges and averages for each material category of assets and liabilities measured at fair value on a recurring basis with a significant Level 3 balance.

The level of aggregation and breadth of products cause the range of inputs to be wide and not evenly distributed across the inventory. Further, the range of unobservable inputs may differ between companies in the financial services industry because of diversity in the types of products included in each company's inventory. The following disclosures include qualitative information on the sensitivity of the fair value measurements to changes in the significant unobservable inputs. There are no predictable relationships between multiple significant unobservable inputs attributable to a given valuation technique. A single amount is disclosed when there is no significant difference between the minimum, maximum and average (weighted average or similar average / median).

| 31 December 2018 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|---|--------------------------|--|--|
| ASSETS | | | |
| Trading financial assets: | | | |
| - Corporate and other debt: | | | |
| - Mortgage- and asset-backed securities | 140 | Comparable pricing | |
| | | Comparable bond price | 3 to 99.5 pts (78 pts) |
| - Corporate bonds | 120 | Comparable pricing | |
| | | Comparable bond price | 65 to 119 pts (91 pts) |
| - Loans and lending commitments | 58 | Comparable pricing | |
| | | Comparable loan price | 49 to 100 pts (72.56 pts) |
| - Corporate equities | 33 | Comparable pricing | |
| | | Comparable equity price | 100% (100%) |
| Investment securities: | | | |
| - Corporate equities | 85 | Comparable pricing | |
| | | Comparable equity price | 95.75% to 100% (96%) |
| Trade and other receivables: | | | |
| -Prepaid OTC contracts | 123 | Discounted Cash Flow | |
| | | Recovery Rate | 22% (22%) |
| - Margin loans | 130 | Option Model | |
| | | Volatility skew | -1% (-1%) |
| Securities Borrowings: | | | |
| - Securities purchased under agreements to resell | 317 | Risk based valuation | |
| | | Comparable collateral price | 33 to 119 pts (76 pts) |

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NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| 31 December 2018 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range (2) (Weighted averages or simple averages/median)(3) |
|---|--------------------------|--|--|
| LIABILITIES | | | |
| Trading financial liabilities: | | | |
| - Net derivatives contracts: ⁽¹⁾⁽⁴⁾⁽⁵⁾ | | | |
| - Interest rate | 555 | Option Model | |
| | | Inflation Volatility | 23% to 65% (44%/40%) |
| | | Interest rate – Foreign exchange correlation | 53% to 56% (55%/55%) |
| | | Interest Rate Curve Correlation | 41% to 97% (71%/73%) |
| | | Inflation Curve | 1.23% to 1.27% (1.25%/1.25%) |
| | | Interest rate volatility skew | 10% to 95% (48%/50%) |
| | | Foreign exchange volatility skew | -0.3% to -0.18% (-0.24%/-0.24%) |
| | | Interest rate – Inflation correlation | -75% to -5% (-36%/-43%) |
| | | Interest rate quanto correlation | -8% to -8% (-8%/-8%) |
| - Credit | (15) | Comparable pricing | |
| | | Credit Spread | 150bps to 499bps (353bps) |
| | | Comparable bond price | 10 to 87 pts (46 pts) |
| | | Funding Spread | 69.44bps to 98.23bps (82.38bps) |
| | | Correlation Model | |
| | | Credit Correlation | 37% to 69% (44%) |
| - Foreign exchange and gold | (25) | Option Model | |
| | | Interest rate – Foreign exchange correlation | 53% to 56% (55%/55%) |
| | | Interest rate volatility skew | 10% to 66% (29%/27%) |
| | | Deal Execution Probability | 90% to 95% (95%/95%) |
| | | Foreign exchange volatility skew | -0.3% to -0.18% (-0.24%-0.24%) |
| - Equity | (374) | Option Model | |
| | | At the money volatility | 6% to 63% (26%) |
| | | Volatility skew | -2% to 0% (-1%) |
| | | Equity equity correlation | 5% to 98% (70%) |
| | | Equity FX correlation | -95% to 55% (-46%) |
| - Commodity | (14) | Comparable pricing | |
| | | Comparable price | \$449 to \$1440 (\$1,086) |
| Debt and other borrowings: | | | |
| - Issued structured notes | (447) | Option Model | |
| | | At the money volatility | 6% to 35% (23%) |
| | | Volatility skew | -2% to 0% (0%) |
| | | Equity equity correlation | 45% to 98% (91%) |
| | | Equity FX correlation | -72% to 13% (-37%) |
| Trade and other payables: | | | |
| - Prepaid OTC contracts | (259) | Option Model | |
| | | At the money volatility | 4% to 30% (12%) |

(1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(2) The ranges of significant unobservable inputs are represented in points, percentages or basis points. Points are a percentage of par; for example, 100 points would be 100% of par. A basis point equals 1/100th of 1%; for example, 353 basis points would equal 3.53%.

(3) Amounts represent weighted averages except where simple averages and the median of the inputs are provided when more relevant.

(4) CVA and FVA are included in fair value, but excluded from the valuation techniques and significant unobservable inputs in the previous table. CVA is a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.

(5) Includes derivative contracts with multiple risks (i.e. hybrid products).

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

| 31 December 2017 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|--|--------------------------|--|---|
| ASSETS | | | |
| Trading financial assets: | | | |
| - Corporate and other debt: | | | |
| - Mortgage and asset-backed securities | 151 | Comparable pricing Comparable bond price | 0 to 100 pts (35 pts) |
| - Corporate bonds | 213 | Comparable pricing Comparable bond price | 65 to 134 pts (70 pts) |
| - Loans and lending commitments | 36 | Comparable pricing Comparable loan price | 78.5 to 100 pts (92.59 pts) |
| - Corporate equities | 77 | Comparable pricing Comparable equity price | 100% (100%) |
| Trade and other receivables: | | | |
| - Margin loans | 229 | Option model Volatility skew | -1% (-1%) |
| - Prepaid OTC contracts | 106 | Discounted cash flow Recovery rate | 15% (15%) |
| Investment securities: | | | |
| - Corporate equities | 92 | Comparable pricing Comparable equity price | 100% (100%) |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

i. Quantitative information about and qualitative sensitivity if significant unobservable inputs (continued)

| 31 December 2017 | Fair value \$millions | Predominant valuation techniques/ Significant unobservable inputs | Range ⁽²⁾ (Weighted averages or simple averages/median) ⁽³⁾ |
|---|--------------------------|---|--|
| LIABILITIES | | | |
| Trading financial liabilities: | | | |
| - Net derivatives contracts: ⁽¹⁾⁽⁴⁾⁽⁵⁾ | | | |
| - Interest rate | 511 | Option model Inflation volatility Interest rate-foreign exchange correlation Interest rate curve correlation Inflation curve Interest rate volatility skew | 23% to 63% (44%/41%) 54% to 57% (56%/56%) 55% to 90% (75%/76%) 2% to 2% (2%/2%) 31% to 99% (42%/45%) |
| - Credit | (21) | Comparable pricing Funding spreads Comparable bond price Credit spreads | 93bps to 96bps (96bps) 1 to 140 pts (40 pts) 150bp (150 bp) |
| - Foreign exchange and gold | (21) | Option model Interest rate-foreign exchange correlation Interest rate volatility skew Deal execution probability | 54% to 57% (56%/56%) 31% to 99% (42%/45%) 95% to 100% (96%/95%) |
| - Equity | (568) | Option model At the money volatility Volatility skew Equity-equity correlation Equity-foreign exchange correlation | 5% to 53% (23%) -2% to 0% (-1%) 25% to 99% (73%) -60% to 40% (26%) |
| - Commodity | 4 | Comparable pricing Comparable price | \$557 to \$1,552 (\$1,233) |
| Debt and other borrowings: | | | |
| - Issued structured notes | (361) | Option model At the money volatility Volatility skew Equity-equity correlation Equity-foreign exchange correlation | 5% to 35% (25%) -1% to 0% (0%) 46% to 86% (68%) -60% to 10% (4%) |
| - Prepaid OTC contracts | (169) | Discounted cash flow Recovery rate | 15% (15%) |

(1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(2) The ranges of significant unobservable inputs are represented in points, percentages or basis points. Points are a percentage of par; for example, 100 points would be 100% of par. A basis point equals 1/100th of 1%; for example, 353 basis points would equal 3.53%.

(3) Amounts represent weighted averages except where simple averages and the median of the inputs are provided when more relevant.

(4) CVA and FVA are included in fair value, but excluded from the valuation techniques and significant unobservable inputs in the previous table. CVA is a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.

(5) Includes derivative contracts with multiple risks (i.e. hybrid products).

NOTES TO THE COMPANY FINANCIAL STATEMENTS
Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

d. Valuation of Level 3 financial assets and liabilities recognised at fair value on a recurring basis (continued)

i. Quantitative information about and qualitative sensitivity if significant unobservable inputs (continued)

A description of the significant unobservable inputs and qualitative sensitivity included in the table above for all major categories of assets and liabilities is included within note 32 of the Group's annual financial statements for the year ended 31 December 2018.

ii. Sensitivity of fair values to changing significant assumptions to reasonably possible alternatives

As detailed in note 2, the valuation of Level 3 financial instruments requires the application of critical accounting judgement, involving estimations and assumptions and it is recognised that there could be a range of reasonably-possible alternative values.

The Company has reviewed the unobservable parameters to identify those which would change the fair value measurement significantly if replaced by a reasonably possible alternative assumption.

In estimating the potential variability, the unobservable parameters were varied individually using statistical techniques and historic data. The potential variability estimated is likely to be greater than the actual uncertainty relating to the financial instruments as any diversification effect has been excluded.

The following table presents the potential impact of both favourable and unfavourable changes, both of which would be reflected in the income statement². The Company has updated the presentation and methodology of this L3 sensitivity disclosure to provide more relevant information to the users of the financial statements. The comparative year disclosure has been re-presented to align to the new format and methodology in the annual financial statements.

| | 31 December 2018 | | 31 December 2017 | |
|---------------------------------|----------------------------------|------------------------------------|----------------------------------|------------------------------------|
| | Favourable changes \$millions | Unfavourable changes \$millions | Favourable changes \$millions | Unfavourable changes \$millions |
| Trading financial assets: | | | | |
| Corporate and other debt | 11 | (11) | 15 | (19) |
| Corporate equities | 2 | (7) | 5 | (15) |
| Investment securities: | | | | |
| Corporate equities | 36 | (30) | 32 | (45) |
| Trading financial liabilities: | | | | |
| Net derivatives contracts(1)(2) | 17 | (21) | 37 | (40) |
| | <u>66</u> | <u>(69)</u> | <u>89</u> | <u>(119)</u> |

(1) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(2) CVA and FVA are included in the fair value, but excluded from the effect of reasonably possible alternative assumptions in the table above. CVA is deemed to be a Level 3 input when the underlying counterparty credit curve is unobservable. FVA is deemed to be a Level 3 input in its entirety given the lack of observability of funding spreads in the principal market.

² All changes would be reflected in the income statement, other than the change relating to investment securities – corporate equities in the prior year which would have been recognised in OCI as those financial assets were classified as available-for-sale financial assets in 2017 under IAS 39.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

26. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

e. Financial instruments valued using unobservable market data

The amounts not recognised in the income statement relating to the difference between the fair value at initial recognition (the transaction price) and the amounts determined at initial recognition using valuation techniques are as follows:

| | 2018 \$millions | 2017 \$millions |
|--|--------------------|--------------------|
| At 1 January | 280 | 245 |
| Impact of change in accounting policy (see note 2) | - | (50) |
| At 1 January (restated) | 280 | 195 |
| New transactions | 134 | 211 |
| Amounts recognised in the income statement during the year | (124) | (126) |
| At 31 December | 290 | 280 |

The balance above predominately relates to derivatives.

The consolidated statement of financial position categories 'Trading financial assets' and 'Trading financial liabilities', 'Trade and other receivables', and 'Investment securities' include financial instruments whose fair value is based on valuation techniques using unobservable market data.

f. Assets and liabilities measured at fair value on a non-recurring basis

Non-recurring fair value measurements of assets and liabilities are those which are required or permitted in the statement of financial position in particular circumstances. There were no assets or liabilities measured at fair value on a non-recurring basis during the year or prior year.

27. ASSETS AND LIABILITIES NOT MEASURED AT FAIR VALUE

At 31 December 2018, for all financial instruments not measured at fair value, the carrying value is considered to be a reasonable approximation of fair value.

The table below presents the carrying value, fair value and fair value hierarchy category of certain financial assets and financial liabilities that are not measured at fair value in the statement of financial position as at 31 December 2017.

Financial assets and financial liabilities not measured at fair value for which the carrying value is considered a reasonable approximation of fair value are excluded from the tables below.

| | Carrying value | Fair value | Fair value measurement using: | | |
|--|----------------|------------|--|--|---|
| | | | Quoted prices in active market (Level 1) | Valuation techniques using observable inputs (Level 2) | Valuation techniques with significant unobservable inputs (Level 3) |
| | \$millions | \$millions | \$millions | \$millions | \$millions |
| Financial liabilities | | | | | |
| Subordinated loans at 31 December 2017 | 7,000 | 7,310 | - | 7,310 | - |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

28. CAPITAL MANAGEMENT

Capital management procedures of the Company are consistent with those of the Group as detailed in the Strategic report.

The capital managed by the Company broadly includes share capital, Additional Tier 1 capital instruments, subordinated loans and reserves, as outlined below:

| | 2018 | 2017 |
|---|---------------|---------------|
| | \$millions | \$millions |
| Ordinary share capital | 12,465 | 12,465 |
| Share premium | 513 | 513 |
| Additional Tier 1 capital | 3,500 | 1,300 |
| Subordinated debt | 5,000 | 7,000 |
| Reserves | 4,654 | 4,256 |
| Total capital | 26,132 | 25,534 |
| Less: Current year unaudited profit as at 31 December | (173) | (199) |
| Regulatory Deductions | (1,811) | (1,364) |
| Own Funds | <u>24,148</u> | <u>23,971</u> |

During 2018, the Company issued a \$6,000 million (2017: \$nil) MREL eligible senior subordinated debt instrument to fulfil the future MREL requirements which became effective on 1 January 2019. For further information refer to the MREL section of the Strategic Report on page 28, and note 14.

Pillar 3 disclosures and Country-by-Country Reporting

The Company is included in the MSI Group Pillar 3 disclosures, which allow investors and other market participants to understand capital adequacy, particular risk exposures and risk management processes of individual firms required by the EU implementation of Basel capital standards.

The Company is also included in the MSI consolidated disclosure to comply with the provisions of Statutory Instrument 2013 No.3118 Capital Requirements (Country-by-Country Reporting) Regulations 2013, which implements in the UK the requirements set out in Article 89 of the Capital Requirements Directive (Directive 2013/36/EU).

The Pillar 3 disclosures and the Country-by-Country Reporting for the MSI Group for the year ended 31 December 2018 will be made available on the Morgan Stanley website at www.morganstanley.com/investorrelations.

29. EMPLOYEE COMPENSATION PLANS

Morgan Stanley maintains various equity-settled share-based and cash-based deferred compensation plans for the benefit of employees.

The following information relates to plans which have been awarded to direct employees of the Group.

Equity-settled share-based compensation plans

Morgan Stanley has granted RSU awards pursuant to several equity-based compensation plans. The plans provide for the deferral of a portion of certain employees' incentive compensation, with awards made in the form of restricted common stock. Awards under these plans are generally subject to vesting over time, generally six months to seven years, and are generally contingent upon continued employment and subject to restrictions on sale, transfer or assignment until conversion to common stock. All, or a portion of, an award may be cancelled if employment is terminated before the end of the relevant vesting period, and after the vesting period in certain situations. Recipients of equity-based awards may have voting rights, at Morgan Stanley's discretion, and generally receive dividend equivalents if the awards vest, unless this is prohibited by regulation.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

29. EMPLOYEE COMPENSATION PLANS (CONTINUED)

During the year, Morgan Stanley granted 93,323 units (2017: 127,710 units) of RSU to direct employees of the Company with a weighted average fair value per unit of \$55.55 (2017: \$42.64), based on the market value of Morgan Stanley common stock at grant date.

The equity-based compensation expense recognised in the year is \$4 million (2017: \$6 million). The Company has also entered into a chargeback arrangement with Morgan Stanley under which it is committed to pay to Morgan Stanley the grant date fair value of awards granted as well as subsequent movements in their fair value. Therefore, the total amount of \$4 million (2017: \$7 million) included within 'Staff costs' and Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expense' includes both the equity-based compensation expense and the movements in the fair value of the awards granted to employees.

The related liability due to Morgan Stanley at the end of the year, reported within 'Other payables' in the statement of financial position, is \$8 million (2017: \$24 million), of which \$3 million (2017: \$9 million) is expected to be settled within one year, and \$3 million (2017: \$4 million) is expected to be settled in greater than one year.

The Company has no options outstanding at 31 December 2018 (2017: nil) and Morgan Stanley has not granted stock options in 2018 or 2017.

Deferred cash-based compensation plans

Morgan Stanley has granted deferred cash-based compensation awards to certain employees which defer a portion of the employees' discretionary compensation. The plans generally provide a return based upon the performance of various referenced investments. Awards under these plans are generally subject to a sole vesting condition of service over time, which normally ranges from one to seven years from the date of grant. All, or a portion of, an award may be cancelled if employment is terminated before the end of the relevant vesting period. The awards are settled in cash at the end of the relevant vesting period.

Awards with a value of \$4 million (2017: \$6 million) were granted to employees of the Company during the year.

The liability to employees at the end of the year, which is reported within 'Accruals and deferred income' in the statement of financial position, is \$12 million (2017: \$22 million), of which \$3 million (2017: \$4 million) is expected to be settled within one year and \$3 million (2017: \$2 million) is expected to be settled in greater than one year.

The Company economically hedges the exposure created by these deferred compensation schemes by entering into derivative transactions with other Morgan Stanley Group undertakings. The derivative balance at the end of the year, recognised within 'Trading financial assets' is \$nil (2017: \$nil) and recognised within 'Trading financial liabilities' is \$1 million (2017: \$nil). The related profit recorded within 'Net trading income' for the year is \$1 million (2017: \$nil).

30. POST-EMPLOYMENT BENEFITS

Defined contribution plans

The Company operates four Morgan Stanley defined contribution plans, which require contributions to be made to funds held in trust, separate from the assets of the Company.

The defined contribution plans are as follows:

- Morgan Stanley Flexible Company Pension Plan (Amsterdam);
- MSII Offshore Retirement Benefit Plan IV, Dubai Section;
- Morgan Stanley & Co. International plc, Seoul Branch Defined Contribution Plan; and
- Morgan Stanley & Co. International plc Zurich Branch Top-up Plan

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS

Year ended 31 December 2018

30. POST-EMPLOYMENT BENEFITS (CONTINUED)

The Company pays fixed contributions to the funds, with no legal or constructive obligation to pay further contributions.

The defined contribution pension charge recognised in total profit was \$4 million for the year (2017: \$4 million) of which \$nil was accrued at 31 December 2018 (2017: \$nil).

Following a legislative change in Switzerland during 2017, a benefit guarantee was removed from the Morgan Stanley & Co. International plc Zurich Branch Top-up Plan. The Company has no further legal or constructive obligation under the plan which is now recognised as a defined contribution scheme.

Defined benefit plans

The Company also operates defined benefit plans, which provide post-employment benefits that are based on length of service and salary. The defined benefit plans are as follows:

- Morgan Stanley & Co. International plc Zurich Branch Base Plan; and
- Morgan Stanley & Co. International plc Dubai Branch End of Service Gratuity

A net liability of \$2 million (2017: \$2 million) is recognised in the statement of financial position in respect of these plans.

31. PARENT UNDERTAKINGS

Refer to note 36 of the consolidated financial statements for information on the Company's immediate and ultimate parent undertaking.

The parent undertaking of the smallest group of companies for which group financial statements are drawn up and of which the Company is a member is Morgan Stanley & Co. International plc, which is registered in England and Wales. Copies of its financial statements can be obtained from the Registrar of Companies for England and Wales, Companies House, Crown Way, Cardiff CF14 3UZ.

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

APPENDIX TO THE FINANCIAL STATEMENTS

List of subsidiaries, including indirect subsidiaries, as at 31 December 2018 and 31 December 2017:

| Name of Company | Address of undertaking's registered office/ principal place of business ⁽²⁾ | Proportion of shares held by the Group ⁽¹⁾⁽³⁾ | | Nature of Business |
|--|---|--|------|--------------------|
| | | 2018 | 2017 | |
| Morgan Stanley France S.A. | 61 Rue De Monceau, 75008, Paris, France | N/A ⁽⁴⁾ | 100% | Financial Services |
| Morgan Stanley Taiwan Limited | 14th & 22nd Floors, Taipei Metro, 207 Tun Hwa South Road, Sec. 2, Taipei, 106, Taiwan | 100% | 100% | Financial Services |
| Morgan Stanley Strategic Investments Limited | | 100% | 100% | Financial Services |
| Morgan Stanley Turnberry Limited | | 100% | 100% | Holding company |
| Morgan Stanley Mallard Investments Limited | | 100% | 100% | Holding company |
| Morgan Stanley Montgomerie Investments Limited | | 100% | 100% | Holding company |
| Morgan Stanley Northcote Investments Limited | | 100% | 100% | Holding company |
| Morgan Stanley Silvermere Limited | | 100% | 100% | Holding company |
| Shavano Cooperatieve U.A. ⁽³⁾ | | N/A ⁽⁵⁾ | 100% | Financial Services |
| Morgan Stanley Humboldt Investments Limited | | 100% | 100% | Financial Services |
| Morgan Stanley Equity Finance (Denmark) ApS | Bech-Bruun Dragsted, Langelinie Alle 35, 2100 , Kobenhavn, Denmark | 100% | 100% | Financial Services |
| Morgan Stanley Rivelino Investments Limited | | 100% | 100% | Holding company |
| Morgan Stanley Dolor Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | 100% | 100% | Holding company |
| Morgan Stanley Tostao Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | 100% | 100% | Financial Services |
| Morgan Stanley Equity Financing Services (Sweden) AB | Hovslagargatan 5 A, 111 48 , Stockholm, Sweden | 100% | 100% | Financial Services |
| Morgan Stanley Havel GmbH | Junghofstrasse 13-15, 60311, Frankfurt am Main, Germany | 100% | 100% | Holding company |
| Morgan Stanley Cooper Investments Limited | | 100% | 100% | Financial Services |
| Morgan Stanley Montrose Investments Limited | | 100% | 100% | Financial Services |
| Morgan Stanley Langtree Investments B.V. | | 100% | 100% | Financial Services |
| Morgan Stanley Equity Investments (UK) Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | 100% | 100% | Financial Services |
| Clearcreek, S.L.U. | Travessera de Gracia, No. 11, 5th floor 08021, Barcelona, Spain | 100% | 100% | Financial Services |
| Cabot 38 Limited | | 100% | 100% | Holding company |
| Morgan Stanley Millbrae Investments B.V. ⁽³⁾ | | 100% | 100% | Financial Services |
| Morgan Stanley Derivative Products (Netherlands) B.V. | Luna Arena, Herikerbergweg 238, 1101 CM, Amsterdam , Netherlands | 100% | 100% | Financial Services |
| Morgan Stanley Longcross Limited | | 100% | 100% | Holding company |
| Morgan Stanley Derivative Products Spain S.L. | Serrano 55, 28006, Madrid, Spain | 100% | 100% | Financial Services |
| Morgan Stanley Equity Investments (Luxembourg) Unlimited Company | Citco Corporate Services (Ireland) Limited, Custom House, Plaza Block 6, , International Financial Services Centre, Dublin, DUBLIN 1, Ireland | 99% | 99% | Holding company |
| Morgan Stanley Langton Limited | | 100% | 100% | Holding company |
| Morgan Stanley Equity Finance (Malta) Limited | SmartCity Malta, SCM 01 TMF Group (Malta) 401, Ricasoli, Kalkara SCM 1001, Malta | 100% | 100% | Financial Services |

MORGAN STANLEY & CO. INTERNATIONAL plc

NOTES TO THE COMPANY FINANCIAL STATEMENTS Year ended 31 December 2018

| | | | | |
|--|---|--------------------|------|-----------------------|
| Morgan Stanley Equity Derivative Services (Luxembourg) S.a.r.l | c/o Citco Luxembourg, 20, rue de la Poste, L-2346, Luxembourg | 100% | 100% | Financial Services |
| Morgan Stanley Equity Financing Limited | | 100% | 100% | Financial Services |
| Drake II Investments Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | 100% | 100% | Financial Services |
| Morgan Stanley Grund S.a.r.L | 46A, Avenue J.F. Kennedy, L-1855, Luxembourg | 100% | 100% | Financial Services |
| Morgan Stanley Kochi Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | 100% | 100% | Holding company |
| Morgan Stanley Derivative Products (Portugal), Unipessoal LDA | Rua Duque de Palmela, No. 23, 1250-097, Lisbon, Portugal | N/A ⁽⁵⁾ | 100% | Financial Services |
| Morgan Stanley Corporate Holdings (Luxembourg) Unlimited Company | Custom House, Plaza Block 6, International Financial Services Centre, Dublin, DUBLIN 1, Ireland | 100% | 100% | Holding company |
| Morgan Stanley Heythorp Investments Unlimited Company | Custom House, Plaza Block 6, International Financial Services Centre, Dublin, DUBLIN 1, Ireland | 100% | 100% | Holding company |
| Morgan Stanley Equity Holding (Netherlands) B.V. | Luna Arena, Herikerbergweg 238, 1101 CM, Amsterdam, Netherlands | 100% | 100% | Financial Services |
| Morgan Stanley Waterloo Limited | Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands | N/A ⁽⁵⁾ | 100% | Financial Services |
| Morstan Nominees Limited | 25 Cabot Square, Canary Wharf, London, E14 4QA | 100% | 100% | Nominee company |
| Global Equity High Yield Fund B.V. | Weena 210-212, 3012NJ, Rotterdam, Netherlands | 100% | 100% | Financial Services |
| Morgan Stanley Client Securities Nominees Limited | 25 Cabot Square, Canary Wharf, London, E14 4QA | 100% | 100% | Nominee company |
| Morgan Stanley France Holdings I S.A.S | 61 Rue De Monceau, 75008, Paris, France | N/A ⁽⁴⁾ | 100% | Holding company |
| Morgan Stanley France Holdings II S.A.S | 61 Rue De Monceau, 75008, Paris, France | N/A ⁽⁴⁾ | 100% | Holding company |
| Morgan Stanley Europe Holding SE | Junghofstrasse 13-15, 60311, Frankfurt am Main, Germany | 100% | 100% | Holding company |
| Morgan Stanley Europe SE | Junghofstrasse 13-15, 60311, Frankfurt am Main, Germany | 100% | 100% | Financial Services |
| MS EU Trading Services SAS | 61 Rue De Monceau, 75008, Paris, France | N/A ⁽⁴⁾ | 100% | Dormant |
| Morgan Stanley Investment Management (Ireland) Limited | The Observatory, 7-11, Sir John Rogerson's Quay, Dublin, Dublin 2, Ireland | N/A ⁽⁴⁾ | 100% | Investment Management |

(1) The proportion of voting rights held by the Group is the same as the proportion of shares held by the Group unless otherwise stated

(2) All entities have a registered address of 20 Bank Street, Canary Wharf, London, E14 4AD, United Kingdom, unless otherwise stated.

(3) All shares held

(4) in each Company are ordinary shares with the exception of Shavano Cooperative U.A where €1 C membership shares were held and Morgan Stanley Millbrae Investments B.V. where ordinary and preference shares are held.

(4) During 2018, Morgan Stanley France Holdings I S.A.S and its subsidiaries Morgan Stanley France S.A., Morgan Stanley France Holdings II S.A.S and MS EU Trading Services SAS, along with Morgan Stanley Investment Management (Ireland) Limited were transferred outside the Group

(5) During 2018, Shavano Cooperatieve U.A., Morgan Stanley Waterloo Limited and Morgan Stanley Derivative Products (Portugal), Unipessoal LDA were legally closed.