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**MORGAN STANLEY & CO. INTERNATIONAL plc**

**Report and financial statements**

**31 December 2019**

**MORGAN STANLEY & CO. INTERNATIONAL plc**

<b>CONTENTS</b>	<b>PAGE</b>
<b>Strategic report</b>	
Group and Company overview	1
Business environment and performance	2
Liquidity and capital resource management and regulation	7
Risk management	
Risk strategy and appetite	15
Risk management framework	15
Market risk	17
Credit risk	21
Liquidity and funding risk	25
Operational risk	26
Corporate Responsibility	
Culture, values and conduct of employees	29
Respect for human rights	31
Environmental, social and governance	32
Anti-corruption and anti-bribery	33
Giving back to the community	34
Stakeholder Engagement and Section 172 Statement	35
Corporate governance	
Corporate Governance Framework	38
Directors' Report	43
Directors' Responsibility Statement	46
Independent auditor's report	47
Consolidated income statement	57
Consolidated statement of comprehensive income	58
Consolidated and Company statement of changes in equity	59
Consolidated and Company statement of financial position	61
Consolidated statement of cash flows	63
Notes to the Consolidated and Company financial statements	64
Appendix to the financial statements: List of subsidiaries	164

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

The Directors present their Strategic report for Morgan Stanley & Co. International plc (the “Company” or “MSIP”) and all of its subsidiary undertakings (together “the Group”) for the year ended 31 December 2019.

#### **GROUP AND COMPANY OVERVIEW**

The principal activity of the Group is the provision of financial services to corporations, governments and financial institutions across a global client base.

The Company operates branches in the Dubai International Financial Centre, the Netherlands, Poland, the Qatar Financial Centre, South Korea and Switzerland. Details of the Company’s subsidiaries are contained within note 13 to the consolidated financial statements.

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

There have not been any 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 Company is also a wholly owned indirect subsidiary of Morgan Stanley International Limited (“MSI”).

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.

From a governance perspective, the Company and MSI, an indirect parent entity, have the same board composition. The Company’s Board of Directors is assisted in discharging its responsibilities via the MSI Audit, Risk, Remuneration and Nomination Governance Committees. In addition, MSIP and MSI have Division-level, Management-level and Executive-level Committees that report up to the Boards in line with the established escalation processes. The corporate governance structure between MSI and the Company is described in further detail within the Corporate Governance Framework section on pages 38 to 42.

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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### BUSINESS ENVIRONMENT AND PERFORMANCE

#### Business environment

##### *Global market and economic conditions*

During 2019, global economic growth slowed to 3.0% from 3.7% in 2018. The slowdown was broad-based across both developed and emerging markets, with growth in developed markets slowing to 1.7% in 2019 from 2.1% in 2018, while in emerging markets, growth softened to 3.9% in 2019 from 4.8% in 2018. Trade tensions weighed heavily on global growth through the year via its impact on corporate sentiment and capital spending, as well as on the manufacturing and trade sectors. In response to the growth headwinds, both monetary and fiscal policies were eased. In particular, the Federal Reserve cut interest rates by 75bps in the second half of the year and resumed an expansion of its balance sheet in response to tightening liquidity conditions. The European Central Bank (“ECB”) announced a series of easing measures in the second half of the year, cutting rates by 10bps, introducing a two-tier system for excess reserve holdings, and restarting quantitative easing. The Bank of England (“BOE”) held rates unchanged against a backdrop of weak global growth and Brexit uncertainties. China’s policymakers implemented both fiscal and monetary easing measures throughout the year, including government bond issuance and interest rate reform. Other major central banks, including the Central Bank of Russia, the Reserve Bank of India, the Central Bank of Brazil (“BCB”), and the Bank of Korea (“BoK”), also cut interest rates to multi-year lows.

The strong start to 2020 following fading trade tensions and sizeable policy easing has been quickly superseded by the impact of COVID-19 (coronavirus). The 2020 global economic growth forecast is now a contraction of 1.9% for the year, versus the pre-COVID-19 growth forecast of 3.2% for the year, followed by a recovery in 2021. The sharp deterioration of economic growth in 2020 is broad-based in both developed markets and emerging markets. In developed markets, 2020 growth is expected to contract by 4.6% for the year versus the pre-COVID-19 forecast of an expansion of 1.3% for the year. In emerging markets, 2020 growth is forecasted to contract by 0.1% for the year versus the pre-COVID-19 forecasted expansion of 4.4%. In response to this sharp deterioration in the growth outlook, both monetary and fiscal policies are on a further easing path. In particular, the Federal Reserve has cut interest rates by 150bps to the zero lower bound, restarted quantitative easing of at least \$700 billion, opened up swap lines with the world’s major central banks and established various lending facilities. The ECB announced additional quantitative easing of €120 billion on 12 March and announced again one week later the €750 billion Pandemic Emergency Purchase Program. The Bank of Japan expanded its quantitative easing program with more proactive purchase of exchange-traded funds and Japanese Real Estate Investment Trusts and increased its purchase of commercial paper and corporate bonds. The BoE has also cut interest rates to the lower bound and started quantitative easing of £200 billion. Other world major central banks, such as the BoK and the BCB, have cut interest rates to multi-year lows as well. On the fiscal side, governments around the globe have announced aggressive fiscal stimulus, including both direct spending and liquidity injection. China’s policy-makers pre-approved another local government bond issuance of around Rmb850 billion ahead of the annual National People’s Conference meeting, and in the US, a large fiscal stimulus of around \$2 trillion was also announced.

##### *Emergence of COVID-19*

The coronavirus disease (COVID-19) pandemic has, and will likely continue to, severely impact global economic conditions, resulting in substantial volatility in the global financial markets, increased unemployment, and operational challenges such as the temporary closure of businesses, sheltering-in-place directives and increased remote work protocols. Governments and central banks around the world have reacted to the economic crisis caused by the pandemic by implementing stimulus and liquidity programs and cutting interest rates, though it is unclear whether these or future actions will be successful in countering the economic disruption. If the pandemic is prolonged or the actions of governments and central banks are unsuccessful, the adverse impact on the global economy will deepen, and the future results of operations and financial condition of Morgan Stanley and the Group will be adversely affected.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### BUSINESS ENVIRONMENT AND PERFORMANCE (CONTINUED)

#### Business environment (continued)

##### *Emergence of COVID-19 (continued)*

Since the emergence of the pandemic each business segment of Morgan Stanley and the business of the Group has been impacted and such impact will likely be greater in the future if conditions persist (e.g., decline and volatility of asset prices, reduction in interest rates, widening of credit spreads, credit deterioration, market volatility and reduced investment banking advisory activity). Operationally, although Morgan Stanley and the Group have initiated a work remotely protocol and restricted business travel and have not experienced any significant loss of operational capability, if significant portions of Morgan Stanley's or the Group's workforce, including key personnel, are unable to work effectively because of illness, government actions, or other restrictions in connection with the pandemic, the business impact of the pandemic could be exacerbated.

While the emergence of the COVID-19 pandemic has negatively impacted the results of Morgan Stanley, the extent to which it, and the related global economic crisis, affects the businesses, the results of operations and financial condition, as well as the regulatory capital and liquidity ratios of Morgan Stanley and the Company, will depend on future developments that are highly uncertain and cannot be predicted, including the scope and duration of the pandemic and any recovery period, future actions taken by governmental authorities, central banks and other third parties in response to the pandemic, and the effects on our customers, counterparties, employees and third-party service providers. Morgan Stanley and the Group continue to use their Risk Management framework, including Stress testing, to understand the attendant uncertainties and their potential impact on our operations, liquidity and capital. Morgan Stanley is maintaining an active dialogue with all its relevant global regulators during this period.

##### *UK withdrawal from the EU*

On 31 January 2020, the United Kingdom (the "UK") withdrew from the European Union (the "EU") under the terms of a withdrawal agreement between the UK and the EU. The withdrawal agreement provides for a transition period to the end of December 2020, during which time the UK will continue to apply EU law as if it were a member state, and UK firms' passporting rights to provide financial services in EU jurisdictions will continue. Under the terms of the withdrawal agreement the UK and the EU may agree to an extension of the transition period for up to two years.

With respect to financial services, the withdrawal agreement provides that the UK and the EU will endeavour to conclude whether they will grant each other equivalence under European financial regulations. Equivalence would provide a degree of access to EU markets for UK financial firms such as the Company, although the extent and duration of such access remains subject to negotiation. If equivalence (or any alternative arrangement) is not agreed, the Morgan Stanley Group's UK licensed entities, including the Company, may be unable to provide regulated services in many EU jurisdictions from the end of December 2020.

Potential effects of the UK exit from the EU and potential mitigation actions may vary considerably depending on the nature of the future trading arrangements between the UK and the EU.

The Morgan Stanley Group has prepared its European operations to be able to do business with its clients in the EU regardless of whether or not equivalence (or an alternative arrangement for financial services) is granted. Changes have been 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 from within the EU where necessary.

These changes include use of a new licenced investment firm, Morgan Stanley Europe S.E ("MSESE"), based in Germany, which is passported throughout the EU and serves 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 S.E. ("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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### BUSINESS ENVIRONMENT AND PERFORMANCE (CONTINUED)

#### Business environment (continued)

##### *UK withdrawal from the EU (continued)*

This new operating model went live in the first quarter of 2019, with MSESE commencing cash securities and derivatives trading. The Company has taken steps to support the build out of this new operating model, including transferring employees to MSESE and migrating a significant number of clients during 2019. The Morgan Stanley Group is continuing to build out the capabilities of its EU entities. The Company has taken steps to prepare the transfer of its existing branch operations in The Netherlands and Poland to MSESE. In addition, the Morgan Stanley Group expects that further clients of the Company, and activities currently transacted by the Company, including capital markets activities will move 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 future trading agreement between the UK and the EU in relation to financial services.

Following the reorganisations mentioned, the Group's principal activity and risks remain unchanged and the majority of current profitability and balance sheet remain within the Group.

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, results of Morgan Stanley's operations and business prospects could be negatively affected.

#### Financial performance indicators

The Board of Directors monitors the results of the Group by reference to a range of performance and risk based metrics, including, but not limited to the following:

##### *Key performance indicators*

in \$ millions	31 December 2019	31 December 2018 (restated) <sup>(1)</sup>
<b>Return on shareholders' equity (Group - audited)</b>		
Ordinary shareholders' equity at beginning of the year	21,060	18,628
Profit after tax	549	729
Return on shareholders' equity	2.6%	3.9%
<b>Tier 1 capital ratio (Company)</b>		
Risk-weighted assets	127,348	124,950
Tier 1 capital	18,894	19,148
Tier 1 capital ratio	14.8%	15.3%
<b>Leverage ratio (Company)</b>		
Leverage exposure	445,417	417,315
Tier 1 capital	18,894	19,148
Leverage ratio	4.2%	4.6%
<b>Liquidity coverage ratio (Company)</b>		
Liquidity buffer - High quality liquid assets	42,688	41,478
Liquidity coverage ratio	214%	207%

(1) Profit after tax and Tier 1 capital have been restated for the IAS 12 amendment which has changed the presentation of Additional Tier 1 dividends. Refer to note 2 for further details.

Movements in Key performance indicators are primarily explained in the movements in the financial statement components in the following section 'Overview of 2019 financial results'.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****BUSINESS ENVIRONMENT AND PERFORMANCE (CONTINUED)****Financial performance indicators (continued)****Key performance indicators (continued)**

The Company has consistently been, and continues to be, in excess of required minimum regulatory ratios for capital and liquidity. Further information on how the Company manages these resources is outlined in the section 'Liquidity and Capital Resources management and regulation'.

**Other performance indicators**

in \$ millions	2019	2018 (restated) <sup>(1)</sup>
<b>Return on assets (Group - audited)</b>		
Total assets at beginning of the year	446,199	461,362
Profit after tax	549	729
Return on assets	0.12%	0.16%

(1) Profit after tax has been restated for the IAS 12 amendment which has changed the presentation of Additional Tier 1 dividends. Refer to note 2 for further details.

**Overview of 2019 financial results****Income statement**

Set out below is an overview of the Group's financial results for the years ended 31 December 2019 and 31 December 2018.

in \$ millions (audited)	Year ended 31 December 2019	Year ended 31 December 2018 Restated <sup>(1)</sup>	Increase/ (decrease)	Variance %
<b>Net revenues</b>	<b>5,413</b>	<b>5,810</b>	<b>(397)</b>	<b>-7%</b>
Staff related expenses	(1,836)	(1,759)	77	4%
Non-staff related expenses	(2,810)	(2,927)	(117)	-4%
<b>Operating expenses</b>	<b>(4,646)</b>	<b>(4,686)</b>	<b>(40)</b>	<b>-1%</b>
Impairment loss	(1)	(2)	(1)	-50%
Net loss on investment in subsidiary	(6)	(66)	(60)	-91%
<b>Profit before tax</b>	<b>760</b>	<b>1,056</b>	<b>(296)</b>	<b>-28%</b>
Income tax expense	(211)	(327)	(116)	-35%
<b>Profit after tax</b>	<b>549</b>	<b>729</b>	<b>(180)</b>	<b>-25%</b>

(1) Income tax and profit after tax have been restated for the IAS 12 amendment which has changed the presentation of Additional Tier 1 dividends. Refer to note 2 for further details.

The consolidated income statement for the year is set out on page 57 and segment reporting in note 24 of the consolidated financial statements. The Group reported a 25% decrease in profit after tax for the year, as net revenues decreased more than expenses for the period primarily from earnings related to Europe, the Middle East and Africa where markets were impacted by Brexit uncertainty.

**Net revenues**

The Group's net revenues decreased 7% compared to 2018, and are best considered in two categories, 'Fee and commission income' and the aggregate of all other net revenues. 'Fee and commission' income declined as a result of lower client activity reflecting the decrease in European equity market volumes. All other net revenues also declined primarily due to lower equity market volatility and lower prime brokerage balances partially offset by improved results in fixed income products, primarily increased facilitation of customer activity in commodity and credit products.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****BUSINESS ENVIRONMENT AND PERFORMANCE (CONTINUED)****Overview of 2019 financial results (continued)***Income statement (continued)**Operating expenses*

The increase in staff related expenses was primarily driven by an increase in deferred compensation relating to prior year equity awards and from increased severance related costs, partially offset by a decrease in discretionary compensation. The equity awards expense increased mainly as a result of the increase in the Morgan Stanley share price during the year (refer to note 31 for more detail). Discretionary compensation decreased as a result of lower revenues.

The decrease in non-staff related expenses was primarily driven by lower volume-related expenses from reduced client activity. The expense decrease also indicates continued expense discipline in line with market conditions.

Refer to note 6 of the consolidated financial statements for further detail on 'Operating expenses'.

*Income tax expense*

The Group's tax expense represents an effective tax rate of 27.8% (2018 restated: 31.0%) which is greater than the average standard rate of UK corporation tax (inclusive of the UK Banking surcharge) of 27% (2018: 27%). The main reason for the higher effective tax rate is the non-deductibility of the UK Bank Levy and the effect of taxes in foreign jurisdictions. See note 7 of the consolidated financial statements for further details.

*Balance sheet*

<b>in \$ millions (audited)</b>	<b>2019</b>	<b>2018</b>	<b>Increase/ (decrease)</b>	<b>Variance %</b>
Cash and short term deposits	28,803	30,829	(2,026)	-7%
Trading financial assets	310,744	253,188	57,556	23%
Secured financing	92,447	95,643	(3,196)	-3%
Trade and other receivables	69,760	65,165	4,595	7%
Other assets	754	1,374	(620)	-45%
<b>Total Assets</b>	<b>502,508</b>	<b>446,199</b>	<b>56,309</b>	<b>13%</b>
Trading financial liabilities	262,256	217,093	45,163	21%
Secured borrowing	84,474	78,927	5,547	7%
Trade and other payables	86,296	91,758	(5,462)	-6%
Debt and other borrowings	48,523	37,115	11,408	31%
Other liabilities	342	189	153	80%
<b>Total Liabilities</b>	<b>481,891</b>	<b>425,082</b>	<b>56,809</b>	<b>13%</b>
<b>Total Equity</b>	<b>20,617</b>	<b>21,117</b>	<b>(500)</b>	<b>-2%</b>

*Assets and liabilities*

The increase in 'Trading financial assets' and 'Trading financial liabilities' is primarily driven by derivative assets and liabilities respectively, as a result of fair value movements due to a reduction in interest rates throughout the year. 'Trading financial assets' also increased due to corporate equities, predominantly driven by an increase in client demand towards the end of the year.

The increase in 'Debt and other borrowings' is due to an increase in unsecured funding to fund the increase in business activity towards the end of the year.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **BUSINESS ENVIRONMENT AND PERFORMANCE (CONTINUED)**

##### **Overview of 2019 financial results (continued)**

##### ***Balance sheet (continued)***

##### ***Equity***

Total Equity decreased by \$500 million as a result of dividends paid of \$859 million and a loss of \$194 million in the 'Debt Valuation Reserve' within Other Comprehensive Income ("OCI") as a result of credit spreads tightening, partly offset by profit after tax of \$549 million. Dividends included the in specie dividend of \$531 million to MSIUK, by transferring the Company's equity interests in MSEHSE and MSESE as part of the Brexit planning noted previously in 'UK withdrawal from the EU'.

##### **Key accounting policies and judgements**

In the preparation of the financial results throughout 2019 in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and as adopted by the EU, management is required to make accounting estimates and assumptions (see note 2 for further details). Of the significant accounting policies (see note 3), the following policies involved a higher degree of judgement and complexity, and consequentially greater consideration by management.

##### ***Valuation of financial instruments at fair value***

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.

##### ***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 a number of 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.

Refer to accounting policy note 3(o) for more details on the Group's accounting policy on provisions.

#### **LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION**

The Group manages its liquidity and capital reserves through internal management frameworks and practices, and ongoing compliance with implemented and upcoming regulatory standards. The EMEA Assets and Liabilities Committee ("EMEA ALCO") is responsible for liquidity and capital management.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)

#### Liquidity and funding management

##### *Liquidity 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 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 and to withstand unanticipated stress events.

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.

##### *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 2019 and 31 December 2018, the Group maintained sufficient liquidity to meet current and contingent funding obligations as modelled in its Liquidity Stress Tests.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)****Liquidity and funding management (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 dependent 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 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 the Liquidity Coverage Ratio (“LCR”) for use as a standard in liquidity risk supervision.

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 Company is subject to Pillar II requirements, assessed by the PRA, for risks not covered in the LCR (Pillar I). These risks are identified by the Company and documented by the Internal Liquidity Adequacy Assessment Process (“ILAAP”) that is then reviewed and assessed by the PRA as part of the Liquidity Supervisory Review Process (“L-SREP”). As a result, the MSI Group is required to hold sufficient liquidity in the form of High Quality Liquid Assets (“HQLA”) to meet both Pillar I and Pillar II.

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

<b>\$ millions</b>	<b>2019</b>	<b>2018</b>
High quality liquid assets	42,688	41,478
Liquidity Coverage ratio	214%	207%

*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 programs for both standard and structured products, targeting global investors and currencies.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)****Liquidity and funding management (continued)*****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.

***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 certain over the counter ("OTC") derivative transactions. When determining credit ratings, ratings agencies consider both company-specific factors and industry-wide factors. These include regulatory or legislative changes, the macro environment and perceived levels of support, among other things.

At 31 December 2019, the Company's senior unsecured ratings were as follows:

	<b>Short- Term Debt</b>	<b>Long- Term Debt</b>	<b>Rating Outlook</b>
Moody's Investors Service, Inc ("Moody's")	P-1	A1	Positive <sup>(1)</sup>
Standard & Poor's Rating Service ("S&P")	A-1	A+	Stable

(1) On 11 December 2019 Moody's revised the Company's outlook to Positive from 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 the Company 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 2019, the future potential collateral amounts and termination payments that could be called or required, by counterparties or exchanges and clearing organisations in the event of one-notch or two-notch downgrade scenarios (from the lowest of Moody's or S&P ratings) based on the relevant contractual downgrade triggers, were \$130 million and an incremental \$241 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 the downgrade, the rating relative to peers, the rating assigned by the relevant agency pre-downgrade, individual client behaviour 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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)**

##### **Capital management**

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

In line with Morgan Stanley Group 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, for which the Company is a significant subsidiary, conducts an Internal Capital Adequacy Assessment Process ("ICAAP") at least annually in order to meet its obligations under the Capital Requirements Directive. The ICAAP is a key tool used to inform the MSI Board and the executive management on risk profile and capital adequacy. The MSI Group's ICAAP:

- Is designed to ensure that the risks to which the MSI Group is exposed are appropriately capitalised and risk managed, including those risks that are either not captured, or not fully captured, under Pillar 1;
- Uses stress testing to size a capital buffer aimed at ensuring the MSI Group will continue to operate above regulatory requirements under a range of severe but plausible stress scenarios; and
- Assesses capital adequacy under normal and stressed operating environments over the three year capital planning horizon to ensure the MSI Group maintains a capital position in line with internal 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 ("TCR"), comprising Pillar 1 and Pillar 2A, which establishes the minimum level of regulatory capital for the MSI Group. Certain elements of the Pillar 2A requirement are a fixed quantum whilst others are a proportion of risk-weighted assets ("RWAs") and are based on a point in time assessment. As at 31 December 2019 the Company TCR was set at 11.3%. In addition, the PRA sets a buffer if required in addition to the Basel Combined Buffers, which is available to support the MSI Group in a stressed market environment.

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 ("AT1") capital instruments, subordinated debt, senior subordinated debt and reserves. In order to maintain or adjust its capital structure, the Company may pay dividends, return capital to its shareholder, issue new shares, or issue or repay AT1 capital instruments or subordinated debt.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)****Capital management (continued)*****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 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 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.

***Own Funds***

Capital managed by the Company broadly includes share capital, Additional Tier 1 capital instruments, subordinated loans and reserves. Set out below are details of the Company’s Capital Resources, described in accordance with CRR in the tables below as Own Funds, as at 31 December 2019 and 31 December 2018:

<b>\$ millions</b>	<b>2019</b>	<b>2018</b>
Ordinary share capital	12,465	12,465
Share premium	513	513
Reserves	4,146	4,654
Less: Current year unaudited profit as at 31 December	(287)	(173)
Regulatory deductions	<u>(1,443)</u>	<u>(1,811)</u>
Common Equity Tier 1 ("CET 1")	15,394	15,648
Additional Tier 1	<u>3,500</u>	<u>3,500</u>
Tier 1 Capital	18,894	19,148
Tier 2 Capital	<u>5,000</u>	<u>5,000</u>
<b>Total Own Funds</b>	<b><u>23,894</u></b>	<b><u>24,148</u></b>
RWAs	127,348	124,950
CET1 Ratio	12.1%	12.5%
Tier 1 Capital Ratio	14.8%	15.3%
Total Capital Ratio	18.8%	19.3%

CET1 decreased by \$254 million in the period, primarily as a result of the decrease in Equity – refer to ‘Overview of 2019 financial results’ above. Regulatory deductions decreased primarily driven by Prudent Valuation Adjustment and Debt Valuation Adjustment.

***Leverage ratio***

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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)****Capital management (continued)*****Leverage ratio (continued)***

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 is detailed in the table below.

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Tier 1 Capital	18,894	19,148
Leverage Exposure	445,417	417,315
Leverage Ratio	4.2%	4.6%

The Company will be subject to a binding leverage ratio of 3% from 28 June 2021 as part of CRR III. Further details of CRR III are below in 'Regulatory Developments'.

**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 EU Bank Recovery and Resolution Directive ("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.

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. 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.

***Minimum Requirement for own funds and Eligible Liabilities ("MREL") and Total Loss Absorbing Capacity ("TLAC")***

In June 2018, the Bank of England, as the UK resolution authority, set MREL for all institutions on both an individual and group consolidation basis, in line with the 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 were effective from 1 January 2019. In 2018, the Group issued a \$6,000 million senior subordinated loan, to ensure compliance with the regulations.

As part of the CRR II, the TLAC requirements apply at the Group level only and were effective from 27 June 2019. The \$6,000 million senior subordinated loan referred to above meets the Group's TLAC requirements.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)**

##### **Regulatory developments**

##### ***Basel Committee on Banking Supervision (“BCBS”) – finalising Basel III reforms***

In December 2017, the BCBS 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.

In January 2019, the BCBS published its revised final standard on the minimum capital requirements for market risk, also known as the Fundamental Review of the Trading Book (“FRTB”). The new regime:

- Clarifies the boundary between the banking book and trading book;
- Provides capital requirements for non-modellable risk factors;
- Introduces an internal models approach that uses expected shortfall methods; and
- Establishes a more risk-sensitive standardised approach that acts as a fallback for the internal models method

Given the above proposals will need to be transposed into national/EU law, the timing and impact of the final outcome remains uncertain.

##### ***Amendments to the Capital Requirements Regulation***

In June 2019, the European Commission published the final rules, known as CRD V and CRR II that amend the existing prudential regime (CRD IV and CRR), and the BRRD.

The CRD V/CRR II package includes: TLAC, FRTB, Standardised Approach to Counterparty Credit Risk (“SA-CRR”), Net Stable Funding Ratio (“NSFR”), revised Leverage Ratio, revised Large Exposure Framework, Intermediate Parent Undertaking (“IPU”) requirement, and revised Pillar 3 disclosure requirements.

Final rules are effective 27 June 2019; however, implementation dates are staggered over a four year period, with TLAC applying from 27 June 2019 and the majority of new requirements applying from 28 June 2021.

##### ***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 to replace LIBOR and replace or reform other interest rate benchmarks (collectively, the “IBORs”). A transition away from the widespread use of such rates to alternative rates and other potential interest rate benchmark reforms has begun and will continue over the course of the next few years. For example, the FCA, which regulates LIBOR, has announced that it has commitments from panel banks to continue to contribute to LIBOR through the end of 2021, but that it will not use its powers to compel contributions beyond such date. As a result, there is considerable uncertainty regarding the publication of LIBOR beyond 2021, and regulators globally have continued to emphasise the need for the industry to plan accordingly.

The Morgan Stanley Group’s transition plan includes a number of key steps, including continued engagement with central bank and industry working groups and regulators (including participation and leadership on key committees), active client engagement, internal operational readiness, and risk management, among other things, to promote the transition to alternative reference. The transition plan is overseen by a global steering committee, with senior management oversight. The transition away from LIBOR is complex and could have a range of impacts on the Morgan Stanley Group’s business, financial condition and results of operations. As part of the global initiative, Morgan Stanley is identifying, assessing and monitoring risks associated with the expected discontinuation or unavailability of one or more of the IBORs.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **LIQUIDITY AND CAPITAL RESOURCE MANAGEMENT AND REGULATION (CONTINUED)**

##### **Regulatory developments (continued)**

##### ***Financial risks from climate change***

In April 2019, the PRA issued a supervisory statement on enhancing banks' and insurers' approaches to managing financial risks from climate change. The Group is considering the impact of this statement on its longer term strategy and how it manages the financial risks of climate change in line with its Risk Management Framework.

##### **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 Company Board of Directors is assisted in its oversight of the Group's risk management by the MSI Audit and the EMEA Risk Committee in addition to a number of management level committees. The corporate governance structure between MSI and MSIP is described in further detail within the 'Corporate Governance Framework' section on pages 38 to 42.

Note 25 to the consolidated financial statements provides additional qualitative and quantitative disclosures about the Group's management of, and exposure to, financial risks.

##### **Risk strategy and appetite**

The Group Risk Appetite Statement articulates the aggregate level and type of risk that the Group is willing to accept in order 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 its business strategy and in consideration of its capital and liquidity resource adequacy framework. As of 31 December 2019, the approved appetite assumes the Group will continue to provide cross-border banking and investment and other services, but this can be re-assessed in light of any material changes in business model as a result of 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 Group has an established Risk Management Framework, which leverages the risk management policies and procedures of the Morgan Stanley Group, to support the identification, monitoring and management of risk.

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. The key components of the framework are set out below.

##### ***Risk policies and processes***

Morgan Stanley Group has a number of well-established policies and processes which set out 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 are reviewed annually.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### RISK MANAGEMENT (CONTINUED)

#### Risk management framework (continued)

##### *Control framework*

The MSI Group operates a control framework consistent with the “Three Lines of Defence” model, with the Business Units and Support Functions (such as Operations, Technology etc.) being the first line, Independent Risk Management being the second line and Internal Audit Department the third line. This structure creates clear delineation of responsibilities between the business unit (1<sup>st</sup> Line), the control functions such as Independent Risk Management (2<sup>nd</sup> Line) and Internal Audit Department (3<sup>rd</sup> Line).

Business Units and Support Functions are accountable for risk associated with their activities and are responsible for managing these risks in accordance with the MSI Group’s risk appetite and its principles. They establish controls to comply with the policies and procedures and ensure compliance with relevant applicable laws, rules and regulations.

Independent Risk Management identify, measure, monitor and control risks. Independent Risk Management includes, for example, functions performed by the EMEA Risk Division, EMEA Compliance Department including Global Financial Crime Department, and Valuation Control (part of Finance Division).

The Internal Audit Department are the 3<sup>rd</sup> 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 and Support Functions and Risk Management. Internal Audit provides independent assurance on the design quality and operating effectiveness of the MSI Group’s internal control environment, risk management and governance systems and control processes using a risk-based audit coverage model and audit execution methodology developed in line with professional auditing standards.

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

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **RISK MANAGEMENT (CONTINUED)**

##### **Risk management framework (continued)**

###### ***Stress testing***

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.

###### ***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.

###### **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 division and an individual product level, and includes consideration of 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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **RISK MANAGEMENT (CONTINUED)**

##### **Market risk (continued)**

###### ***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.

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 Value at Risk ("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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### STRATEGIC REPORT

#### RISK MANAGEMENT (CONTINUED)

##### Market risk (continued)

##### *Value at Risk (continued)*

The Group calculates VaR using a model based on 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.

##### *VaR methodology, assumptions and limitations*

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.

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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****RISK MANAGEMENT (CONTINUED)****Market risk (continued)*****VaR methodology, assumptions and limitations (continued)***

VaR statistics are not readily comparable across firms because of differences in the firms' portfolios, modeling 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 below shows the Group's VaR for Primary Risk Categories and Total Management VaR for the year ended 31 December 2019 and for the year ended 31 December 2018. The detailed table can be found in note 25 to the consolidated financial statements.

in \$ millions (audited)	95%/ one-day VaR for the year ended 31 December 2019		95%/ one-day VaR for the year ended 31 December 2018	
	Period end	Average	Period end	Average
Primary Risk Categories	15	19	17	19
Credit Portfolio <sup>(1)</sup>	5	5	4	4
Less diversification benefit <sup>(2)</sup>	(5)	(4)	(3)	(2)
<b>Total Management VaR</b>	<b>15</b>	<b>20</b>	<b>18</b>	<b>21</b>

(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 2019 was \$19 million, unchanged from 2018.

The average Credit Portfolio VaR for 2019 was \$5 million compared with \$4 million for 2018. The increase in the average VaR over the year was driven by exposure changes during 2019.

The average total VaR for 2019 was \$20 million compared with \$21 million for 2018.

Additional information on non-trading risks and currency risk together with an analysis of VaR sensitivity is presented in note 25 to the financial statements.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### STRATEGIC REPORT

#### RISK MANAGEMENT (CONTINUED)

##### 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.

The 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.

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.

##### *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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## STRATEGIC REPORT

### RISK MANAGEMENT (CONTINUED)

#### Credit risk (continued)

##### *Monitoring and control (continued)*

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 2019, the Group had no significant geographical concentration of risk but had 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 2019, the Group's material credit exposure was to central clearing counterparties, corporate entities, financial institutions and sovereign-related entities.

##### *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 similarly highly-liquid assets. The Group has internal policies on the acceptability of specific classes of collateral or credit risk mitigation. 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****RISK MANAGEMENT (CONTINUED)****Credit risk (continued)*****Risk mitigation (continued)****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 below shows the Group's maximum exposure to credit risk and credit exposure for certain financial assets 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 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.

in \$ millions (audited)	31 December 2019			31 December 2018		
	Gross credit exposure <sup>(1)</sup>	Credit enhancements	Net credit exposure	Gross credit exposure <sup>(1)</sup>	Credit enhancements	Net credit exposure
Trading financial assets:						
Derivatives	216,289	(209,619)	6,670	179,311	(173,250)	6,061
Secured financing	92,447	(91,419)	1,028	95,643	(94,546)	1,097
<b>Unrecognised financial instruments</b>						
Loan commitments	3,946	(1,059)	2,887	2,308	(84)	2,224
	<u>312,682</u>	<u>(302,097)</u>	<u>10,585</u>	<u>277,262</u>	<u>(267,880)</u>	<u>9,382</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 25 to the consolidated financial statements.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **RISK MANAGEMENT (CONTINUED)**

##### **Credit risk (continued)**

##### *Exposure to credit risk (continued)*

##### *Country and Sovereign 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 a different 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.

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

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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****STRATEGIC REPORT****RISK MANAGEMENT (CONTINUED)****Credit risk (continued)***Exposure to credit risk (continued)**Country and Sovereign risk exposure (continued)*

Five largest non-UK country risk net exposures:

<b>in \$ millions (audited)</b>		<b>Net</b>		<b>Unfunded</b>	<b>Exposure</b>		<b>Net</b>	<b>Net</b>
<b>Country</b>	<b>Net inventory<sup>(1)</sup></b>	<b>counterparty exposure<sup>(2)</sup></b>	<b>Funded lending</b>	<b>commit- ments</b>	<b>before hedges</b>	<b>Hedges<sup>(3)</sup></b>	<b>exposure 2019<sup>(4)</sup></b>	<b>exposure 2018</b>
United States								
Sovereigns	148	71	-	-	219	-	219	
Non-sovereigns	1,549	1,634	27	641	3,851	(123)	3,728	
<b>United States</b>	<b>1,697</b>	<b>1,705</b>	<b>27</b>	<b>641</b>	<b>4,070</b>	<b>(123)</b>	<b>3,947</b>	<b>3,948</b>
Japan								
Sovereigns	525	-	-	-	525	(37)	488	
Non-sovereigns	156	1,016	-	-	1,172	(37)	1,135	
<b>Total Japan</b>	<b>681</b>	<b>1,016</b>	<b>-</b>	<b>-</b>	<b>1,697</b>	<b>(74)</b>	<b>1,623</b>	<b>1,850</b>
France								
Sovereigns	(1,684)	-	-	-	(1,684)	-	(1,684)	
Non-sovereigns	(309)	1,713	13	1,772	3,189	(319)	2,870	
<b>Total France</b>	<b>(1,993)</b>	<b>1,713</b>	<b>13</b>	<b>1,772</b>	<b>1,505</b>	<b>(319)</b>	<b>1,186</b>	<b>2,530</b>
Netherlands								
Sovereigns	46	-	-	-	46	(15)	31	
Non-sovereigns	319	677	-	-	996	(34)	962	
<b>Total Netherlands</b>	<b>365</b>	<b>677</b>	<b>-</b>	<b>-</b>	<b>1,042</b>	<b>(49)</b>	<b>993</b>	<b>-(<sup>5</sup>)</b>
United Arab Emirates								
Sovereigns	129	712	-	-	841	-	841	
Non-sovereigns	-	84	-	-	84	-	84	
<b>Total United Arab Emirates</b>	<b>129</b>	<b>796</b>	<b>-</b>	<b>-</b>	<b>925</b>	<b>-</b>	<b>925</b>	<b>-(<sup>5</sup>)</b>

- (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 2019, the Group had exposure to these countries for overnight deposits with banks of approximately \$2,883 million.
- (5) Neither the Netherlands nor the United Arab Emirates were within the Group's five largest non-UK country and sovereign net exposures in the prior period.

**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 encompasses 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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **RISK MANAGEMENT (CONTINUED)**

##### **Liquidity and funding risk (continued)**

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 and funding risks arising from the 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.

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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **RISK MANAGEMENT (CONTINUED)**

##### **Operational risk (continued)**

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 defences 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 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 Firm 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 utilises third party suppliers. The Group anticipates that such usage 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 arising from misconduct by individual employees or contingent workers (collectively, "Covered Persons") or groups of Covered Persons, or the risk arising from conduct by Morgan Stanley where the outcome has an adverse impact on clients, markets or the Morgan Stanley Group's reputation. Conduct includes both intentional and unintentional behaviours.

The MSI Group has an approved Global Conduct Risk Management Policy and an EMEA and MSI Group Conduct Risk Management Supplement ("EMEA Supplement"). These documents cover the two main strands of Morgan Stanley's Conduct Risk management:

- i) Managing the risk associated with misconduct by Covered Persons relating to:
  - Business activities and obligations ("Business Conduct")
  - "HR or Personal Conduct", defined as misconduct relating to employee relations, such as misconduct relating to the work environment, working relationships, compensation, or performance management, or in relation to any allegation of retaliation, or other detrimental treatment by the Firm or violations of discrimination and harassment policies, or
- ii) Managing the risk arising from conduct by Morgan Stanley where the outcome is an adverse impact on clients or markets ("Firm Conduct Risk").

Furthermore, the Policy sets out key roles and responsibilities in relation to Conduct Risk Management including key support and governance mechanisms.

##### **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 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.

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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### STRATEGIC REPORT

#### RISK MANAGEMENT (CONTINUED)

##### Operational risk (continued)

##### *Legal, regulatory and compliance risk (continued)*

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 its cyber and information security risks and is designed to enhance the Group's defences against such risks as well as 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. The GDPR imposes mandatory privacy and data protection obligations, including providing for individual rights, enhanced governance and accountability requirements and significant fines and litigation risk for noncompliance. In addition, other jurisdictions have adopted or are proposing GDPR or similar standards, such as Australia, Singapore, Japan, Argentina, India, Brazil, Switzerland, and the Cayman Islands.

#### CORPORATE RESPONSIBILITY

##### Culture, values and conduct of employees

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's core values drive a shared set of behaviours and attributes that help employees make decisions consistent with the expectations of our clients, shareholders, regulators, Board of Directors and the public. Morgan Stanley 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 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, is the senior management committee that oversees the Firm-wide culture, values and conduct program; and complements ongoing business and region-specific culture initiatives. 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's Conduct Risk Management Policy also sets out a consistent global framework for managing Conduct Risk (i.e. the risk arising from misconduct by employees or contingent workers) and CRI.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (CONTINUED)**

##### **Culture, values and conduct of employees (continued)**

If an employee believes his or her own, or someone else's, behaviour may violate a law, regulation or the principles of conduct in the Code of Conduct, the employee must promptly inform his or her supervisor, the designated contact for a specific policy or procedure, a member of the Legal and Compliance Division, his or her Human Resources Representative, or call the Integrity Hotline. Supervisors are required to monitor the employees' conduct, notify appropriate persons with any concerns escalated to them and identify and take action to stop any misconduct. All calls to the hotline are treated confidentially, and employees may remain anonymous if they wish. All matters are addressed promptly and tracked to completion by the Compliance Department.

Each year, Managing Directors and other senior staff lead mandatory Morgan Stanley wide culture conversations, engaging employees and onsite contingent workers in a dialogue about appropriate conduct, behaviour and decision-making. Case studies and other reference materials used during the sessions encourage robust discussion on sustaining Morgan Stanley's culture, and attendance is tracked to ensure participation.

Morgan Stanley's remuneration policies and practices ensure that there is an alignment between reward, risk, culture and conduct. Conduct, culture, and core values are considered in the employee annual performance evaluation process. The performance review process also includes 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 is not in line with Firm expectations. These results are incorporated in identified employees' performance reviews and 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. Additional information in relation to the Morgan Stanley Group's remuneration policies can be found in the Morgan Stanley International Limited Group CRR 450 disclosure.

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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (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. 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 3 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.

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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (CONTINUED)**

##### **Respect for human rights (continued)**

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, seeks to integrate sustainability considerations into business strategies, products and services, thought leadership, and operations. Morgan Stanley offers financial solutions and advisory services that provide positive long-term benefits for clients and shareholders, as well as for the environment and global communities. The Nominating and Governance Committee oversees the Morgan Stanley Group's environmental, social and governance ("ESG") initiatives and the Risk Committee now oversees risks relating to climate change, with each committee reporting to the Board.

The 2019 key areas of focus and highlights include:

##### *Sustainable solutions and services*

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

In 2019, Morgan Stanley announced the Morgan Stanley Plastic Waste Resolution to facilitate the prevention, reduction and removal of 50 million metric tons of plastic waste from entering rivers, oceans, landscapes and landfills by 2030.

Morgan Stanley has mobilised approximately \$80 billion in capital towards its goal of \$250 billion in low-carbon solutions by 2030, including over \$50 billion in 2019.

Morgan Stanley also supported over \$24 billion in green, social and sustainability bonds in 2019, bringing the total to over \$83 billion since 2013.

##### *Institute for Sustainable Investing*

Established in 2013, the Institute focuses on accelerating the adoption of sustainable investing across global markets. Chaired by Morgan Stanley's Chairman and CEO, an advisory board of prominent leaders from business, academia and leading non-governmental organisations help to ensure that Morgan Stanley's sustainability strategy is comprehensive, rigorous and innovative.

In October 2019 the Institute hosted the inaugural Morgan Stanley Sustainable Investing Summit, which brought together 100+ clients from across Morgan Stanley's businesses to discuss the innovation and ideas reshaping capital markets.

##### *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. This includes monitoring for emerging environmental and social risks and related trends, as well as engaging with clients and other stakeholders as appropriate.

In 2019, the Board of Morgan Stanley approved a new Environmental and Social Policy Statement.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (CONTINUED)**

##### **Environmental, social and governance (continued)**

###### *Corporate sustainability*

Morgan Stanley is committed to integrating ESG across its business activities and operations. Morgan Stanley has enhanced its approach to disclosure in the annual Sustainability Report, aiming to follow the Sustainability Accounting Standards Board (“SASB”) guidance as appropriate to help deliver investor-relevant information.

Corporate Services introduced a new Sustainability at Work program across global operations, which seeks to reduce operational environmental impacts and engage employees in meeting sustainability objectives.

The Morgan Stanley Group is committed to achieving carbon neutrality across our global operations by 2022, including sourcing 100% of our global electricity needs from renewable energy.

Information about Morgan Stanley’s sustainable initiatives, including the Sustainability Report, is available at [www.morganstanley.com/about-us/sustainability-at-morgan-stanley](http://www.morganstanley.com/about-us/sustainability-at-morgan-stanley).

##### **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 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.

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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (CONTINUED)**

##### **Anti-corruption and anti-bribery (continued)**

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. In 2019, through Global Volunteer Month and other campaigns, employees logged over 510,000 volunteer hours for charities around the world.

In EMEA, over 97% of employees participated in volunteering service in 2019, with employees taking part in hundreds of activities, from sharing career insights with students to maintaining communal parks and gardens, and preparing food for those in need in the local community.

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 20,000 service hours, valued at over \$3.1 million, to 29 charities in the UK. In 2019, five charities benefitted from the program. The winning team, working with Cancer Research UK, developed an effective business model to help build and diversify their income streams.

##### ***Giving***

Morgan Stanley and employee philanthropic giving continued in 2019. Employees, together with the Firm, the Morgan Stanley Foundation and the Morgan Stanley International Foundation, donated nearly \$106 million to charities globally.

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

In February 2019, London employees nominated Teenage Cancer Trust as their new charity partner. Employees and the Foundation have set out to raise over \$1.25 million in support of this charity over 2019 and 2020, which will help to build a new specialist Teenage Cancer Trust ward at University College London Hospital and create a new team of community nurses to provide expert care to young people fighting cancer both at hospital and at home.

In March 2017, Glasgow employees nominated Marie Curie as their local charity partner. Employees and the Foundation have raised over \$325,000 to help create the first full time Child Bereavement Helpline service in Scotland. In the first year of service, the charity has been able to support over 90 children, a 50% increase against the numbers seen in the previous year.

In April 2019, Glasgow employees nominated the Scottish Association for Mental Health ("SAMH") as their new charity partner. Employees and the Foundation have set out to raise over \$200,000 in support of this charity over 2019 and 2020, enabling SAMH to develop a new program of activity delivering services and interventions to children and young people to increase mental health awareness, support transitions and improve wellbeing. The program will operate within two Glasgow based primary schools with attached nurseries and their feeder secondary school.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **CORPORATE RESPONSIBILITY (CONTINUED)**

##### **Giving back to the community (continued)**

###### ***Giving (continued)***

In February 2019, Budapest employees nominated Heim Pál Children's Hospital as their new charity partner. Employees and the Foundation have set out to raise over \$45,000 in support of this charity over 2019 and 2020, to help with the refurbishment and modernisation of the trauma centre, providing a more efficient care service and improved experience to young patients and their families.

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

###### ***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 Healthy Cities, a global Morgan Stanley program. 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.

2019 was the fifth year of the Healthy London program. To date over 59,000 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 6,300 hours of play for local children. Employees have also engaged in the program and logged over 5,300 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. Two years on, over 56,000 meals have been delivered and play specialists have led over 22,500 hours of play for children.

In February 2020, the Firm announced the establishment of the Morgan Stanley Alliance for Children's Mental Health. It will align the Firm's resources and global reach with the best thinking and practices in the field, strategically partnering with charitable organisations around the world working to reduce stigma, increase early intervention and help to address the far-reaching challenges of stress, anxiety and depression.

The Foundation will be supporting two UK charities as inaugural partners of the Alliance – being SAMH, the current Glasgow employee nominated charity partner and Place2Be in London. The partnership with Place2Be will enable the charity to scale up its program to train more school leaders and teachers about children's mental health, supporting them to create 'mentally healthy' schools where children can build lifelong coping skills and thrive.

#### **STAKEHOLDER ENGAGEMENT AND SECTION 172(1) STATEMENT**

Directors of MSIP are required to act in a way that they consider, in good faith, to be most likely to promote the success of the Company for the benefit of its members as a whole, and in so doing have regard, among other matters to: the likely consequences of any decision in the long term; the interests of the Company's employees, the need to foster the Company's business relationships with suppliers, customers and others; the impact of the Company's operations on the community and the environment; the desirability of the Company maintaining a reputation for high standards of business conduct; and the need to act fairly as between members of the Company.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### STRATEGIC REPORT

#### STAKEHOLDER ENGAGEMENT AND SECTION 172(1) STATEMENT (CONTINUED)

To assist them in discharging their duty under s172 Companies Act 2006, Directors undertake a number of stakeholder engagement activities to provide them with the information they need to understand the views and interests of stakeholders. This information helps Directors to have regard to stakeholder interests, and the likely long term consequences, including to the reputation of MSIP, when making decisions and setting strategy. MSIP's key stakeholders were considered in 2019 and are listed below with examples of the stakeholder engagement activities that took place in 2019.

*Employees:* During 2019, Directors continued a program of "open door" sessions at which employees were encouraged to ask questions about the MSIP business, its strategy, performance, current initiatives and the role of the Board. The Board also considered the Banking Standards Board annual culture assessment report and the results of the employee engagement survey and Banking Standards Board survey. The annual employee engagement survey is used to formally capture employee views, is a key tool for understanding employee interests and concerns and informs management actions for the following year. The Board considered employee culture and conduct in 2019 as part of its review of the EMEA Culture Plan. For more information on the practices and procedures relating to 'Culture, values and conduct of employees' see pages 29 to 31.

*Suppliers:* In 2019, the Board (via the MSI Risk Committee) received an overview of MSIP's relationships with key suppliers as part of a focus on Financial Markets Infrastructure and discussed relationships with suppliers in the context of changes to outsourcing regulations and an enhanced focus on operational resilience. Reporting on the Morgan Stanley Modern Slavery Act Statement also provided the MSIP Board with insights into how supplier relationships are managed.

*Clients:* Throughout the year, the MSIP Board received reports from the heads of each business unit on the competitive landscape for their business and the plans in place to respond to changing client demands. Business unit heads also provided regular updates on performance and clients focus areas which gave the Board insight into client issues and concerns. The competitive landscape and servicing clients were key focus areas of the MSIP Board strategy day.

*Community and Environment:* Morgan Stanley is committed to giving back to the communities in which it operates. The MSIP Board receives updates on giving back and sustainability initiatives taking place in EMEA. For more details on Morgan Stanley's Giving Back to the Community initiatives see page 34. MSIP Board members engage directly with the local community as part of the Morgan Stanley's Global Volunteering month. The MSIP Board has spent time this year considering climate change risk in response to regulatory developments in this area. For more information on this, see page 15. For more information on Morgan Stanley's sustainability initiatives see page 32.

*Regulators:* In 2019, the Board has continued its open and continuous dialogue with MSIP's regulators. The Chairman and CEO meet regularly with both the PRA and FCA. In addition, individual Directors engage regularly with both regulators through Continuous Assessment and Proactive Engagement meetings.

*Investors:* MSIP is a wholly owned subsidiary of Morgan Stanley. A number of Executive Directors on the MSIP Board are members of Morgan Stanley Group management committees and are able to provide the Board with insights on Morgan Stanley's views and priorities. Further insight into the views of Morgan Stanley and its shareholders are obtained through regular interactions between the MSIP Chairman and Chairs of the MSI Board Committees and the Morgan Stanley non-executive directors, including the Chairs of the Morgan Stanley Audit, Risk and Remuneration Committees. For further details on Board composition, see the Corporate Governance Framework on pages 38 to 42.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **STRATEGIC REPORT**

#### **STAKEHOLDER ENGAGEMENT AND SECTION 172(1) STATEMENT (CONTINUED)**

When making decisions, the MSIP Board considers the insights obtained through relevant stakeholder engagement activities as well as the need to maintain a reputation for high standards of business conduct and the long term consequence of its decisions. A principal decision taken by the MSIP Board in 2019 was to implement the relevant steps of an MSI Group reorganisation to facilitate changes needed to Morgan Stanley's European operations in preparation for the UK's withdrawal from the European Union. When making this decision, the interests of clients and the Firm's ability to meet their needs now and longer term, post-Brexit, were important considerations as were the long term consequences of not proceeding with the restructure and the potential impact this could have on the reputation of MSIP and Morgan Stanley. The interests of employees, suppliers, shareholders and MSIP's regulators were also considered.

Approved by the Board and signed on its behalf by

DocuSigned by:  
  
DE3D3BFF099E494...

K Lazaroo

Director

21 April 2020

## MORGAN STANLEY & CO. INTERNATIONAL plc

### CORPORATE GOVERNANCE

#### CORPORATE GOVERNANCE FRAMEWORK

When determining its corporate governance arrangements, MSIP applies regulatory requirements as set out by the PRA and FCA and aligns with best practice guidance on the corporate governance of financial institutions. It has therefore chosen not to formally adopt an additional corporate governance code. The corporate governance arrangements in place for MSIP are described below and are materially in accordance with the framework set out in the Wates Corporate Governance Principles.

MSIP is part of the Morgan Stanley Group whose strategy and core values are:

#### **Our Strategy:**

*What we do* – advise, originate, trade, manage and distribute capital for governments, institutions and individuals, and always do so with a standard of excellence

*How we do it* – Execute in a way that is consistent with our values and, whenever possible, deliver more than one part of the Firm

*With what result* – Deliver strong returns for our shareholders, build long-term value for our clients and offer highly attractive career opportunities for our employees

#### **Our Core Values:**

Since our founding in 1935, Morgan Stanley has consistently delivered first class business in a first-class way. Underpinning all that we do are four core values:

<p><b>Putting Clients First</b></p> <p>Keep the client’s interests first</p> <p>Work with colleagues to deliver the best of the Firm to every client</p> <p>Listen to what the client is saying and needs</p>	<p><b>Doing the Right Thing</b></p> <p>Act with integrity</p> <p>Think like an owner to create long-term shareholder value</p> <p>Value and reward honesty, character and diversity</p> <p>Foster a collegial work environment where all employees feel a sense of belonging</p>
<p><b>Leading with Exceptional Ideas</b></p> <p>Win by breaking new ground</p> <p>Leverage different perspectives to gain new insight</p> <p>Drive innovation</p> <p>Be vigilant about what we can do better</p>	<p><b>Giving Back</b></p> <p>Serve our communities generously with our expertise, time and money</p> <p>Build a better Firm for the future through mentoring others</p>

Morgan Stanley’s Strategy and Core Values are communicated to employees who are accountable for conducting themselves in accordance with the Core Values. For more information see the ‘Culture, values and conduct of employees’ section of the Strategic Report on page 29.

#### **Board Composition**

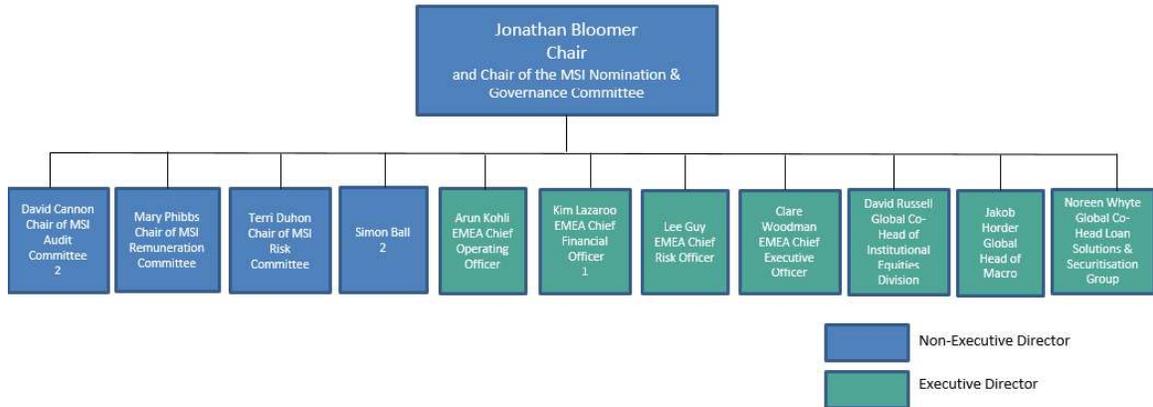
The MSIP Board is comprised of 12 Directors (7 Executive Directors and 5 Non-Executive Directors). Fig 1 below provides an overview of the MSIP Board of Directors. In line with corporate governance best practice, the roles of Chairman and CEO are held by different people.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## CORPORATE GOVERNANCE

### CORPORATE GOVERNANCE FRAMEWORK (CONTINUED)

**Figure 1 MSIP Board**



1. Kim Lazaroo was appointed EMEA Chief Financial Officer and MSIP Executive Director on 22 February 2019.
2. Simon Ball was appointed as a MSIP Non-Executive Director on 28 February 2019 and as Chair of the MSI Audit Committee in place of David Cannon from 29 January 2020.

The size, structure and composition of the MSIP Board is reviewed annually to ensure it remains appropriate and promotes effective decision making. The MSI Nomination and Governance Committee (“NomCo”), led by the Chairman, considers the balance of skills and experience on the MSIP Board, with recommendations made to the MSIP Board as needed. Having a diverse range of opinions and views on the MSIP Board is important. To promote this the MSIP Board has a Board Diversity policy in place which includes a target for the representation of women on the Board. As at 31 December 2019, the representation of women on the MSIP Board was 42%.

New appointments to the MSIP Board are reviewed by the NomCo prior to recommendation to the MSIP Board for approval. The NomCo will consider a number of factors when deciding on a new appointment including a candidate’s: skills and experience; honesty, integrity and independence of mind; time commitment; and collective fit with the MSIP Board and the Morgan Stanley Core Values.

When new Directors are appointed to the MSIP Board, they receive a tailored induction programme designed to give them a broad understanding of MSIP, its business and governance and risk management frameworks and an understanding of their regulatory and legal responsibilities. To keep their skills and knowledge up to date, the MSIP Board receives tailored board training sessions on key topics each year. Non-Executive Directors receive additional briefings from senior management and attend site visits to ensure they continue to have the skills and knowledge needed to fulfil their role.

The MSIP Board reviews its effectiveness annually using either an internal or externally facilitated assessment. Directors also receive individual annual performance assessments to assist with their personal development.

#### **Director responsibilities**

The MSIP Board and each Director have a clear understanding of their responsibilities. These are set out in the matters reserved to the MSIP Board and the terms of reference for each of the Board committees and the role profile provided to each director on appointment, and reviewed periodically.

MSIP is a wholly owned subsidiary of Morgan Stanley International Limited (MSI). MSIP and MSI have the same board composition. The MSI Board has established Board Committees to assist it, and a number of its regulated subsidiaries, in performing their duties. The MSIP Board is assisted in discharging its responsibilities via the MSI Audit, Risk, Remuneration and Nomination and Governance Committees which are described below in ‘MSI Board committee and EMEA executive management structure’.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### CORPORATE GOVERNANCE

#### CORPORATE GOVERNANCE FRAMEWORK (CONTINUED)

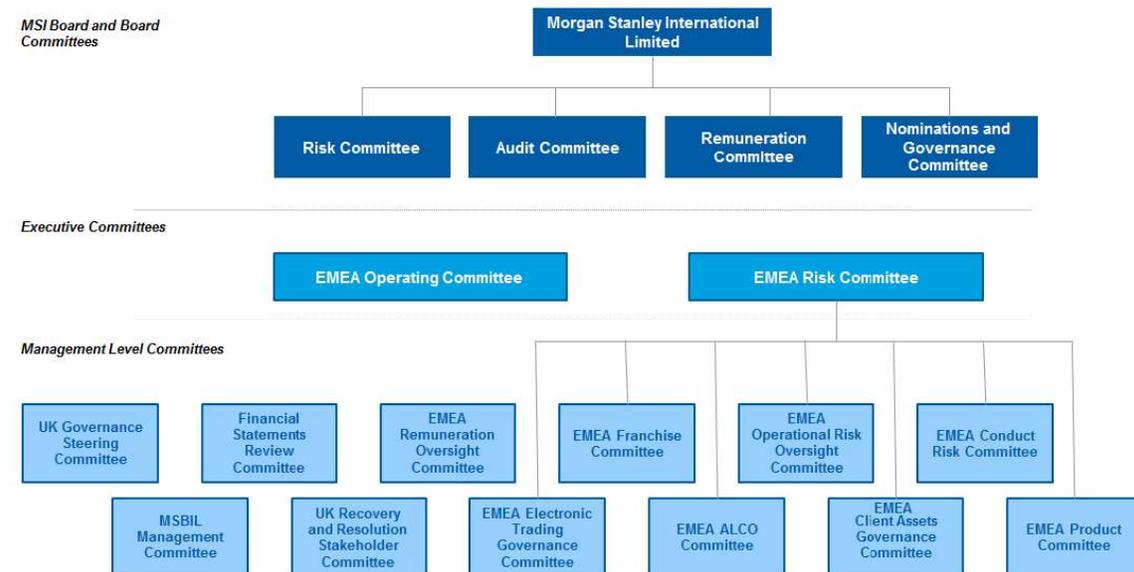
##### Director responsibilities (continued)

The MSIP Board meets circa 10 times a year and receives regular reporting on key aspects of the MSIP business, including performance against KPIs, financial performance, risk management information and updates on market conditions and the regulatory environment. The MSI Risk Committee and MSI Audit Committee meet at least quarterly and the MSI Remuneration Committee and MSI Nomination and Governance Committee meet at least twice a year to receive reports on key matters within their remit.

##### EMEA executive and risk focused management committees

Day to day management of the MSIP business is delegated to key EMEA Executive Management Committees: the EMEA Operating Committee and EMEA Risk Committee. These 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 Executive Committees are supported in their oversight of specific areas of the MSI Group's activities by the management committees.

##### MSI Board Committee structure and EMEA executive management structure



##### Board Committees

The **MSI Risk Committee** assists the MSIP 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 against tolerance and limits; (v) risk culture; (vi) financial resource management and capital; and (vii) recovery and resolution.

The **MSI Audit Committee** assists the MSIP Board in monitoring: (i) financial reporting; (ii) internal controls; (iii) legal and regulatory compliance; (iv) internal audit; and (v) external auditors.

The **MSI Remuneration Committee** assists the MSIP Board in (i) overseeing the implementation of remuneration policies and practices applicable to MSIP (as a member of the MSI Group) and (ii) overseeing compliance by MSIP with applicable EU and UK remuneration rules, statements and guidance.

The **MSI Nomination and Governance Committee** assists the MSIP Board in (i) the recruitment of Board members; (ii) assessment of the performance of the MSIP Board and (iii) the MSI Group corporate governance framework (as it applies to MSIP).

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **CORPORATE GOVERNANCE**

#### **CORPORATE GOVERNANCE FRAMEWORK (CONTINUED)**

##### **Board Committees (continued)**

Each MSI Board Committee is comprised solely of independent Non-Executive Directors appointed to provide robust and effective challenge of the matters within its remit. Processes are in place to manage conflicts of interest, should they arise.

##### **Executive and risk focused 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.

##### *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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **CORPORATE GOVERNANCE**

#### **CORPORATE GOVERNANCE FRAMEWORK (CONTINUED)**

##### **Opportunity and risk**

The MSIP Board sets the MSIP strategy, which implements the Global Morgan Stanley Strategy as it applies to the MSIP business and is aligned to the MSIP Risk Appetite Statement. The MSIP Board, with assistance from the MSI Risk Committee, reviews performance against the strategy and risk appetite (including compliance with the risk management framework, risk tolerances and risk limits) at its meetings throughout the year. The MSIP Board holds an annual strategy day to consider long term strategic opportunities and risks for the business. Significant changes in strategy or risk appetite, including material changes to the MSIP business, require MSIP Board consideration and approval to ensure they are in the long-term interests of MSIP and to consider the impact on key stakeholders. The MSIP Board is supported in its monitoring of financial and non-financial risk by the MSI Risk Committee. The EMEA Risk Committee is responsible for the oversight of the day-to-day management of MSIP financial and non-financial risks. Further information on the risk management framework applicable to the MSIP business is provided in the Risk Management section of the Strategic Report, beginning on page 15.

##### **Remuneration**

MSIP, as a wholly owned subsidiary of Morgan Stanley, is subject to Global Morgan Stanley Remuneration Policies and Procedures which determine the remuneration paid to MSIP employees. Morgan Stanley has a pay for performance philosophy and is committed to responsible compensation programs with the following key objectives, all of which support the Firm's culture and values and shareholders' interests: deliver pay for sustainable performance; align compensation with shareholders' interests; attract and retain top talent; and mitigate excessive risk-taking. The MSIP Board has delegated responsibility to the MSI Remuneration Committee to oversee the implementation of those policies and procedures to the MSIP business and oversee compliance by MSIP with applicable EU and UK remuneration rules, statements and guidance. Further information on the link between the culture, values and conduct of employees and their remuneration is provided in the 'Culture, values and conduct of employees' section of the Strategic Report, beginning on page 29. Information about compliance with the Capital Requirements Directive (CRD IV), the FCA Remuneration Code for dual-regulated firms (SYSC 19D), the PRA Rulebook – Remuneration part, and any guidelines or guidance related to these provisions is included in MSI's annual CRR 450 remuneration disclosure.

##### **Stakeholder Relationships and Engagement**

Details of engagement activities undertaken by the MSIP Board in 2019 with employees, suppliers, clients and other stakeholders and how they inform decision making are provided in the s172(1) Statement beginning on page 35.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **CORPORATE GOVERNANCE**

#### **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 and the Group and Company related notes 1 to 34 and the appendix to the financial statements for the year ended 31 December 2019.

#### **Results and Dividends**

The Group’s profit for the year, after tax, was \$549 million (2018 restated: \$729 million profit after tax).

The Company paid the following dividends during the year (see note 21):

- On 1 March 2019, the Company paid a dividend in specie of \$531 million (2018: \$nil) to Morgan Stanley Investments (UK), transferring equity interest in Morgan Stanley Europe Holding S.E. and Morgan Stanley Europe S.E.
- On 30 May 2019, the Directors approved a coupon payment on the \$1,300 million Additional Tier 1 capital instrument of \$119 million (2018: \$119 million).
- On 31 October 2019, the Directors approved a coupon payment on the \$2,200 million Additional Tier 1 capital instrument of \$209 million (2018: \$nil).

#### **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 culture, values and conduct of employees has been included in the Strategic Report on pages 29 to 31.

#### **Stakeholder relationships and engagement**

Details of engagement activities undertaken by the MSIP Board in 2019 with employees, suppliers, clients and other stakeholders and how they inform decision making are provided in the s172(1) Statement beginning on page 35.

#### **Corporate governance framework**

The corporate governance arrangements in place for MSIP are described in the ‘Corporate governance framework’ section on pages 38 to 42.

#### **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 2019 will be made available on the Morgan Stanley website at [www.morganstanley.com/investorrelations](http://www.morganstanley.com/investorrelations).

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **CORPORATE GOVERNANCE**

#### **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	(Chairman)
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	
D A Russell	
N P Whyte	
C Woodman	

##### **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 further detail, refer to the 'Corporate governance framework' section on pages 38 to 42.

##### **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 6 and 31 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 totalling \$2.1 million (2018: \$3.0 million), of which \$1.5 million was donated to the Morgan Stanley International Foundation (2018: \$2.7 million).

# MORGAN STANLEY & CO. INTERNATIONAL plc

## CORPORATE GOVERNANCE

### DIRECTORS' REPORT

#### Events after the reporting date

Since the balance sheet date the emergence of the coronavirus disease (COVID-19) pandemic has, and will likely continue to, severely impact global economic conditions, resulting in substantial volatility in the global financial markets and operational challenges. The extent of the impact is highly uncertain and cannot be predicted and could adversely affect the future operations and financial condition of Morgan Stanley and the Company. For further detail, refer to the 'Emergence of COVID-19' section on pages 2 and 3 of the Strategic Report.

#### 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 the current and potential stresses of COVID-19 (coronavirus) and Brexit for the foreseeable future. The existing and potential effects of COVID-19 on the business of the Group have been considered as part of the going concern analysis, including impact on operational capacity, access to liquidity and capital, contractual obligations, asset valuations and other critical accounting judgements and key sources of estimation uncertainty. Additionally, the specific impact of Brexit on the business of the Group has been considered. 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.

#### 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

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K Lazaroo

Director

21 April 2020

## MORGAN STANLEY & CO. INTERNATIONAL plc

### CORPORATE GOVERNANCE

#### Directors' Responsibility 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 ("IFRS") 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 these 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 jurisdiction.

The Directors, the names of whom are set out on page 44, 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

K Lazaroo, Director, 21 April 2020

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# 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 2019 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"> <li>• Consolidated income statement;</li> <li>• Consolidated statement of comprehensive income;</li> <li>• Consolidated statement of changes in equity;</li> <li>• Consolidated statement of financial position;</li> <li>• Consolidated statement of cash flows; and</li> <li>• Information identified as “audited” in the Risk Management section of the Strategic Report on pages 9 to 26.</li> </ul>	<ul style="list-style-type: none"> <li>• Statement of changes in equity; and</li> <li>• Statement of financial position.</li> </ul>
Group and Parent Company	
<ul style="list-style-type: none"> <li>• Relevant notes 1 – 37 to the financial statements.</li> </ul>	

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).

### 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.

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

### Summary of our audit approach

<b>Key audit matters</b>	<p>The key audit matters that we identified in the current year were:</p> <ul style="list-style-type: none"> <li>• Valuation of Level 3 financial instruments;</li> <li>• Impact of Covid-19 on the financial statements.</li> </ul>
<b>Materiality</b>	<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>
<b>Scoping</b>	<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 &amp; Touche LLP, US, the lead auditor of the ultimate parent company, Morgan Stanley.</p>
<b>Significant changes in our approach</b>	<p>Given the rapid spread of Covid-19 and the ongoing uncertainty surrounding its impact, we have focused a greater degree of effort on the Directors' judgements in relation to:</p> <ul style="list-style-type: none"> <li>• the disclosure of Covid-19 as a non-adjusting post balance sheet event; and</li> <li>• the potential impact on future earnings, capital and liquidity, which are considered by the Directors in their assessment of the Company's and Group's ability to continue to adopt the going concern basis over a period of at least 12 months from the date of approval of the Financial Statements.</li> </ul> <p>In accordance with this greater level of effort, we have identified a new key audit matter in the period relating to the impact of Covid-19 on the financial statements.</p> <p>In addition to the new key audit matter in the current year we no longer consider the following as key audit matters:</p> <ul style="list-style-type: none"> <li>• Completeness and accuracy of intercompany transactions is not reported as a key audit matter. This is due to improvements in the control environment and associated governance and as such is not deemed a significant risk to the audit; and</li> <li>• Given the reduction in open tax authority enquiries, the appropriateness of provisions for uncertain tax matters is no longer deemed a significant risk to the audit and as such not considered a key audit matter.</li> </ul> <p>There are no other significant changes in our approach apart from the changes in key audit matters.</p>

### Conclusions relating to going concern

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 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.

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

### 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.

<b>Valuation of Level 3 financial instruments</b>	
<b>Relevant references in the financial statements</b>	<p>Group financial statements:</p> <ul style="list-style-type: none"> <li>• Note 2 – Basis of Preparation – Critical judgements and key sources of estimation uncertainty</li> <li>• Note 3 – Summary of significant accounting policies               <ul style="list-style-type: none"> <li>• (d) Fair value</li> </ul> </li> <li>• Note 32 – Assets and liabilities measured at fair value – (a) (c) (d) (e) (f)</li> </ul> <p>Parent company financial statements:</p> <ul style="list-style-type: none"> <li>• Note 26 – Assets and liabilities measured at fair value – (a) (c) (d) (e) (f)</li> </ul>
<b>Key audit matter description</b>	<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> <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 2019, 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>
<b>How the scope of our audit responded to the key audit matter</b>	<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 procedures:</p>

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

	<ul style="list-style-type: none"> <li>• We obtained an understanding and tested Morgan Stanley's valuation controls including the:             <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> </ul> </li>   <li>• We also performed the following procedures on a sample basis in line with our audit methodology:             <ul style="list-style-type: none"> <li>- Evaluated management's valuation methodologies, including the input assumptions, against the expected assumptions of other market participants leveraging relevant external data.</li> <li>- Assessed the consistency by which Group management has applied significant and unobservable valuation assumptions.</li> <li>- Performed a retrospective assessment of management's valuation estimate by comparing such estimate against relevant subsequent transactions.</li> <li>- 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.</li> <li>- We tested the revenues arising from the valuation estimate on trade date for certain structured transactions involving Level 3 financial instruments. In performing such procedures, we also developed independent valuation estimates for certain structured transaction selections, as well as tested the valuation assumptions and methodologies used by the Group. Those procedures also included evaluating whether the methods were consistent with relevant Group valuation policies and agreeing relevant cash flows to underlying support.</li> <li>- 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.</li> </ul> </li> </ul>
<b>Key observations</b>	Based on our audit procedures performed, we concluded that the valuation of Level 3 financial instruments was appropriate.

<b>Impact of Covid-19 on the financial statements</b>	
<b>Relevant references in the financial statements</b>	Group financial statements: <ul style="list-style-type: none"> <li>• Note 2 (h) – The going concern assumption;</li> <li>• Note 34 – Events after the reporting period</li> </ul>

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

<b>Key audit matter description</b>	<p>The rapid spread and ongoing uncertainty surrounding the impact of Covid-19 has led to additional disclosure in the financial statements and required the Directors' to critically assess the Group's and Company's ability to continue as a going concern over a period of at least 12 months from the date of approval of the Financial Statements.</p> <p>In making their assessment, the Directors concluded that the impact of Covid-19 on the business is a non-adjusting post balance sheet event, the full impact of which cannot be reliably estimated at this stage, and concluded based on the available information that the going concern basis of accounting continues to be appropriate.</p> <p>The Directors have disclosed their explanations and conclusions on going concern basis and the key matters considered, including judgements in relation to the ongoing confidence in the Company's and Group's capital solvency and liquidity positions involving stress and sensitivity analysis performed by management, as well as the capability of the business continuity plans in place, over the assessment period.</p>
<b>How the scope of our audit responded to the key audit matter</b>	<p>In response to the significant economic disruption associated with the Covid-19 pandemic we focused our audit effort to understand whether there was a material uncertainty over the Company's and Group's ability to continue as a going concern over a period of at least twelve months from the date of approval of the Financial Statements.</p> <p>In forming our conclusion, we reviewed Management's going concern analysis of the Group and Company's solvency, liquidity and funding forecast position. Specific procedures included:</p> <ul style="list-style-type: none"> <li>• Reviewed the sensitivity analysis, including the associated macro-economic assumptions and understood the impact on the headroom available against minimum regulatory requirements;</li> <li>• Reviewed the liquidity and funding analysis performed by the Company and understood the forecast changes to the Company's liquidity and funding plan;</li> <li>• Understood Management's business continuity plans and subsequent changes to those plans as a consequence of a prolonged impact from the Covid-19 pandemic;</li> <li>• Reviewed the most recent Board minutes and regulatory correspondence to identify items of interest and understood Management's assessment of the impact of the significant business developments that occurred after the year end; and</li> <li>• Assessed the adequacy of the disclosures in relation to events after the reporting date and going concern.</li> </ul>
<b>Key observations</b>	<p>Based on our audit procedures performed, we concluded that:</p> <ul style="list-style-type: none"> <li>• adequate disclosures have been provided in relation to events after the reporting date; and</li> <li>• as set out in our Conclusions related to going concern above, we have no matters to report in respect of the use of the going concern basis of accounting in preparation of the financial statements.</li> </ul>

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

### 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
<b>Materiality</b>	\$100 million (2018: \$100 million)	\$99 million (2018: \$99 million)
<b>Basis for determining materiality</b>	The Group materiality of \$100 million represents 0.5% (2018: 0.5%) of Total Equity	The parent company materiality of \$99 million represents 0.5% (2018: 0.5%) of Total Equity
<b>Rationale for the benchmark applied</b>	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.	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 set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at 70% of group materiality for the 2019 audit (2018: 70%). In determining performance materiality, we considered the following factors:

- our risk assessment, including our assessment of the group's overall control environment and that we consider it appropriate to rely on controls over a number of business processes; and
- our past experience of the audit, which has indicated a low number of corrected and uncorrected misstatements identified in prior periods.

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of \$5 million (2018: \$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.

### An overview of the scope of our audit

#### *Identification and scoping of components*

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 (2018: \$85 million).

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

### ***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 visited the component auditor throughout the year to oversee and review the work performed in support of our audit. Where restrictions were placed on our ability to travel internationally post year end due to COVID-19 we undertook remote reviews. 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 obtaining an understanding and testing of relevant controls over the financial reporting process.

### **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 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.

### **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.

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

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations 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](http://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, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;
- results of our enquiries of management, internal audit and the audit committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their 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 of fraud or non-compliance with laws and regulations
- the matters discussed among the audit engagement team including significant component audit teams and involving relevant internal specialists, including tax, valuations, IT and industry specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following area: valuation of Level 3 financial instruments. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act. In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the company's ability to operate or to avoid a material penalty. These included the Group's operating licence and regulatory solvency requirements.

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

### ***Audit response to risks identified***

As a result of performing the above, the valuation of Level 3 financial instruments is a key audit matter related to the potential risk of fraud. 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.

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 provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- 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 the 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.***

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

### ***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.***

### **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 23 years, covering the years ended 30 November 1997 to 31 December 2019.

#### ***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.

Fiona Walker, FCA (Senior Statutory Auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, United Kingdom

21 April 2020

**MORGAN STANLEY & CO. INTERNATIONAL plc****CONSOLIDATED INCOME STATEMENT****Year ended 31 December 2019**

<b>in \$ millions</b>	<b>Note</b>	<b>2019</b>	<b>2018 restated</b>
Net trading income		5,150	4,825
Net income from other financial instruments held at fair value		(539)	335
Fee and commission income	4	2,277	2,496
Other revenue		4	35
Interest income	5	1,988	1,195
Interest expense	5	<u>(3,467)</u>	<u>(3,076)</u>
Net interest expense		(1,479)	(1,881)
<b>Net revenue</b>		<u>5,413</u>	<u>5,810</u>
Net loss on investments in subsidiaries, associates and joint ventures	13	(6)	(66)
<b>Non-interest expenses:</b>			
Operating expense	6	(4,646)	(4,686)
Net impairment loss on financial instruments		(1)	(2)
<b>PROFIT BEFORE TAX</b>		<u>760</u>	<u>1,056</u>
Income tax expense	7	(211)	(327)
<b>PROFIT FOR THE YEAR</b>		<u>549</u>	<u>729</u>
Attributable to:			
Owners of the parent		548	728
Non-controlling interest		1	1
<b>PROFIT FOR THE YEAR</b>		<u>549</u>	<u>729</u>

All operations were continuing in the current and prior year.

The notes on pages 64 to 163 form an integral part of the consolidated financial statements.

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 \$552 million for the year ended 31 December 2019 (31 December 2018 restated: \$692 million).

**MORGAN STANLEY & CO. INTERNATIONAL plc****CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME  
Year ended 31 December 2019**

<b>in \$ millions</b>	<b>Note</b>	<b>2019</b>	<b>2018 (restated)</b>
<b>PROFIT FOR THE YEAR</b>		549	729
<b>OTHER COMPREHENSIVE INCOME, NET OF TAX</b>			
<b>Items that will not be reclassified subsequently to profit or loss:</b>			
Remeasurement of net defined benefit liability	7	1	(1)
Changes in fair value attributable to own credit risk on financial liabilities designated at fair value	7, 8	(198)	171
<b>Items that may be reclassified subsequently to profit or loss:</b>			
Currency translation reserve:			
Foreign currency translation differences arising on foreign operations	7	(9)	(58)
Net amount reclassified to consolidated income statement upon transfer of subsidiary	13	6	66
<b>OTHER COMPREHENSIVE INCOME, NET OF TAX</b>		<u>(200)</u>	<u>178</u>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<u>349</u>	<u>907</u>
Attributable to:			
Owners of the parent		350	909
Non-controlling interest		<u>(1)</u>	<u>(2)</u>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>		<u>349</u>	<u>907</u>

The notes on pages 64 to 163 form an integral part of the consolidated financial statements.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2019

in \$ millions	Note	Equity instruments	Share premium	Currency translation reserve	Available-for-sale reserve	Capital contribution reserve	Capital redemption reserve	Debt valuation adjustment reserve	Pension reserve and Retained earnings	Attributable to owners of the parent	Non-controlling interests	Total equity
<b>Balance at 1 January 2018</b>		13,765	513	98	63	3	1,400	(118)	2,904	18,628	59	18,687
Impact of change in accounting policy for fair value gains and losses on inception		-	-	-	-	-	-	-	37	37	-	37
Impact of adoption of new accounting standards		-	-	-	(63)	-	-	-	67	4	-	4
<b>Profit for the year</b>		-	-	-	-	-	-	-	696	696	1	697
Prior period impact of IAS 12 amendment		-	-	-	-	-	-	-	32	32	-	32
Other comprehensive income for the period:												
Remeasurement of defined benefit liability	7	-	-	-	-	-	-	-	(1)	(1)	-	(1)
Changes in fair value attributable to own credit risk on financial liabilities designated at fair value	7	-	-	-	-	-	-	171	-	171	-	171
Foreign currency translation differences arising during the year	7	-	-	(55)	-	-	-	-	-	(55)	(3)	(58)
Recycling of currency translation reserve upon disposal of subsidiary		-	-	66	-	-	-	-	-	66	-	66
<b>Total comprehensive income/(loss)</b>		-	-	11	-	-	-	171	727	909	(2)	907
<b>Transactions with owners:</b>												
Issue of Additional Tier 1 capital		2,200	-	-	-	-	-	-	-	2,200	-	2,200
Dividends		-	-	-	-	-	-	-	(529)	(529)	-	(529)
Prior period impact of IAS 12 amendment		-	-	-	-	-	-	-	(32)	(32)	-	(32)
Difference recognised in equity upon dividend in specie of MS France Group		-	-	-	-	-	-	-	(157)	(157)	-	(157)
<b>Balance at 31 December 2018</b>		15,965	513	109	-	3	1,400	53	3,017	21,060	57	21,117
<b>Profit for the year</b>		-	-	-	-	-	-	-	549	549	-	549
Other comprehensive income for the period:												
Remeasurement of defined benefit liability		-	-	-	-	-	-	-	1	1	-	1
Changes in fair value attributable to own credit risk on financial liabilities designated at fair value		-	-	-	-	-	-	(198)	-	(198)	-	(198)
Realised debt valuation losses		-	-	-	-	-	-	4	(4)	-	-	-
Foreign currency translation differences arising during the year		-	-	(8)	-	-	-	-	-	(8)	(1)	(9)
Recycling of currency translation reserve upon disposal of subsidiary		-	-	6	-	-	-	-	-	6	-	6
<b>Total comprehensive income/(loss)</b>		-	-	(2)	-	-	-	(194)	546	350	(1)	349
<b>Transactions with owners:</b>												
Dividends		-	-	-	-	-	-	-	(859)	(859)	-	(859)
Transfer of business to Morgan Stanley S.V., S.A.U		-	-	-	-	-	-	-	3	3	-	3
Difference recognised in equity upon dividend in specie of MSEHSE Group		-	-	-	-	-	-	-	7	7	-	7
<b>Balance at 31 December 2019</b>		15,965	513	107	-	3	1,400	(141)	2,714	20,561	56	20,617

# MORGAN STANLEY & CO. INTERNATIONAL plc

## COMPANY STATEMENT OF CHANGES IN EQUITY Year ended 31 December 2019

in \$ millions	Note	Equity instruments	Share premium	Currency translation reserve	Available-for-sale reserve	Capital contribution reserve	Capital redemption reserve	Debt valuation adjustment reserve	Pension reserve and Retained earnings	Total equity
<b>Balance at 1 January 2018</b>		13,765	513	(102)	63	3	1,400	(118)	3,010	18,534
Impact of change in accounting policy for fair value gains and losses on inception		-	-	-	-	-	-	-	37	37
Impact of adoption of new accounting standards		-	-	-	(63)	-	-	-	61	(2)
<b>Profit for the year</b>		-	-	-	-	-	-	-	660	660
Prior period impact of IAS 12 amendment		-	-	-	-	-	-	-	32	32
Other comprehensive income for the year:										
Remeasurement of defined benefit liability	7	-	-	-	-	-	-	-	(1)	(1)
Changes in fair value attributable to own credit risk on financial liabilities designated at fair value	7	-	-	-	-	-	-	171	-	171
Foreign currency translation differences arising on foreign operations	7	-	-	(12)	-	-	-	-	-	(12)
Recycling of currency translation reserve upon disposal of subsidiary		-	-	74	-	-	-	-	-	74
<b>Total comprehensive income</b>		-	-	62	-	-	-	171	691	924
<b>Transactions with owners:</b>										
Issue of Additional Tier 1 capital		2,200	-	-	-	-	-	-	-	2,200
Dividends		-	-	-	-	-	-	-	(529)	(529)
Prior period impact of IAS 12 amendment		-	-	-	-	-	-	-	(32)	(32)
<b>Balance at 31 December 2018</b>		15,965	513	(40)	-	3	1,400	53	3,238	21,132
<b>Profit for the year</b>		-	-	-	-	-	-	-	552	552
Other comprehensive income for the year:										
Remeasurement of defined benefit liability		-	-	-	-	-	-	-	1	1
Changes in fair value attributable to own credit risk on financial liabilities designated at fair value		-	-	-	-	-	-	(198)	-	(198)
Realised debt valuation adjustment losses		-	-	-	-	-	-	4	(4)	-
Foreign currency translation differences arising during the year		-	-	(8)	-	-	-	-	-	(8)
<b>Total comprehensive income/(loss)</b>		-	-	(8)	-	-	-	(194)	549	347
Dividends		-	-	-	-	-	-	-	(859)	(859)
Transfer of business to Morgan Stanley S.V. , S.A.U		-	-	-	-	-	-	-	3	3
<b>Balance at 31 December 2019</b>		15,965	513	(48)	-	3	1,400	(141)	2,931	20,623

The notes on pages 64 to 163 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 2019**

in \$ millions

	Note	2019	2018
<b>ASSETS</b>			
Cash and short term deposits	22	28,803	30,829
Trading financial assets (of which \$44,935 million (2018: \$38,499 million) were pledged to various parties)	9	310,744	253,188
Secured financing	8	92,447	95,643
Loans and advances	11	203	836
Investment securities		141	132
Trade and other receivables	12	69,760	65,165
Current tax assets		282	350
Deferred tax assets	18	70	5
Property, plant and equipment		18	10
Other assets		40	41
<b>TOTAL ASSETS</b>		<b>502,508</b>	<b>446,199</b>
<b>LIABILITIES AND EQUITY</b>			
Bank loans and overdrafts	22	9	4
Trading financial liabilities	9	262,256	217,093
Secured borrowing	8	84,474	78,927
Trade and other payables	15	86,296	91,758
Debt and other borrowings	16	48,523	37,115
Provisions	17	25	3
Current tax liabilities		49	55
Deferred tax liability	18	-	33
Accruals and deferred income		253	87
Post-employment benefit obligations	32	6	7
<b>TOTAL LIABILITIES</b>		<b>481,891</b>	<b>425,082</b>
<b>EQUITY</b>			
Share capital	20	15,965	15,965
Share premium account	20	513	513
Currency translation reserve	20	107	109
Capital contribution reserve		3	3
Capital redemption reserve		1,400	1,400
Pension reserve		-	(1)
Debt valuation reserve		(141)	53
Retained earnings		2,714	3,018
<b>Equity attributable to the owners of the parent</b>		<b>20,561</b>	<b>21,060</b>
<b>Non-controlling interests</b>		<b>56</b>	<b>57</b>
<b>TOTAL EQUITY</b>		<b>20,617</b>	<b>21,117</b>
<b>TOTAL LIABILITIES AND EQUITY</b>		<b>502,508</b>	<b>446,199</b>

These consolidated financial statements were approved by the Board and authorised for issue on 20 April 2020.

Signed on behalf of the Board

DocuSigned by:  
  
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K Lazaroo  
 Director

The notes on pages 64 to 163 form an integral part of the consolidated financial statements.

**MORGAN STANLEY & CO. INTERNATIONAL plc**

Registered number: 2068222

**COMPANY STATEMENT OF FINANCIAL POSITION  
As at 31 December 2019**

in \$ millions	Note	2019	2018
<b>ASSETS</b>			
Cash and short term deposits	22	28,523	30,076
Trading financial assets (of which \$44,935 million (2018: \$38,499 million) were pledged to various parties)	9	310,744	253,188
Secured financing	8	92,447	95,643
Loans and advances	11	173	832
Investment securities		141	131
Trade and other receivables	12	69,843	65,260
Current tax assets		279	363
Deferred tax assets	18	69	4
Investment in subsidiaries, associates and joint ventures	13	103	646
Property, plant and equipment		14	6
Other assets		40	42
<b>TOTAL ASSETS</b>		<u>502,376</u>	<u>446,191</u>
<b>LIABILITIES AND EQUITY</b>			
Bank loans and overdrafts	22	9	4
Trading financial liabilities	9	262,256	217,093
Secured borrowing	8	84,474	78,927
Trade and other payables	15	86,293	91,838
Debt and other borrowings	16	48,399	37,025
Provisions	17	25	3
Current tax liabilities		45	50
Deferred tax liability	18	-	33
Accruals and deferred income		249	82
Post-employment benefit obligations	32	3	4
<b>TOTAL LIABILITIES</b>		<u>481,753</u>	<u>425,059</u>
<b>EQUITY</b>			
Share capital	20	15,965	15,965
Share premium account	20	513	513
Currency translation reserve	20	(48)	(40)
Capital contribution reserve		3	3
Capital redemption reserve		1,400	1,400
Pension reserve		-	(1)
Debt valuation reserve		(141)	53
Retained earnings		2,931	3,239
<b>TOTAL EQUITY</b>		<u>20,623</u>	<u>21,132</u>
<b>TOTAL LIABILITIES AND EQUITY</b>		<u>502,376</u>	<u>446,191</u>

These financial statements were approved by the Board and authorised for issue on 20 April 2020.

Signed on behalf of the Board

DocuSigned by:  
  
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K Lazaroo

Director

The notes on pages 64 to 163 form an integral part of the financial statements.

**MORGAN STANLEY & CO. INTERNATIONAL plc****CONSOLIDATED STATEMENT OF CASH FLOWS  
Year ended 31 December 2019**

<b>in \$ millions</b>	<b>Note</b>	<b>2019</b>	<b>2018</b>
<b>NET CASH FLOWS (USED IN)/ FROM OPERATING ACTIVITIES</b>	22b	(659)	1,986
<b>INVESTING ACTIVITIES</b>			
Purchase of property, plant and equipment		(1)	(6)
Changes in ownership interest in subsidiaries	13	<u>(456)</u>	<u>(1,347)</u>
<b>NET CASH FLOWS USED IN INVESTING ACTIVITIES</b>		<u>(457)</u>	<u>(1,353)</u>
<b>FINANCING ACTIVITIES</b>			
Issue of Additional Tier 1 capital	16	-	2,200
Dividends paid	21	(328)	(119)
Repayments of subordinated loan liabilities	16	-	(2,000)
Issue of senior subordinated loan liabilities	16	-	6,000
Interest on subordinated loan liabilities		(231)	(237)
Interest on senior subordinated loan liabilities		<u>(230)</u>	<u>(11)</u>
<b>NET CASH FLOWS (USED IN)/ FROM FINANCING ACTIVITIES</b>		<u>(789)</u>	<u>5,833</u>
<b>NET (DECREASE)/ INCREASE IN CASH AND CASH EQUIVALENTS</b>		(1,905)	6,466
Currency translation differences on foreign currency cash balances		(126)	(979)
<b>CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR</b>	22a	<u>30,825</u>	<u>25,338</u>
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR</b>	22a	<u><u>28,794</u></u>	<u><u>30,825</u></u>

The notes on pages 64 to 163 form an integral part of the consolidated financial statements.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 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 Morgan Stanley Investments (UK) ("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](http://www.morganstanley.com/investorrelations).

#### 2. BASIS OF PREPARATION

##### a. Statement of compliance

These financial statements incorporate the financial statements of the Group and the Company.

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.

The Company financial statements have been 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 3(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), revenue recognition, presentation of comparative information in respect of certain assets and shares outstanding, presentation of a cash flow statement, accounting standards not yet adopted, related party transactions and leases. Where relevant, equivalent disclosures have been provided in the Group accounts in which the Company is consolidated.

##### b. New standards and interpretations adopted during the year

The following standards, amendments to standards and interpretations relevant to the Group and Company's operations were adopted during the year. These did not have a material impact on the Group or Company's financial statements.

IFRS 16 '*Leases*' was issued by the IASB in January 2016. The standard was endorsed by the EU in November 2017. This accounting update required lessees to recognise in the statement of financial position all leases with terms exceeding one year, and results in the recognition of a right of use ("ROU") asset and corresponding lease liability for all such leases, including those previously classified as operating leases.

The Group and Company adopted this standard using the modified retrospective method of adoption, which resulted in the recognition of additional ROU assets and lease liabilities for leases existing at, or entered into after 1 January 2019 which were previously accounted for as operating leases under IAS 17 '*Leases*'. Comparative amounts have not been restated and there was no resultant cumulative effect adjustment arising on adoption of the standard.

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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 2. BASIS OF PREPARATION (CONTINUED)

##### b. New standards and interpretations adopted during the year (continued)

An amendment to IAS 28 '*Long-term Interests in Associates and Joint Ventures*' was issued by the IASB in October 2017, for retrospective application in accounting periods beginning on or after 1 January 2019. The amendment was endorsed by the EU in February 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 Company and 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 has changed the presentation of the tax benefit relating to coupon payments on the AT 1 capital instruments, which are now presented within 'Income tax expense' in the Group's consolidated income statement rather than in the consolidated statement of changes in equity. Comparatives have been restated. The amendments were endorsed by the EU in March 2019. Refer to note 2(f) for further detail.

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. Implementation of the interpretation had no impact on the results of the Group or Company.

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

##### c. New standards and interpretations not yet adopted

At the date of authorisation of these financial statements, the following amendments to standards relevant to the Group and Company's operations were issued by the IASB but not mandatory for accounting periods beginning 1 January 2019. The Group and Company do not expect that the adoption of the following amendments to standards will have a material impact on the Group and Company financial statements.

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. The amendments were endorsed by the EU in December 2019.

An amendment to IFRS 3 '*Business Combinations*' was issued by the IASB in October 2018, for application in accounting periods beginning on or after 1 January 2020.

##### d. Basis of measurement

The financial statements of the Company and 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.

##### e. Critical accounting judgements and sources of estimation uncertainty

In preparing the financial statements and consolidated financial statements, the Company and Group make 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 and Company'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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 2. BASIS OF PREPARATION (CONTINUED)

##### e. Critical accounting judgements and sources of estimation uncertainty (continued)

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

- *Consolidation of structured entities*: the Group determines whether it controls, and therefore should consolidate a structured entity upon its initial involvement and reassesses on an ongoing basis for as long as it has any continuing involvement with the structured entity. See note 14.

The Group and Company's 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 29 'Sensitivity of fair values to changing significant assumptions to reasonable possible alternatives'.
- *Measurement of property, litigation, taxation and other 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 and the Company recognise that it is inherently difficult to estimate the amount of the future losses in certain instances. See accounting policy note 3(o) and note 17.

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

##### f. Change in accounting policy arising from IAS 12 amendment

As noted in note 2(b), an amendment to IAS 12, for application in accounting periods beginning on or after 1 January 2019 has been adopted by the Group and the Company and affects the presentation of the tax benefit relating to dividend payments on the AT1 capital instruments. Previously the Group recognised the tax benefit of such coupon payments directly in 'Retained earnings'. Following adoption of the amendment, this benefit is reflected within 'Income tax expense' in the consolidated income statement.

As required by the IAS 12 amendment, the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period have been presented in 'Income tax expense', rather than directly in 'Retained earnings' and comparatives have been restated accordingly. This change had no net impact on 'Retained earnings' for the year ended 31 December 2018.

##### g. Basis of consolidation

The consolidated financial statements of the Group comprise the financial statements of the Company and its subsidiaries as at 31 December 2019. 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 subsidiaries which don't have US dollars as their reporting currency 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****2. BASIS OF PREPARATION (CONTINUED)****g. Basis of consolidation (continued)**

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.

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 as 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 14 to these financial statements.

**h. The going concern assumption**

The Group's and Company's business activities, together with the factors likely to affect its future development, performance and position, and the Group's and 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 1 to 37, and as set out in the Strategic report, retaining sufficient liquidity and capital to withstand market pressures remains central to the Morgan Stanley Group's, the Group's and the Company's strategy.

Specifically, the existing and potential effects of COVID-19 (coronavirus) on the operational capacity of the business, access to liquidity and capital, contractual obligations, asset valuations and other critical accounting judgements and key sources of estimation uncertainty have been considered on page 2. Additionally, the specific impact of Brexit on the business of the Group and the Company has been considered on page 3. The notes to the financial statements include details of its financial instruments and provide further information, not included in the Strategic Report, on its credit risk and liquidity risk.

Taking the above factors into consideration, the Directors believe it is reasonable to assume that the Group and 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES****a. Functional currency**

Items included in the 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. 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'.

The amount of change in the fair value of financial liabilities designated at fair value through profit and loss ("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 loss 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**

Trading financial instruments include government debt securities, corporate and other debt, traded loans, and corporate equities where the Group or Company 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 and Company recognises any unrealised fair value in the 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 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'.

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'.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 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 (continued)

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 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, and
- certain investment securities (unlisted equities).

Non-trading financial assets at FVPL are principally financial assets where the Group and Company make decisions based upon the assets' fair values. These assets 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 and Company recognise 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 investments 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'.

Transaction costs are excluded from the initial fair value measurement of the financial assets and are recognised in the consolidated income statement in 'Operating expense'.

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

The Group and Company have 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 and Company have 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.

From the date the transaction in a financial instrument designated at FVPL is entered into (trade date) until settlement date, the Group and Company recognise any unrealised fair value changes in the contract as financial instruments designated at FVPL in the 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).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****c. Financial instruments (continued)****ii) Financial instruments designated at fair value through profit or loss (continued)**

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 subsequently reclassified to the consolidated income statement, but is transferred to 'Retained earnings' when realised.

For the Company, 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.

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 8 for an analysis of financial assets and financial liabilities designated at FVPL.

**iii) 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.

Investments in subsidiaries are stated at cost, less provision for any impairment (see note 3(c)(iv) below). Dividends, impairment losses and reversals of impairment losses are recognised in 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.

**iv) 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 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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

##### **c. Financial instruments (continued)**

##### **v) Financial assets and financial liabilities at amortised cost**

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 and Company'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 and Company become 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 expected credit loss ("ECL") allowance. Interest is recognised in the consolidated income statement in 'Interest income', using the effective interest rate ("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 gain/(loss) on financial instruments'.

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 and Company become 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.

##### **vi) Secured financing and secured borrowings**

In the course of financing its business and part of its trading activities, the Group and Company enter 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 and Company under resale arrangements and securities borrowing arrangements are generally not recognised in the statement of financial position, and securities pledged or sold by the Group and Company under sale and repurchase agreements and securities lending arrangements are generally not derecognised from the statement of financial position.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### 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 and Company believe market participants would use in pricing the asset or liability at the measurement date.

Where the Group and Company 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 and Company 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.

In determining fair value, the Group and Company use various valuation approaches and establish 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 and Company. Unobservable inputs are inputs that reflect assumptions the Group and Company believe 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, including, for example, the type of product, whether the product is new and not yet established in the marketplace, the liquidity of markets and other characteristics particular to the product. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgement. Accordingly, the degree of judgement exercised by the Group and Company in determining fair value is greatest for instruments categorised in Level 3 of the fair value hierarchy.

The Group and Company consider 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 to a lower Level of the fair value hierarchy.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****d. Fair value (continued)**

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 and Company incorporate 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 and Company’s existing credit-related valuation adjustment calculation methodologies, which apply to both assets and liabilities.

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 and Company carry 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 and Company, 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 and Company apply credit-related valuation adjustments (“CVA”) to their Borrowings (primarily structured notes) which are designated at FVPL and to OTC derivatives. The Group and Company consider 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 or Company’s and the counterparty’s credit rating is considered when measuring fair value. In determining the expected exposure the Group and Company simulate 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 and Company also consider collateral held and legally enforceable master netting agreements that mitigate 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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### d. Fair value (continued)

The Group and Company may apply a concentration adjustment to certain of their 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.

##### *Valuation process*

Valuation Control (“VC”) within the Financial Control Group (“FCG”) is responsible for the Group and Company’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 and Company’s financial instruments. VC implements valuation control processes designed to validate the fair value of the Group and Company’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 and Company generally subject 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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### d. Fair value (continued)

###### *Valuation process (continued)*

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.

###### *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 and Company recognises a gain or loss on inception of the transaction.

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

For further information, see note 29.

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

Certain of the Group and Company's assets and liabilities are measured at fair value on a non-recurring basis. The Group and Company incur 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

The Group and Company derecognise 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 or Company neither transfers nor retains substantially all of the risks and rewards of the asset, then the Group and Company determine whether it has retained control of the asset.

If the Group or Company 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 or Company 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 and Company derecognise financial liabilities when the Group and Company's obligations are discharged or cancelled or when they expire.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### f. Impairment of financial instruments

The Group and Company 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, ECLs 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, ECLs are the present value of the cash shortfalls (i.e. the difference between contractual and expected cash flows), assuming that the loan is drawn down.

For a financial guarantee contract, the ECLs 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 and Company apply a three stage approach to measuring ECLs 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 significant increase in credit risk ("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 Group and Company consider both quantitative and qualitative information and analysis based on the Group and Company's historical experience and expert credit risk assessment, including forward-looking information.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### f. Impairment of financial instruments (continued)

###### *Assessment of SICR (continued)*

The Probability of default (“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 Group and Company consider that SICR has occurred in all cases when an asset is more than 30 days past due.

The Group and Company do not use the ‘low’ credit risk practical expedient. As a result, the Group and Company monitor all financial instruments subject to impairment for SICR, except for unrated ‘Trade and receivables’, for which a lifetime ECL is always calculated without considering whether SICR has occurred.

In general, ECLs 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.
- Loss given default (“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.
- Exposure at default (“EAD”): this represents the expected EAD, taking into account the expected repayment of principal and interest from the balance sheet date to the date of 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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

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

##### f. Impairment of financial instruments (continued)

###### *Calculation of ECL (continued)*

When measuring ECL, the Group and Company consider 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 and Company measure ECL on an individual asset basis and has no purchased or originated credit-impaired financial assets.

###### *Presentation of ECL*

ECL is recognised in the consolidated income statement within 'Net impairment (loss)/gain on financial instruments'. ECL on financial assets measured at amortised cost are presented as an ECL allowance. The allowance reduces the net carrying amount on the face of the consolidated statement of financial position. ECLs 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 and Company define 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 or Company 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 and Company define 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 or Company 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.

###### *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 on financial instruments' and is not recognised in the loss allowance account. Any subsequent recoveries are credited to 'Net impairment loss on financial instruments' within the consolidated income statement.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****g. Revenue recognition**

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 over time based on estimated progress of work as advice is provided to the client and 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.

**h. Fees and commission expense**

Fees and commission expense in the consolidated income statement include 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(k) below), which are included within 'Operating expense' in the consolidated income statement.

For premises held under operating leases (see note 3(n)), 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 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

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****j. Disposal of subsidiaries**

When subsidiaries are sold or the Company ceases to control an entity, the difference between the proceeds (plus the fair value of any investment retained), and the total assets less total liabilities disposed of, cumulative translation differences and unamortised goodwill, is recognised in the consolidated income statement within 'Net gains/(losses) on investments in subsidiaries, associates and joint ventures'. 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. 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 (CGU). 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 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.

**l. 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.

**m. 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 and Company'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 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 and Company 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****m. Income tax (continued)**

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

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

Current tax assets are offset against current tax liabilities when there is a legally enforceable right to set off current tax assets against current tax liabilities and the Group or Company 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 or Company intends to settle its current tax assets and current tax liabilities on a net basis.

**n. Leases*****Applicable from 1 January 2019***

For leases whose original lease term exceeds one year, right-of-use (“ROU”) assets and lease liabilities are initially recognised based on the present value of the future minimum lease payments over the lease term. The discount rate used in determining the present value is the Group and Company’s borrowing rate. The ROU asset also includes any prepaid lease payments and initial direct costs incurred and is reduced to reflect lease incentives received. The lease liabilities are subsequently accounted for at amortised cost, using the effective interest rate method.

The liability is remeasured when there is a change in future lease payments arising from a change in an index or rate or from a market rent review. Additionally, the lease liability is remeasured if the Company changes its assessment of whether it will exercise an extension or termination option or undertakes certain modifications of the lease. The ROU asset is depreciated on a straight line basis from the lease commencement date to the earlier of the end of its useful life or the end of the lease term. Depreciation of ROU assets is presented within ‘Operating expenses’. In addition, the ROU asset is tested for impairment losses where there is an impairment event.

The Group and Company evaluates contracts greater than one year to determine whether they contain lease components at inception. Where contracts contain both lease and non-lease components, they are accounted for as a single lease.

The Group and Company present ROU assets within the ‘Property, plant and equipment’ line and lease liabilities within the ‘Trade and other payables’ line of the statement of financial position.

***Applicable until 31 December 2018***

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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)****o. Provisions and commitments**

Provisions are recognised when the Group or Company 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.

A commitment is any legal obligation to potentially make or receive cash payments or transfer cash.

**p. Offsetting of financial assets and financial liabilities**

Where there is a currently legally enforceable right to set off the recognised amounts and an intention to either settle on a net basis or to realise the asset and the liability simultaneously, financial assets and financial liabilities are offset and the net amount 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.

**q. Employee compensation plans****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 and Company. 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 (“VWAP”). The fair value of RSUs not entitled to dividends until conversion is measured at VWAP reduced by the present value of dividends expected to be paid on the underlying shares prior to scheduled conversion date.

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 and Company recognise 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 and Company pay Morgan Stanley for the procurement of shares. The Group and Company pay 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 income statement.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****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 and Company 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 that employees select.

The Group and Company recognise 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 occur.

Deferred cash-based compensation expense is recorded within 'Operating expense' in the income statement. 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 and Company enter into 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 and Company, 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 and Company operate defined contribution and defined benefit post-employment plans.

Contributions due in relation to the Group and Company's defined contribution post-employment plan are recognised in 'Operating expense' in the income statement as the related employee service is rendered.

For the Group and Company's defined benefit post-employment plans, 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 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 costs 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 income statement. Remeasurements that arise in calculating the Group and Company's obligation in respect of a plan are recognised in other comprehensive income, in the period in which they occur.

The Group and Company participate in a defined benefit plan operated by another Morgan Stanley affiliate. The Group and Company recognise recharges for the net defined benefit cost of the plan as a whole under inter-affiliate contractual agreements.

Details of the plan are given in note 32 to the financial statements.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****4. FEE AND COMMISSION INCOME**

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Investment banking <sup>(1)</sup>	1,153	1,195
Commission income	694	868
Trust and other fiduciary activities	161	175
Other fee and commission income	269	258
<b>Total fee and commission income</b>	<b>2,277</b>	<b>2,496</b>
<i>Of which, revenue from contracts with customers</i>	<i>2,239</i>	<i>2,598</i>

Total fee and commission income is stated after the transfer of revenues totaling \$38 million (2018: \$106 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 from contracts with customers.

<b>in \$ millions</b>	<b>Contract revenues</b>	
	<b>2019</b>	<b>2018</b>
Investment banking <sup>(1)</sup>	1,171	1,301
Commission income	694	864
Trust and other fiduciary activities	105	175
Other revenue from contracts with customers	269	258
<b>Total revenue from contracts with customers</b>	<b>2,239</b>	<b>2,598</b>

(1) Includes advisory and underwriting revenues.

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

**5. 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.

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
<b>Financial assets not measured at FVPL</b>	<b>1,428</b>	<b>1,275</b>
Trading financial assets	219	109
Non-trading financial assets at FVPL	341	(189)
<b>Financial assets measured at FVPL</b>	<b>560</b>	<b>(80)</b>
<b>Total interest income</b>	<b>1,988</b>	<b>1,195</b>
Financial liabilities measured at amortised cost	3,410	3,043
Financial liabilities designated at FVPL	57	33
<b>Total interest expense</b>	<b>3,467</b>	<b>3,076</b>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****5. INTEREST INCOME AND INTEREST EXPENSE (CONTINUED)**

‘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 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 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’.

**6. OPERATING EXPENSE**

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Direct staff costs	635	137
Management charges from other Morgan Stanley Group undertakings relating to staff costs	1,201	1,622
<b>Staff-related expenses</b>	<b>1,836</b>	<b>1,759</b>
Management charges from other Morgan Stanley Group undertakings relating to other services	1,285	1,178
Brokerage fees	564	670
Administration and corporate services	78	105
Professional services	161	156
UK Bank levy	74	64
Other taxes	502	631
Auditor's remuneration:		
Fees payable to the Company’s auditor and its associates for the audit of the Company’s annual financial statements	3	4
Fees payable to the Company’s auditor and its associates for other services to the Group <sup>(1)</sup>	1	1
Other	142	118
<b>Non-staff related expenses</b>	<b>2,810</b>	<b>2,927</b>
<b>Total operating expense</b>	<b>4,646</b>	<b>4,686</b>

(1) Fees payable to the Company’s auditor for other services in 2019 comprise \$165,000 for the audit of the Company’s subsidiaries (2018: \$179,000) and \$818,000 for other assurance services (2018: \$1,012,000).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****6. OPERATING EXPENSE (CONTINUED)**

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

Further information regarding employee compensation plans is provided in note 31.

Staff related expenses increased by 4% from \$1,759 million to \$1,836 million for the year. The increase in staff related expenses was primarily driven by an increase in deferred compensation relating to prior year equity awards and from increased severance related costs, partially offset by a decrease in discretionary compensation. The equity awards expense increased mainly as a result of the increase in the Morgan Stanley share price during the year (refer to note 31 for more detail). Discretionary compensation decreased as a result of lower revenues.

‘Direct staff costs’ increased and ‘Management charges from other Morgan Stanley Group undertakings relating to staff costs’ decreased as a result of the transfer of staff from MSES to the Company during the year. Refer to the analysis of direct employees below for further information.

Non-staff related expenses decreased by 4% from \$2,927 million to \$2,810 million for the year. This decrease was primarily driven by lower volume-related expenses including brokerage and transaction taxes, from reduced client activity. This is partially offset by an increase in management charges from other Morgan Stanley Group undertakings related to other services.

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 7 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% over the period 2016-2021. The rates for 2019 and 2018 were 0.15% and 0.16%, respectively. The Levy expense for 2019 is higher than for 2018 due to an increase in liabilities subject to bank levy partially offset by this reduction in rate.

The average number of direct employees of the Group and the relevant employment costs is analysed below:

	<b>Number</b>	
	<b>2019</b>	<b>2018</b>
Institutional Securities and Investment Management	1,061	220
Support services	93	124
	1,154	344

The cost of the staff, including the Directors, is analysed below:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Wages and salaries	553	116
Social security costs	68	16
Pension costs	14	5
	635	137

On 1 July 2019, 1,779 staff transferred from MSES to the Company.

As a result certain Directors are now employed by the Company. Both the Company and Group also incurred management charges in respect of Directors’ qualifying services provided by employees of other Morgan Stanley Group undertakings, 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 33.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****7. INCOME TAX**

A reconciliation of the Group's income tax expense for the year ended 31 December 2019 and 31 December 2018 is below:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b> <b>(restated)</b>
<b>Current tax</b>		
United Kingdom corporation tax charge		
- current year	150	222
- adjustments in respect of prior years	(18)	(18)
Double taxation relief		
- current year	(82)	(136)
Overseas tax		
- current year	193	203
- adjustments in respect of prior years	-	(2)
	<hr/> 243	<hr/> 269
<b>Deferred tax (benefit)/ expense</b>		
Current year	(35)	58
Effect of changes in tax rates	3	-
	<hr/> (32)	<hr/> 58
<b>Income tax</b>	<hr/> <hr/> 211	<hr/> <hr/> 327

**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 (including an increase to the net effect of foreign withholding taxes suffered by the Group), the additional 8% UK banking surcharge, as well as the non deductibility of certain expenses for tax purposes, partially offset by the income tax benefit of coupon payments on the AT1 capital instruments.

The UK statutory rate, excluding the banking surcharge, is 19% for the period. 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 period. Finance (No. 2) Act 2015 reduced the UK main rate of corporation tax to 17% with effect from 1 April 2020. However, following the UK Budget on 11 March 2020 and subsequent resolutions given statutory effect under the Provisional Collection of Taxes Act 1968, for the financial year 2020 the UK statutory rate is 19%. While this change does not affect the income tax charge for the period, it will affect future periods. See Note 18 Deferred Tax Assets and Liabilities for further details.

The current year income tax expense is higher (2018: higher) than that resulting from applying the average standard rate of corporation tax for banking companies in the UK for the year of 27% (2018: 27%). The main differences are explained on the next page:

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****7. INCOME TAX (CONTINUED)**

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b> <b>(restated)</b>
Profit before income tax	760	1,056
Income tax expense using the average standard rate of corporation tax for banking companies in the UK of 27% (2018: 27%)	205	285
Impact on tax of:		
Tax deductible coupons on Additional Tier 1 capital instruments	(89)	(32)
Non deductible UK Bank Levy	20	17
Other expenses:		
Other permanent differences	5	32
Movement in tax reserve	(1)	11
Group relief surrendered for no cash consideration	-	13
Effect of tax rates in foreign jurisdictions	(4)	4
Net effect of foreign withholding taxes	93	9
Over provided in prior years	(18)	(20)
Other	-	8
<b>Total income tax expense in the consolidated income statement</b>	<b>211</b>	<b>327</b>

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 that were surrendered inside the Group in the current year (2018: surrendered both inside and outside the Group).

As described in note 2, following amendment to IAS 12, the tax benefits of coupon payments made on the Additional Tier 1 capital instruments are presented within income tax expense for accounting periods beginning on or after 1 January 2019. Since these payments are tax deductible the amended presentation will reduce the income tax expense presented in the consolidated income statement for current and future periods. The prior year comparative results have been restated to reflect the amended presentation required by IAS 12.

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:

<b>in \$ millions</b>	<b>2019</b>			<b>2018</b>		
	<b>Before tax</b>	<b>Tax benefit</b>	<b>Net of tax</b>	<b>Before tax</b>	<b>Tax expense</b>	<b>Net of tax</b>
Pension reserve:						
Remeasurement of net defined benefit liability	1	-	1	(1)	-	(1)
Foreign currency translation reserve:						
Foreign currency translation differences on foreign operations	(3)	-	(3)	8	-	8
Debt valuation reserve:						
Changes in fair value of liabilities designated at fair value through profit or loss due to changes in the Company's own credit risk	(264)	66	(198)	228	(57)	171
Other comprehensive income	(266)	66	(200)	235	(57)	178

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****8. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY**

The following table analyses financial assets and financial liabilities presented in the Group's consolidated statement of financial position and the Company's statement of financial position by the IFRS 9 classifications as at 31 December 2019 and 31 December 2018.

2019 in \$ millions	Group				Company			
	FVPL	FVPL designated	Amortised cost	Total	FVPL	FVPL designated	Amortised cost	Total
Cash and short term deposits	-	-	28,803	<b>28,803</b>	-	-	28,523	<b>28,523</b>
Trading financial assets	310,744	-	-	<b>310,744</b>	310,744	-	-	<b>310,744</b>
Secured financing:								
Cash collateral on securities borrowed	28,796	-	-	<b>28,796</b>	28,796	-	-	<b>28,796</b>
Securities purchased under agreements to resell	47,509	-	-	<b>47,509</b>	47,509	-	-	<b>47,509</b>
Other secured financing	16,142	-	-	<b>16,142</b>	16,142	-	-	<b>16,142</b>
Loans and advances	19	-	184	<b>203</b>	19	-	154	<b>173</b>
Investment securities	141	-	-	<b>141</b>	141	-	-	<b>141</b>
Trade and other receivables	1,656	-	67,967	<b>69,623</b>	1,656	-	68,051	<b>69,707</b>
<b>Total financial assets</b>	<b>405,007</b>	<b>-</b>	<b>96,954</b>	<b>501,961</b>	<b>405,007</b>	<b>-</b>	<b>96,728</b>	<b>501,735</b>
Bank loans and overdrafts	-	-	9	<b>9</b>	-	-	9	<b>9</b>
Trading financial liabilities	262,256	-	-	<b>262,256</b>	262,256	-	-	<b>262,256</b>
Secured borrowings:								
Cash collateral on securities loaned	-	1	22,993	<b>22,994</b>	-	1	22,993	<b>22,994</b>
Securities sold under agreements to repurchase	-	13,345	21,356	<b>34,701</b>	-	13,345	21,356	<b>34,701</b>
Other financial liabilities	-	25,387	1,392	<b>26,779</b>	-	25,387	1,392	<b>26,779</b>
Trade and other payables	-	2,073	83,924	<b>85,997</b>	-	2,073	83,922	<b>85,995</b>
Debt and other borrowings	-	7,047	41,476	<b>48,523</b>	-	7,047	41,352	<b>48,399</b>
<b>Total financial liabilities</b>	<b>262,256</b>	<b>47,853</b>	<b>171,150</b>	<b>481,259</b>	<b>262,256</b>	<b>47,853</b>	<b>171,024</b>	<b>481,133</b>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****8. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY  
(CONTINUED)**

2018 in \$ millions	Group				Company			
	FVPL	FVPL designated	Amortised cost	Total	FVPL	FVPL designated	Amortised cost	Total
Cash and short term deposits	-	-	30,829	<b>30,829</b>	-	-	30,076	<b>30,076</b>
Trading financial assets	253,188	-	-	<b>253,188</b>	253,188	-	-	<b>253,188</b>
Secured financing:								
Cash collateral on securities borrowed	23,122	-	-	<b>23,122</b>	23,122	-	-	<b>23,122</b>
Securities purchased under agreements to resell	64,872	-	-	<b>64,872</b>	64,872	-	-	<b>64,872</b>
Other secured financing	7,649	-	-	<b>7,649</b>	7,649	-	-	<b>7,649</b>
Loans and advances	11	-	825	<b>836</b>	11	-	821	<b>832</b>
Investment securities	132	-	-	<b>132</b>	131	-	-	<b>131</b>
Trade and other receivables	780	-	64,282	<b>65,062</b>	780	-	64,376	<b>65,156</b>
<b>Total financial assets</b>	<b>349,754</b>	<b>-</b>	<b>95,936</b>	<b>445,690</b>	<b>349,753</b>	<b>-</b>	<b>95,273</b>	<b>445,026</b>
Bank loans and overdrafts	-	-	4	<b>4</b>	-	-	4	<b>4</b>
Trading financial liabilities	217,093	-	-	<b>217,093</b>	217,093	-	-	<b>217,093</b>
Secured borrowings:								
Cash collateral on securities loaned	-	366	20,737	<b>21,103</b>	-	366	20,737	<b>21,103</b>
Securities sold under agreements to repurchase	-	15,868	25,608	<b>41,476</b>	-	15,868	25,608	<b>41,476</b>
Other financial liabilities	-	16,348	-	<b>16,348</b>	-	16,348	-	<b>16,348</b>
Trade and other payables	-	897	90,636	<b>91,533</b>	-	897	90,716	<b>91,613</b>
Debt and other borrowings	-	5,664	31,451	<b>37,115</b>	-	5,664	31,361	<b>37,025</b>
<b>Total financial liabilities</b>	<b>217,093</b>	<b>39,143</b>	<b>168,436</b>	<b>424,672</b>	<b>217,093</b>	<b>39,143</b>	<b>168,426</b>	<b>424,662</b>

**Financial assets and financial liabilities designated at FVPL**

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

*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. Prepaid contract liabilities are designated at FVPL as they form part of a group of financial assets and liabilities which are managed, evaluated and reported internally on a fair value basis.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****8. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY  
(CONTINUED)**

*Cash collateral on securities loaned and securities sold under agreements to repurchase:* 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:* 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 16 for more information.

*Other financial assets and liabilities:* These include

- financial assets and liabilities such as 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.

The financial assets and liabilities arising upon consolidation of certain special purpose entities and the financial liabilities arising from continuing recognition of certain financial assets continued to be designated at FVPL to eliminate or significantly reduce an accounting mismatch which would otherwise arise or, where the financial liabilities form a part of a group of financial assets and financial liabilities which are managed, evaluated and reported on internally on a fair value basis. The other assets are classified as non-trading at FVPL as they are managed on a fair value basis.

As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
<b>Liabilities:</b>		
Secured borrowing		
Cash collateral on securities loaned	1	366
Securities sold under agreements to repurchase	13,345	15,868
Other financial liabilities	25,387	16,348
Trade and other payables		
Prepaid OTC contracts	2,069	887
Unfunded loan commitments <sup>(1)</sup>	4	10
Debt and other borrowings		
Issued structured notes	7,047	5,664
	47,853	39,143
	47,853	39,143

(1) Related to loans which are on balance sheet as non-trading at 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 2019 is a loss of \$190 million (2018: gain of \$70 million). During the year, \$4 million (2018: \$nil) was realised as a result of the derecognition of such financial liabilities and was transferred from the 'Debt valuation adjustment reserve' to 'Retained earnings'.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****8. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY (CONTINUED)**

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 \$18 million lower than the contractual amount due at maturity (2018: \$226 million lower).

**9. TRADING FINANCIAL ASSETS AND LIABILITIES**

As at 31 December 2019 and 31 December 2018 there were no differences between Group and Company in respect of the below table.

in \$ millions	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Government debt securities	15,310	19,293	14,775	17,935
Corporate and other debt	11,485	3,519	11,252	4,593
Corporate equities	67,660	23,727	47,850	20,452
Derivatives (see note 10)	216,289	215,717	179,311	174,113
	<u>310,744</u>	<u>262,256</u>	<u>253,188</u>	<u>217,093</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****10. DERIVATIVES**

As at 31 December 2019 and 31 December 2018 there were no differences between Group and Company in respect of the below table.

in \$ millions	2019				2018			
	Bilateral OTC	Cleared OTC	Listed derivative contracts	Total	Bilateral OTC	Cleared OTC	Listed derivative contracts	Total
Derivative assets:								
Interest rate contracts	77,594	3,352	-	80,946	62,650	1,980	8	64,638
Credit contracts	5,955	220	-	6,175	3,885	93	-	3,978
Foreign exchange and gold contracts	83,545	1,403	-	84,948	70,972	1,328	9	72,309
Equity contracts	34,151	-	6,704	40,855	28,441	-	6,911	35,352
Commodity contracts	3,276	-	89	3,365	3,002	-	32	3,034
	<u>204,521</u>	<u>4,975</u>	<u>6,793</u>	<u>216,289</u>	<u>168,950</u>	<u>3,401</u>	<u>6,960</u>	<u>179,311</u>
Derivative liabilities:								
Interest rate contracts	75,023	2,234	2	77,259	58,372	848	9	59,229
Credit contracts	6,114	269	-	6,383	3,751	74	-	3,825
Foreign exchange and gold contracts	83,114	1,526	2	84,642	71,258	1,325	12	72,595
Equity contracts	37,971	-	5,917	43,888	27,962	-	7,612	35,574
Commodity contracts	3,411	-	134	3,545	2,800	-	90	2,890
	<u>205,633</u>	<u>4,029</u>	<u>6,055</u>	<u>215,717</u>	<u>164,143</u>	<u>2,247</u>	<u>7,723</u>	<u>174,113</u>

**11. LOANS AND ADVANCES**

	Group		Company	
	2019	2018	2019	2018
Loans and advances at amortised cost:				
Amounts due from Morgan Stanley Group undertakings	156	804	126	800
Other	30	21	30	21
Less: ECL	(2)	-	(2)	-
	<u>184</u>	<u>825</u>	<u>154</u>	<u>821</u>
Loans and advances at FVPL				
	<u>19</u>	<u>11</u>	<u>19</u>	<u>11</u>
	<u>203</u>	<u>836</u>	<u>173</u>	<u>832</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****12. TRADE AND OTHER RECEIVABLES**

<b>in \$ millions</b>	<b>Group</b>		<b>Company</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
<b>Trade and other receivables (amortised cost)</b>				
Trade receivables				
Contracts with customers	234	224	234	224
Amounts due from other Morgan Stanley Group undertakings	28,223	30,826	28,292	30,930
Trading receivables	38,479	31,766	38,465	31,756
Less: ECL	(3)	(3)	(3)	(3)
	<u>66,933</u>	<u>62,813</u>	<u>66,988</u>	<u>62,907</u>
Other receivables <sup>(1)</sup>				
Amounts held at exchanges	743	863	729	839
Amounts due from other Morgan Stanley Group undertakings	291	605	334	629
Other amounts receivable	138	104	137	105
	<u>1,172</u>	<u>1,572</u>	<u>1,200</u>	<u>1,573</u>
Total trade and other receivables (amortised cost)	<u>68,105</u>	<u>64,385</u>	<u>68,188</u>	<u>64,480</u>
<b>Trade and other receivables (FVPL)</b>				
Prepaid OTC contracts	1,634	622	1,634	622
Margin loans	-	141	-	141
Amounts held at exchanges	21	17	21	17
	<u>1,655</u>	<u>780</u>	<u>1,655</u>	<u>780</u>
<b>Total</b>	<u>69,760</u>	<u>65,165</u>	<u>69,843</u>	<u>65,260</u>

(1) There was no IFRS 9 ECL as at 31 December 2019 or 31 December 2018, respectively.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****13. 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.

<b>in \$ millions</b>	<b>Subsidiary undertakings</b>
<b>Cost</b>	
At 1 January 2019	1,642
Disposals	(531)
Capital Reduction	(12)
At 31 December 2019	<u>1,099</u>
<b>Impairment Provisions</b>	
At 1 January 2019 and 31 December 2019	<u>(996)</u>
<b>Carrying Amounts</b>	
At 31 December 2018	<u>646</u>
At 31 December 2019	<u>103</u>

As part of Brexit planning, on 1 March 2019, the Company paid a dividend in specie of \$531 million to MSIUK, by transferring its equity interest in MSEHSE and MSESE. Refer to 'UK withdrawal from the EU' on page 3 of the Strategic Report for further detail.

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

Information regarding interests in structured entities is included in note 14.

**Disposal of subsidiary**

The carrying value of the net assets of MSEHSE and MSESE at the date of transfer and at 31 December 2018 was as follows:

<b>in \$ millions</b>	<b>At date of transfer</b>	<b>31 December 2018</b>
<b>ASSETS</b>		
Cash and short term deposits	456	509
Trade and other receivables	145	20
Property plant and equipment	1	-
<b>TOTAL ASSETS</b>	<u>602</u>	<u>529</u>
<b>LIABILITIES</b>		
Accruals and deferred income	1	1
Debt issued and other borrowings	77	-
<b>TOTAL LIABILITIES</b>	<u>78</u>	<u>1</u>
<b>NET ASSETS</b>	<u>524</u>	<u>528</u>
Dividend in specie	531	
Difference recognised in equity upon dividend in specie of MSEHSE and MSESE	<u>7</u>	

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **13. INTERESTS IN SUBSIDIARIES (CONTINUED)**

##### **Reclassification of Currency translation reserve**

At the date of transfer, MSEHSE and MSESE had generated an accumulated 'Currency translation reserve' of a \$6 million loss. 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'.

#### **14. 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 considered to be structured entities. The Group's interests in structured entities include certain debt and equity interests, commitments, guarantees, and derivative instruments. 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 asset-repackaged notes designed to meet the investment objectives of clients; and
- Certain derivatives entered into with 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 Company's overall derivative exposure.

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.

##### **Consolidated structured entities**

As at 31 December 2019 the Group had no structured entities that it consolidated (31 December 2018: nil).

##### **Unconsolidated structured entities**

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

The table below shows certain non-consolidated structured entities in which the Group has an interest at 31 December 2019 and at 31 December 2018. The table includes 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 table are sponsored by unrelated parties; the Group's involvement is generally the result of the Group's secondary market-making activities.

The Group's maximum exposure to loss is dependent on the nature of the Group's interest in the structured entity and is limited to notional amounts of certain liquidity facilities, total return swaps and the fair value of certain other derivatives and investments the Group has made in the structured entity. The reported exposure does not include the offsetting benefit of hedges, including total return swaps in relation to fund investments and other entities, or of 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. Where notional amounts are used to quantify maximum exposure related to derivatives, such amounts do not reflect fair value write downs already recorded by the Group. Liabilities issued by structured entities are generally non-recourse to the Group.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****14. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)**

in \$ millions	Mortgage and asset-backed securitisations	Collateralised debt obligations	Fund investments	Other	Total
<b>31 December 2019</b>					
Assets of the structured entities	5,949	1,970	7,795	4,286	20,000
Maximum exposure to loss:					
Debt and equity interests	403	225	1,913	-	2,541
Derivative and other contracts	-	-	161	2,666	2,827
Total maximum exposure to loss	403	225	2,074	2,666	5,368
Carrying value of interests - assets <sup>(1)</sup> :					
Debt and equity interests	403	225	1,913	-	2,541
Derivative and other contracts	-	-	49	333	382
<b>Total carrying value of exposure to loss - assets</b>	403	225	1,962	333	2,923
Carrying value of interests - liabilities <sup>(1)</sup> :					
Debt and equity instruments	-	-	1,931	-	1,931
Derivative and other contracts	-	-	113	315	428
<b>Total carrying value of exposure to loss - liabilities</b>	-	-	2,044	315	2,359
<b>Additional structured entities owned<sup>(2)</sup></b>	217	176	-	1	394
<b>31 December 2018</b>					
Assets of the structured entities	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 <sup>(1)</sup> :					
Debt and equity interests	341	207	2,036	1	2,585
Derivative and other contracts	-	-	54	13	67
<b>Total carrying value of exposure to loss - assets</b>	341	207	2,090	14	2,652
Carrying value of exposure to loss - liabilities <sup>(1)</sup> :					
Derivative and other contracts	-	-	63	66	129
<b>Total carrying value of exposure to loss - liabilities</b>	-	-	63	66	129
<b>Additional structured entities owned<sup>(2)</sup></b>	176	146	-	57	379

(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.

(2) 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****14. INTERESTS IN STRUCTURED ENTITIES (CONTINUED)**

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 are generally included in trading financial assets – 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 2019 (2018: \$nil).

The loss related to sponsored entities during 2019 was \$184 million (2018: gain of \$167 million). Gains or losses are reported under 'Net trading income' in the consolidated income statement. During 2019 there were \$381 million (2018: \$921 million) 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.

**15. TRADE AND OTHER PAYABLES**

in \$ millions	<b>Group</b>		<b>Company</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
<b>Trade and other payables (amortised cost)</b>				
Trade payables	82,382	89,020	82,354	89,054
Other Payables				
Amounts due to other Morgan Stanley Group undertakings	1,580	1,625	1,607	1,671
Other amounts payable	261	216	259	216
	<u>84,223</u>	<u>90,861</u>	<u>84,220</u>	<u>90,941</u>
<b>Trade and other payables (designated at FVPL)</b>				
Prepaid OTC contracts	2,069	887	2,069	887
Unfunded loan commitments	4	10	4	10
	<u>2,073</u>	<u>897</u>	<u>2,073</u>	<u>897</u>
<b>Total</b>	<u>86,296</u>	<u>91,758</u>	<u>86,293</u>	<u>91,838</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****16. DEBT AND OTHER BORROWINGS**

in \$ millions	<b>Group</b>		<b>Company</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
<b>Debt and other borrowings (amortised cost)</b>				
Senior subordinated debt	6,000	6,000	6,000	6,000
Subordinated debt	5,000	5,000	5,000	5,000
Other borrowings <sup>(1)</sup>	30,476	20,451	30,352	20,361
	<u>41,476</u>	<u>31,451</u>	<u>41,352</u>	<u>31,361</u>
<b>Debt and other borrowings (designated at FVPL)</b>				
Issued structured notes	7,047	5,664	7,047	5,664
	<u>48,523</u>	<u>37,115</u>	<u>48,399</u>	<u>37,025</u>

(1) There is 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 which are presented within 'Other borrowings'. The value of assets subject to this charge at 31 December 2019 was \$27,317 million (2018: \$16,129 million).

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

in \$ millions			<b>2019</b>		<b>2018</b>	
Counterparty	Repayment Date	Interest Rate	Accrued Interest	Balance	Accrued Interest	Balance
MSIUK	21 December 2025	OBFR <sup>(1)</sup> plus 2.3%	33	5,000	39	5,000

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

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

in \$ millions			<b>2019</b>		<b>2018</b>	
Counterparty	Repayment Date	Interest Rate	Accrued Interest	Balance	Accrued Interest	Balance
MSIUK	29 January 2021 <sup>(2)</sup>	MS Proxy <sup>(3)</sup>	1	6,000	1	6,000

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

(3) 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 in certain circumstances, consistent with the June 2018 Statement of Policy on *The Bank of England's approach to setting a minimum requirement for own funds and eligible liabilities (MREL)*.

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

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****17. PROVISIONS**

As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

<b>\$ millions</b>	<b>Property</b>	<b>Taxes and levies</b>	<b>Other</b>	<b>Total</b>
At 1 January 2019	2	1	-	3
Additional provisions	-	-	23	23
Unused provisions reversed	-	(1)	-	(1)
<b>At 31 December 2019</b>	<u>2</u>	<u>-</u>	<u>-</u>	<u>25</u>

The increase in Other provisions is driven by a €20 million fine imposed by the Autorité des Marchés Financiers (“AMF”) on the Company in relation to certain trading by the Company in French government bonds and related instruments on 16 June 2015, which the AMF determined constituted market manipulation. The Company has appealed against this decision.

**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 consolidated 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.

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 consolidated 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****17. PROVISIONS (CONTINUED)**

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 7 March 2019, the court denied the relief that CDIB sought in a motion to clarify and resettle the portion of the court’s 21 December 2018 order granting spoliation sanctions. On 5 December 2019, the Appellate Division, First Department heard the parties’ cross-appeals.

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 \$85 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 in the Court of Appeal of Milan. On 31 May 2019, the Group and another Morgan Stanley Group affiliate filed its response to the plaintiff’s appeal. An appeal hearing is scheduled to take place on 16 September 2020.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 17. PROVISIONS (CONTINUED)

On 22 June 2017, the public prosecutor for the Court of Accounts for the Republic of Italy filed a claim against the Group 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 €2.76 billion (approximately \$3.1 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 of Accounts for the Republic of Italy issued a decision affirming the decision below declining jurisdiction and dismissing the claim against the Group. On 19 April 2019, the public prosecutor filed an appeal with the Italian Supreme Court seeking to overturn this decision. On 14 June 2019, the Group filed its response to the public prosecutor's appeal.

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 \$139 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 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*. On 26 June and 2 July 2019, a hearing of the Dutch Authority's appeal was held.

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 \$80 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 \$115 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 below.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****17. 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.

**18. 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:

in \$ millions	Group				Company			
	2019	2018	2019	2018	2019	2018	2019	2018
	Deferred tax asset	Deferred tax liabilities						
At 1 January	5	(33)	107	(13)	4	(33)	100	(14)
Adjustment in respect of prior years	1	-	-	-	1	-	-	-
Amount recognised in the income statement	19	15	(58)	-	19	15	(58)	-
Amount recognised in other comprehensive income	53	18	(40)	(20)	53	18	(40)	(19)
Impact of changes in tax rates recognised in the income statement	(3)	-	-	-	(3)	-	-	-
Impact of changes in tax rates recognised in other comprehensive income	(5)	-	3	-	(5)	-	2	-
Transfer of entity	-	-	(7)	-	-	-	-	-
At 31 December	70	-	5	(33)	69	-	4	(33)

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****18. DEFERRED TAX ASSETS AND LIABILITIES (CONTINUED)**

in \$ millions	Group					Company		
	2019	2018	2019	2018	2018	2019	2018	2018
	Deferred tax asset	Consolidated income statement	Deferred tax asset	Deferred tax liability	Consolidated income statement	Deferred tax asset	Deferred tax asset	Deferred tax liability
Accelerated capital allowances	2	-	-	2	-	2	-	2
Deferred compensation	37	31	4	2	(2)	36	3	2
Transitional adjustment	(10)	-	-	(12)	-	(10)	-	(12)
Temporary differences arising in respect of changes in Group's and Company's own credit risk	48	-	-	(17)	-	48	-	(17)
Deferred interest	-	-	-	-	(48)	-	-	-
Unrealised gains/(losses)	(7)	1	-	(8)	(8)	(7)	-	-
Other temporary differences	-	-	1	-	-	-	1	(8)
	<u>70</u>	<u>32</u>	<u>5</u>	<u>(33)</u>	<u>(58)</u>	<u>69</u>	<u>4</u>	<u>(33)</u>

The UK main rate of corporation tax, excluding the banking surcharge, is 19% for the period. 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 and future period.

Finance (No. 2) Act 2015 reduced the UK main rate of corporation tax to 17% with effect from 1 April 2020. However, following the UK budget on 11 March 2020 and subsequent resolutions given statutory effect under the Provisional Collection of Taxes Act 1968, for the financial years 2020 and 2021 the UK statutory rate is 19%. Had this change in rate been effective at the balance sheet date for 2020 and subsequent years, due to revaluation, the net deferred tax asset recognised at 31 December 2019 would have been \$75 million.

The net deferred tax asset shown above has been recognised based on management's assessment that it is probable that the Group will have taxable profits against which the temporary differences can be utilised.

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

in \$ millions	2019	2018
Unused tax losses	37	41

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****19. COMMITMENTS AND CONTINGENCIES**

As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Group and the Company. At 31 December, the Group and Company had the following outstanding commitments and contingent liabilities arising from off-balance sheet financial instruments:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
<i>Commitments<sup>(1)</sup></i>		
Loan commitments	3,945	2,308
Underwriting commitments	637	687
Guarantees	343	405
Letters of credit	105	2
Unsettled securities purchased under agreements to resell <sup>(2)</sup>	37,367	34,623
Unsettled securities sold under agreements to repurchase <sup>(2)</sup>	22,516	26,225
Other commitments	25	22

(1) On balance sheet commitments include 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 2019 and settle after the year-end. The amounts shown reflect the obligation to transfer or receive cash payments at a future date.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****20. EQUITY INSTRUMENTS**

<b>in \$ millions</b>	<b>Ordinary shares of \$1 each</b>	<b>Ordinary shares of £1 each</b>	<b>Class A ordinary shares of \$1 each</b>	<b>Additional Tier 1 capital</b>	<b>Total equity instruments</b>
<b>Issued and fully paid:</b>					
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 at 31 December 2019	<u>10,935</u>	<u>30</u>	<u>1,500</u>	<u>3,500</u>	<u>15,965</u>
<b>Voting rights at 31 December 2019</b>	<u>99.9%<sup>(1)</sup></u>	<u>0.1%<sup>(1)</sup></u>	<u>Non-voting</u>	<u>Non-voting</u>	<u>100%</u>

(1) Ordinary shares are pari passu with each other regardless of currency and together carry 100% of the voting rights (2018: 100%)

**Equity instruments**

At 31 December 2018 and 31 December 2019, the total equity instruments in issue of the Company equated to \$15,965 million (1 January 2018: \$13,765 million) comprising 10,935,105,148 ordinary shares of \$1 each (1 January 2018: 10,935,105,148), 17,615,107 ordinary shares of £1 each (1 January 2018: 17,615,107), 1,500,000,000 Class A Non-voting ordinary shares of \$1 each (1 January 2018: 1,500,000,000) and Additional Tier 1 capital instruments of \$3,500,000,000 (1 January 2018: \$1,300,000,000). All equity instruments are fully paid.

**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**

Additional Tier 1 capital issued by the Company comprises two separate instruments, with balances of \$2,200 million and \$1,300 million, respectively. 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 outstanding principal amount of the Instruments, together with any accrued interest coupon, will be written down. In this situation, Morgan Stanley International Limited, the holder 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 the \$2,200 million instrument, and daily for the \$1,300 million instrument.

Coupons on the Instruments are non-cumulative and payable at a fixed rate of 7.5% per annum for \$2,200 million instrument, and 9% per annum for \$1,300 million instrument. Payment of the coupon is wholly at the discretion of the Group.

**Reserves***Share premium*

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

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **20. EQUITY INSTRUMENTS (CONTINUED)**

##### *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'.

##### *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 32).

##### *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'.

#### **21. DIVIDENDS**

On 1 March 2019 as part of the Group's Brexit planning, 120,000 €1 ordinary shares in MSEHSE and 451,000,000 €1 ordinary shares in MSESE were transferred from the Company to MSIUK by way of a dividend in specie, with a value of \$141,837 and \$530,917,113, respectively.

On 31 May 2019, the Directors approved a coupon payment on the \$1,300 million Additional Tier 1 capital instrument of \$118,625,000 (31 December 2018: \$118,625,000) out of reserves available for distribution. The coupon was paid on 30 May 2019.

On 31 October 2019, the Directors approved a coupon payment on the \$2,200 million Additional Tier 1 capital instrument of \$209,462,000 (2018: \$nil) out of reserves available for distribution. The coupon was paid on 2 December 2019.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****22. 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:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Cash and short term deposits	28,803	30,829
Bank loans and overdrafts	(9)	(4)
	<u>28,794</u>	<u>30,825</u>

Included within Group and Company 'Cash and short term deposits' is \$10,886 million (2018: \$13,483 million) of segregated client money, held in accordance with the FCA's Client Money Rules. There is an amount for Group of \$130 million (2018: \$126 million) and for the Company of \$45 million (2018: \$64 million), which represents other client money, that is not available for use, by the Group and the Company, respectively. The corresponding payable is recognised and included in 'Trade and other payables'.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****22. ADDITIONAL CASH FLOW INFORMATION (CONTINUED)****b. Reconciliation of cash flows from operating activities**

	Note	2019	2018 (restated)
Profit for the year		549	729
<i>Adjustments for:</i>			
Impairment loss on financial instruments		1	7
Depreciation on property, plant and equipment		5	3
Provisions	17	22	(20)
Interest income		(1,988)	(1,195)
Interest expense		3,467	3,076
Income tax expense	7	211	327
Operating cash flows before changes in operating assets and liabilities		<u>2,267</u>	<u>2,927</u>
Changes in operating assets			
Net decrease in secured financing		3,196	56
Net decrease/(increase) in loans and advances		594	(364)
Net (increase)/decrease in trade and other receivables		(4,592)	5,247
Net (increase)/decrease in investment securities		(9)	29
Net (increase)/decrease in trading financial assets		(57,556)	4,509
Net increase in other assets		(300)	(166)
		<u>(58,667)</u>	<u>9,311</u>
Changes in operating liabilities			
Net increase/(decrease) in secured borrowing		5,547	(2,856)
Net decrease in trade and other payables		(5,444)	(3,802)
Net increase/(decrease) in debt and other borrowings		11,291	(6,168)
Net increase in trading financial assets		45,163	3,554
Net increase in other liabilities		127	28
Net increase/(decrease) in provisions		-	(28)
		<u>56,684</u>	<u>(9,272)</u>
Interest received		1,909	1,156
Interest paid		(3,035)	(2,845)
Income taxes received/(paid)		61	(281)
Effect of foreign exchange movements		122	990
<b>Net cash flows (used in)/from operating activities</b>		<u><u>(659)</u></u>	<u><u>1,986</u></u>

**c. Reconciliation of liabilities arising from financing activities**

As at 31 December 2019 there was \$6,000 million of senior subordinated loans (1 January 2019: \$6,000 million) and \$5,000 million of subordinated loans (1 January 2019: \$5,000 million).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****23. 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.

in \$ millions	Group					
	2019			2018		
	Less than or equal to twelve months	More than twelve months	Total	Less than or equal to twelve months	More than twelve months	Total
<b>ASSETS</b>						
Secured financing	92,444	3	92,447	95,577	66	95,643
Loans and advances	50	153	203	712	124	836
Investment securities	-	141	141	-	132	132
Trade and other receivables	68,063	1,697	69,760	63,542	1,623	65,165
Deferred tax assets	5	65	70	-	5	5
Property, plant and equipment	-	18	18	-	10	10
Other	339,869	-	339,869	284,406	2	284,408
	<u>500,431</u>	<u>2,077</u>	<u>502,508</u>	<u>444,237</u>	<u>1,962</u>	<u>446,199</u>
<b>LIABILITIES</b>						
Secured borrowing	83,217	1,257	84,474	74,952	3,975	78,927
Trade and other payables	85,966	330	86,296	91,187	571	91,758
Debt and other borrowings	24,917	23,606	48,523	4,908	32,207	37,115
Deferred tax liabilities	-	-	-	-	33	33
Post-employment benefit obligations	-	6	6	-	7	7
Other	262,592	-	262,592	217,242	-	217,242
	<u>456,692</u>	<u>25,199</u>	<u>481,891</u>	<u>388,289</u>	<u>36,793</u>	<u>425,082</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****23. EXPECTED MATURITY OF ASSETS AND LIABILITIES (CONTINUED)**

in \$ millions	Company					
	2019		2018		Total	Total
	Less than or equal to twelve months	More than twelve months	Less than or equal to twelve months	More than twelve months		
<b>ASSETS</b>						
Secured financing	92,444	3	92,447	95,577	66	95,643
Loans and advances	50	123	173	820	12	832
Investment securities	-	141	141	-	131	131
Trade and other receivables	68,160	1,683	69,843	63,662	1,598	65,260
Deferred tax assets	5	64	69	-	4	4
Investments in subsidiaries, associates and joint ventures	-	103	103	-	646	646
Property, plant and equipment	-	14	14	-	6	6
Other	339,586	-	339,586	283,667	2	283,669
	<u>500,245</u>	<u>2,131</u>	<u>502,376</u>	<u>443,726</u>	<u>2,465</u>	<u>446,191</u>
<b>LIABILITIES</b>						
Secured borrowing	83,217	1,257	84,474	74,952	3,975	78,927
Trade and other payables	85,963	330	86,293	91,267	571	91,838
Debt and other borrowings	24,917	23,482	48,399	4,818	32,207	37,025
Deferred tax liabilities	-	-	-	-	33	33
Post-employment benefit obligations	-	3	3	-	4	4
Other	262,584	-	262,584	217,232	-	217,232
	<u>456,681</u>	<u>25,072</u>	<u>481,753</u>	<u>388,269</u>	<u>36,790</u>	<u>425,059</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****24. 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.

in \$ millions	EMEA		Americas		Asia		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
External revenues net of interest	4,228	4,611	273	167	912	1,032	5,413	5,810
Profit before income tax	534	831	62	(3)	164	228	760	1,056
Total assets	368,224	325,762	70,952	67,681	63,332	52,756	502,508	446,199

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT****25.1 Risk management procedures**

Risk is an inherent part of the Group and Company's business activity. The Group and Company seek 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 and Company have developed their 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 and Company.

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

**25.2 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 2019*

The table below presents the Management VaR for the Group and Company's trading portfolio on a year-end, average and annual high and low basis for 31 December 2019 and 31 December 2018. As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

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.

in \$ millions	95%/ one-day VaR for the year ended 31 December 2019				95%/ one-day VaR for the year ended 31 December 2018			
	Period end	Average	High	Low	Period end	Average	High	Low
<i>Market risk category:</i>								
Interest rate and credit spread	13	14	20	11	13	15	21	11
Equity price	7	11	27	7	7	11	25	7
Foreign exchange rate	3	5	9	2	5	4	8	2
Commodity price	2	2	4	1	2	1	2	1
Less diversification benefit <sup>(1)(2)</sup>	(10)	(13)	N/A	N/A	(10)	(12)	N/A	N/A
<b>Primary Risk Categories</b>	<b>15</b>	<b>19</b>	<b>31</b>	<b>13</b>	<b>17</b>	<b>19</b>	<b>31</b>	<b>15</b>
Credit Portfolio <sup>(3)</sup>	5	5	8	4	4	4	6	3
Less diversification benefit <sup>(1)(2)</sup>	(5)	(4)	N/A	N/A	(3)	(2)	N/A	N/A
<b>Total Management VaR</b>	<b>15</b>	<b>20</b>	<b>34</b>	<b>14</b>	<b>18</b>	<b>21</b>	<b>31</b>	<b>15</b>

(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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.2 Market risk (continued)**

*VaR for the year ended 31 December 2019 (continued)*

The average VaR for Primary Risk Categories for 2019 was \$19 million, unchanged from 2018.

The average Credit Portfolio VaR for 2019 was \$5 million compared with \$4 million for 2018. The increase in the average VaR over the year was driven by exposure changes during 2019.

The average total VaR for 2019 was \$20 million compared with \$21 million for 2018.

*Non-trading risks for the year ended 31 December 2019*

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

*Interest rate risk*

The Group and 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 loss or gain, respectively, of approximately \$53.8 million as at 31 December 2019, compared to a net loss or gain of \$130.0 million as at 31 December 2018.

*Funding liabilities*

The credit spread risk sensitivity of the Group and Company's mark-to-market funding liabilities corresponds to an increase in value of approximately \$4.6 million and \$4.3 million for each 1 basis point widening in the Group and Company's credit spread level at 31 December 2019 and 31 December 2018 respectively.

*Equity investments price risk*

The Group and Company are 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. As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

<b>in \$ millions</b>	<b>31 December 2019</b>	<b>31 December 2018</b>
	<b>10% sensitivity</b>	<b>10% sensitivity</b>
Investment securities	<u>14</u>	<u>13</u>

*Currency risk*

The Group and Company have 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 and Company also have 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 and Company, by foreign currency, relating to the retranslation of branches and subsidiaries which are not denominated in US dollars. 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.2 Market risk (continued)***Currency risk (continued)*

Group	2019			2018		
	Sensitivity to applied percentage change in currency (+/-)			Sensitivity to applied percentage change in currency (+/-)		
	Foreign currency exposure	Percentage change applied	Other comprehensive income	Foreign currency exposure	Percentage change applied	Other comprehensive income
<b>in \$ millions</b>		%			%	
Euro	45	14%	6	579	14%	81
Taiwan New Dollar	135	8%	11	128	8%	10
Polish Zloty	6	17%	1	5	17%	1
South Korean Won	270	11%	30	246	11%	27
Swiss Franc	23	4%	1	21	12%	3
	<u>479</u>		<u>49</u>	<u>979</u>		<u>122</u>

Company	2019			2018		
	Sensitivity to applied percentage change in currency (+/-)			Sensitivity to applied percentage change in currency (+/-)		
	Foreign currency exposure	Percentage change applied	Other comprehensive income	Foreign currency exposure	Percentage change applied	Other comprehensive income
<b>in \$ millions</b>		%			%	
Euro	7	14%	1	6	14%	1
Polish Zloty	6	17%	1	5	17%	1
South Korean Won	270	11%	30	246	11%	27
Swiss Franc	23	4%	1	21	12%	3
	<u>306</u>		<u>33</u>	<u>278</u>		<u>32</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 2015 to 31 December 2019 (2018: 1 January 2014 to 31 December 2018). 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 and Company also have foreign currency exposure arising from trading activities and assets and liabilities in currencies other than US dollars, which are actively managed by hedging with other Morgan Stanley Group undertakings.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **25. FINANCIAL RISK MANAGEMENT (CONTINUED)**

##### **25.3 Credit risk (continued)**

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

###### **25.3.1 Exposure to credit risk**

The maximum exposure to credit risk (“gross credit exposure”) of the Group and Company as at 31 December 2019 is disclosed below, based on the carrying amounts of the financial assets and the maximum amount that the Group and Company could have to pay in relation to unrecognised financial instruments, which the Group and Company believes are subject to credit risk.

Where the Group or 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 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 Group and Company manages this issuer credit risk through their market risk management infrastructure and this traded credit risk is incorporated within the VaR based risk measures included in the market risk disclosure. However, listed derivatives are included below as they are recognised as having credit risk exposure to central counterparties.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.1 Exposure to credit risk (continued)***Exposure to credit risk by class*

Class in \$ millions	Group					
	2019			2018		
	Gross credit exposure	Credit enhance- ments	Net credit exposure <sup>(1)</sup>	Gross credit exposure	Credit enhance- ments	Net credit exposure <sup>(1)</sup>
<b>Subject to ECL:</b>						
Cash and short-term deposits	28,803	-	28,803	30,829	-	30,829
Loans and advances	184	-	184	825	-	825
Trade and other receivables <sup>(2)</sup>	67,967	-	67,967	64,282	-	64,282
<b>Not subject to ECL:</b>						
Trading financial assets						
Derivatives	216,289	(209,619)	6,670	179,311	(173,250)	6,061
Secured financing	92,447	(91,419)	1,028	95,643	(94,546)	1,097
Loans and advances	19	-	19	11	-	11
Trade and other receivables <sup>(2)</sup>	1,656	(583)	1,073	780	(370)	410
	<u>407,365</u>	<u>(301,621)</u>	<u>105,744</u>	<u>371,681</u>	<u>(268,166)</u>	<u>103,515</u>
<b>Unrecognised financial</b>						
<b>Subject to ECL:</b>						
Loan commitments	1,767	-	1,767	1,556	-	1,556
Letters of credit	104	-	104	1	-	1
<b>Not subject to ECL:</b>						
Loan commitments	2,179	(1,059)	1,120	752	(84)	668
Guarantees	1	-	1	1	-	1
Unsettled securities purchased under agreements to resell <sup>(3)</sup>	37,367	-	37,367	34,623	-	34,623
Total unrecognised financial instruments	<u>41,418</u>	<u>(1,059)</u>	<u>40,359</u>	<u>36,933</u>	<u>(84)</u>	<u>36,849</u>
	<u>448,783</u>	<u>(302,680)</u>	<u>146,103</u>	<u>408,614</u>	<u>(268,250)</u>	<u>140,364</u>

(1) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$4,970 million of an available \$27,617 million (2018: \$4,392 million of an available \$29,892 million) to be offset in the event of default by certain Morgan Stanley counterparties.

(2) 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.

(3) 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.1 Exposure to credit risk (continued)***Exposure to credit risk by class*

Class in \$ millions	Company					
	2019			2018		
	Gross credit exposure	Credit enhance- ments	Net credit exposure <sup>(1)</sup>	Gross credit exposure	Credit enhance- ments	Net credit exposure <sup>(1)</sup>
<b>Subject to ECL:</b>						
Cash and short-term deposits	28,523	-	28,523	30,076	-	30,076
Loans and advances	154	-	154	821	-	821
Trade and other receivables <sup>(2)</sup>	68,051	-	68,051	64,376	-	64,376
<b>Not subject to ECL:</b>						
Trading financial assets						
Derivatives	216,289	(209,619)	6,670	179,311	(173,250)	6,061
Secured financing	92,447	(91,419)	1,028	95,643	(94,546)	1,097
Loans and advances	19	-	19	11	-	11
Trade and other receivables <sup>(2)</sup>	1,656	(583)	1,073	780	(370)	410
	<u>407,139</u>	<u>(301,621)</u>	<u>105,518</u>	<u>371,018</u>	<u>(268,166)</u>	<u>102,852</u>
<b>Unrecognised financial instruments</b>						
<b>Subject to ECL:</b>						
Loan commitments	1,767	-	1,767	1,556	-	1,556
Letters of credit	104	-	104	1	-	1
<b>Not subject to ECL:</b>						
Loan commitments	2,179	(1,059)	1,120	752	(84)	668
Letters of credit	1	-	1	1	-	1
Unsettled securities purchased under agreements to resell <sup>(3)</sup>	<u>37,367</u>	<u>-</u>	<u>37,367</u>	<u>34,623</u>	<u>-</u>	<u>34,623</u>
Total unrecognised financial instruments	<u>41,418</u>	<u>(1,059)</u>	<u>40,359</u>	<u>36,933</u>	<u>(84)</u>	<u>36,849</u>
	<u>448,557</u>	<u>(302,680)</u>	<u>145,877</u>	<u>407,951</u>	<u>(268,250)</u>	<u>139,701</u>

(1) Of the residual net credit exposure, intercompany cross product netting arrangements are in place which would allow for an additional \$4,942 million of an available \$27,616 million (31 December 2018: \$4,364 million of an available \$29,885 million) to be offset in the event of default by certain Morgan Stanley counterparties.

(2) 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.

(3) 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.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **25. FINANCIAL RISK MANAGEMENT (CONTINUED)**

##### **25.3 Credit risk (continued)**

##### **25.3.1 Exposure to credit risk (continued)**

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 28.

##### **25.3.2 Credit quality**

###### *Exposure to credit risk by internal rating grades*

Internal credit ratings are derived using methodologies generally consistent with those used by external agencies.

Investment grade: AAA - BBB

Non-investment grade: BB - CCC

Default: D

The table on the next page presents gross carrying/ nominal amount by internal rating grade. All exposures subject to ECL are Stage 1, unless otherwise shown. For the unrated trade receivable balances, a lifetime ECL is always calculated without considering whether SICR has occurred.

Until 31 December 2018, unless credit-impaired, the Group and Company had reported all trade receivables as Stage 2 for the purpose of the disclosure below, reflecting the Group and Company's accounting policy to measure lifetime credit losses on trade receivables under the simplified approach. From 1 January 2019, the Group and Company have continued to apply the simplified approach but, notwithstanding the recognition of lifetime credit losses under the simplified approach, has revised the presentation of these balances, such that trade receivables are now reported as Stage 1, where they are not credit-impaired.

The Group and Company believes that this presentation, which is more consistent with industry practice for such disclosures, better reflects the credit risk associated with such assets, notwithstanding the fact that a lifetime approach is used for their ECL measurement, and provides more relevant information. This change has also been applied to the prior year disclosure below. There is no impact on the reported level of ECLs as a consequence of this presentational change.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.2 Credit quality (continued)**

At 31 December 2019 in \$ millions	Investment grade				Group		Total	Net of ECL
	AAA	AA	A	BBB	Non- Investment Grade	Unrated <sup>(1)</sup> /Default		
<b>Subject to ECL:</b>								
Cash and short term deposit	7,483	8,503	12,190	584	43	-	28,803	28,803
Loans and advances								
Stage 1	-	-	127	28	23	-	178	178
Stage 2	-	-	-	-	8	-	8	6
Trade and other receivables								
Stage 1	2,330	5,320	38,228	10,858	5,698	5,492	67,926	67,926
Stage 3	2	2	3	5	-	32	44	41
	<b>9,815</b>	<b>13,825</b>	<b>50,548</b>	<b>11,475</b>	<b>5,772</b>	<b>5,524</b>	<b>96,959</b>	<b>96,954</b>
<b>Not subject to ECL:</b>								
Trading financial assets - derivatives	3,854	22,558	142,101	27,228	15,302	5,246	216,289	216,289
Secured financing	2,408	14,723	50,684	20,603	4,029	-	92,447	92,447
Loans and advances	-	-	-	1	18	-	19	19
Trade and other receivables	-	36	579	5	1,036	-	1,656	1,656
	<b>6,262</b>	<b>37,317</b>	<b>193,364</b>	<b>47,837</b>	<b>20,385</b>	<b>5,246</b>	<b>310,411</b>	<b>310,411</b>
<b>Unrecognised financial instruments subject to ECL:</b>								
Loan commitments								
Stage 1	-	487	788	297	179	-	1,751	1,751
Stage 2	-	-	-	-	16	-	16	16
Letters of credit	-	-	103	-	1	-	104	104
	<b>-</b>	<b>487</b>	<b>891</b>	<b>297</b>	<b>196</b>	<b>-</b>	<b>1,871</b>	<b>1,871</b>
<b>Total unrecognised financial instruments not subject to ECL:</b>								
Unsettled securities purchased under agreements to resell	-	21,441	4,846	10,671	409	-	37,367	37,367
Guarantees	-	-	-	-	1	-	1	1
Loan commitments	-	135	765	617	638	24	2,179	2,179
	<b>-</b>	<b>21,576</b>	<b>5,611</b>	<b>11,288</b>	<b>1,048</b>	<b>24</b>	<b>39,547</b>	<b>39,547</b>

(1) For the unrated trade receivables, a lifetime ECL is always calculated without considering whether SICR has occurred.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.2 Credit quality (continued)**

31 December 2018 in \$ millions	Investment grade			Group			Total Gross Carrying Amount	Net of ECL
	AAA	AA	A	BBB	Non- Investment Grade	Unrated <sup>(1)</sup> / Default		
<b>Subject to ECL:</b>								
Cash and short term deposit	8,233	7,606	13,918	916	156	-	30,829	30,829
Loans and advances	-	-	98	705	22	-	825	825
Trade and other receivables								
Stage 1	1,707	3,860	39,247	8,622	6,907	3,913	64,256	64,256
Stage 3	-	3	1	4	1	20	29	26
	<b>9,940</b>	<b>11,469</b>	<b>53,264</b>	<b>10,247</b>	<b>7,086</b>	<b>3,933</b>	<b>95,939</b>	<b>95,936</b>
<b>Not subject to ECL:</b>								
Trading financial assets - derivatives	4,602	12,021	106,983	41,482	13,585	638	179,311	179,311
Secured financing	3,895	20,145	49,719	18,445	3,423	16	95,643	95,643
Loans and advances	-	-	-	-	11	-	11	11
Trade and other receivables	-	-	461	178	141	-	780	780
	<b>8,497</b>	<b>32,166</b>	<b>157,163</b>	<b>60,105</b>	<b>17,160</b>	<b>654</b>	<b>275,745</b>	<b>275,745</b>
<b>Unrecognised financial instruments subject to ECL:</b>								
Loan commitments								
Stage 1	-	435	683	294	116	-	1,528	1,528
Stage 2	-	-	-	-	29	-	29	29
Letters of credit	-	-	-	-	1	-	1	1
	-	<b>435</b>	<b>683</b>	<b>294</b>	<b>146</b>	-	<b>1,558</b>	<b>1,558</b>
<b>Unrecognised financial instruments not subject to ECL:</b>								
Loan commitments	-	137	246	203	159	6	751	751
Letters of credit	-	-	-	-	1	-	1	1
Unsettled securities purchased under agreements to resell	-	17,167	7,732	8,579	1,146	-	34,624	34,624
	-	<b>17,304</b>	<b>7,978</b>	<b>8,782</b>	<b>1,306</b>	<b>6</b>	<b>35,376</b>	<b>35,376</b>

(1) For the unrated trade receivables, a lifetime ECL is always calculated without considering whether SICR has occurred.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

### 25. FINANCIAL RISK MANAGEMENT (CONTINUED)

#### 25.3 Credit risk (continued)

##### 25.3.2 Credit quality (continued)

At 31 December 2019 in \$ millions	Company					Unrated <sup>(1)</sup> / Default	Total	Net of ECL
	Investment grade				Non- Investment Grade			
	AAA	AA	A	BBB				
<b>Subject to ECL:</b>								
Cash and short term deposit	7,483	8,500	12,159	338	43	-	28,523	28,523
Loans and advances								
Stage 1	-	-	123	3	22	-	148	148
Stage 2	-	-	-	-	8	-	8	6
Trade and other receivables								
Stage 1	2,331	5,325	38,222	10,963	5,702	5,467	68,010	68,010
Stage 3	2	2	3	5	-	32	44	41
	<b>9,816</b>	<b>13,827</b>	<b>50,507</b>	<b>11,309</b>	<b>5,775</b>	<b>5,499</b>	<b>96,733</b>	<b>96,728</b>
<b>Not subject to ECL:</b>								
Trading financial assets - derivatives	3,854	22,558	142,101	27,228	15,302	5,246	216,289	216,289
Secured financing	2,408	14,723	50,684	20,603	4,029	-	92,447	92,447
Loans and advances	-	-	-	1	18	-	19	19
Trade and other receivables	-	36	579	5	1,036	-	1,656	1,656
	<b>6,262</b>	<b>37,317</b>	<b>193,364</b>	<b>47,837</b>	<b>20,385</b>	<b>5,246</b>	<b>310,411</b>	<b>310,411</b>
<b>Unrecognised financial instruments subject to ECL:</b>								
Loan commitments								
Stage 1	-	487	788	297	179	-	1,751	1,751
Stage 2	-	-	-	-	16	-	16	16
Letters of credit	-	-	103	-	1	-	104	104
	-	<b>487</b>	<b>891</b>	<b>297</b>	<b>196</b>	-	<b>1,871</b>	<b>1,871</b>
<b>Total unrecognised financial instruments not subject to ECL:</b>								
Unsettled securities purchased under agreements to resell	-	21,441	4,846	10,671	409	-	37,367	37,367
Letters of credit	-	-	-	-	1	-	1	1
Loan commitments	-	135	765	617	638	24	2,179	2,179
	-	<b>21,576</b>	<b>5,611</b>	<b>11,288</b>	<b>1,048</b>	<b>24</b>	<b>39,547</b>	<b>39,547</b>

(1) For the unrated trade receivables, a lifetime ECL is always calculated without considering whether SICR has occurred.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.2 Credit quality (continued)**

31 December 2018 in \$ millions	Company Investment grade					Non- Investme nt Grade	Unrated <sup>(1)</sup> / Default	Total Gross Carrying Amount	Net of ECL
	AAA	AA	A	BBB					
<b>Subject to ECL:</b>									
Cash and short term deposit	8,233	7,606	13,689	392	156	-	-	30,076	30,076
Loans and advances Trade and other receivables	-	-	-	799	22	-	-	821	821
Stage 1	1,706	3,857	39,291	8,655	6,892	3,949	-	64,350	64,350
Stage 3	-	3	1	4	1	20	-	29	26
	<b>9,939</b>	<b>11,466</b>	<b>52,981</b>	<b>9,850</b>	<b>7,071</b>	<b>3,969</b>	-	<b>95,276</b>	<b>95,273</b>
<b>Not subject to ECL:</b>									
Trading financial assets - derivatives	4,602	12,021	106,983	41,482	13,585	638	-	179,311	179,311
Secured financing	3,895	20,145	49,719	18,445	3,423	16	-	95,643	95,643
Loans and advances Trade and other receivables	-	-	-	-	11	-	-	11	11
	-	-	461	178	141	-	-	780	780
	<b>8,497</b>	<b>32,166</b>	<b>157,163</b>	<b>60,105</b>	<b>17,160</b>	<b>654</b>	-	<b>275,745</b>	<b>275,745</b>
<b>Unrecognised financial instruments subject to ECL:</b>									
Loan commitments									
Stage 1	-	435	683	294	116	-	-	1,528	1,528
Stage 2	-	-	-	-	29	-	-	29	29
Letters of credit	-	-	-	-	1	-	-	1	1
	-	<b>435</b>	<b>683</b>	<b>294</b>	<b>146</b>	-	-	<b>1,558</b>	<b>1,558</b>
<b>Unrecognised financial instruments not subject to ECL:</b>									
Loan commitments	-	137	246	203	159	6	-	751	751
Letters of credit	-	-	-	-	1	-	-	1	1
Unsettled securities purchased under agreements to resell	-	17,167	7,732	8,579	1,146	-	-	34,624	34,624
	-	<b>17,304</b>	<b>7,978</b>	<b>8,782</b>	<b>1,306</b>	<b>6</b>	-	<b>35,376</b>	<b>35,376</b>

(1) For the unrated trade receivables, a lifetime ECL is always calculated without considering whether SICR has occurred.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.3 Credit risk (continued)****25.3.3 Expected credit loss allowance**

*Financial instruments subject to the impairment requirements of IFRS 9*

There have been no changes made to estimation techniques or significant assumptions for estimating impairment during the year. As at 31 December 2019, there is no collateral held against credit-impaired assets (2018: \$nil).

The table below shows the financial assets and unrecognised financial instruments subject to the impairment requirements of IFRS 9 and related ECL allowance. The \$5 million (2018: \$3 million) of ECL allowance recognised relates to financial assets classified within stages 2 and 3 of the impairment model. No ECL has been recognised on stage 1 financial assets and unrecognised financial instruments as these are generally held with highly rated counterparties and are therefore considered to have de minimus ECL. Within trade receivables, the gross carrying amount on which no ECL is recognised because of collateral held is \$44,005 million (2018: \$41,558 million). The remaining stage 1 trade receivables are short term in nature and considered to have de minimus ECL.

<b>Group</b> <b>in \$ millions</b>	<b>2019</b>			<b>2018</b>		
	<b>Gross carrying/nominal amount</b>	<b>Allowance for ECL</b>	<b>Net carrying amount</b>	<b>Gross carrying/nominal amount</b>	<b>Allowance for ECL</b>	<b>Net carrying amount</b>
Cash and short term deposits	28,803	-	28,803	30,829	-	30,829
Loans and advances	186	(2)	184	825	-	825
Trade and other receivables <sup>(1)</sup>	67,970	(3)	67,967	64,285	(3)	64,282
<b>Total gross carrying amount on balance sheet</b>	<b>96,959</b>	<b>(5)</b>	<b>96,954</b>	<b>95,939</b>	<b>(3)</b>	<b>95,936</b>
Loan commitments	1,767	-	1,767	1,558	-	1,558
Letters of credit	104	-	104	-	-	-
<b>Total</b>	<b>98,830</b>	<b>(5)</b>	<b>98,825</b>	<b>97,497</b>	<b>(3)</b>	<b>97,494</b>
<b>Company</b>						
<b>in \$ millions</b>						
Cash and short term deposits	28,523	-	28,523	30,076	-	30,076
Loans and advances	157	(2)	155	821	-	821
Trade and other receivables <sup>(1)</sup>	68,054	(3)	68,051	64,379	(3)	64,376
<b>Total gross carrying amount on balance sheet</b>	<b>96,734</b>	<b>(5)</b>	<b>96,729</b>	<b>95,276</b>	<b>(3)</b>	<b>95,273</b>
Loan commitments	1,767	-	1,767	1,558	-	1,558
Letters of credit	104	-	104	-	-	-
<b>Total</b>	<b>98,605</b>	<b>(5)</b>	<b>98,600</b>	<b>96,834</b>	<b>(3)</b>	<b>96,831</b>

(1) In the prior year, 'Trade and other receivables' included gross carrying amount of \$74 million and related ECL of \$34 million in relation to capitalised unbilled expenses on revenue contracts. The net amount has been classified in 'Other assets' in the current year to reflect that these are not financial receivable balances. December 2018 amounts have been represented to conform to current year presentation. The related income statement charge for the 12 months to 31 December 2019 of \$21 million (2018: \$5 million) has been re-presented within 'Operating expense' rather than ECL impairment charge.

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **25. FINANCIAL RISK MANAGEMENT (CONTINUED)**

##### **25.4 Liquidity and funding risk**

Liquidity and funding risk refers to the risk that the Group or Company will be unable to finance their 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 and Company'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.

##### *Maturity analysis*

In the following maturity analysis of financial liabilities, derivative contracts and other financial liabilities held as part of the Group and Company's trading activities are presented at fair value, consistent with how these financial liabilities are managed, and disclosed as on demand. Derivatives not held as part of the Group or 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 Group or Company arising from financial liabilities to their earliest contractual maturities as at 31 December 2019 and 31 December 2018. 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 and 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 Group and Company.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.4 Liquidity and funding risk (continued)***Maturity analysis (continued)*

in \$ millions	Group						Total
	On demand	Less than 1 month	1 month - 3 months	3 months - 1 year	1 year - 5 years	Greater than 5 years	
<b>31 December 2019</b>							
<b>Financial liabilities</b>							
Bank loans and overdrafts	9	-	-	-	-	-	9
Trading financial liabilities:							
Derivatives	215,717	-	-	-	-	-	215,717
Other	46,539	-	-	-	-	-	46,539
Secured borrowing	67,166	5,793	5,444	4,894	1,260	-	84,557
Trade and other payables	85,206	-	-	523	93	238	86,060
Debt and other borrowings	710	85	23,933	1,009	14,573	10,053	50,363
<b>Total financial liabilities</b>	<b>415,347</b>	<b>5,878</b>	<b>29,377</b>	<b>6,426</b>	<b>15,926</b>	<b>10,291</b>	<b>483,245</b>
Guarantees	343	-	-	-	-	-	343
Letters of credit	-	-	-	-	105	-	105
Loan commitments	3,945	-	-	-	-	-	3,945
Underwriting commitments	-	-	-	637	-	-	637
Unsettled securities purchased under agreements to resell <sup>(1)</sup>	27,720	6,534	512	2,378	223	-	37,367
Other commitments	25	-	-	-	-	-	25
<b>Total unrecognised financial instruments</b>	<b>32,033</b>	<b>6,534</b>	<b>512</b>	<b>3,015</b>	<b>328</b>	<b>-</b>	<b>42,422</b>
<b>31 December 2018</b>							
<b>Financial liabilities</b>							
Bank loans and overdrafts	4	-	-	-	-	-	4
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
<b>Total financial liabilities</b>	<b>363,915</b>	<b>7,832</b>	<b>10,744</b>	<b>6,828</b>	<b>25,310</b>	<b>13,922</b>	<b>428,551</b>
<b>Unrecognised financial instruments</b>							
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 <sup>(1)</sup>	31,955	1,689	-	979	-	-	34,623
Other commitments	22	-	-	-	-	-	22
<b>Total unrecognised financial instruments</b>	<b>34,690</b>	<b>1,689</b>	<b>-</b>	<b>1,666</b>	<b>2</b>	<b>-</b>	<b>38,047</b>

(1) The Group enters into forward starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2019 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount at 31 December 2019, \$27,720 million settled within three business days.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****25. FINANCIAL RISK MANAGEMENT (CONTINUED)****25.4 Liquidity and funding risk (continued)***Maturity analysis (continued)*

31 December 2019 in \$ millions	Company						Total
	On demand	Less than 1 month	1 month - 3 months	3 months - 1 year	1 year - 5 years	Greater than 5 years	
<b>Financial liabilities</b>							
Bank loans and overdrafts	9	-	-	-	-	-	9
Trading financial liabilities:							
Derivatives	215,717	-	-	-	-	-	215,717
Other	46,539	-	-	-	-	-	46,539
Secured borrowing	67,166	5,793	5,444	4,894	1,260	-	84,557
Trade and other payables	85,203	-	-	523	93	238	86,057
Debt and other borrowings	918	85	23,726	1,009	14,449	10,053	50,240
<b>Total financial liabilities</b>	<b>415,552</b>	<b>5,878</b>	<b>29,170</b>	<b>6,426</b>	<b>15,802</b>	<b>10,291</b>	<b>483,119</b>
<b>Unrecognised financial instruments</b>							
Guarantees	343	-	-	-	-	-	343
Letters of credit	-	-	-	-	105	-	105
Loan commitments	3,945	-	-	-	-	-	3,945
Underwriting commitments	-	-	-	637	-	-	637
Unsettled securities purchased under agreements to resell <sup>(1)</sup>	27,720	6,534	512	2,378	223	-	37,367
Other commitments	25	-	-	-	-	-	25
<b>Total unrecognised financial instruments</b>	<b>32,033</b>	<b>6,534</b>	<b>512</b>	<b>3,015</b>	<b>328</b>	<b>-</b>	<b>42,422</b>
<b>31 December 2018</b>							
<b>Financial liabilities</b>							
Bank loans and overdrafts	4	-	-	-	-	-	4
Derivatives	174,113	-	-	-	-	-	174,113
Other	42,981	-	-	-	-	-	42,981
Secured borrowing	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
<b>Total financial liabilities</b>	<b>364,000</b>	<b>7,832</b>	<b>10,744</b>	<b>6,823</b>	<b>25,219</b>	<b>13,923</b>	<b>428,541</b>
<b>Unrecognised financial instruments</b>							
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 <sup>(1)</sup>	31,955	1,689	-	979	-	-	34,623
Other commitments	22	-	-	-	-	-	22
<b>Total unrecognised financial instruments</b>	<b>34,690</b>	<b>1,689</b>	<b>-</b>	<b>1,666</b>	<b>2</b>	<b>-</b>	<b>38,047</b>

(1) The Company enters into forward starting reverse repurchase agreements (agreements which have a trade date at or prior to 31 December 2019 and settle subsequent to period end). These agreements primarily settle within three business days and of the total amount at 31 December 2019, \$27,720 million settled within three business days.

The Group and Company do not expect that all of the cash flows associated with financial guarantees, letters of credits and loan commitments will be required.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****26. 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 and Company enter 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 and Company's inventory positions.

The Group and 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 consolidated statement of financial position. The Group and 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.

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 or 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 Group and 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 \$51,570 million (2018: \$ 42,423 million).

The following table presents those financial assets which have been sold or otherwise transferred, but which for accounting purposes remain recognised on the Group's consolidated statement of financial position and the Company's 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.

As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

<b>\$millions</b>	<b>2019</b>	<b>2018</b>
<b>Trading financial assets</b>		
Debt securities	22,065	22,203
Equity instruments	51,701	40,413
	<u>73,766</u>	<u>62,616</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****27. FINANCIAL ASSETS ACCEPTED AS COLLATERAL**

The Group and Company's policy is generally to take possession of securities received as collateral, securities purchased under agreements to resell and securities borrowed. The Group and Company monitor 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 and Company 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 for Group and Company as at 31 December 2019 was \$331,750 million (2018: \$341,971 million). Of this amount \$296,576 million (2018: \$307,379 million) has been sold or repledged to third parties in connection with financing activities, or to comply with commitments under short sale transactions.

**28. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING**

In order to manage credit exposure arising from its business activities, the Group and Company apply various credit risk management policies and procedures, see note 25 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 and Company enter into master netting arrangements and collateral arrangements with its counterparties. These agreements provide the Group and Company 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 or Company against the net amount owed by the counterparty.

However, in certain circumstances, the Group and Company 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 and Company may not have sought legal advice to support the enforceability of the agreement.

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. 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 and Company's exposure to credit risk is disclosed in note 25. As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****28. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)**

in \$ millions	Gross amounts	Amounts offset <sup>(1)</sup>	Net amounts	Amounts not offset <sup>(3)(4)</sup>		Net exposure <sup>(5)</sup>
				Financial instruments	Cash collateral <sup>(2)</sup>	
<b>31 DECEMBER 2019</b>						
<b>Assets</b>						
Secured Financing:						
Cash collateral on securities borrowed	38,393	(9,597)	28,796	(28,064)	-	732
Securities purchased under agreement to resell	141,464	(93,955)	47,509	(47,212)	-	297
Trading financial assets - derivatives	297,056	(80,767)	216,289	(183,059)	(26,561)	6,669
<b>TOTAL ASSETS AS AT 31 DECEMBER 2019</b>	<b>476,913</b>	<b>(184,319)</b>	<b>292,594</b>	<b>(258,335)</b>	<b>(26,561)</b>	<b>7,698</b>
<b>Liabilities</b>						
Secured borrowing:						
Cash collateral on securities loaned	32,591	(9,597)	22,994	(22,988)	-	6
Securities sold under agreement to repurchase	128,657	(93,956)	34,701	(33,653)	-	1,048
Trading financial liabilities - derivatives	296,545	(80,828)	215,717	(179,443)	(26,466)	9,808
<b>TOTAL LIABILITIES AS AT 31 DECEMBER 2019</b>	<b>457,793</b>	<b>(184,381)</b>	<b>273,412</b>	<b>(236,084)</b>	<b>(26,466)</b>	<b>10,862</b>
<b>31 DECEMBER 2018</b>						
<b>Assets</b>						
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
<b>TOTAL ASSETS AS AT 31 DECEMBER 2018</b>	<b>440,964</b>	<b>(173,659)</b>	<b>267,305</b>	<b>(236,505)</b>	<b>(23,531)</b>	<b>7,269</b>
<b>Liabilities</b>						
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
<b>TOTAL LIABILITIES AS AT 31 DECEMBER 2018</b>	<b>409,898</b>	<b>(173,206)</b>	<b>236,692</b>	<b>(204,668)</b>	<b>(19,509)</b>	<b>12,515</b>

(1) Includes \$4,056 million and \$4,118 million (31 December 2018: \$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'.

(2) Cash collateral not offset is recognised within Trade and other receivables and Trade and other payables, respectively.

(3) In addition to the balances disclosed in the table above, certain other secured financing and secured borrowing have legally enforceable master netting arrangements in place. As a result, \$2,067 million (31 December 2018: \$2,686 million) of netting is included within the statement of financial position.

(4) In addition to the balances disclosed in the table above, \$1,113 million (31 December 2018: \$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.

(5) Intercompany cross-product legally enforceable netting arrangements are in place which would allow for Group an additional \$4,970 million (31 December 2018: \$4,392 million) and Company an additional \$4,942 million (31 December 2018: \$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 CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****28. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)**

In the table above, 'net exposure' includes the following amounts for which master netting agreements are not in place or may not be legally enforceable:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Secured financing:		
Cash collateral on securities borrowed	195	240
Securities purchased under agreements to resell	227	533
Trading financial assets - derivatives	<u>1,136</u>	<u>1,287</u>
	<u>1,558</u>	<u>2,060</u>
Secured borrowing:		
Cash collateral on securities loaned	-	336
Securities sold under agreements to repurchase	445	1,009
Trading financial liabilities - derivatives	<u>2,012</u>	<u>1,760</u>
	<u>2,457</u>	<u>3,105</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****29. 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. As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

2019	Quoted prices in active market	Observable inputs	Significant unobservable inputs	Total
in \$ millions	(Level 1)	(Level 2)	(Level 3)	
<b>Trading financial assets:</b>				
Government debt securities	13,377	1,930	3	15,310
Corporate and other debt	-	11,004	481	11,485
Corporate equities	67,323	309	28	67,660
<b>Derivatives:</b>				
Interest rate contracts	539	79,255	1,152	80,946
Credit contracts	-	5,844	331	6,175
Foreign exchange and gold contracts	-	84,765	183	84,948
Equity contracts	301	39,334	1,220	40,855
Commodity contracts	6	3,341	18	3,365
<b>Total trading financial assets</b>	<b>81,546</b>	<b>225,782</b>	<b>3,416</b>	<b>310,744</b>
<b>Secured financing:</b>				
Cash collateral on securities borrowed	-	28,796	-	28,796
Securities purchased under agreements to resell	-	47,252	257	47,509
Other secured financing	-	16,142	-	16,142
<b>Total secured financing</b>	<b>-</b>	<b>92,190</b>	<b>257</b>	<b>92,447</b>
Loans and advances - corporate loans	-	10	9	19
Investment securities - corporate equities	19	-	122	141
<b>Trade and other receivables:</b>				
Prepaid OTC contracts	-	1,282	353	1,635
Other	-	-	21	21
<b>Total trade and other receivables</b>	<b>-</b>	<b>1,282</b>	<b>374</b>	<b>1,656</b>
<b>Total financial assets measured at fair value</b>	<b>81,565</b>	<b>319,264</b>	<b>4,178</b>	<b>405,007</b>
<b>Trading financial liabilities:</b>				
Government debt securities	17,920	1,373	-	19,293
Corporate and other debt	-	3,499	20	3,519
Corporate equities	23,717	3	7	23,727
<b>Derivatives:</b>				
Interest rate contracts	13	76,800	446	77,259
Credit contracts	-	6,000	383	6,383
Foreign exchange and gold contracts	2	84,448	192	84,642
Equity contracts	371	41,570	1,947	43,888
Commodity contracts	7	3,521	17	3,545
<b>Total trading financial liabilities</b>	<b>42,030</b>	<b>217,214</b>	<b>3,012</b>	<b>262,256</b>
<b>Secured borrowing:</b>				
Cash collateral on securities loaned	-	1	-	1
Securities sold under agreements to repurchase	-	13,345	-	13,345
Other secured borrowing	-	25,387	-	25,387
<b>Total secured borrowing</b>	<b>-</b>	<b>38,733</b>	<b>-</b>	<b>38,733</b>
<b>Trade and other payables:</b>				
Prepaid OTC contracts	-	1,728	341	2,069
Unfunded loan commitments	-	3	1	4
<b>Total trade and other payables</b>	<b>-</b>	<b>1,731</b>	<b>342</b>	<b>2,073</b>
Debt and other borrowings - issued structured notes	-	6,733	314	7,047
<b>Total financial liabilities measured at fair value</b>	<b>42,030</b>	<b>264,411</b>	<b>3,668</b>	<b>310,109</b>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****29. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)****a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)**

2018 in \$ millions	Quoted prices in active market (Level 1)	Observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
<b>Trading financial assets:</b>				
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
<b>Derivatives:</b>				
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
<b>Total trading financial assets</b>	<b>60,299</b>	<b>189,463</b>	<b>3,426</b>	<b>253,188</b>
<b>Secured financing:</b>				
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
<b>Total secured financing</b>	<b>-</b>	<b>95,326</b>	<b>317</b>	<b>95,643</b>
Loans and advances - corporate loans	-	11	-	11
Investment securities - corporate equities	14	33	85	132
<b>Trade and other receivables:</b>				
Prepaid OTC contracts	-	499	123	622
Margin loans	-	11	130	141
Other	-	-	17	17
<b>Total trade and other receivables</b>	<b>-</b>	<b>510</b>	<b>270</b>	<b>780</b>
<b>Total financial assets measured at fair value</b>	<b>60,313</b>	<b>285,343</b>	<b>4,098</b>	<b>349,754</b>
<b>Trading financial liabilities:</b>				
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
<b>Derivatives:</b>				
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
<b>Total trading financial liabilities</b>	<b>37,675</b>	<b>176,474</b>	<b>2,944</b>	<b>217,093</b>
<b>Secured borrowing:</b>				
Cash collateral on securities loaned	-	366	-	366
Securities sold under agreements to repurchase	-	15,868	-	15,868
Other secured borrowing	-	16,348	-	16,348
<b>Total secured borrowing</b>	<b>-</b>	<b>32,582</b>	<b>-</b>	<b>32,582</b>
<b>Trade and other payables:</b>				
Prepaid OTC contracts	-	628	259	887
Unfunded loan commitments	-	10	-	10
<b>Total trade and other payables</b>	<b>-</b>	<b>638</b>	<b>259</b>	<b>897</b>
Debt and other borrowings - issued structured notes	-	5,217	447	5,664
<b>Total financial liabilities measured at fair value</b>	<b>37,675</b>	<b>214,911</b>	<b>3,650</b>	<b>256,236</b>

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 29. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)

##### a. Financial assets and liabilities recognised at fair value on a recurring basis (continued)

The Group and Company'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
<b>Government debt securities</b>	
US Treasury Securities	
<ul style="list-style-type: none"> <li>Fair value is determined using quoted market prices.</li> </ul>	<ul style="list-style-type: none"> <li>Level 1</li> </ul>
Non US Government Obligations	
<ul style="list-style-type: none"> <li>Fair value is determined using quoted prices in active markets when available. When not available, quoted prices in less-active markets are used. In the absence of position-specific quoted prices, fair value may be determined through benchmarking from comparable instruments.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 1</li> <li>Level 2—if the market is less active or prices are dispersed</li> <li>Level 3—in instances where the prices are unobservable</li> </ul>
<b>Corporate and Other Debt and Corporate loans</b>	
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"> <li>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.</li> <li>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.</li> <li>Market standard cash flow models may be utilised 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.</li> <li>Valuation levels of RMBS and CMBS indices are used as an additional data point for benchmarking purposes or to price outright index positions.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 2 – if value based on observable market data for comparable instruments</li> <li>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</li> </ul>
Corporate Bonds	
<ul style="list-style-type: none"> <li>Fair value is determined using recently executed transactions, market price quotations, bond spreads, CDS spreads obtained from independent external parties such as vendors and brokers adjusted for any basis difference between cash and derivative instruments</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 2 – if value based on observable market data for comparable instruments</li> <li>Level 3 - in instances where prices, or significant spread inputs are unobservable</li> </ul>

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 29. 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
<b>Collateralised Debt Obligations (“CDO”)</b>	
<ul style="list-style-type: none"> <li>The Group holds cash CDOs 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”).</li> <li>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.</li> <li>Asset-backed CDOs 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 position is evaluated independently taking into consideration available comparable market levels, underlying collateral performance and pricing, deal structures and liquidity.</li> </ul>	<ul style="list-style-type: none"> <li>Level 2 - when either comparable market transactions are observable or credit correlation input is insignificant</li> <li>Level 3 - when either comparable market transactions are unobservable or the credit correlation input is significant</li> </ul>
<b>Loans and Lending Commitments</b>	
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Level 2 - if value based on observable market data for comparable instruments</li> <li>Level 3 - in instances where prices or significant spread inputs are unobservable</li> </ul>
<b>Corporate Equities and Equity investments</b>	
<ul style="list-style-type: none"> <li>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.</li> <li>Unlisted equity securities are generally valued based on an assessment of each underlying security, considering rounds of financing and third-party transactions, discounted cash flow analyses and market-based information, including comparable company transactions, trading multiples and changes in market outlook, among other factors</li> <li>Listed fund units are generally marked to the exchange-traded price if actively traded or Net Asset Value (“NAV”) if not. Unlisted fund units are generally marked to NAV.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 1 – exchange-traded securities (including direct equity investments) and fund units if actively traded</li> <li>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</li> <li>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</li> </ul>

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 29. 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
<b>Derivatives</b>	
<p>Listed Derivative Contracts</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Level 1 - listed derivatives that are actively traded</li> <li>Level 2 - listed derivatives that are not actively traded</li> </ul>
<p>OTC Derivative Contracts</p> <ul style="list-style-type: none"> <li>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</li> <li>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.</li> <li>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 historic and/or implied observations, may be employed as a technique to estimate the model input values.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 2 - OTC derivative products valued using observable inputs, or where the unobservable input is not deemed significant</li> <li>Level 3 - OTC derivative products for which the unobservable input is deemed significant</li> </ul>
<b>Securities purchased under agreements to resell, Securities sold under agreements to repurchase, Cash collateral on securities borrowed/securities loaned and other secured financing</b>	
<ul style="list-style-type: none"> <li>Fair value is computed using a standard cash flow discounting methodology.</li> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 2</li> </ul>
<b>Prepaid OTC contracts and issued structured notes</b>	
<ul style="list-style-type: none"> <li>The Group carries structured notes and 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.</li> <li>Fair value is determined using valuation models for the derivative and debt portions of the instruments. These models incorporate observable inputs referencing identical or comparable securities, including prices to which the instruments are linked, interest rate yield curves, option volatility and currency rates, and commodity or equity prices.</li> <li>Independent, external and traded prices for the instruments are considered as well as the impact of the Group's own credit spreads which are based on observed secondary bond market spreads.</li> </ul>	<ul style="list-style-type: none"> <li>Generally Level 2</li> <li>Level 3 - in instances where the unobservable inputs are deemed significant</li> </ul>

**MORGAN STANLEY & CO. INTERNATIONAL plc**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019**

**29. FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE (CONTINUED)**

**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 for the Company or Group between Level 1 and Level 2 of the fair value hierarchy during the year to 31 December 2019 (2018: nil).

**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 2019 and 31 December 2018. 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.

As at 31 December 2019 and 31 December 2018 amounts reported in the following table were the same for both the Company and the Group.

The unrealised gains/ (losses) during the period for assets and liabilities within the Level 3 category presented in the following tables herein 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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

### 29. 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)

2019 in \$ millions	Balance at 1 January 2019	Total gains/(losses) recognised in consolidated income statement <sup>(1)</sup>	Total gains/(losses) recognised in consolidated statement of comprehensive income <sup>(1)</sup>	Purchases	Sales & Issuances <sup>(2)</sup>	Settlements and/or of Level 3 <sup>(3)</sup>	Net transfers in (out)	Balance at 31 December 2019	Unrealised gains/ (losses) for Level 3 assets/ liabilities outstanding as at 31 December 2019 <sup>(4)</sup>
Trading financial assets:									
Government debt securities	13	-	-	2	(2)	-	(10)	3	-
Corporate and other debt	318	(4)	-	182	(187)	-	172	481	(19)
Corporate equities	33	(4)	-	3	(10)	-	6	28	-
<b>Total trading financial assets</b>	<b>364</b>	<b>(8)</b>	<b>-</b>	<b>187</b>	<b>(199)</b>	<b>-</b>	<b>168</b>	<b>512</b>	<b>(19)</b>
Secured financing:									
Securities purchased under agreements to resell	317	-	-	257	(317)	-	-	257	-
<b>Total secured financing</b>	<b>317</b>	<b>-</b>	<b>-</b>	<b>257</b>	<b>(317)</b>	<b>-</b>	<b>-</b>	<b>257</b>	<b>-</b>
Loans and advances:									
Corporate loans	-	-	-	-	-	(1)	10	9	-
Investment securities:									
Corporate equities	85	8	-	1	(3)	-	31	122	8
Trade and other receivables:									
Prepaid OTC contracts	123	175	-	63	(8)	-	-	353	175
Margin loans	130	-	-	-	(57)	-	(73)	-	-
Other	17	-	-	4	-	-	-	21	-
<b>Total trade and other receivables</b>	<b>270</b>	<b>175</b>	<b>-</b>	<b>67</b>	<b>(65)</b>	<b>-</b>	<b>(73)</b>	<b>374</b>	<b>175</b>
<b>Total financial assets measured at fair value</b>	<b>1,036</b>	<b>175</b>	<b>-</b>	<b>512</b>	<b>(584)</b>	<b>(1)</b>	<b>136</b>	<b>1,274</b>	<b>164</b>
Trading financial liabilities:									
Corporate and other debt	-	-	-	-	20	-	-	20	-
Corporate equities	9	2	-	(5)	-	-	5	7	-
Net derivative contracts <sup>(5)</sup>	(127)	(94)	-	(804)	649	376	(107)	81	97
<b>Total trading financial liabilities</b>	<b>(118)</b>	<b>(92)</b>	<b>-</b>	<b>(809)</b>	<b>669</b>	<b>376</b>	<b>(102)</b>	<b>108</b>	<b>97</b>
Trade and other payables:									
Prepaid OTC contracts	259	(183)	-	-	52	(153)	-	341	(173)
Unfunded loan commitments	-	-	-	-	1	-	-	1	-
Debt and other borrowings:									
Issued structured notes	447	(56)	(13)	-	79	(228)	(53)	314	(45)
<b>Total financial liabilities measured at fair value</b>	<b>588</b>	<b>(331)</b>	<b>(13)</b>	<b>(809)</b>	<b>800</b>	<b>(5)</b>	<b>(155)</b>	<b>763</b>	<b>(121)</b>

(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 2019 related to assets and liabilities still outstanding at 31 December 2019. 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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

### 29. 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 in \$ millions	Balance at 1 January 2018	Impact of adopting IFRS 9	Total gains/ (losses) recognised in consolidated income statement <sup>(1)</sup>	Total gains/ (losses) recognised in consolidated statement of comprehensive income <sup>(1)</sup>	Purchases	Sales & Issuances <sup>(2)</sup>	Settlements	Net transfers in and/or (out) of Level 3 <sup>(3)</sup>	Balance at 31 December 2018	Unrealised gains/ (losses) for Level 3 assets/ liabilities outstanding as at 31 December 2018 <sup>(4)</sup>
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
<b>Total trading financial assets</b>	<b>479</b>	<b>(17)</b>	<b>77</b>	<b>-</b>	<b>247</b>	<b>(222)</b>	<b>-</b>	<b>(200)</b>	<b>364</b>	<b>(1)</b>
Secured financing - securities purchased under agreements to resell	-	-	-	-	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	-
<b>Total Trade and other receivables</b>	<b>335</b>	<b>9</b>	<b>(51)</b>	<b>-</b>	<b>33</b>	<b>(50)</b>	<b>-</b>	<b>(6)</b>	<b>270</b>	<b>(45)</b>
<b>Total financial assets measured at fair value</b>	<b>907</b>	<b>9</b>	<b>23</b>	<b>-</b>	<b>597</b>	<b>(294)</b>	<b>-</b>	<b>(206)</b>	<b>1,036</b>	<b>(49)</b>
Trading financial liabilities										
Corporate equities	15	-	4	-	(7)	5	-	-	9	3
Net derivative contracts <sup>(5)</sup>	95	-	360	-	(735)	1,276	(113)	(290)	(127)	352
<b>Total trading financial liabilities</b>	<b>110</b>	<b>-</b>	<b>364</b>	<b>-</b>	<b>(742)</b>	<b>1,281</b>	<b>(113)</b>	<b>(290)</b>	<b>(118)</b>	<b>355</b>
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
<b>Total financial liabilities measured at fair value</b>	<b>640</b>	<b>-</b>	<b>382</b>	<b>26</b>	<b>(766)</b>	<b>1,498</b>	<b>(152)</b>	<b>(224)</b>	<b>588</b>	<b>397</b>

(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 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.

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 (2018: \$nil).

## **MORGAN STANLEY & CO. INTERNATIONAL plc**

### **NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019**

#### **29. 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 the ranges and averages for each material category of assets and liabilities measured at fair value on a recurring basis.

The level of aggregation and breadth of products cause the range of inputs to be wide and not evenly distributed across the inventory of financial instruments. Further, the range of unobservable inputs may differ across groups in the financial services industry because of diversity in the types of products included in each group's inventory.

The following disclosures also 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.

# MORGAN STANLEY & CO. INTERNATIONAL plc

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

### 29. 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 2019	Fair value Smillions	Predominant valuation techniques/ Significant unobservable inputs	Range (Average) <sup>(3)</sup>
<b>ASSETS</b>			
<b>Trading financial assets:</b>			
- Corporate and other debt:			
- Mortgage- and asset-backed securities	231	Comparable pricing Comparable bond price	2 to 101 pts (68 pts)
- Corporate bonds	186	Comparable pricing Comparable bond price	65 to 130 pts (105.14 pts)
- Loans and lending commitments	64	Comparable pricing Comparable loan price	25.5 to 100 pts (77.9 pts)
- Corporate equities	28	Comparable pricing Comparable equity price	100%
<b>Investment securities:</b>			
- Corporate equities	122	Comparable pricing Comparable equity price	96.67% to 100% (98%)
<b>Secured borrowings</b>			
- Securities purchased under agreements to resell	257	Consensus data on underlying curves Availability of market price for collateral cusips	14 to 79 (64)
<b>Trade and other receivables:</b>			
- Prepaid OTC contracts	353	Discounted cash flow Recovery rate	51% to 62% (54%)
<b>LIABILITIES</b>			
<b>Trading financial liabilities:</b>			
- Net derivatives contracts: <sup>(2)</sup>			
- Interest rate	707	Option model Inflation volatility Interest rate-foreign exchange correlation Interest rate curve correlation Inflation curve Interest rate volatility skew Foreign exchange volatility skew Interest rate – inflation correlation Interest rate – quanto correlation Bond volatility	24% to 63% (44%/41%) 55% to 58% (56%/56%) 47% to 90% (71%/72%) 1.05% to 1.07% (1.06%/1.06%) 24% to 155% (63%/52%) -0.2% to -0.1% (-0.1%/-0.1%) -75% to -5% (-39%/-45%) -11% to -1% (-5%/-8%) 4% to 15% (13%/14%)
- Credit	(52)	Comparable pricing Credit spread Comparable bond price Funding spread	4pbs to 373bps (103bps) 12 to 104 pts (59 pts) 46.94 to 117.09 bps (83.9 bps)
- Foreign exchange and gold <sup>(3)</sup>	(9)	Option model Interest rate-foreign exchange correlation Interest rate volatility skew Currency basis Deal execution probability	32% to 57% (46%/46%) 24% to 155% (63%/52%) 10% to 11% (10%/10%) 85% to 95% (93%/95%)

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****29. 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 2019	Fair value \$millions	Predominant valuation techniques/ Significant unobservable inputs	Range (Average) <sup>(3)</sup>
- Equity <sup>(3)</sup>	(726)	Option model	
		At the money volatility	9% to 81% (22%)
		Volatility skew	-3% to 0% (-1%)
		Equity-equity correlation	5% to 98% (69%)
		Equity-foreign exchange correlation	-72% to 60% (-43%)
- Commodity	1	Comparable pricing	
		Comparable price	\$470 to \$1,698 (\$1,036)
- Corporate equities	(7)	Comparable pricing	
		Comparable equity price	100%
<b>Debt and other borrowings:</b>			
- Issued structured notes	(314)	Option model	
		At the money volatility	15% to 44% (22%)
		Volatility skew	-1% to 0% (0%)
		Equity-equity correlation	45% to 91% (77%)
		Equity-foreign exchange correlation	-70% to 13% (-29%)
<b>Trade and other payables:</b>			
- Prepaid OTC contracts	(341)	Discounted cash flow	
		Recovery rate	51% to 62%(54%)

(1) A single amount is disclosed for range and average when there is no significant difference between the minimum, maximum and average. Amounts represent weighted averages except where simple averages and the median of the inputs are provide when more relevant.

(2) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(3) Includes derivative contracts with multiple risks (i.e. hybrid products).

# MORGAN STANLEY & CO. INTERNATIONAL plc

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

### 29. 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 (Average <sup>(1)</sup> )
<b>ASSETS</b>			
<b>Trading financial assets:</b>			
- 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%)
<b>Investment securities:</b>			
- Corporate equities	85	Comparable pricing Comparable equity pricing	95.75% to 100% (96%)
<b>Trade and other receivables:</b>			
- Prepaid OTC contracts	123	Discounted Cash Flow Recovery Rate	22% (22%)
- Margin loans	130	Option Model Volatility Skew	-1%(-1%)
<b>Securities borrowed:</b>			
- Securities purchased under agreements to resell	317	Risk based valuation Comparable collateral price	33 to 119 (76)
<b>LIABILITIES</b>			
<b>Trading financial liabilities:</b>			
- Net derivatives contracts: <sup>(2)</sup>			
- 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	1.22% 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 98.23bp (82.38 bps)
- Foreign exchange and gold <sup>(3)</sup>	(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%)

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****29. 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**

	<b>Fair value \$millions</b>	<b>Predominant valuation techniques/ Significant unobservable inputs</b>	<b>Range (Average<sup>(1)</sup>)</b>
- Equity <sup>(3)</sup>	(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 foreign exchange correlation	-95% to 55% (-46%)
- Commodity	(14)	Comparable pricing	
		Comparable price	\$449 to \$1,440 (\$1,086)
<b>Debt and other borrowings:</b>			
- 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 foreign exchange correlation	-72% to 13% (-37%)
<b>Trade and other payables:</b>			
- Prepaid OTC contracts	(259)	Option model	
		At the money volatility	4% to 30% (12%)

(1) A single amount is disclosed for range and average when there is no significant difference between the minimum, maximum and average. Amounts represent weighted averages except where simple averages and the median of the inputs are provided when more relevant.

(2) Net derivative contracts represent trading financial liabilities – derivative contracts net of trading financial assets – derivative contracts.

(3) Includes derivative contracts with multiple risks (i.e. hybrid products).

**Significant Unobservable Inputs – Description and Sensitivity**

An increase (decrease) to the following inputs would generally result in a higher (lower) fair value:

- **Comparable bond price:** A pricing input used when prices for the identical instrument are not available for comparable instruments. 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 or loan, then adjusting that yield (or spread) to derive a value for the bond or loan. The adjustment to yield (or spread) should account for the relevant differences in the bonds or loans such as maturity or credit quality. 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.
- **Comparable equity price:** 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.
- **Recovery rate:** Amount expresses as a percentage of par that is expected to be received when a credit event occurs.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****29. 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)**

An increase (decrease) to the following inputs would generally result in a lower (higher) fair value:

- Credit spread: 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 US Treasury or LIBOR.
- Funding spread: The cost of borrowing defined as the incremental spread over the OIS rate for a specific collateral rate (which refers to the rate applicable to a specific type of security pledged as collateral).

An increase (decrease) to the following inputs would generally 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:

- Correlation: 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.e. how the change in one variable influences a change in the other variable).
- Interest rate curve: 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.
- Volatility: 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, the tenor and the strike price of the option.
- Volatility skew: The measure of the difference in implied volatility for options with identical underliers and expiry dates but with different strikes.

ii. Sensitivity of fair values to changing significant assumptions to reasonably possible alternatives

As detailed in note 3, 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 and Company have 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 statement. The Group and Company have 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****29. 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)**

in \$ millions	31 December 2019		31 December 2018	
	Favourable changes	Unfavourable changes	Favourable changes	Unfavourable changes
Trading financial assets:				
Corporate and other debt	15	(8)	11	(11)
Corporate equities	-	(8)	2	(7)
Investment securities:				
Corporate equities	30	(13)	36	(30)
Trading financial liabilities:				
Net derivatives contracts <sup>(1)(2)</sup>	51	(27)	17	(21)
Debt and other borrowings:				
Issued structured notes	8	(2)	6	(5)
	<u>104</u>	<u>(58)</u>	<u>72</u>	<u>(74)</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 Level 3 input in its entirety given the lack of observability of funding spreads in the principle 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:

\$ millions	2019	2018
At 1 January	290	280
New transactions	127	134
Amounts recognised in the consolidated income statement during the year	<u>(75)</u>	<u>(124)</u>
<b>At 31 December</b>	<u><b>342</b></u>	<u><b>290</b></u>

The balance above predominately relates to derivatives.

The 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 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****30. ASSETS AND LIABILITIES NOT MEASURED AT FAIR VALUE**

For all financial instruments not carried at fair value, the carrying value is a reasonable approximation of fair value as at 31 December 2019 owing to their short-term nature, with the exception of \$5,000 million of subordinated loan liabilities for which the Level 2 fair value is \$5,357 million. The fair value of subordinated loans has been determined based on the assumption that all subordinated loans are held to maturity. At 31 December 2018 the carrying value was a reasonable approximation of fair value for all financial instruments not carried at fair value.

**31. EMPLOYEE COMPENSATION PLANS**

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

As described in note 6, 1,779 staff transferred from MSES to the Company on 1 July 2019. As a result, equity-settled share-based and cash-based deferred compensation awards, expenses and liabilities previously incurred through management charges were recorded directly on the Company from the transfer date.

**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 forfeited if employment is terminated before the end of the relevant vesting period or cancelled 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.

*Group:*

During the year, Morgan Stanley granted 557,922 RSUs (2018: 105,555 RSUs) to employees of the Group with a weighted average fair value per unit of \$42.33 (2018: \$55.51), based on the market value of Morgan Stanley common stock at grant date. The equity-based compensation expense recognised in the year is \$78 million (2018: \$10 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 'Direct staff costs' and 'Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expense' was \$83 million (2018: \$10 million). This includes the equity-based compensation expense and 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 'Accruals and deferred income' in the statement of financial position, is \$72 million (2018: \$8 million). \$31 million (2018: \$5 million) is expected to be settled wholly within one year and \$41 million (2018: \$3 million) thereafter.

The unrecognised compensation cost related to equity-based awards for the Group is shown in the table below:

<b>in \$ millions</b>	<b>Unvested awards granted:</b>		
	<b>To 31 December 2019</b>	<b>In January 2020</b>	<b>Total</b>
Expense expected to be recognised in:			
2020	48	102	150
2021	17	22	39
2022	3	11	14
Thereafter	-	2	2
	68	137	205

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****31. EMPLOYEE COMPENSATION PLANS (CONTINUED)****Equity-settled share-based compensation plans (continued)**

Amounts above do not reflect forfeitures, cancellations, accelerations or future adjustments to fair value for certain awards.

*Company:*

During the year, Morgan Stanley granted 478,144 RSUs (2018: 93,323 RSUs) to employees of the Company with a weighted average fair value per unit of \$42.38 (2018: \$55.55), based on the market value of Morgan Stanley common stock at grant date. The equity-based compensation expense recognised in the year is \$77 million (2018: \$4 million). As a result of the chargeback agreement described in accounting policy 3q(i), the total amount of equity-based compensation expense recognised within 'Direct staff costs' and 'Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expense' was \$81 million (2018: \$4 million). This includes the equity-based compensation expense and 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 'Accruals and deferred income' in the statement of financial position, is \$71 million (2018: \$8 million). \$30 million (2018: \$5 million) is expected to be settled wholly within one year and \$41 million (2018: \$3 million) thereafter.

**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 forfeited 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.

*Group:*

Awards with a value of \$9 million (2018: \$4 million) were granted to employees of the Group during the year.

The deferred cash-based compensation expenses recognised in the year is shown in the table below:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Deferred cash-based awards	53	8
Return on referenced investments	1	-
	54	8

*Group:*

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 \$63 million (2018: \$12 million). \$31 million (2018: \$9 million) is expected to be settled wholly within one year, and \$32 million (2018: \$3 million) thereafter.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****31. EMPLOYEE COMPENSATION PLANS (CONTINUED)****Deferred cash-based compensation plans (continued)**

The unrecognised compensation cost related to deferred cash-based compensation awards for the Group is shown in the table below:

in \$ millions	Unvested awards granted:		Total
	To 31 December 2019	In January 2020	
Expense expected to be recognised in:			
2020	38	57	95
2021	10	25	35
2022	2	6	8
Thereafter	-	2	2
	50	90	140
	50	90	140

Amounts above do not reflect forfeitures, cancellations, accelerations or assumptions about future market conditions.

The Group economically hedges the exposure created by these deferred compensation plans 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 \$3 million (2018: \$nil) and recognised within 'Trading financial liabilities' is \$nil (2018: \$1 million loss). The related profit recorded within 'Net trading income' for the year is \$4 million (2018: \$1 million loss).

*Company:*

Awards with a value of \$6 million (2018: \$4 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 \$62 million (2018: \$12 million). \$31 million (\$9 million) is expected to be settled wholly within one year and \$31 million (2018: \$3 million) thereafter.

The Company economically hedges the exposure created by these deferred compensation plans 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 \$3 million (2018: \$nil) and recognised within 'Trading financial liabilities' is \$nil (2018: \$1 million). The related profit recorded within 'Net trading income' for the year is \$4 million (2018: \$1 million loss).

**Management charges from fellow Morgan Stanley undertakings**

As described in note 6, the Group and Company utilise 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.

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 32. POST-EMPLOYMENT BENEFITS

##### Defined contribution plans

The Group operates several Morgan Stanley defined contribution plans, which require contributions to be made to funds held in trust, separate from the assets of the Group.

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 (transferred out of the Group 1 March 2019)

The Group pays fixed contributions to the funds, 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 \$3.2 million for the year (2018: \$3.7 million) of which \$nil was accrued at 31 December 2019 (2018: \$nil).

##### *Company:*

The Company operates four Morgan Stanley defined contribution plans:

- 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

The defined contribution pension charge recognised in total profit was \$3 million for the year (2018: \$4 million) of which \$nil was accrued at 31 December 2019 (2018: \$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 (transferred out of the Group 1 March 2019)

## MORGAN STANLEY & CO. INTERNATIONAL plc

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS Year ended 31 December 2019

#### 32. POST-EMPLOYMENT BENEFITS (CONTINUED)

##### Defined benefit plans (continued)

The cumulative amount of actuarial gains and losses recognised in other comprehensive income is a \$1.3 million loss (2018: \$2 million gain). A net liability of \$5.9 million (2018: \$4.5 million) is recognised in the Group's consolidated statement of financial position in respect of these plans.

##### *Company:*

The defined benefit plans operated by the Company 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 \$3.4 million (2018: \$2.6 million) is recognised in the statement of financial position in respect of these plans.

##### Plans operated by fellow Morgan Stanley undertakings

In addition to the above, the Group and Company incurs direct expenses and management charges from fellow Morgan Stanley undertakings for post-employment benefit costs related to the Morgan Stanley UK Group Pension Plan ('the Plan') operated by Morgan Stanley UK Limited ("MSUKL"). The Plan is a defined contribution scheme with a closed defined benefit section.

##### Defined contribution section of the Plan

MSUKL pays fixed contributions to the funds, with no legal or constructive obligation to pay further contributions.

The defined contribution pension charge recognised within 'Direct staff costs' in 'Operating expense' in the income statement was \$10.2 million for the year (2018: \$nil) of which \$nil was accrued at 31 December 2019 (2018: \$nil).

As described in note 6, the Group and Company utilise 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 the Plan.

##### *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, 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 MSUKL. The Trustees of the fund are required by law to act in the interest of the fund 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.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****32. POST-EMPLOYMENT BENEFITS (CONTINUED)****Plans operated by fellow Morgan Stanley undertakings (continued)*****Defined benefit section of the Plan (“DB Plan”) (continued)***

The DB Plan exposes MSUKL 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 157) the interest rate and inflation risks are largely hedged for the majority of the Defined Benefit liabilities on a funding basis (described below). 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 to determine the position of the DB Plan on a funding basis. The funding basis uses assumptions reflective of the cost of securing the benefits built up in the DB Plan with an insurance company and is reviewed each year as part of the annual funding update. The most recent full actuarial valuation of the Plan, carried out at 31 December 2018, showed a surplus of scheme assets over liabilities of \$27 million. Accordingly, no new schedule of contributions was agreed and there were no contributions payable to the DB Plan during 2019 (2018: \$nil).

An actuarial valuation of the DB Plan is carried out annually on an accounting basis by a qualified actuary.

Under the accounting basis, the obligations are measured by discounting the best estimate of future cash flows to be paid out by the DB Plan using the projected unit method. As accrual of future benefits ceased in 1996, no benefit has been attributed to service during subsequent reporting periods and the defined benefit obligation is an actuarial measure of the present value of benefits for service already rendered.

On an accounting basis, the DB Plan has a surplus of scheme assets over liabilities.

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 MSUKL's statement of financial position:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Present value of the defined benefit obligation	(299)	(264)
Fair value of Plan assets	389	337
Surplus of the defined benefit Plan	90	73
Impact of asset ceiling	(69)	(73)
Net Asset	21	-

The surplus recognised in MSUKL statement of financial position is limited to the amount of future economic benefits available to the entity in the form of reduced contributions. Under contractual group recharging arrangements, the corresponding credit recognised in Other Comprehensive Income, has been recharged to the Company within 'Management charges to other Morgan Stanley Group undertakings' in 'Operating expense'.

Of the defined benefit obligation \$297,571,000 (2018: \$262,547,000) relates to deferred members and \$1,513,000 (2018: \$1,019,000) relates to retired members. Upon reaching retirement, until 31 December 2018, the majority members were bought out via an annuity in the name of the retiree, with MSUKL having no further obligation. The Trustee has temporarily suspended the practice of individually buying out members' benefits until the legal position and benefit entitlements with respect to GMP equalisation are clearer. Since the end of 2018, individuals who have reached benefit age have been retained as members in the plan.

The weighted average duration of the defined benefit obligation at 31 December 2019 is 28 years (2018: 29 years).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****32. POST-EMPLOYMENT BENEFITS (CONTINUED)****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 as recognised by MSUKL:

<b>2019 in \$ millions</b>	<b>Present value of obligation</b>	<b>Fair value of plan assets</b>	<b>Total</b>	<b>Impact of asset ceiling</b>	<b>Total</b>
At 1 January 2019	(264)	337	73	(73)	-
Net interest (expense)/income	(7)	8	1	(1)	-
<b>Amounts recognised in the income statement</b>	<b>(7)</b>	<b>8</b>	<b>1</b>	<b>(1)</b>	<b>-</b>
Remeasurements:					
The return on scheme assets (excluding amounts included in net interest expense)	-	36	36	-	36
Actuarial gain arising from changes in demographic assumptions	11	-	11	-	11
Actuarial loss arising from changes in financial assumptions	(50)	-	(50)	-	(50)
Actuarial gain arising from experience adjustments	14	-	14	-	14
Adjustments for restrictions on the defined benefit asset	-	-	-	9	9
<b>Amounts recognised in the statement of comprehensive income</b>	<b>(25)</b>	<b>36</b>	<b>11</b>	<b>9</b>	<b>20</b>
Foreign exchange rate changes	(11)	16	5	(4)	1
Benefit payments	8	(8)	-	-	-
<b>At 31 December 2019</b>	<b>(299)</b>	<b>389</b>	<b>90</b>	<b>(69)</b>	<b>21</b>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****32. POST-EMPLOYMENT BENEFITS (CONTINUED)****Movement in the net defined benefit asset and impact of asset ceiling (continued)**

<b>2018</b> <b>in \$ millions</b>	<b>Present value</b> <b>of obligation</b>	<b>Fair value of</b> <b>plan assets</b>	<b>Total</b>	<b>Impact of</b> <b>asset ceiling</b>	<b>Total</b>
At 1 January 2018	(285)	371	86	(86)	-
Net interest (expense)/income	(6)	8	2	(2)	-
Past Service Cost	(15)	-	(15)	-	(15)
<b>Amounts recognised in the</b> <b>income statement</b>	<b>(21)</b>	<b>8</b>	<b>(13)</b>	<b>(2)</b>	<b>(15)</b>
Remeasurements:					
The return on scheme assets (excluding amounts included in net interest expense)	-	(11)	(11)	-	(11)
Actuarial gain arising from changes in financial assumptions	18	-	18	-	18
Actuarial loss arising from experience assumptions	(1)	-	(1)	-	(1)
Adjustments for restrictions on the defined benefit asset	-	-	-	9	9
<b>Amounts recognised in the</b> <b>statement of comprehensive</b> <b>income</b>	<b>17</b>	<b>(11)</b>	<b>6</b>	<b>9</b>	<b>15</b>
Foreign exchange rate changes	14	(20)	(6)	6	-
Benefit payments	11	(11)	-	-	-
<b>At 31 December 2018</b>	<b>(264)</b>	<b>337</b>	<b>73</b>	<b>(73)</b>	<b>-</b>

A past service cost of \$15 million was recorded by MSUKL in 2018 to incorporate the estimated impact of a High Court ruling on 26 October 2018 which confirmed that pension schemes are required to equalise male and female members' GMP benefits.

**Actuarial assumptions**

The following table presents the principal actuarial assumptions used in the valuation of the DB Plan:

	<b>2019</b>	<b>2018</b>
	<b>%</b>	<b>%</b>
Pre-retirement discount rate	1.8	2.5
Post-retirement discount rate	1.5	2.0
Inflation (RPI)	3.1	3.5
Revaluation in deferment (CPI)	2.1	2.5

The actuarial assumptions presented above are weighted averages for the DB Plan.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****32. POST-EMPLOYMENT BENEFITS (CONTINUED)****Actuarial assumptions (continued)**

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
<b>31 December 2019</b>				
UK	89.2	90.5	90.7	92.1
<b>31 December 2018</b>				
UK	89.8	92.0	91.5	93.8

The sensitivities regarding the principal assumptions used to measure the defined benefit obligation are as follows:

**2019**

<b>Assumption</b>	<b>Change in assumption</b>	<b>Impact on scheme liabilities</b>
Discount rate	Increase/ decrease by 0.25%	Decrease/ increase by 6.86%/7.16%
Inflation assumption	Increase/ decrease by 0.25%	Increase/ decrease by 1.22%/1.21%
Life expectancy	Increase/decrease by 1 year	Increase/decrease by 4.61%/4.56%

**2018**

<b>Assumption</b>	<b>Change in assumption</b>	<b>Impact on scheme liabilities</b>
Discount rate	Increase/ decrease by 0.25%	Decrease/ increase by 6.91%/7.40%
Inflation assumption	Increase/ decrease by 0.25%	Increase/ decrease by 4.01%/3.87%
Life expectancy	Increase/decrease by 1 year	Decrease/Increase by 3.34%/3.34%

The sensitivity analysis presented above has been determined based on reasonably possible changes of the assumptions occurring at 31 December 2019 and 31 December 2018 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**

MSUKL 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 2019****32. 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 MSUKL 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, however, the Trustee has temporarily suspended this practice until the legal position and benefit entitlements with respect to GMP equalisation are clearer.

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.

in \$ millions	Fair value of assets					
	2019			2018		
	Quoted in an active market	Other	Total	Quoted in an active market	Other	Total
Cash and cash equivalents	-	76	76	-	67	67
Corporate bonds	66	-	66	53	-	53
Government bonds	247	-	247	217	-	217
	<u>313</u>	<u>76</u>	<u>389</u>	<u>270</u>	<u>67</u>	<u>337</u>

MSUKL and the Trustees conducted a full asset-liability review for the DB plan during 2019 with underlying investments updated in January 2020. Overall investment strategies remain unchanged with the primary objective being to invest the DB Plan's assets to minimise the volatility of the DB Plan. The asset-liability review occurs every three years with the next scheduled review due to take place in 2021. These studies are used to assist the Trustees and MSUKL in determining the optimal long-term asset allocation with regard to the structure of liabilities within the scheme.

**MORGAN STANLEY & CO. INTERNATIONAL plc**

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019**

**32. POST-EMPLOYMENT BENEFITS (CONTINUED)**

**Plan assets (continued)**

The main strategic choices formulated in the actuarial and technical policy documents of the scheme are:

- a) Assets invested in hedging assets such as gilts, corporate bonds and swap-based hedging funds in order 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 modest degree of excess investment return.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES****Parent and subsidiary relationships***Parent and ultimate controlling entity*

The Group's immediate parent undertaking is Morgan Stanley Investments (UK) 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](http://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, those designated as senior managers under the UK's Senior Manager regime 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.

Key management personnel compensation in respect of their services rendered comprised the following:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Short-term employee benefits	58	66
Share-based payments	52	22
Other long-term employee benefits	29	23
	139	111

The share-based payment costs disclosed above reflect the amortisation of equity-based awards granted to key management personnel and are therefore not directly aligned with other staff costs in the current year.

Key management personnel compensation is borne directly by the Group as well as other Morgan Stanley Group undertakings in the current year. Management recharges in respect of key management personnel compensation borne by other Morgan Stanley Group undertakings are included in 'Management charges from other Morgan Stanley Group undertakings relating to staff costs' within 'Operating expenses', as disclosed in note 6.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS  
Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES (CONTINUED)****Directors' remuneration**

in \$ millions	2019	2018
<b>Total emoluments of all Directors:</b>		
Aggregate remuneration	16	18
Long term incentive schemes	1	3
	17	21
<b>Disclosures in respect of the highest paid Director:</b>		
Aggregate remuneration	5	5
Long term incentive schemes	1	1
	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 (2018: eight).

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.

There are three Directors to whom retirement benefits are accruing under a non-UK defined benefits scheme (2018: two). In addition, one Director has benefits accruing under the Alternative Retirement Plan, a defined benefit scheme, operated by Morgan Stanley UK Limited (2018: one).

The Morgan Stanley Group operates a defined contribution pension scheme, the Morgan Stanley UK Group Pension Plan. There are six Directors to whom retirement benefits are accruing under this scheme (2018: four). Three directors have benefits accruing under a non-UK defined contribution scheme (2018: four).

The Group has not provided any loans or other credit advances to its Directors during the year (2018: 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 (2018: \$nil).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES (CONTINUED)****Transactions with related parties (continued)***Cash*

The Group places cash with other Morgan Stanley Group undertakings. All such transactions are entered into on an arm's length basis.

\$ millions	2019		2018	
	Interest	Balance	Interest	Balance
Amounts due from other Morgan Stanley Group undertakings	-	134	-	611

*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 40, 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:

\$ millions	2019		2018	
	Interest	Balance	Interest	Balance
<i>Undated</i>				
Amounts due from the Group's direct and indirect parent undertakings	-	177	3	10
Amounts due from other Morgan Stanley Group undertakings	4	114	27	1,274
	<u>4</u>	<u>291</u>	<u>30</u>	<u>1,284</u>
<i>Rolling 395 day term</i>				
Amounts due from the Group's direct and indirect parent undertakings	4	114	1	87
Amounts due from other Morgan Stanley Group undertakings	9	42	1	37
	<u>13</u>	<u>156</u>	<u>2</u>	<u>124</u>
<i>Undated</i>				
Amounts due to the Group's direct and indirect parent undertakings	-	96	161	3,504
Amounts due to other Morgan Stanley Group undertakings	69	1,450	159	4,979
	<u>69</u>	<u>1,546</u>	<u>320</u>	<u>8,483</u>

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES (CONTINUED)****Transactions with related parties (continued)*****40 day termed***

Amounts due to other Morgan Stanley  
Group undertakings

7	207	-	-
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***60 day termed***

Amounts due to the Group's direct  
and indirect parent undertakings  
Amounts due to associates

219	23,414	274	13,300
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***Rolling 395 day term***

Amounts due to the Group's direct  
and indirect parent undertakings  
Amounts due to other Morgan Stanley  
Group undertakings

489	6,565	471	1
28	290	30	254
517	6,855	501	255

- Subordinated loans***

The Group received a subordinated loan and a senior subordinated loan from another Morgan Stanley Group undertaking. Details of the terms of these loans, including the contractual maturity and the interest rate are shown in note 16.

***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 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:

<b>in \$ millions</b>	<b>2019</b>		<b>2018</b>	
	<b>Interest</b>	<b>Balance</b>	<b>Interest</b>	<b>Balance</b>
<b>Financial assets measured at amortised cost</b>				
Amounts due from other Morgan Stanley Group undertakings	437	30,933	202	30,565
<b>Financial liabilities measured at amortised cost</b>				
Amounts due to the Group's direct and indirect parent undertakings	-	154	64	3,662
Amounts due to other Morgan Stanley Group undertakings	493	27,579	346	23,298
	493	27,733	410	26,960
<b>Financial liabilities measured at fair value</b>				
Amounts due to other Morgan Stanley Group undertakings	65	2,965	48	3,627

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES****Transactions with related parties (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:

<b>in \$ millions</b>	<b>2019</b>	<b>2018</b>
Amounts due from the Group's direct and indirect parent undertakings on securities and derivative transactions	2,658	1,729
Amounts due from other Morgan Stanley Group undertakings on securities and derivative transactions	81,415	57,014
	<u>84,073</u>	<u>58,743</u>
Amounts due to the Group's direct and indirect parent undertakings on securities and derivative transactions	2,462	1,599
Amounts due to other Morgan Stanley Group undertakings on securities and derivative transactions	80,320	58,470
	<u>82,782</u>	<u>60,069</u>

The Group has received collateral of \$383 million (2018: \$245 million) from the Group's direct and indirect parent undertaking and \$3,877 million (2018: \$2,554 million) from other Morgan Stanley Group undertakings. The Group has pledged collateral of \$45 million (2018: \$5 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 2019, a net loss of \$755 million was transferred to other Morgan Stanley Group undertakings relating to such revenue transfer pricing policies and recognised in the consolidated income statement arising from such policies (2018: net loss of \$1,980 million).

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****33. RELATED PARTY DISCLOSURES****Transactions with related parties (continued)***Infrastructure services*

The Group receives and incurs management charges to and 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:

in \$ millions	2019		2018	
	Staff costs	Other services	Staff costs	Other services
Amounts recharged from the Group's direct and indirect parent undertakings	13	-	23	-
Amounts recharged from other Morgan Stanley Group undertakings	1,188	1,285	1,599	1,178
	<u>1,201</u>	<u>1,285</u>	<u>1,622</u>	<u>1,178</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 7).

*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 2019, no call had been made by the Group under this arrangement.

On 30 March 2020, the deed of the abovementioned guarantee provided by MSI to the Company was amended. MSI provided an indemnity to the Company in relation to amounts due on financial transactions the Company is party to with certain fellow Morgan Stanley Group undertakings. The maximum amount of the indemnity is \$10,000 million.

**34. EVENTS AFTER THE REPORTING PERIOD**

Since the balance sheet date the emergence of the coronavirus disease (COVID-19) pandemic has, and will likely continue to, severely impact global economic conditions, resulting in substantial volatility in the global financial markets and operational challenges. The extent of the impact is highly uncertain and cannot be predicted and could adversely affect the future operations and financial condition of Morgan Stanley and the Company. For further detail, refer to the 'Emergence of COVID-19' section on pages 2 and 3 of the Strategic Report.

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****Year ended 31 December 2019****APPENDIX TO THE FINANCIAL STATEMENTS**

List of subsidiaries, including indirect subsidiaries, as at 31 December 2019 and 31 December 2018:

Name of Company	Address of undertaking's registered office/ principal place of business <sup>(2)</sup>	Proportion of shares held by the Group <sup>(1)(3)</sup>		Nature of Business
		2019	2018	
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
Morgan Stanley Humboldt Investments Limited		100%	100%	Financial Services
Morgan Stanley Equity Finance (Denmark) ApS	Bech-Bruun Dragsted, Langelinie Alle 35, 2100 , Kobenhavn, Denmark	N/A <sup>(5)</sup>	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	N/A <sup>(5)</sup>	100%	Financial Services
Morgan Stanley Equity Financing Services (Sweden) AB	Hovslagargatan 5 A, 111 48 , Stockholm, Sweden	N/A <sup>(5)</sup>	100%	Financial Services
Morgan Stanley Havel GmbH	Grosse Gallusstrasse 18, 60312, Frankfurt am Main, Germany	100%	100%	Holding company
Morgan Stanley Cooper Investments Limited	25 Farringdon Street, London, EC4A 4AB, United Kingdom	100%	100%	Holding company
Morgan Stanley Montrose Investments Limited	25 Farringdon Street, London, EC4A 4AB, United Kingdom	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.	Calle Aribau 171, 8036, Barcelona, Spain	100%	100%	Financial Services
Cabot 38 Limited		100%	100%	Financial Services
Morgan Stanley Millbrae Investments B.V. <sup>(3)</sup>		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)	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 Equity Derivative Services (Luxembourg) S.a r.l	Citco Luxembourg, 20, rue de la Poste, L-2346, Luxembourg	100%	100%	Financial Services
Morgan Stanley Equity Financing Limited		100%	100%	Financial Services

**MORGAN STANLEY & CO. INTERNATIONAL plc****NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
**Year ended 31 December 2019**

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	N/A <sup>(5)</sup>	100%	Holding company
Morgan Stanley Corporate Holdings (Luxembourg)	Custom House, Plaza Block 6, International Financial Services Centre, Dublin, DUBLIN 1, Ireland	100%	100%	Holding company
Morgan Stanley Heythorp Investments	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
Morstan Nominees Limited	25 Cabot Square, Canary Wharf, London, E14 4QA, United Kingdom	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, United Kingdom	100%	100%	Nominee company
Morgan Stanley Europe Holding SE	Grosse Gallusstrasse 18, 60312, Frankfurt am Main, Germany	N/A <sup>(4)</sup>	100%	Holding company
Morgan Stanley Europe SE	Grosse Gallusstrasse 18, 60312, Frankfurt am Main, Germany	N/A <sup>(4)</sup>	100%	Financial Services

(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 in each Company are ordinary shares with the exception of Morgan Stanley Millbrae Investments B.V. where ordinary and preference shares are held.

(4) During 2019, Morgan Stanley Europe Holding SE and Morgan Stanley Europe SE were transferred outside the Group

(5) During 2019, Morgan Stanley Equity Finance (Denmark) ApS, Morgan Stanley Tostao Limited, Morgan Stanley Equity Financing Services (Sweden) AB and Morgan Stanley Kochi Limited were legally closed.