MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

Reports and financial statements

31 December 2019

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

REPORTS AND FINANCIAL STATEMENTS
Year ended 31 December 2019

CONTENTS	PAGE
Directors' report	1
Independent auditor's report	4
Income statement	7
Statement of comprehensive income	8
Statement of changes in equity	9
Statement of financial position	10
Statement of cash flows	11
Notes to the financial statements	12
Unaudited supplementary financial information	66

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

DIRECTORS' REPORT

The Directors present the annual report and audited financial statements (which comprise the income statement, statement of comprehensive income, statement of changes in equity, statement of financial position, statement of cash flows and related notes 1 to 33) for Morgan Stanley Bank Asia Limited (the "Company" or "MSBAL") (formerly known as "Morgan Stanley Asia International Limited") for the year ended 31 December 2019.

PRINCIPAL ACTIVITIES

The Company is a private limited company incorporated in Hong Kong, with a head office in Hong Kong and a branch in Singapore ("Branch"). The Company is a full licensed bank under the Banking Ordinance in Hong Kong, regulated by the Hong Kong Monetary Authority ("HKMA"). With effect from 26 September 2019, the HKMA has approved the upgrade of the Company from a restricted licence bank to a full licensed bank. The Branch is licensed as a wholesale bank in Singapore, regulated by the Monetary Authority of Singapore ("MAS"). The Company is also a registered institution under the Hong Kong Securities and Futures Ordinance.

With effect from 12 November 2019, the name of the Company was changed from "Morgan Stanley Asia International Limited" to "Morgan Stanley Bank Asia Limited".

The principal activities of the Company are to engage in the business of banking including deposit taking and lending. It also acts (a) as agent on behalf of its customers in connection with the provision of general investment, securities and futures dealing, as well as discretionary management and (b) as introducing broker to Morgan Stanley & Co. International plc for the provision of clearance, settlement and custody services in relation to the aforementioned transactions.

The Company's ultimate parent undertaking and controlling entity is Morgan Stanley which, together with the Company and Morgan Stanley's other subsidiary undertakings, form the Morgan Stanley Group (the "Morgan Stanley Group").

RESULTS AND APPROPRIATIONS

The results of the Company for the year ended 31 December 2019 are set out in the income statement on page 7.

No interim dividends were paid to the sole shareholder during the year. The Directors do not recommend the payment of a final dividend and propose that the profits be retained.

SHARE CAPITAL

Details of the Company's shares issued are set out in note 20 to the financial statements. The Company issued 500,000,000 ordinary shares on 22 March 2019 to its shareholder for a cash consideration of US$500,000,000.

DIRECTORS

The following Directors held office throughout the year and up to the date of approval of this report:

Chui, Yik Chiu Vincent
Clatworthy, David Peter
Fung, Choi Cheung
Gazzi, Robert
Kwan, Yin Ping
Laroia, Gokul
Ong, Whatt Soon Ronald
Rajaram, Harish
Wraight, David John

DIRECTORS' REPORT (CONTINUED)

DIRECTORS' MATERIAL INTERESTS IN TRANSACTIONS, ARRANGEMENTS AND CONTRACTS THAT ARE SIGNIFICANT IN RELATION TO THE COMPANY'S BUSINESS

No transactions, arrangements and contracts of significance to which the Company, its holding companies or any subsidiaries of its holding companies were a party and in which a Director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

DIRECTORS' RIGHTS TO ACQUIRE SHARES AND DEBENTURES

Morgan Stanley, the Company's ultimate holding company, has several senior executive incentive compensation programs under which senior executives receive, as part of their total compensation, incentive awards of restricted stock units. All Directors of the Company except independent non-executive directors, are eligible to participate in such incentive compensation programs and receive awards of restricted stock units thereunder.

Details of the deferred stock awards of the ultimate holding company, in which the Directors of the Company are entitled to participate, are set out in note 30 to the financial statements.

Other than as disclosed above, at no time during the year was the Company, its holding companies or any subsidiaries of its holding companies a party to any arrangements to enable the Directors of the Company to acquire benefits by means of acquisition of shares in, or debentures of, the Company or any other body corporate.

SUBSEQUENT EVENTS

The emergence of COVID 19 (coronavirus) has created economic and financial disruptions in the global economy which has led to operational challenges that could impair Morgan Stanley's ability to manage or conduct some of its businesses around the world. In line with many national and local guidelines, Morgan Stanley has required nearly all staff to work from home and business travel is severely restricted, however Morgan Stanley remains open for business.

Given the disruptions in the financial markets, Morgan Stanley and the Company are closely tracking their operational capacity. Additionally, the financial effects of the outbreak have a high degree of uncertainty, given that they are dependent on external factors such as the spread of the virus and the measures taken by the various governments and central banks. Morgan Stanley and the Company have already observed significant volatility in the global marketplace which could have an impact on their financial results and financial position in the future. Morgan Stanley and the Company 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.

This is a non-adjusting event as the significant changes in the business activities and economic conditions occurred as a result of events occurring after the reporting date.

PERMITTED INDEMNITY PROVISION

The Articles of Association of the Company provide that a Director or former Director of the Company may be indemnified out of the Company's assets against any liability incurred by the Director to a person other than the Company or an associated company of the Company in connection with any negligence, default, breach of duty or breach of trust in relation to the Company or associated company (as the case may be).

OTHER MATTERS

With effect from 21 March 2019, the Company's immediate parent undertaking was changed from Morgan Stanley Hong Kong Limited to Morgan Stanley Hong Kong 1238 Limited.

DIRECTORS' REPORT (CONTINUED)

AUDITOR

A resolution will be submitted to the annual general meeting to re-appoint Messrs. Deloitte Touche Tohmatsu as auditor of the Company.

On behalf of the Board

____

CHUI, VINCENT YIK CHIU

DIRECTOR

22 April 2020

INDEPENDENT AUDITOR'S REPORT

TO THE SOLE MEMBER OF MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")
(incorporated in Hong Kong with limited liability)

Opinion

We have audited the financial statements of Morgan Stanley Bank Asia Limited (the "Company")(Formerly known as "Morgan Stanley Asia International Limited") set out on pages 7 to 65, which comprise the statement of financial position as at 31 December 2019, and the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements give a true and fair view of the financial position of the Company as at 31 December 2019, and of its financial performance and its cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. 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 Company in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Directors are responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information 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, 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 this regard.

TO THE SOLE MEMBER OF MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")
(incorporated in Hong Kong with limited liability)

Responsibilities of Directors and Those Charged with Governance for the Financial Statements

The Directors are responsible for the preparation of the financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, 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 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 Company or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

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 solely to you in accordance with section 405 of the Hong Kong Companies Ordinance, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs 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.

As part of an audit in accordance with HKSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.

TO THE SOLE MEMBER OF MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS “MORGAN STANLEY ASIA INTERNATIONAL LIMITED”)
(incorporated in Hong Kong with limited liability)

Auditor's Responsibilities for the Audit of the Financial Statements – continued

- Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong
22 April 2020

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNAIONAL LIMITED")

INCOME STATEMENT
Year ended 31 December 2019

	Note	2019 US$'000	2018 US$'000
Interest income		105,120	75,752
Interest expense		(20,241)	(23,517)
Net interest income	4	84,879	52,235
Fee and commission income		272,666	245,388
Fee and commission expense		(1,950)	-
Net fee and commission income	5	270,716	245,388
Net trading (expense)/income		(1,461)	10,152
Net gains on derecognition of financial assets measured at fair value through other comprehensive income ("FVOCI")	6	6	373
Other revenue	7	9,568	6,503
Total non-interest revenues		278,829	262,416
Net revenues		363,708	314,651
Non-interest expense:			
Other expense	8	(263,682)	(227,035)
PROFIT BEFORE INCOME TAX		100,026	87,616
Income tax	9	(15,568)	(13,343)
PROFIT FOR THE YEAR		84,458	74,273

All results were derived from continuing operations.

The notes on pages 12 to 65 form an integral part of the financial statements.

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS “MORGAN STANLEY ASIA INTERNATIONAL LIMITED”)

STATEMENT OF COMPREHENSIVE INCOME
Year ended 31 December 2019

	Note	2019 US$’000	2018 US$’000
PROFIT FOR THE YEAR		84,458	74,273
Items that may be reclassified subsequently to profit or loss:			
FVOCI reserve:	9		
Net change in fair value		367	1,976
Net amount reclassified to income statement		(5)	(312)
OTHER COMPREHENSIVE INCOME AFTER INCOME TAX		362	1,664
TOTAL COMPREHENSIVE INCOME FOR THE YEAR ATTRIBUTABLE TO OWNER OF THE COMPANY		84,820	75,937

The notes on pages 12 to 65 form an integral part of the financial statements.

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

STATEMENT OF CHANGES IN EQUITY
Year ended 31 December 2019

	Note	Share capital US$'000	FVOCI reserve US$'000	Available-for-sale reserve US$'000	Retained earnings US$'000	Total equity US$'000
Balance at 1 January 2018		170,000	-	(696)	63,664	232,968
Impact of adoption of new accounting standards		-	(696)	696	-	-
Profit for the year		-	-	-	74,273	74,273
Other comprehensive income for the year:	9					
FVOCI reserve:						
Net change in fair value		-	1,976	-	-	1,976
Net amount reclassified to income statement		-	(312)	-	-	(312)
Total comprehensive income for the year		-	1,664	-	74,273	75,937
Balance at 31 December 2018 and 1 January 2019		170,000	968	-	137,937	308,905
Profit for the year		-	-	-	84,458	84,458
Other comprehensive income for the year:	9					
FVOCI reserve:						
Net change in fair value		-	367	-	-	367
Net amount reclassified to income statement		-	(5)	-	-	(5)
Total comprehensive income for the year		-	362	-	84,458	84,820
Transaction with owner:						
Issue of share capital		500,000	-	-	-	500,000
Balance at 31 December 2019		670,000	1,330	-	222,395	893,725

The notes on pages 12 to 65 form an integral part of the financial statements.

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

STATEMENT OF FINANCIAL POSITION
As at 31 December 2019

	Note	2019 US$'000	2018 US$'000
ASSETS			
Cash and short-term deposits	21(a)	633,898	538,485
Trading financial assets	11	441	969
Secured financing	12	362,047	-
Loans and advances to customers	13	2,770,325	1,598,301
Investment securities	14	854,769	1,315,300
Trade and other receivables	15	62,570	6,172
Deferred tax assets	18	5,002	4,023
Prepayments		835	124
TOTAL ASSETS		4,689,887	3,463,374
LIABILITIES AND EQUITY			
Deposits	16	3,665,736	3,029,991
Trading financial liabilities	11	3,552	3,164
Trade and other payables	17	104,689	112,919
Current tax liabilities		21,251	7,662
Accruals		934	733
TOTAL LIABILITIES		3,796,162	3,154,469
EQUITY			
Share capital	20	670,000	170,000
FVOCI reserve	20	1,330	968
Retained earnings		222,395	137,937
Equity attributable to owner of the Company		893,725	308,905
TOTAL EQUITY		893,725	308,905
TOTAL LIABILITIES AND EQUITY		4,689,887	3,463,374

These financial statements were approved by the Board and authorised for issue on 22 April 2020:

Signed on behalf of the Board

Chui, Vincent Yik Chiu
Director

Wraight, David John
Director

The notes on pages 12 to 65 form an integral part of the financial statements.

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

STATEMENT OF CASH FLOWS
Year ended 31 December 2019

	Note	2019 US$'000	2018 US$'000
NET CASH FLOWS USED IN OPERATING ACTIVITIES	21(b)	(892,967)	(767,080)
INVESTING ACTIVITIES			
Purchase of investment securities		(2,750,300)	(7,566,430)
Proceeds from maturity/sale of investment securities		3,229,426	8,678,869
Interest received from investment securities		9,254	4,859
NET CASH FLOWS FROM INVESTING ACTIVITIES		488,380	1,117,298
FINANCING ACTIVITIES			
Issue of ordinary share capital		500,000	-
NET CASH FLOWS FROM FINANCING ACTIVITIES		500,000	-
NET INCREASE IN CASH AND CASH EQUIVALENTS		95,413	350,218
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR		538,485	188,267
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	21(a)	633,898	538,485

The notes on pages 12 to 65 form an integral part of the financial statements.

1. CORPORATE INFORMATION

The Company is a private limited company with a head office in Hong Kong and a branch in Singapore ("Branch"). The Company was incorporated and is domiciled in Hong Kong, at the following principal place of business: Level 31, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong.

The Company is a full licensed bank under the Banking Ordinance in Hong Kong, regulated by the HKMA. With effect from 26 September 2019, the HKMA has approved the upgrade of the Company from a restricted licence bank to a full licensed bank. The Branch is licensed as a wholesale bank in Singapore, regulated by the MAS. The Company is also a registered institution under the Hong Kong Securities and Futures Ordinance. The principal activities of the Company are to engage in the business of banking including deposit taking and lending. It also acts (a) as agent on behalf of its customers in connection with the provision of general investment, securities and futures dealing, as well as discretionary management and (b) as introducing broker to Morgan Stanley & Co. International plc for the provision of clearance, settlement and custody services in relation to the aforementioned transactions.

As at 31 December 2018, the Company's immediate parent undertaking was Morgan Stanley Hong Kong Limited, which was incorporated in Hong Kong.

With effect from 21 March 2019 and as at 31 December 2019, the Company's immediate parent undertaking was changed to Morgan Stanley Hong Kong 1238 Limited, which was incorporated in Hong Kong.

With effect from 12 November 2019, the name of the Company was changed from "Morgan Stanley Asia International Limited" to "Morgan Stanley Bank Asia Limited".

The Company's ultimate parent undertaking and controlling entity is Morgan Stanley which, together with the Company 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 http://www.morganstanley.com/investorrelations.

2. BASIS OF PREPARATION

Statement of compliance

The Company has prepared its annual financial statements in accordance with Hong Kong Financial Reporting Standards ("HKFRS") and interpretations issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and the Hong Kong Companies Ordinance.

New standards and interpretations adopted during the year

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

As part of the 2015-2017 Annual Improvements Cycle published in February 2018, the HKICPA made amendments to the following standards that are relevant to the Company's operations: HKAS 12 'Income Taxes' and HKAS 23 'Borrowing Costs', for application in accounting periods beginning on or after 1 January 2019.

HK(IFRIC)-Int 23 'Uncertainty over Income Tax Treatments' was issued by the HKICPA in July 2017 for application in accounting periods beginning on or after 1 January 2019.

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

2. BASIS OF PREPARATION (CONTINUED)

New standards and interpretations not yet adopted

At the date of authorisation of these financial statements, the following amendments to standards relevant to the Company's operations were issued by the HKICPA but not mandatory for accounting periods beginning 1 January 2019. Except where otherwise stated, the Company does not expect that the adoption of the following standards, amendments to standards and interpretations will have a material impact on the Company's financial statements.

Amendments to HKAS 1 'Presentation of Financial Statements' and HKAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors' were issued by the HKICPA in January 2019, for application in accounting periods beginning on or after 1 January 2020.

Basis of measurement

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

Critical accounting judgements and key sources of estimation uncertainty

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

Critical accounting judgements are key decisions made by management in the application of the Company's accounting policies, other than those involving estimations, which have the most significant effects on the amounts recognised in the financial statements.

Key sources of estimation uncertainty represent assumptions and estimations made by management that have a significant risk of resulting in a material adjustment to the carrying amount of assets and liabilities within the next financial year.

The critical judgements in applying the Company's accounting policies are existences of impairment of financial assets, see note 3(f).

The key sources of estimation uncertainty are the valuation of certain financial instruments. For further details on the assumptions and estimation uncertainties in determining the fair value of certain assets and liabilities, see notes 3(d) and 27.

The Company evaluates the critical accounting judgements and key sources of estimation uncertainty on an ongoing basis and believes that these are reasonable.

The going concern assumption

The notes to the financial statements include the Company's objectives, policies and processes for managing its capital; its financial risk management objectives; details of its financial instruments; and its exposures to credit risk and liquidity risk. Retaining sufficient liquidity and capital to withstand market pressures remains central to the Morgan Stanley Group's and the Company's strategy.

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

The impact of the economic and financial disruption due to the emergence of COVID 19 has been considered as part of the going concern analysis.

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 Company operates.

All currency amounts in the financial statements are rounded to the nearest thousand US dollars.

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. Foreign exchange differences arising from remeasurement of the amortised cost of fair value through other comprehensive income ("FVOCI") assets are recognised in the income statement. All other gains and losses from movements in foreign exchange rates on FVOCI assets are recorded in other comprehensive income. All other translation differences are taken through the income statement. Exchange differences recognised in the income statement are presented in 'Other revenue' or 'Other expense', except where noted in 3(c) below.

c. Financial instruments

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

Trading financial instruments

Trading financial instruments include all derivatives contracts.

Trading financial instruments are initially recorded on trade date at fair value (see note 3(d) below).

All subsequent changes in fair value and foreign exchange differences are reflected in the income statement in 'Net trading (expense)/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 (expense)/income', otherwise, it is included within 'Interest income' or 'Interest expense'.

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

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

Non-trading financial assets at fair value through profit or loss ("FVPL") include secured financing transactions such as securities purchased under agreements to resell.

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

For all non-trading financial assets at FVPL, transaction costs are excluded from the initial fair value measurement of the financial assets. These costs are recognised in the income statement in 'Other expense' (note 8).

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

ii) Financial assets measured at FVOCI

Financial assets measured at FVOCI include government debt securities.

Financial assets measured at FVOCI are financial instruments which are held within a business model whose objective is achieved both by collecting contractual cash flows and selling financial assets and the contractual terms of which give rise on specified dates to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets measured at FVOCI are recorded on trade date and are initially recognised and subsequently measured at fair value (see note 3(d) below).

Transaction costs that are directly attributable to the acquisition of a financial asset measured at FVOCI are added to the fair value on initial recognition.

Interest calculated using the effective interest rate ("EIR") method (see note 3(c)(iii) below) is recognised in the income statement in 'Interest income'. Foreign exchange differences on the amortised cost of the asset are recognised in the income statement in 'Other revenue' or 'Other expense'. Movement in ECL allowance is recognised in both the income statement in 'Net impairment loss on financial instruments' and in the statement of comprehensive income in the 'FVOCI reserve'. All other gains and losses on financial assets measured at FVOCI are recognised in the 'FVOCI reserve' within equity.

On derecognition of a financial asset measured at FVOCI, the cumulative gain or loss in the 'FVOCI reserve' is reclassified to the income statement and reported in 'Net gains on derecognition of financial assets measured at FVOCI'.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

c. Financial instruments (continued)

iii) Financial assets and financial liabilities at amortised cost

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

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

Financial liabilities classified at amortised cost include deposits and trade and other payables.

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 Company becomes a party to the contractual provisions of the instrument and are initially measured at fair value (see note 3(d) below) and subsequently measured at amortised cost. Interest is recognised in the 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.

iv) Secured financing

In the course of financing its business, the Company enters into arrangements which involve the purchase of securities with resale agreements.

Securities received by the Company under resale arrangements are generally not recognised on the statement of financial position. Where cash collateralised, the resulting cash collateral receivable and accrued interest arising under resale agreements are classified as 'Non-trading at FVPL' as they are managed on a fair value basis.

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 Company believes market participants would use in pricing the asset or liability at the measurement date.

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

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

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

  Valuations based on quoted prices in active markets that the Morgan Stanley Group has the ability to access for identical assets or liabilities. Valuation adjustments, block discounts and discounts for equity-specific restrictions that would not transfer to market participants 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.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value

Fair value measurement (continued)

The availability of observable inputs can vary from product to product and is affected by a wide variety of factors, including 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 Company in determining fair value is greatest for instruments categorised in Level 3 of the fair value hierarchy.

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

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the total fair 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.

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.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

Valuation techniques

Many cash instruments and OTC derivative contracts have bid and ask prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Ask prices represent the lowest price that a party is willing to accept for an asset. The Company carries positions at the point within the bid-ask range that meets its best estimate of fair value. For offsetting positions in the same financial instrument, the same price within the bid-ask spread is used to measure both the long and short positions.

Fair value for many cash instruments and OTC derivative contracts is derived using pricing models. Pricing models take into account the contract terms, as well as multiple inputs including, where applicable, commodity prices, equity prices, interest rate yield curves, credit curves, correlation, creditworthiness of the counterparty, creditworthiness of the 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 and funding.

Adjustments for liquidity risk adjust model-derived mid-market amounts 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.

Valuation process

Valuation Control ("VC") within Finance is responsible for the 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 Company's financial instruments. VC implements valuation control processes designed to validate the fair value of the 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 Company generally subjects valuations and models to a review process initially and on a periodic basis thereafter.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

d. Fair value (continued)

Valuation process (continued)

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 Morgan Stanley Group's three business segments (i.e. Institutional Securities, Wealth Management and Investment Management), the CFO and the CRO on a regular basis.

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

VC reviews the models and valuation methodology used to price new material Level 2 and Level 3 transactions and both Finance 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 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 income statement, but is deferred and recognised over the life of the instrument or at the earlier of when the unobservable market data become observable, maturity or disposal of the instrument.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

e. Derecognition of financial assets and liabilities

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

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

If the Company has retained control of the asset, it shall continue to recognise the financial asset to the extent of its continuing involvement in the financial asset. If the 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.

The renegotiation or modification of the contractual cash flows of a financial instrument can lead to derecognition where the modification is "substantial", determined by qualitative assessment of whether the revised contractual terms of a financial instrument, such as a loan, are significantly different from those of the original financial instrument. In the event that the qualitative assessment is unclear, a quantitative 10% cash flow test is performed.

Where modifications do not result in derecognition of the financial instrument, the gross carrying amount of the financial instrument is recalculated and a modification gain/ (loss) is recognised in the income statement.

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 income statement within 'Net gains/(losses) on derecognition of financial assets measured at FVOCI'.

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

f. Impairment of financial instruments

The Company recognises loss allowances for ECL for the following financial instruments that are not measured at FVPL:

- financial assets measured at amortised cost;
- financial assets measured at FVOCI;

Measurement of ECL

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

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

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

- Stage 1: if the credit risk of the financial instrument at the reporting date has not increased significantly since initial recognition then the loss allowance is calculated as the lifetime cash shortfalls that will result if a default occurs in the next 12 months, weighted by the probability of that default occurring.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Measurement of ECL (continued)

- 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.

Assessment of significant increase in credit risk

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

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 Company considers that SICR has occurred in all cases when an asset is more than 30 days past due.

The Company's accounting policy is to not use the 'low' credit risk practical expedient. As a result, the Company monitors all financial instruments which are subject to impairment for SICR, with the exception of loans and advances to customers and the corresponding interest receivable, for which a lifetime ECL is always calculated.

In general, ECL are measured so that they reflect:

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

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Calculation of ECL

ECL are calculated using three main components:

- Probability of default ("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.
- Expected 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.
- Estimated 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 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 EIR. 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.

When measuring ECL, the Company considers multiple scenarios, except where practical expedients are used to determine ECL. Practical expedients are used where they are consistent with the principles described above.

The Company measures ECL on an individual asset basis and has no purchased or originated credit-impaired ("POCI") financial assets.

More information on measurement of ECL is provided in note 23.

Presentation of ECL

ECL is recognised in the income statement within 'Net impairment loss 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 statement of financial position. Where the financial asset is measured at FVOCI, the loss allowance is recognised as an accumulated impairment amount in other comprehensive income and does not reduce the carrying amount of the financial asset on the statement of financial position.

Credit-impaired financial instruments

In assessing the impairment of financial instruments under the ECL model, the Company defines credit-impaired financial instruments in accordance with the 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 Company will be unable to collect all scheduled payments of principal or interest when due according to the contractual terms of the agreement.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

f. Impairment of financial instruments (continued)

Definition of Default

In assessing the impairment of financial instruments under the ECL model, the Company defines default in accordance with Credit Risk Management Department's policies and procedures. This considers whether the borrower is unlikely to pay its credit obligations to the 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 ("DPD") has defaulted.

Write-offs

Loans and government 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 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 balance.

Partial write-offs are made when a portion of the balance is uncollectable. However, 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 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 income statement.

g. Revenue recognition

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

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 the Company providing services in connection with the provision of general investment, securities and futures dealing, as well as discretionary management to its customers and as introducing broker to Morgan Stanley & Co. International plc for the provision of clearance, settlement and custody services in relation to the aforementioned transactions. Fee and commission income is recognised on trade date when the performance obligation is satisfied.

h. Fees and commission expense

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

i. Cash and cash equivalents

Cash and cash equivalents comprise cash and demand deposits with banks 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.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

j. 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 income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The 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 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.

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, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax is charged or credited in the 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 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 Company intends to settle its current tax assets and current tax liabilities on a net basis.

k. Commitments

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

Commitments are not recognised in the financial statements. However, disclosure is made unless the probability of settlement is remote.

l. 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 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 ("VWAP") on the date of grant. 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.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

l. Employee compensation plans (continued)

i) Equity-settled share-based compensation plans (continued)

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

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

Share-based compensation expense is recorded within 'Staff costs' and 'Directors' remuneration' in 'Other expense' in the income statement.

ii) Deferred cash-based compensation plans

Morgan Stanley awards deferred cash-based compensation on behalf of the 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 Company recognises compensation cost over the relevant vesting period for each separately vesting portion of the award. Forfeitures due to failure to satisfy service conditions are accounted for as they occur.

Deferred cash-based compensation expense is recorded within 'Staff costs' and 'Directors' remuneration' in 'Other expense' in the income statement. The liability for the awards is measured at fair value and is included within 'Other liabilities' in the statement of financial position.

m. Post-employment benefits

The Company operates defined contribution post-employment plans. Additionally, the Branch of the Company participates in a defined contribution plan, the Singapore Central Provident Fund.

Contributions due in relation to the Company's defined contribution post-employment benefit plan are recognised in 'Other expense' in the income statement when payable.

Details of the plans are given in note 31 to these financial statements.

4. 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 method for financial assets and financial liabilities measured at amortised cost and financial assets measured at FVOCI. Interest income and expense includes realised interest on certain financial assets and financial liabilities measured at FVPL.

	2019 US$'000	2018 US$'000
Financial assets measured at amortised cost	68,903	40,652
Financial assets measured at FVOCI	23,747	35,100
Financial assets not measured at FVPL	92,650	75,752
Non-trading financial assets measured at FVPL	12,470	-
Financial assets measured at FVPL	12,470	-
Total interest income	105,120	75,752
Financial liabilities measured at amortised cost	(20,241)	(23,517)
Total interest expense	(20,241)	(23,517)
Net interest income	84,879	52,235

No other gains or losses have been recognised in respect of financial assets measured at amortised cost other than as disclosed as 'Interest income' and foreign exchange differences disclosed in 'Other expense' (note 8).

No other gains or losses have been recognised in respect of financial liabilities measured at amortised cost other than as disclosed as 'Interest expense', and foreign exchange differences disclosed in 'Other expense' (note 8).

5. FEE AND COMMISSIONS

	2019 US$'000	2018 US$'000
Fee and commission income:		
Sales commissions and fees	272,656	245,378
Other fees	10	10
Total fee and commission income	272,666	245,388
Of which, revenue from contracts with customers	*14,077*	*16,980*
Fee and commission expense:		
Sales commissions and fees	(1,950)	-
Total fee and commission expense	(1,950)	-
Net fee and commission income	270,716	245,388

6. NET GAINS ON DERECOGNITION OF FINANCIAL ASSETS AT FVOCI

The table below summarises the carrying amount of the derecognised financial assets measured at FVOCI and the gain on derecognition.

	2019		2018	
	Carrying amount of financial assets sold US$'000	Gains arising from derecognition US$'000	Carrying amount of financial assets sold US$'000	Gains arising from derecognition US$'000
Investment securities	99,976	6	1,021,581	373

7. OTHER REVENUE

	2019 US$'000	2018 US$'000
Net foreign exchange gains	3,023	-
Management charges to other Morgan Stanley Group undertakings	6,465	6,420
Others	80	83
	9,568	6,503
Of which, revenue from contracts with customers	*6,465*	*6,420*

8. OTHER EXPENSE

	2019 US$'000	2018 US$'000
Staff costs	165,609	133,239
Directors' remuneration		
Fees	167	134
Contribution to defined contribution plan	70	70
Others	9,796	6,804
Net foreign exchange losses	-	5,467
Auditors' remuneration:		
Fees payable to the Company's auditor for the audit of the Company's annual financial statements	580	569
Fees payable to the Company's auditor for other services to the Company	1	2
Non-audit professional services	6,890	7,435
Management charges from other Morgan Stanley Group undertakings relating to staff costs	298	539
Management charges from other Morgan Stanley Group undertakings relating to other services	75,926	68,960
Others	4,345	3,816
	263,682	227,035

Included within 'Staff costs', 'Directors' remuneration' and 'Management charges from other Morgan Stanley Group undertakings' are amounts totalling US$18,678,000 (2018: US$15,521,000) in relation to equity-settled share-based compensation plans granted to employees of the Company. These costs reflect the amortisation of equity-based awards in relation to current and previous years' awards and are therefore not directly aligned with other staff costs in the current year. Similarly, included within 'Staff costs', 'Directors' remuneration' and 'Management charges from other Morgan Stanley Group undertakings' are amounts totalling US$19,471,000 (2018: US$14,996,000) in relation to the amortisation of current and previous years' awards of deferred cash-based compensation, granted to employees of the Company.

Further information regarding employee compensation plans is provided in note 30.

For the years ended 31 December 2019 and 31 December 2018, the Company has not paid any (a) payments or benefits in respect of the termination of the service of directors whether in the capacity of directors or in any other capacity while being a director of the Company, and (b) consideration provided to or receivable by any third party for making available the services of a person as a director or in any other capacity while being a director of the Company.

During the year, the Company has not granted any loans, quasi-loans nor entered into any other dealings in favor of (a) the Directors, (b) entities controlled by the Directors; or (c) entities connected with the Directors (2018: Nil).

9. INCOME TAX

	2019 US$'000	2018 US$'000
Current tax		
Current year		
Hong Kong	14,420	9,210
Other jurisdiction	2,033	1,959
	16,453	11,169
Adjustments in respect of prior years		
Hong Kong	(2)	44
Other jurisdiction	131	21
	129	65
	16,582	11,234
Deferred tax		
Origination and reversal of temporary differences	(1,030)	2,101
Adjustments in respect of prior years	16	8
	(1,014)	2,109
Income tax	15,568	13,343

Reconciliation of effective tax rate

The current year income tax expense is lower (2018: lower) than that resulting from applying the standard rate of profits tax in Hong Kong for the year of 16.5% (2018:16.5%). The main differences are explained below:

	2019 US$'000	2018 US$'000
Profit before income tax	100,026	87,616
Income tax using the standard rate of profits tax in Hong Kong of 16.5%	16,504	14,457
Impact on tax of:		
Expenses not deductible for tax purposes	1,362	1,583
Tax exempt income	(1,734)	(2,010)
Concessionary tax rate	(712)	(794)
Effect of tax rates in foreign jurisdiction	81	85
Tax under provided in prior years	145	73
Withholding tax expensed	5	10
Other	(83)	(61)
Total income tax in the income statement	15,568	13,343

9. INCOME TAX (CONTINUED)

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

	2019			2018		
	Before tax US$'000	Tax (expense)/ benefit US$'000	Net of tax US$'000	Before tax US$'000	Tax (expense)/ benefit US$'000	Net of tax US$'000
FVOCI reserve:						
Net change in fair value	427	(60)	367	2,332	(356)	1,976
Net amount reclassified to income statement	(6)	1	(5)	(373)	61	(312)
Other comprehensive income	421	(59)	362	1,959	(295)	1,664

10. FINANCIAL ASSETS AND FINANCIAL LIABILITIES BY MEASUREMENT CATEGORY

The following table analyses financial assets and financial liabilities as presented in the statement of financial position by HKFRS 9 classifications.

2019	FVPL US$'000	FVOCI US$'000	Amortised cost US$'000	Total US$'000
Cash and short-term deposits	-	-	633,898	633,898
Trading financial assets	441	-	-	441
Secured financing	362,047	-	-	362,047
Loans and advances to customers	-	-	2,770,325	2,770,325
Investment securities	-	854,769	-	854,769
Trade and other receivables	-	-	62,570	62,570
Total financial assets	362,488	854,769	3,466,793	4,684,050
Deposits	-	-	3,665,736	3,665,736
Trading financial liabilities	3,552	-	-	3,552
Trade and other payables	-	-	104,689	104,689
Total financial liabilities	3,552	-	3,770,425	3,773,977

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

2018	FVPL	FVOCI	Amortised cost	Total
	US$'000	US$'000	US$'000	US$'000
Cash and short-term deposits	-	-	538,485	538,485
Trading financial assets	969	-	-	969
Loans and advances to customers	-	-	1,598,301	1,598,301
Investment securities	-	1,315,300	-	1,315,300
Trade and other receivables	-	-	6,172	6,172
Total financial assets	969	1,315,300	2,142,958	3,459,227
Deposits	-	-	3,029,991	3,029,991
Trading financial liabilities	3,164	-	-	3,164
Trade and other payables	-	-	112,919	112,919
Total financial liabilities	3,164	-	3,142,910	3,146,074

11. TRADING FINANCIAL ASSETS AND LIABILITIES

Trading assets and trading liabilities are summarised as follows:

	2019			2018		
	Notional amount	Fair value Assets	Fair value Liabilities	Notional amount	Fair value Assets	Fair value Liabilities
	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000
Derivatives:						
Foreign exchange contracts	709,391	441	3,552	696,576	969	3,164

The derivatives are entered with other Morgan Stanley Group undertakings (see note 32).

12. SECURED FINANCING

The following table provides an analysis of secured financing by measurement classification:

	2019	2018
	US$'000	US$'000
Non-trading at FVPL		
Securities purchased under agreements to resell	362,047	-

13. LOANS AND ADVANCES TO CUSTOMERS

	2019 US$'000	2018 US$'000
Loans and advances to customers at amortised cost	2,770,325	1,598,301

There was no ECL impairment loss on loans and advances to customers as at 31 December 2019 (2018: Nil). Refer to note 23 for further information.

14. INVESTMENT SECURITIES

	2019 US$'000	2018 US$'000
Investment securities (FVOCI)		
Government debt securities:		
Singapore government treasury bills	252,278	270,923
US treasury bills and securities	602,491	1,044,377
Total	854,769	1,315,300

15. TRADE AND OTHER RECEIVABLES

	2019 US$'000	2018 US$'000
Trade and other receivables		
Trade receivables	36,356	1,735
Other receivables		
Amounts due from other Morgan Stanley Group undertakings	20,283	39
Interest receivable	5,591	4,362
Other amounts receivable	340	36
	62,570	6,172

16. DEPOSITS

	2019 US$'000	2018 US$'000
Deposits of banks		
Current account balances	2,149	1,202
Deposits of non-bank customers		
Current account balances	2,622,296	2,484,966
Term deposits	1,041,164	543,823
Deposits of other Morgan Stanley Group undertakings	127	-
	3,665,736	3,029,991

17. TRADE AND OTHER PAYABLES

	2019 US$'000	2018 US$'000
Trade and other payables		
Trade payables	-	17,047
Other payables		
Amounts due to other Morgan Stanley Group undertakings	8,873	12,039
Staff compensation and benefits accruals	85,343	74,577
Interest payable	7,024	5,589
Other amounts payable	3,449	3,667
	104,689	112,919

18. DEFERRED TAX ASSETS

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

	Deferred tax asset	
	2019 US$'000	2018 US$'000
At 1 January	4,023	6,452
Amount recognised in the income statement	1,014	(2,109)
Amount recognised in other comprehensive income:		
Financial assets measured at FVOCI	(59)	(295)
Foreign exchange revaluation	24	(25)
At 31 December	5,002	4,023

The deferred tax included in the statement of financial position and changes recorded in 'Income tax'/'Other comprehensive income' are as follows:

	2019			2018		
	Deferred Tax Asset US$'000	Income statement US$'000	Other Comprehensive Income US$'000	Deferred tax asset US$'000	Income statement US$'000	Other Comprehensiv e Income US$'000
Deferred compensation	5,259	(1,014)	-	2,779	2,109	-
Financial assets measured at FVOCI	(257)	-	(59)	1,244	-	(295)
	5,002	(1,014)	(59)	4,023	2,109	(295)

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

19. COMMITMENTS AND CONTINGENCIES

At 31 December, the Company had the following outstanding commitments.

	2019 US$'000	2018 US$'000
Commitments		
Unsettled securities purchased under agreements to resell[1]	51,800	-

(1) Unsettled securities purchased under agreements to resell have a trade date at or prior to 31 December 2019 and settle subsequent to year end.

20. EQUITY

Ordinary share capital

	Ordinary shares Number	Ordinary shares US$'000
Issued and fully paid		
At 1 January 2018 and 31 December 2018	170,000,000	170,000
Increases in the year:		
22 March 2019	500,000,000	500,000
At 31 December 2019	670,000,000	670,000

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at general meetings of the Company. All shares rank equally with regard to the Company's residual assets.

Reserves

FVOCI reserve

The 'FVOCI reserve' of US$1,330,000 (2018: US$968,000) includes the cumulative net change in the fair value of FVOCI financial assets held at the reporting date. The tax effect of these movements is also included in the 'FVOCI reserve'.

21. ADDITIONAL CASH FLOW INFORMATION

a. Cash and cash equivalents

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

	2019 US$'000	2018 US$'000
Cash with central bank	8,037	7,985
Cash at banks	435,861	526,978
Placements with banks	190,000	3,522
	633,898	538,485

b. Reconciliation of cash flows from operating activities

	2019 US$'000	2018 US$'000
Profit for the year	84,458	74,273
Adjustments for:		
Net gains on derecognition of financial assets measured at FVOCI	(6)	(373)
Interest income	(105,120)	(75,752)
Interest expense	20,241	23,517
Income tax	15,568	13,343
Operating cash flows before changes in operating assets and liabilities	15,141	35,008
Changes in operating assets		
Increase in secured financing	(361,994)	-
Increase in loans and advances to customers	(1,172,024)	(167,885)
(Increase)/decrease in trade and other receivables	(78,916)	14,229
Decrease in trading financial assets	528	1,844
(Increase)/decrease in prepayments	(711)	91
	(1,613,117)	(151,721)
Changes in operating liabilities		
Increase/(decrease) in deposits	635,745	(651,434)
Decrease in trade and other payables	(9,664)	(11,550)
Increase/(decrease) in trading financial liabilities	388	(12,607)
Increase in accruals	201	125
	626,670	(675,466)
Interest received	103,838	39,032
Interest paid	(18,806)	(23,988)
Net income tax paid	(3,106)	(5,205)
Effect of foreign exchange movements	(3,587)	15,260
Net cash flows used in operating activities	(892,967)	(767,080)

22. EXPECTED MATURITY OF ASSETS AND LIABILITIES

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

At 31 December 2019

	Less than or equal to twelve months US$'000	More than twelve months US$'000	Total US$'000
ASSETS			
Cash and short-term deposits	633,898	-	633,898
Trading financial assets	441	-	441
Secured financing	362,047	-	362,047
Loans and advances to customers	2,770,325	-	2,770,325
Investment securities	854,769	-	854,769
Trade and other receivables	62,570	-	62,570
Deferred tax assets	-	5,002	5,002
Prepayments	835	-	835
	4,684,885	5,002	4,689,887
LIABILITIES			
Deposits	3,665,609	127	3,665,736
Trading financial liabilities	3,552	-	3,552
Trade and other payables	78,883	25,806	104,689
Current tax liabilities	21,251	-	21,251
Accruals	934	-	934
	3,770,229	25,933	3,796,162

At 31 December 2018

	Less than or equal to twelve months US$'000	More than twelve months US$'000	Total US$'000
ASSETS			
Cash and short-term deposits	538,485	-	538,485
Trading financial assets	969	-	969
Loans and advances to customers	1,598,301	-	1,598,301
Investment securities	720,304	594,996	1,315,300
Trade and other receivables	6,172	-	6,172
Deferred tax assets	-	4,023	4,023
Prepayments	124	-	124
	2,864,355	599,019	3,463,374
LIABILITIES			
Deposits	3,029,991	-	3,029,991
Trading financial liabilities	3,164	-	3,164
Trade and other payables	96,462	16,457	112,919
Current tax liabilities	7,662	-	7,662
Accruals	733	-	733
	3,138,012	16,457	3,154,469

23. FINANCIAL RISK MANAGEMENT

Risk management procedures

Risk is an inherent part of the Morgan Stanley Group's and the Company's business activities. The Company 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 has developed its own risk management policy framework, which is consistent with and leverages the risk management policies and procedures of the Morgan Stanley Group and which include escalation to appropriate senior management personnel of the Company as well as oversight through the Company's Board of Directors (the "Board") and through a dedicated Risk Committee that reports to the Board.

Significant risks faced by the Company resulting from its private wealth management and financing activities are set out below.

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 Company. The Company incurs credit risk primarily from margin loans to clients of the Wealth Management business segment, and to a lesser extent from Treasury activities related to deposit placement, investment portfolio and interest rate and foreign exchange hedges.

Credit risk management

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 and the Board of Directors.

The Company incurs credit risk primarily in the Wealth Management business through margin loans to its clients. Margin loans are asset-based in nature secured by mostly cash and marketable securities held with the Company as collateral.

The Company also incurs credit risk through a variety of treasury activities, including, but not limited to, the following:

- entering into derivative contracts with other Morgan Stanley Group undertakings under which counterparties may have obligations to make payments to the Company;
- posting margin and/or collateral to banks and other financial counterparties;
- placing funds on deposit at other financial institutions; and
- entering into securities transactions, whereby the value of these assets may fluctuate based on realised or expected defaults on the underlying obligations.

Monitoring and Control

In order to help protect the Company 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 Company'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.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit risk management (continued)

Monitoring and Control (continued)

A Credit Limits Framework is utilised to manage credit risk levels across the Company. The Credit Limits Framework is calibrated within the Company's risk appetite and includes stress loss, product, collateral concentration, correlated collateral, single-name, regulatory and connected lending limits. The Credit Risk Management Department helps ensure timely and transparent communication of material credit risks, compliance with established limits and escalation of risk concentrations to appropriate senior management. The Credit Risk Management Department also works closely with the Market Risk Department and applicable business units to monitor risk exposures and to perform stress tests to identify, analyse and control credit risk concentrations arising from the Company's lending and treasury activities. The stress tests shock market factors (e.g. interest rates, security prices, credit spreads) and risk parameters (e.g. default probabilities), in order to assess the impact of stresses on exposures, profit and loss, and the Company's capital position. Stress tests are conducted in accordance with established policies and procedures of Morgan Stanley Group and the Company and comply with methodologies outlined in the Basel regulatory framework.

Credit Evaluation

The evaluation of corporate and institutional counterparties and borrowers includes assigning obligor credit ratings, which reflect an assessment of an obligor's PD and LGD. An obligor credit rating can be categorised into Investment grade, Non-investment grade and 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 Morgan Stanley 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.

The Company's Wealth Management business segment generates minimal credit exposure given the collateralised nature of the business, as such the credit evaluation focuses on the counterparties' and borrowers' background and collateral evaluation, to ensure the exposures are well-collateralised and credit risk is mitigated.

In addition to assessing and monitoring its credit exposure and risk at the individual obligor level, the Company also reviews its credit exposure and risk to geographic regions. As at 31 December 2019 and 31 December 2018, credit exposure was concentrated in North American and Asian countries. In addition, the Company 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 Company also reviews its credit exposure and risk to certain types of customers. At 31 December 2019 and 31 December 2018, the Company's material credit exposure was to sovereigns, sovereign related entities, corporate entities, financial institutions and individuals.

Risk Mitigation

The Credit Risk Management Department may seek to mitigate credit risk from its lending and treasury activities in multiple ways, including collateral provisions and hedges.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit risk management (continued)

Risk Mitigation (continued)

In connection with the Company's Wealth Management business, the Company relies on the use of collateral to manage credit risk. The amount and type of collateral required by the Company depends on an assessment of the credit risk of the obligor. Collateral held is managed in accordance with the Company's guidelines and the relevant underlying agreements. Collateral is primarily publicly traded debt and equity securities, as well as a small amount of other collateral including unlisted securities, notes, mutual funds and insurance policies that fulfill the risk management requirement of being valuable and realisable at short notice.

In connection with the Company's derivatives activities with other Morgan Stanley Group undertakings, the Company generally enters into master netting agreements and collateral arrangements with counterparties. These agreements provide the Company with the ability to demand collateral, as well as to liquidate collateral and offset receivables and payables covered under the same master agreement in the event of a counterparty default.

In connection with securities purchased under agreements to resell transactions, the Company manages credit exposure arising from such transactions by, in appropriate circumstances, entering into Global Master Repurchase Agreements with counterparties that provide the Company, in the event of a counterparty default, with the right to net a counterparty's rights and obligations under such agreement and liquidate and set off collateral held by the Company against the net amount owed by the counterparty. Under these securities purchased under agreements to resell transactions, the Company receives collateral, including US government securities. The Company 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.

Exposure to credit risk

The maximum exposure to credit risk ("gross credit exposure") of the Company as at 31 December 2019 and 31 December 2018 is disclosed below, based on the carrying amounts of the financial assets and the maximum amount that the Company could have to pay in relation to unrecognised financial instruments, which the Company believes are subject to credit risk. The table includes financial instruments subject to ECL and not subject to ECL. Those financial instruments that bear credit risk but are not subject to ECL are subsequently measured at fair value. Exposure arising from financial instruments not recognised on the statement of financial position is measured as the maximum amount that the Company could have to pay, which may be significantly greater than the amount that would be recognised as a liability.

Where the Company enters into credit enhancements, including receiving cash and security as collateral and master netting agreements, to manage the credit exposure on these financial instruments the financial effect of the credit enhancements is also disclosed below. The net credit exposure represents the credit exposure remaining after the effect of the credit enhancements.

Collateral and other credit enhancements

The Company employs a range of policies and practices to mitigate credit risk, the most common being acceptance of collateral for funds advanced. The main types of collateral held are cash and marketable securities. The Company has internal policies on the acceptability of specific classes of collateral or credit risk mitigation.

The market value of securities received as collateral is monitored on a daily basis and securities received as collateral generally are not recognised on the statement of financial position. The Company monitors the creditworthiness of counterparties on an ongoing basis and requests additional collateral in accordance with collateral arrangements when deemed necessary.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Collateral and other credit enhancements (continued)

At 31 December 2019, the carrying amount of financial assets on which no ECL were recognised because of collateral held was US$2,770,325,000 (2018: US$1,598,301,000).

The Company closely monitors collateral held for financial assets considered to be credit-impaired, as in such cases it is considered more likely that the Company will take possession of collateral to mitigate potential credit losses.

The Company does not hold financial assets considered to be credit-impaired.

Exposure to credit risk by class

	31 December 2019			31 December 2018		
Class	Gross credit exposure (1)	Credit enhancements	Net credit exposure	Gross credit exposure (1)	Credit enhancements	Net credit exposure
	US$'000	US$'000	US$'000	US$'000	US$'000	US$'000
Subject to ECL:						
Cash and short-term deposits	633,898	-	633,898	538,485	-	538,485
Loans and advances to customers(3)	2,770,325	(2,770,325)	-	1,598,301	(1,598,301)	-
Investment securities	854,769	-	854,769	1,315,300	-	1,315,300
Trade and other receivables(2)	62,570	-	62,570	6,172	-	6,172
Not subject to ECL:						
Trading financial assets:						
Derivatives	441	(441)	-	969	(969)	-
Secured financing	362,047	(359,010)	3,037	-	-	-
	4,684,050	(3,129,776)	1,554,274	3,459,227	(1,599,270)	1,859,957
Unrecognised financial instruments						
Not subject to ECL:						
Unsettled securities purchased under agreements to resell(4)	51,800	-	51,800	-	-	-

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

(2) Trade and other receivables include cash collateral pledged against the payable on OTC derivative positions. These derivative liabilities are included within trading financial liabilities in the statement of financial position.

(3) The collateral held as security for loans and advances to customers consists of cash of US$529,704,000 (2018: US$379,894,000), securities of US$1,019,982,000 (2018: US$714,488,000) and other collateral of US$1,220,639,000 (2018: US$503,919,000).

(4) For unsettled securities purchased under agreements to resell, collateral in the form of securities will be received at the point of settlement. Since the value of collateral is determined at a future date, it is currently unquantifiable and not included in the table.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit quality

Exposure to credit risk by internal rating grades

Internal credit ratings, as below, 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 below shows gross carrying amount and, in the case of unrecognised financial instruments, nominal amounts by internal rating grade. All exposures subject to ECL are Stage 1, unless otherwise shown.

Until 31 December 2018, unless credit-impaired, the Company had reported all loans and advances to customers and the corresponding interest receivable as stage 2 for the purpose of the disclosure below, reflecting the Company's accounting policy to measure lifetime credit losses on loans and advances to customers and the corresponding interest receivable under the simplified approach. From 1 January 2019, the Company continues 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 loans and advances to customers and the corresponding interest receivable are now reported as stage 1 where they are not credit-impaired.

The 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 period disclosure below. There is no impact on the reported level of ECLs as a consequence of this presentational change.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit quality (continued)

Exposure to credit risk by internal rating grades (continued)

At 31 December 2019 in US$ thousands	AAA	AA	A	BBB	Total Investment Grade	Non-Investment Grade	Unrated[(1)]/ Default	Total Gross Carrying Amount	Loss Allowance	Total Carrying Amount
Subject to ECL:										
Cash and short term deposits	158,037	76,224	399,302	319	633,882	16	-	633,898	-	633,898
Loans and advances to customers	-	-	-	182,357	182,357	2,531,824	56,144	2,770,325	-	2,770,325
Investment securities	854,769	-	-	-	854,769	-	-	854,769	-	854,769
Trade and other receivables	14	-	56,695	315	57,024	5,455	91	62,570	-	62,570
Total subject to ECL	1,012,820	76,224	455,997	182,991	1,728,032	2,537,295	56,235	4,321,562	-	4,321,562
Not subject to ECL:										
Trading financial assets: derivatives	-	-	441	-	441	-	-	441	-	441
Secured financing	-	-	362,047	-	362,047	-	-	362,047	-	362,047
Total not subject to ECL	-	-	362,488	-	362,488	-	-	362,488	-	362,488
Unrecognised financial instruments not subject to ECL:										
Unsettled securities purchased under agreements	-	-	51,800	-	51,800	-	-	51,800	-	51,800

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Credit quality (continued)

Exposure to credit risk by internal rating grades (continued)

At 31 December 2018 in US$ thousands	AAA	AA	A	BBB	Total Investment Grade	Non-Investment Grade	Unrated[(1)]/ Default	Total Gross Carrying Amount	Loss Allowance	Total Carrying Amount
Subject to ECL:										
Cash and short term deposits	7,985	207,332	323,168	-	538,485	-	-	538,485	-	538,485
Loans and advances to customers	-	-	-	45,500	45,500	1,530,209	22,592	1,598,301	-	1,598,301
Investment securities	1,315,300	-	-	-	1,315,300	-	-	1,315,300	-	1,315,300
Trade and other receivables	2	-	1,738	17	1,757	4,319	96	6,172	-	6,172
Total subject to ECL	1,323,287	207,332	324,906	45,517	1,901,042	1,534,528	22,688	3,458,258	-	3,458,258
Not subject to ECL:										
Trading financial assets: derivatives	-	-	-	-	-	-	969	969	-	969
Total not subject to ECL	-	-	-	-	-	-	969	969	-	969

(1) For the unrated loans and receivables and the corresponding interest receivable, a lifetime ECL is always calculated without considering whether SICR has occurred.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Expected credit loss allowance

Financial instruments subject to the impairment requirements of HKFRS 9

There have been no changes made to estimation techniques or significant assumptions for estimating impairment during the year. There were no modifications to financial assets during the year or since origination and therefore modifications have not impacted ECL staging.

ECL on cash and short-term deposits, loans and advances to customers and trade and other receivables is de minimis owing to their short term tenure and the collateralised nature of loans and advances to customers. For investment securities, the gross carrying amount on which no ECL is recognised because they have an investment grade internal credit rating of AAA, corresponding to a low risk of default.

Liquidity risk

Liquidity risk refers to the risk that the Company 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 Company's ability (or perceived ability) to meet its financial obligations without experiencing significant business disruption or reputational damage that may threaten the Company's 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 Company incurs liquidity risk as a result of its trading, lending, investing and client facilitation activities.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity risk (continued)

The Morgan Stanley Group's Liquidity Risk Management Framework is critical to helping ensure that the Company maintains sufficient liquidity reserves and durable funding sources to meet its daily obligations and to withstand unanticipated stress events. The Liquidity Risk Department is a distinct area in Risk Management, which oversees and monitors liquidity risk. The Liquidity Risk Department 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 Liquidity Risk Department:

- 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 under a range of adverse scenarios.

The liquidity risks identified by these processes are summarised in reports produced by the Liquidity Risk Department that are circulated to and discussed with the Company's Asset & Liability Committee ("ALCO") and regional ALCO and risk committees, as appropriate.

The Treasury Department and applicable business units have primary responsibility for evaluating, monitoring and controlling the liquidity risks arising from the Morgan Stanley Group's business activities, and for maintaining processes and controls to manage the key risks inherent in their respective areas. The Liquidity Risk Department 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.

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

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

The following principles guide the Company's liquidity risk management framework:

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

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

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity risk (continued)

Required Liquidity Framework

The Required Liquidity Framework establishes the amount of liquidity the Company 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 Company uses Liquidity Stress Tests to model external and intercompany liquidity flows across multiple scenarios and 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 Company's Liquidity Stress Tests are important components of the Required Liquidity Framework.

Liquidity Stress Tests are produced for the Company, 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 Company 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 Company maintained sufficient liquidity to meet current and contingent funding obligations as modelled in its Liquidity Stress Tests.

Liquidity Reserve

The Company maintains sufficient liquidity reserves ("Liquidity Reserve") to meet regulatory requirements, 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 Company considering the following components: unsecured debt maturity profile; balance sheet size and composition; funding needs in a stressed environment inclusive of contingent cash outflows; regulatory requirements; and collateral requirements. In addition, the Company's Liquidity Reserve includes a discretionary surplus based on the Company's risk tolerance and is subject to change depending on market and firm-specific events. The Liquidity Reserve consists of cash, investment securities and securities received as collateral.

The Company 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.

Funding Management

The Company manages its funding in a manner that reduces the risk of disruption to the Company's operations. The Company 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 Company funds itself through diverse sources. These sources include the Company's equity capital, borrowings and deposits.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity risk (continued)

Balance sheet management

In managing both the Morgan Stanley Group's and the Company's liquidity 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.

Maturity analysis

In the following maturity analysis of financial liabilities, derivatives contracts measured at fair value are presented at fair value, consistent with how these financial liabilities are managed, and disclosed as on demand. All other amounts represent undiscounted cash flows payable by the Company arising from its financial liabilities to 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 Company to appropriately reflect the liquidity risk arising from those financial liabilities, presented in a way that is consistent with how the liquidity risk on these financial liabilities is managed by the Company.

31 December 2019	On demand US$'000	Not more than 1 month US$'000	More than 1 month but not more than 3 months US$'000	More than 3 months but not more than 1 year US$'000	More than 1 year but not more than 5 years US$'000	Total US$'000
Financial liabilities						
Deposits of banks	2,149	-	-	-	-	2,149
Deposits of non-bank customers	2,623,233	263,247	446,463	338,697	-	3,671,640
Deposits of other Morgan Stanley Group undertakings	-	-	-	-	127	127
Trading financial liabilities:						
Derivatives	-	1,747	1,805	-	-	3,552
Trade and other payables	9,142	22,315	42,867	4,559	25,806	104,689
Total financial liabilities	2,634,524	287,309	491,135	343,256	25,933	3,782,157
Unrecognised financial instruments						
Unsettled securities purchased under agreements to resell[(1)]	-	51,800	-	-	-	51,800

(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, US$51.8 million settled within three business days.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Liquidity risk (continued)

Maturity analysis (continued)

31 December 2018	On demand US$'000	Not more than 1 month US$'000	More than 1 month but not more than 3 months US$'000	More than 3 months but not more than 1 year US$'000	More than 1 year but not more than 5 years US$'000	Total US$'000
Financial liabilities						
Deposits of banks	1,202	-	-	-	-	1,202
Deposits of non-bank customers	2,484,966	127,451	142,990	278,049	-	3,033,456
Trading financial liabilities:						
Derivatives	-	1,556	1,608	-	-	3,164
Trade and other payables	30,382	23,009	35,398	7,673	16,457	112,919
Total financial liabilities	2,516,550	152,016	179,996	285,722	16,457	3,150,741

Market Risk

Market risk is defined by HKFRS 7 '*Financial Instruments: Disclosures*' ("HKFRS 7") as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices.

The Company manages the market risk associated with its assets and liabilities management activities at both 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 Company's culture. The Company is responsible for ensuring that market risk exposures are well-managed and monitored. The Company 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 Morgan Stanley Group monitors the market risk of the firm 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 Company is managed within the Morgan Stanley Group's global framework. The market risk management policies and procedures of the Company include performing risk analyses and reporting material risks identified to appropriate senior management of the Company.

The Company is exposed to the following types of market risk under this definition: interest rate risk and currency risk.

23. FINANCIAL RISK MANAGEMENT (CONTINUED)

Market Risk (continued)

Interest rate risk

Interest rate risk is defined by HKFRS 7 as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is primarily exposed to interest rate risk under this definition as a result of changes in the future cash flows of deposits and loans, bank balance, changes in the fair value of fixed rate debt investments categorised as FVOCI, and the interest rate swap hedges.

The application of a parallel shift in market interest rates of 50 basis points increase or decrease to these positions, would result in a net gain or loss of approximately US$6,310,000 (2018: US$2,487,000).

Currency risk

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

The analysis below details the material foreign currency exposure for the Company, by foreign currency. 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.

	2019				2018			
			Sensitivity to applied percentage change in currency (+/-)				Sensitivity to applied percentage change in currency (+/-)	
	Foreign currency exposure US$'000	Percentage change applied %	Profit or loss US$'000	Other comprehensive income US$'000	Foreign currency exposure US$'000	Percentage change applied %	Profit or loss US$'000	Other comprehensive income US$'000
Hong Kong Dollar	(9,786)	1	98	-	(10,557)	1	106	-
Singapore Dollar	(3,115)	2	62	-	(2,268)	8	181	-
Yuan Renminbi	(412)	5	21	-	(221)	6	13	-
	(13,313)				(13,046)			

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 2-year period from 1 January 2018 to 31 December 2019 (2018: from 1 January 2017 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 year ended 31 December 2019, or for the year ended 31 December 2018.

24. FINANCIAL ASSETS ACCEPTED AS COLLATERAL

The Company's policy is generally to take possession of securities purchased under agreements to resell. The Company monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and, as necessary, requests additional collateral to ensure such transactions are adequately collateralised. Where deemed appropriate, the Company's agreements with third parties specify its rights to request additional collateral. These transactions are mostly conducted under standard documentation used by financial market participants. The fair value of collateral accepted under these arrangements as at 31 December 2019 was US$359,010,000 (2018: nil).

25. OPERATIONAL RISK

Operational risk refers to the risk of loss, or of damage to the Company's reputation, resulting from inadequate or failed processes, 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 Company may incur operational risk across the full scope of its business activities, including revenue-generating activities (e.g., private wealth management) and support and control groups (e.g., information technology and trade processing).

The Company has established an operational risk framework to identify, measure, monitor and control risk across the Company. This framework is consistent with the framework established by the Morgan Stanley Group and includes escalation to the Company'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 account for changes in the Company and to respond to the changing regulatory and business environment.

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

In addition, the Company 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 reviewed and confirmed by the Board and are prioritised accordingly.

The breadth and variety of operational risk are such that the types of mitigating activities are wide-ranging. Examples of activities include continuous enhancement of defences against cyber attacks; 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 Company'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 Company'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.

25. OPERATIONAL RISK (CONTINUED)

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 Company.

The Operational Risk Department scope includes oversight of technology risk, cybersecurity risk, information security risk and data risk management programme (e.g., cybersecurity), fraud risk management and prevention programme and third party risk management (supplier and affiliate risk oversight and assessment) programme. 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 Company's advanced measurement approach for operational risk capital.

Business Continuity Management maintains programmes for business continuity management and technology disaster recovery that facilitate activities designed to mitigate risk to the Morgan Stanley Group during a business continuity event. A business continuity event is an interruption with potential impact to normal business activity of the Company's people, operations, technology, suppliers and/or facilities. The business continuity management programme'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 Company's operations during business continuity events. Disaster recovery plans supporting business continuity are in place for critical facilities and resources across the Company.

The Company maintains a programme that oversees its cyber and information security risks. The Company's cybersecurity and information security policies, procedures and technologies are designed to protect the Company's information assets against unauthorised disclosure, modification or misuse and are also designed to address regulatory requirements. These policies and procedures 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.

In connection with its ongoing operations, the Company utilises the services of third party suppliers, which it anticipates will continue and may increase in the future. These services include, for example, outsourced processing and support functions and consulting and other professional services. The Company'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 risk and ongoing monitoring of the third party suppliers' performance. The Company maintains a third party risk programme with appropriate governance, policies, procedures, and technology that supports alignment with our risk tolerance and is designed to meet regulatory requirements. The third party risk programme 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.

26. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING

In order to manage credit exposure arising from its business activities, the Company applies various credit risk management policies and procedures, see note 23 for further details. Primarily in connection with securities purchased under agreements to resell and derivative transactions, the Company enters into master netting arrangements and collateral arrangements with its counterparties. These agreements provide the 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 Company against the net amount owed by the counterparty.

However, in certain circumstances, the 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 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 assets and the liabilities 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 Company's exposure to credit risk is disclosed in note 23.

26. FINANCIAL ASSETS AND FINANCIAL LIABILITIES SUBJECT TO OFFSETTING (CONTINUED)

				Amounts not offset		
	Gross amount	**Amount offset**	**Net amount**	**Financial instruments**	**Cash collateral[1]**	**Net exposure**
	US$'000	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**
31 December 2019						
Assets						
Secured Financing:						
Securities purchased under agreements to resell	362,047	-	362,047	(359,010)	-	3,037
Trading financial assets:						
Derivatives	441	-	441	(441)	-	-
TOTAL ASSETS	362,488	-	362,488	(359,451)	-	3,037
Liabilities						
Trading financial liabilities:						
Derivatives	3,552	-	3,552	(441)	(3,111)	-
TOTAL LIABILITIES	3,552	-	3,552	(441)	(3,111)	-
31 December 2018						
Assets						
Trading financial assets:						
Derivatives	969	-	969	(969)	-	-
TOTAL ASSETS	969	-	969	(969)	-	-
Liabilities						
Trading financial liabilities:						
Derivatives	3,164	-	3,164	(969)	(1,734)	461
TOTAL LIABILITIES	3,164	-	3,164	(969)	(1,734)	461

(1) The cash collateral is recognised in the statement of financial position within 'Trade and other receivables' and 'Trade and other payables' respectively.

27. ASSETS AND LIABILITIES MEASURED AT FAIR VALUE

a. Financial assets and liabilities recognised at fair value on a recurring basis

The following tables present the carrying value of the Company's financial assets and financial liabilities recognised at fair value on a recurring basis, classified according to the fair value hierarchy.

2019	Quoted prices in active market (Level 1) US$'000	Valuation techniques using observable inputs (Level 2) US$'000	Valuation techniques with significant unobservable inputs (Level 3) US$'000	Total US$'000
Trading financial assets:				
- Derivatives				
Foreign exchange contracts	-	441	-	441
Secured financing:				
- Securities purchased under agreements to resell	-	362,047	-	362,047
Investment securities:				
- Government debt securities	602,491	252,278	-	854,769
Total financial assets measured at fair value	602,491	614,766	-	1,217,257
Trading financial liabilities:				
- Derivatives				
Foreign exchange contracts	-	3,552	-	3,552
Total financial liabilities measured at fair value	-	3,552	-	3,552

27. ASSETS AND LIABILITIES MEASURED AT FAIR VALUE (CONTINUED)

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

2018	Quoted prices in active market (Level 1) US$'000	Valuation techniques using observable inputs (Level 2) US$'000	Valuation techniques with significant unobservable inputs (Level 3) US$'000	Total US$'000
Trading financial assets:				
- Derivatives				
Foreign exchange contracts	-	969	-	969
Investment securities:				
- Government debt securities	1,044,377	270,923	-	1,315,300
Total financial assets measured at fair value	1,044,377	271,892	-	1,316,269
Trading financial liabilities:				
- Derivatives				
Foreign exchange contracts	-	3,164	-	3,164
Total financial liabilities measured at fair value	-	3,164	-	3,164

27. ASSETS AND LIABILITIES MEASURED AT FAIR VALUE (CONTINUED)

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

The Company's valuation approach and fair value hierarchy categorisation for certain significant classes of financial instruments recognised at fair value on a recurring basis is as follows:

Asset and Liability / Valuation Technique	Valuation Hierarchy Classification
Government debt securities	
US treasury securities • Fair value is determined using quoted market prices.	• Level 1
Non US Government Obligations • 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.	• Generally Level 1 • Level 2 - if the market is less active or prices are dispersed • Level 3 - in instances where the prices are unobservable
Derivatives	
OTC derivative contracts (include swap contracts related to interest rates and foreign currencies) • 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. In the case of more established derivative products, the pricing models used by the Company are widely accepted by the financial services industry.	• Generally Level 2 - OTC derivative products valued using observable inputs, or where the unobservable input is not deemed significant • Level 3 - OTC derivative products for which the unobservable input is deemed significant
Securities purchased under agreements to resell	
• Fair value is computed using a standard cash flow discounting methodology. • The inputs to the valuation include contractual cash flows and collateral funding spreads, which are the incremental spread over the overnight indexed swap ("OIS") rate for a specific collateral rate (which refers to the rate applicable to a specific type of security pledged as collateral).	• Generally Level 2

27. ASSETS AND LIABILITIES 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 transfers between Level 1 and Level 2 of the fair value hierarchy during the current year and prior year.

c. Changes in Level 3 financial assets and liabilities recognised at fair value on a recurring basis

There were no transfers between Level 2 and Level 3 of the fair value hierarchy during the current year and prior year.

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

Non-recurring fair value measurements of assets or liabilities are those which are required or permitted in the statement of financial position in particular circumstances. There were no assets or liabilities measured at fair value on a non-recurring basis during the current year and prior year.

28. ASSETS AND LIABILITIES NOT MEASURED AT FAIR VALUE

For all financial instruments not measured at fair value, the carrying amount is considered to be a reasonable approximation of fair value due to the short term nature of these assets and liabilities.

29. CAPITAL MANAGEMENT

The Morgan Stanley Group manages its capital on a global basis with consideration for its legal entities. The capital managed by the Morgan Stanley Group broadly includes ordinary share capital, preference share capital, subordinated loans and reserves.

The Morgan Stanley Group actively manages its consolidated 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 and, therefore, in the future may expand or contract its capital base to address the changing needs of its businesses.

The Morgan Stanley Group also aims to adequately capitalise at a legal entity level whilst safeguarding that entity’s ability to continue as a going concern and ensuring that it meets all regulatory capital requirements, so that it can continue to provide returns for the Morgan Stanley Group.

In order to maintain or adjust the capital structure as described above, the Company may adjust the amount of dividends paid, return capital to shareholder, issue new shares, issue subordinated debt or sell assets to reduce debt.

29. CAPITAL MANAGEMENT (CONTINUED)

The Company is regulated by the HKMA and as such is subject to minimum capital requirements. The Company's capital is monitored on an ongoing basis to ensure compliance with these requirements. At a minimum, the Company must ensure that capital is greater than the capital requirement covering credit, market and operational risk.

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

The Company manages the following items as capital:

	2019 US$'000	2018 US$'000
Share capital	670,000	170,000
FVOCI reserve	1,330	968
Retained earnings	222,395	137,937
	893,725	308,905

The Company has earmarked part of its retained earnings for maintaining its regulatory reserve for general banking risks to satisfy the provisions of the Banking Ordinance for prudential supervision purposes. At 31 December 2019, US$27,703,000 (2018: US$17,581,000) in the retained earnings was earmarked for this purpose.

30. 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.

Equity-settled share-based compensation plans

Morgan Stanley has granted RSU awards pursuant to several equity-based compensation plans. The plans provide for the deferral of a portion of certain employees' incentive compensation, with awards made in the form of restricted common stock. Awards under these plans are generally subject to vesting over time, generally six months to seven years, and are generally contingent upon continued employment and subject to restrictions on sale, transfer or assignment until conversion to common stock. All, or a portion of, an award may be cancelled if employment is terminated before the end of the relevant vesting period, and after the vesting period in certain situations. Recipients of equity-based awards may have voting rights, at Morgan Stanley's discretion, and generally receive dividend equivalents if the awards vest, unless this is prohibited by regulation.

During the year, Morgan Stanley granted 479,074 units (2018: 323,657 units) of RSU to employees of the Company with a weighted average fair value per unit of US$43.28 (2018: US$56.13), based on the market value of Morgan Stanley shares at grant date.

The equity-based compensation expense recognised in the year is US$18,678,000 (2018: US$15,521,000). The Company has also entered into a chargeback agreement with Morgan Stanley under which it is committed to pay to Morgan Stanley the grant date fair value of awards granted as well as subsequent movements in their fair value. Therefore, the total amount included within 'Staff costs' within 'Other expense' of US$26,012,000 (2018: US$11,323,000) includes the equity-based compensation expense and the movements in the fair value of the awards granted to employees.

The related liability due to Morgan Stanley at the end of the year, reported within 'Trade and other payables' in the statement of financial position, is US$32,148,000 (2018: US$32,357,000), of which US$14,513,000 (2018: US$14,639,000) is expected to be settled in greater that one year.

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 six months to three years from the date of grant. All or a portion of an award may be cancelled if employment is terminated before the end of the relevant vesting period. The awards are settled in cash at the end of the relevant vesting period.

Awards with a value of US$20,485,000 (2018: US$17,076,000) have been granted to employees of the Company during the year. The liability to employees at the end of the year, reported within 'Trade and other payables' in the statement of financial position, is US$26,721,000 (2018: US$21,826,000).

Plans operated by fellow Morgan Stanley undertakings

As explained in note 8, the Company utilises the services of staff who are employed by other Morgan Stanley Group entities. Management charges are incurred in respect of these employee services which include the cost of equity-settled share-based compensation plans and deferred cash-based compensation plans.

31. POST-EMPLOYMENT BENEFITS

Defined contribution plans

The Morgan Stanley Group operates the Morgan Stanley Defined Contribution Plan (the "Plan"), which requires contributions to be made to funds held in trust, separate from the assets of the Company. The Plan is a defined contribution plan.

Additionally, the employees of the Branch are members of a state-managed retirement benefit plan, the Central Provident Fund, operated by the Government of Singapore. The Branch is required to contribute a specified percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Branch with respect to the retirement plan is to make the specified contributions.

The defined contribution pension charge recognised within 'Staff costs' and 'Directors' remuneration' in 'Other expense' in the income statement was US$5,644,000 for the year (2018: US$4,730,000) of which US$243,000 was accrued at 31 December 2019 (2018: US$218,000).

32. RELATED PARTY DISCLOSURES

Parent and subsidiary relationships

Parent and ultimate controlling entity

As at 31 December 2018, the Company's immediate parent undertaking was Morgan Stanley Hong Kong Limited, which was incorporated in Hong Kong.

With effect from 21 March 2019 and as at 31 December 2019, the Company's immediate parent undertaking was changed to Morgan Stanley Hong Kong 1238 Limited, which was incorporated in Hong Kong.

The ultimate parent undertaking and controlling entity and the largest group of which the Company is a member and for which group financial statements are prepared is Morgan Stanley. 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.

32. RELATED PARTY DISCLOSURES (CONTINUED)

Key management compensation

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Company. Key management personnel include the Board of Directors of the Company.

Compensation paid to key management personnel in the Morgan Stanley Group in respect of their services rendered to the Company, comprised the following:

	2019 US$'000	2018 US$'000
Short-term employee benefits	4,674	5,845
Post-employment benefits	77	93
Share-based payments	5,305	799
Other long-term employee benefits	3,344	2,871
	13,400	9,608

The share-based payment costs disclosed above reflect the amortisation of equity-based awards granted to key management personnel over the last three years and are therefore not directly aligned with other staff costs in the current year.

Key management personnel compensation is borne by Morgan Stanley Group undertakings in both the current and prior years. Management recharges (if any) 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 'Other expense', as disclosed in note 8.

In addition to the above, directors not in the Morgan Stanley Group provided key management personnel services to the Company for which a fee of US$168,000 was charged for the year (2018: US$134,000) and of which nil was accrued at 31 December 2019 (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 Company 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. Settlement of the outstanding balances will be made in cash. The Company has not recognised any expense and has made no provision for impairment relating to the amount of outstanding balances from related parties (2018: Nil).

32. RELATED PARTY DISCLOSURES (CONTINUED)

Transactions with related parties (continued)

Cash

The Company receives deposits from other Morgan Stanley Group undertakings. All such transactions are entered into on an arm's length basis.

	2019		2018	
	Interest	Balance	Interest	Balance
	US$'000	US$'000	US$'000	US$'000
Amounts due to the Company's direct and indirect parent undertakings	-	-	7,193	-
Amounts due to other Morgan Stanley Group undertakings	527	127	5,921	-
	527	127	13,114	-

Trading and risk management

The Company enters into purchases and sales of securities and derivative transactions with other Morgan Stanley Group undertakings primarily to meet local regulatory requirements and to manage the market risks associated with such transactions. The Company also has a cash sweep service with other Morgan Stanley Group undertakings to facilitate provision of financial services to clients on a global basis. All such transactions are entered into on an arm's length basis. The total amounts receivable and payable on such securities transactions not yet settled and the fair value of such derivatives contracts outstanding at the year end were as follows:

	2019	2018
	US$'000	US$'000
Amounts due from other Morgan Stanley Group undertakings on unsettled securities and derivative transactions	33,636	969
Amounts due to other Morgan Stanley Group undertakings on unsettled securities and derivative transactions	3,552	20,208

The Company has received collateral of US$Nil (2018: US$Nil) at 31 December 2019 and incurred interest charges of US$14,000 (2018: US$111,000) to other Morgan Stanley Group undertakings during the year and has pledged collateral of US$3,160,000 (2018: US$1,734,000) at 31 December 2019 and received interest of US$13,000 (2018: US$90,000) from other Morgan Stanley Group undertakings during the year to mitigate credit risk on exposures arising under derivatives contracts between the Company and other Morgan Stanley Group undertakings. This is reported in the statement of financial position in 'Trade and other receivables'/ 'Trade and other payables'.

32. RELATED PARTY DISCLOSURES (CONTINUED)

Transactions with related parties (continued)

Infrastructure services and fees and commissions

The Company receives and incurs management charges to and from other Morgan Stanley Group undertakings for infrastructure services, including the provision of staff, administrative support and office facilities. Management recharges received and incurred during the year are as follows:

	2019 US$'000	2018 US$'000
Amounts recharged from the Company's direct and indirect parent undertakings	-	144
Amounts recharged from other Morgan Stanley Group undertakings	76,224	69,355
	76,224	69,499
Amounts recharged to other Morgan Stanley Group undertakings	6,465	6,420

The management and execution of business strategies on a global basis results in many Morgan Stanley transactions impacting a number of Morgan Stanley Group undertakings. The Morgan Stanley Group operates a number of intra-group policies to ensure that, where possible, revenues and related costs are matched.

The Company earns fee and commission income from other Morgan Stanley Group undertakings for value added services which include sales commissions and fees arising from such policies. Fees and commissions received during the year are as follows:

	2019 US$'000	2018 US$'000
Fees and commissions received from the Company's direct and indirect parent undertakings	-	228,408
Fees and commissions received from other Morgan Stanley Group undertakings	258,589	-
	258,589	228,408
Fees and commissions paid to other Morgan Stanley Group undertakings	1,950	-
	1,950	-

32. RELATED PARTY DISCLOSURES (CONTINUED)

Transactions with related parties (continued)

Infrastructure services and fees and commissions (continued)

Amounts arising from infrastructure services and fee and commission income outstanding at the reporting date are as follows:

	2019 US$'000	2018 US$'000
Amounts due from the Company's direct and indirect parent undertakings	-	5
Amounts due from other Morgan Stanley Group undertakings	20,283	34
	20,283	39

	2019 US$'000	2018 US$'000
Amounts due to the Company's direct and indirect parent undertakings	474	3,777
Amounts due to other Morgan Stanley Group undertakings	8,399	8,262
	8,873	12,039

These balances are undated, unsecured and non-interest bearing.

33. EVENTS AFTER THE REPORTING PERIOD

The emergence of COVID 19 (coronavirus) has created economic and financial disruptions in the global economy which has led to operational challenges that could impair Morgan Stanley's ability to manage or conduct some of its businesses around the world. In line with many national and local guidelines, Morgan Stanley has required nearly all staff to work from home and business travel is severely restricted, however Morgan Stanley remains open for business.

Given the disruptions in the financial markets, Morgan Stanley and the Company are closely tracking their operational capacity. Additionally, the financial effects of the outbreak have a high degree of uncertainty, given that they are dependent on external factors such as the spread of the virus and the measures taken by the various governments and central banks. Morgan Stanley and the Company have already observed significant volatility in the global marketplace which could have an impact on their financial results and financial position in the future. Morgan Stanley and the Company 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.

This is a non-adjusting event as the significant changes in the business activities and economic conditions occurred as a result of events occurring after the reporting date.

UNAUDITED SUPPLEMENTARY FINANCIAL INFORMATION
Year ended 31 December 2019

The following information is disclosed as part of the accompanying information to the financial statements to comply with the Banking (Disclosure) Rules and does not form part of the audited financial statements.

A. CORPORATE GOVERNANCE

Corporate Governance Practices
The Company and Morgan Stanley are committed to upholding high standards in its corporate governance practices. The HKMA has issued statutory guidelines on Corporate Governance of Locally Incorporated Authorised Institutions ("CG-1") under section 7(3) of the Banking Ordinance applicable to all locally incorporated Authorised Institutions ("AIs"). The Company has in place an effective framework which is consistent with the principles and best practices in corporate governance as set forth in the guidelines on CG-1.

Board of Directors
The Board of the Company currently comprises of nine members: two Executive Directors, four Non-Executive Directors, and three Independent Non-Executive Directors. All Directors have the appropriate experience, competence, personal and professional integrity to discharge their responsibilities effectively. The Directors have sufficient independence, expertise and experience to oversee the Company's operations and manage risks appropriately.

Board Practices
Board meetings are held at least four times a year, with one in each quarter. Notice of each Board meeting is given to all Directors in advance and the agenda is sent to the Directors before the date of each Board meeting. Minutes of each Board meeting are circulated to all Directors for their comments prior to confirmation of the minutes at the following Board meeting. Minutes of Board meetings are kept by the Company Secretary and are available for inspection by the Directors.

There are four Board level committees: (a) Board Audit Committee (formerly known as "Audit Committee"), (b) Board Remuneration and Culture, Values and Conduct Committee (formerly known as "Remuneration Committee"), (c) Board Risk Committee (formerly known as "Risk Committee"); and (d) Board Nomination Committee.

In addition, there are two Management level committees: (a) Management Committee; and (b) Bank Risk Committee, which are in turn supported by a number of management sub-committees.

Key Board Level Committees
(a) Board Audit Committee
Three Board members sit on the Board Audit committee including two Independent Non-Executive Directors and one Non-Executive Director. The Board Audit Committee is chaired by an Independent Non-Executive Director and expects to meet at least 4 times a year. The Board Audit Committee's mandate is to ensure that there is effective supervision of the Company's financial reporting processes, systems of internal controls and internal audit function. The Board Audit Committee also will review and endorse the recommendation on the appointment or re-appointment of external auditors and reviews the financial statements before recommending them to the Board for approval.

A. CORPORATE GOVERNANCE (CONTINUED)

Key Board Level Committees (continued)

(b) Board Remuneration and Culture, Values and Conduct Committee

Three Board members sit on the Board Remuneration and Culture, Values and Conduct Committee including two Independent Non-Executive Directors and one Non-Executive Director. The Board Remuneration and Culture, Values and Conduct Committee is chaired by an Independent Non-Executive Director and meets at least twice a year. The Board Remuneration and Culture, Values and Conduct Committee’s responsibility is to assist the Board in discharging its responsibility for the design and operation of the Company’s remuneration system, and the oversight of the Company’s culture, values and conduct programme. The Board has delegated to the Board Remuneration and Culture, Values and Conduct Committee the authority to approve the remuneration packages for the Company’s senior management and key personnel with a view to creating a remuneration system that incentivises proper employee behavior, and to oversee the implementation of the Company’s culture, values and conduct programme.

(c) Board Risk Committee

The Board Risk Committee comprises three Board members, including two Independent Non-Executive Directors and one Non-Executive Director. The Board Risk Committee meets at a minimum of 4 times a year and is chaired by an Independent Non-Executive Director. The Board Risk Committee oversees key risk matters and risk governance and recommends to the Board the Company’s risk appetite statements. It also reviews annually the Company’s risk management strategy and policy, and reviews and ensures that the Company has appropriate manpower resources, infrastructure and other resources and systems to identify, assess, monitor, and manage risks.

(d) Board Nomination Committee

Three Board members sit on the Board Nomination Committee including two Independent Non-Executive Directors and one Non-Executive Director. The Board Nomination Committee is chaired by an Independent Non-Executive Director and meets as frequently as is properly required to carry out its functions and at least once a year. The Board Nomination Committee is responsible for assisting and providing guidance to the Board in relation to the appointment of board members, and the assessment of board performance for the Company.

Key Management Level Committees

(a) Management Committee

The Management Committee is chaired by the Chief Executive of the Company and meets monthly. The Management Committee oversees the operations of the Company and provides a regular forum for business leaders across the Company to identify and discuss key issues and actions that need to be taken to fulfill the Company’s strategy.

(b) Bank Risk Committee

The Bank Risk Committee is chaired by the Chief Executive of the Company and meets monthly. The Bank Risk Committee provides a regular forum for senior representatives of the Company to oversee the risk management practices within the Company.

A. CORPORATE GOVERNANCE (CONTINUED)

Internal Audit
The Internal Audit Department ("IAD") is established to assist both senior management and the Board Audit Committee in the effective discharge of their legal, fiduciary, and oversight responsibilities. IAD provides independent assurance on the quality and effectiveness of the Company's internal control, risk management and governance systems and processes. IAD therefore operates as the third line of defense in the Company's internal control governance framework, after business operations and the Company's oversight functions, to protect the assets and reputation of the Company. IAD acts as an objective and independent function within the Company's risk management framework to promote an environment that fosters continual improvement of risk management processes. IAD identifies and assesses operating risks and evaluates the adequacy and effectiveness of the Company's system of internal control. Accordingly, IAD develops an independent and informed view of the risks faced by the Company and the risk management processes employed to manage those risks.

Compliance
The Company is committed to maintaining and upholding high standards of corporate governance. The Company has been in material compliance with the HKMA Module on "Corporate Governance of Locally Incorporated Authorised institutions" ("CG-1") issued under the HKMA's Supervisory Policy Manual ("SPM").

Financial disclosure policy
The Company has in place the financial disclosure policy which is reviewed and approved by the Board of the Company. It sets out (a) the process and approach in determining the content, appropriateness, frequency, relevance and adequacy of the information disclosed, and (b) governance and oversight of the Company's disclosures for verifying or reviewing the accuracy of the information disclosed.

B. SEGMENTAL INFORMATION

(a) By geographical area

The geographical segmental analysis for the year ended 31 December 2019 is as follows:

2019	Hong Kong [1] US$'000	Singapore [1] US$'000	Total US$'000
Total operating income (net of interest expense)	298,331	65,377	363,708
Profit before income tax	76,764	23,262	100,026
Total assets	3,060,194	1,629,693	4,689,887
Total liabilities	2,515,112	1,281,050	3,796,162
Commitments	-	51,800	51,800

(1) The amounts disclosed above are after elimination of interoffice balances or transactions between the head office in Hong Kong and the Branch.

(b) By class of business

The main business segments of the Company are as follows:

(i) Wealth Management: the Company engages in the business of banking including deposit taking and lending. It also acts (a) as agent on behalf of its customers in connection with the provision of general investment, securities dealing, as well as discretionary management and (b) as introducing broker to Morgan Stanley & Co. International plc for the provision of clearance, settlement and custody services in relation to the aforementioned transactions.

B. SEGMENTAL INFORMATION (CONTINUED)

(b) By class of business (continued)

(ii) Treasury and others: includes treasury operations and back office activities.

The Company's business segment results for the year ended 31 December 2019 are as follows:

2019	Wealth Management [1] US$'000	Treasury and others [1] US$'000	Total US$'000
Total operating income (net of interest expense)	323,076	40,632	363,708
Profit before income tax	59,973	40,053	100,026
Total assets	2,777,075	1,912,812	4,689,887

(1) The amounts disclosed above are after elimination of interoffice balances or transactions between the head office in Hong Kong and the Branch.

There were no impairment losses, specific provision and collective provision for impaired assets for the year.

C. LOAN AND ADVANCES – SECTOR INFORMATION

Sector classification	As at 31 December 2019 US$'000
Loans and advances for use in Hong Kong	
Industrial, commercial and financial:	
- Financial concerns	32,738
- Others	1,018,462
Individuals	
- Others	207,260
Loans and advances for use outside Hong Kong	1,511,865
Total	2,770,325

The total loans were fully secured by collateral as at 31 December 2019.

C. LOAN AND ADVANCES – SECTOR INFORMATION (CONTINUED)

Geographical Areas	As at 31 December 2019 US$'000
Hong Kong	1,258,460
Mainland China	459,561
Singapore	443,762
Taiwan	185,728
Others	422,814
Total	2,770,325

Loan and Advances are exposures of counterparties based on the location of the counterparties after taking into account any risk transfer. The risk transfers have been made if the claims are guaranteed by a party in a geographical area which is different from that of the counterparty or if the claims are on an overseas branch of a bank whose head office is located in another geographical area.

D. INTERNATIONAL CLAIMS

International claims are on-balance sheet exposures of counterparties based on the location of the counterparties after taking into account any risk transfer. The risk transfers have been made if the claims are guaranteed by a party in a geographical area which is different from that of the counterparty or if the claims are on an overseas branch of a bank whose head office is located in another geographical area.

			Non-bank private sector		
	Bank	Official sector	Non-bank financial institutions	Non-financial private sector	Total
31 December 2019	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**
Developed countries	504,115	602,575	54,128	3,223	1,164,041
of which: United States	132,951	602,575	362	743	736,631
Offshore centres	387,252	-	289,961	1,581,542	2,258,755
of which: Hong Kong	387,180	-	189,037	768,915	1,345,132
of which: Singapore	72	-	12,162	420,417	432,651
Developing Asia and Pacific	64,988	-	100,254	616,292	781,534
of which: China	64,988	-	100,254	302,938	468,180

E. OVERDUE AND RESCHEDULED ASSETS

There were no impaired, overdue or rescheduled assets as at 31 December 2019.

F. MAINLAND ACTIVITIES

Below is a breakdown of the Company’s Mainland exposures to non-bank counterparties on the Hong Kong office into the specified categories, in accordance with the numbers reported in the Return of Mainland Activities submitted to the HKMA.

As at 31 December 2019 Type of counterparties	On-balance sheet exposures US$’000	Off-balance sheet exposures US$’000	Total US$’000
Local governments, local government-owned entities and their subsidiaries and joint ventures (“JVs”)	999	-	999
The People’s Republic of China (“PRC”) nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs	186,958	-	186,958
Of which, PRC nationals residing in Mainland China or entities beneficially-owned by Mainland interest	25,043	-	25,043
Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	454,505	-	454,505
Total	667,505	-	667,505

G. CURRENCY RISK

The currency risk arising from the Company’s operation for those individual currencies which each constitutes more than 10% of the total net positions in all foreign currencies are as follows:

As at 31 December 2019	SGD [1] US$’000	USD [1] US$’000
Spot assets	372,841	3,016,081
Spot liabilities	(238,210)	(3,320,163)
Forward purchases	-	515,310
Forward sales	(137,587)	(198,073)
Net (short)/ long position	(2,956)	13,155

(1) Net (short)/long positions in individual currencies of the Company are reported in gross, i.e. interoffice balances and transactions between the head office in Hong Kong and the Branch are not eliminated.

The Company had no option and structural positions in any particular foreign currency as at 31 December 2019.

H. PILLAR 3 DISCLOSURE

The capital adequacy ratios of the Company were calculated in accordance with Banking (Capital) Rules of the Banking Ordinance. The Company uses the following approaches to calculate its capital charge for:

(a) credit risk: Standardised (Credit Risk) Approach ("STC approach"); and
(b) operational risk: Basic Indicator Approach ("BIA approach").

There was no risk-weighted amount ("RWA") for market risk for the Company because the Company was exempted by the HKMA from the calculation of market risk.

The following templates and tables show the standard disclosure templates and tables specified by the HKMA in relation to the Pillar 3 disclosures required under the Banking (Disclosure) Rules. Other Pillar 3 templates or tables not disclosed below either are not applicable to the Company or have no reportable amount for the period.

Table OVA: Overview of risk management

Risk Management Framework

The Company has established a risk governance framework ("RGF"), which is vital to the success of the Company's business activities. The RGF integrates the diverse roles of the Business Units, Support and Control Functions, Firm Risk Management, and Compliance into a holistic enterprise structure and facilitates the incorporation of risk assessment into decision-making processes across the Company. The Company's RGF affirms to Morgan Stanley's firm-wide risk governance framework.

RGF recognises that risks are often interrelated and therefore should be managed Bank-wide on an aggregate and individual basis. RGF encompasses the Company's risk management culture, principles and practices that support risk identification, measurement, monitoring, escalation and decision-making processes. RGF views risk in a broad context and considers the risk to earnings and capital adequacy in a stressed market environment, as well as the risks to future earnings due to reputational damage.

The principal risks involved in the Company's business activities include market, interest rate, credit, operational, liquidity, compliance, conduct and reputational risk. Strategic risk is integrated into the Company's business planning, embedded in the evaluation of all principal risks and overseen by the Company's Board of Directors (or a committee thereof).

The Company's articulation of the aggregate level and types of risk that it is willing to accept in order to achieve its business objectives is established, communicated and monitored in accordance with the Company's Risk Appetite Statement. The combination of Risk Tolerance Statements, quantitative risk limits, and Key Risk Indicators ("KRIs") aims to ensure the Company's businesses are carried out in line with the risk appetite established by the Company's Board, and to protect the Company's capital and reputation in both normal and stressed environments. There are regular reporting, including reporting on breaches, to the both management and Board level committees.

Risk Management Culture

The Company's risk management culture requires the Company to seek acceptable risk-adjusted returns through prudent risk- taking that protects the Company's capital base and franchise, and is faithful to the Company's risk appetite and core values. The Company's three lines of defense, its Business Units, Independent Risk Management and Compliance functions, and the Internal Audit Department, shall play an integral role in enabling the Company's to achieve the objectives of the RGF.

The Company's risk management culture is based on the following five key principles:

- **Integrity**: critical to Morgan Stanley Group's approach to Enterprise Risk Management ("ERM") is strong risk culture and risk governance. Developing the Morgan Stanley Group's risk culture is a continuous process and builds upon the Morgan Stanley Group's commitment to "doing the right thing" and its values that make managing risk each employee's responsibility;

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table OVA: Overview of risk management (continued)

Risk Management Culture (continued)

- **Comprehensiveness**: a well-defined, comprehensive risk governance structure maintained by employees with appropriate risk management expertise that provides for periodic assessment of the efficacy of the Morgan Stanley Group's risk management framework;
- **Independence**: independent lines of reporting for risk managers in regard to identification, measurement, monitoring, escalation and mitigation of risk;
- **Accountability**: well-defined roles and responsibilities that establish clear accountability for risk management and are aligned with the Morgan Stanley Group's disciplinary and compensation structure;
- **Transparency**: strong risk culture that encourages open dialogue, effective challenge, escalation and appropriate reporting of risk to senior management, the Board (or a committee thereof) and the Company's regulators as well as external disclosures of risk matters.

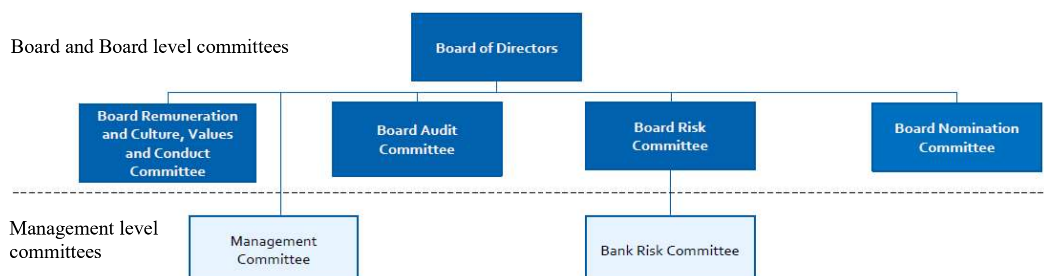
The Company executes risk oversight through multiple lines of defense.

- **The first line of defense** is provided by the business units where risks are taken. In the course of conducting business activities, staff in the business units hold frontline positions in the proper identification, assessment, management and reporting of risk exposures on an ongoing basis, having regard to the Company's risk appetite, policies, procedures and controls.
- **The second line of defense** is provided by independent and effective risk management and compliance functions. The risk management function is primarily responsible for overseeing the Company's risk-taking activities, undertaking risk assessments and reporting independently from the business line, while the compliance function monitors compliance with laws, corporate governance rules, regulations and internal policies; and
- **The third line of defense** is provided by an independent and effective internal audit function, which is responsible for providing assurance on the effectiveness of the Company's risk management framework including the risk governance arrangements (including the first and second lines of defense described above).

Risk Governance Structure

Risk management requires independent bank-level oversight, accountability of the Company's business segments, and effective communication of risk matters to senior management and the Board. The nature of the Company's risks, coupled with this risk management philosophy, forms the Company's risk governance structure.

The Company's risk governance structure includes:



H. PILLAR 3 DISCLOSURE (CONTINUED)

Table OVA: Overview of risk management (continued)

Risk Governance Structure (continued)

Above committees are further detailed in Section A of the Unaudited Supplementary Financial Information.

Risk Appetite Monitoring and Reporting

The Company's Risk Appetite Framework requires a comprehensive approach to monitor, assess and report on the risk profiles of the Company, Business Units on an ongoing basis, with regular reporting to the Bank Risk Committee and Board Risk Committee. The reporting must include quantitative measurements and qualitative assessments that enable a comparison of the Company's current risk profile against risk limits, KRIs and Risk Tolerance Statements. Reporting must identify matters for escalation and decisions, as well as highlight emerging risks, mitigating actions and matters that are significant to the Company's strategy.

Monitoring is an ongoing review of major risks and/or controls at a set frequency. The scope and frequency of monitoring depends on the types of risk, as well as on the specific business risk operations and activities. Adequate monitoring enables the Company to understand its risk profile across risk types, groups, and lines of business. It also helps the Company to ascertain how particular risks may be evolving or changing in reaction to controls and the impact of emerging risks.

Risk data and analysis are reported at and across multiple levels of the Company, and to various audiences, through an extensive suite of periodic and ad hoc reports. Reports include backward- looking, current, and forward-looking risk management information. The goal of effective risk reporting is to provide actionable information that informs daily business decisions, prompts responses to key current and emerging issues, and ensures that senior management and the Board maintain a comprehensive view of key risk profiles.

Firm Risk Management Functions

Market Risk

The Market Risk Department ("MRD") is responsible for the governance and oversight of all market risk exposures arising from the Company's trading and non-trading business activities by identifying and defining market risks; developing and employing risk measures and tools to monitor, control and mitigate those risks; establishing limits; monitoring usage against these limits; and producing and distributing comprehensive reports designed to keep senior management apprised of the Company's market risk exposures. MRD helps ensure transparency of material market risks, which includes, but is not limited to, the escalation of risk concentrations to senior management, as well as the disclosure and reporting of market risks to the Board and the Company's regulatory authorities.

Credit Risk

The Credit Risk Management Department ("CRM") oversees, assesses, monitors, measures, controls and reports on credit risk exposure to institutions and individuals primarily through the Wealth Management businesses ("PWM Asia"). CRM helps ensure transparency of material credit risks, which includes the escalation of risk concentrations to senior management, as well as the disclosure and reporting of credit risks to the Board and the Company's regulatory authorities. CRM also works closely with MRD and applicable Business Units to monitor risk exposures and to perform stress tests to identify, analyse and control credit risk concentrations arising in PWM Asia's lending and trading activities.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table OVA: Overview of risk management (continued)

Firm Risk Management Functions (continued)

Liquidity Risk

The Liquidity Risk Department ("LRD") oversees the liquidity risk arising from the Company's business activities. LRD independently ensures transparency of material liquidity risks, compliance with established risk limits, escalation of risk concentrations to senior management, adherence to sound business practices, and compliance with applicable regulations and supervisory guidance.

Operational Risk

The Operational Risk Department ("ORD") provides independent oversight and challenge of Operational Risk management within the Company by identifying, measuring, monitoring and controlling Operational Risks and independently validating the effectiveness and consistency of risk management processes via its Operational Risk framework.

Legal and Compliance Department

The Company has established procedures based on legal and regulatory requirements that are designed to facilitate compliance with applicable statutory and regulatory requirements as well as Morgan Stanley's global standard relating to business conduct, ethics and practices.

Compliance Department

- The Compliance Department maintains an enterprise-wide, independent compliance risk management program. The Compliance Department is responsible for promoting a strong culture of compliance; defining an operating model and setting standards for compliance risk management; identifying, measuring, mitigating and reporting on compliance risks; maintaining a risk-based program for monitoring and testing compliance risk management by the risk owners across the Company; providing management and staff with advice, guidance (including policies and, where appropriate, procedures) and training concerning the laws, regulations and policies associated with their responsibilities; managing a Company-wide compliance risk reporting framework; reviewing new products and business initiatives; and supporting and facilitating the framework for managing significant communications with regulators and regulatory relationships through oversight by the Regulatory Relations Group.

Legal Department

- The Legal Department provides legal and regulatory advice that protects the Company's financial well-being and reputation and assists the business in evaluating risks associated with completing transactions and other activities.

Global Financial Crimes

- The Company has adopted an AML policy which outlines the Company's anti-money laundering compliance program. This AML policy sets forth the guiding principles and consistent standards for best practices designed to protect the Company's business from being used to facilitate money laundering, terrorist financing, or other illicit activities.

- The Company is subject to risk of major regulatory sanctions and reputation damage if the Company significantly fails to comply with applicable AML, sanction screening laws, or Anti-Bribery and Corruption rules.

- Financial crimes related issues are reported as required to the Franchise Risk Officer, the Company's Global Financial Crimes Committee, Management Committee and the Board of Directors.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table OVA: Overview of risk management (continued)

Internal Audit Department

IAD is established to assist both senior management and the Board Audit Committee in the effective discharge of their legal, fiduciary, and oversight responsibilities. It is further detailed in Section A of the Unaudited Supplementary Financial Information.

Stress testing

Stress testing is one of the Company's principal risk management tools, which is used to identify and assess the impact of scenarios on its portfolios and capital, covering all products offered by the Company. Stress testing complements other company-wide risk metrics by providing a flexible approach to understanding risk and assessing the Company's resilience to different 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 weakness in Company's portfolio as a basis for senior management to take portfolio-level decisions, determining risk mitigation actions and set risk limits, and improving risk and control environment.
- Capital and Liquidity planning: Informing the proposed stressed capital and liquidity forecasts through severe but plausible stress tests.
- Others including business planning, new product evaluation and strategic business decision.

The MSBAL Stress Testing Framework utilises stress testing methodologies, including sensitivity tests and scenario analyses, to identify and assess Company's resilience to different stress conductions.

Risk Mitigation

Risk Mitigation is further detailed in the note 23 to the audited financial statements.

Adequacy of Risk Management Arrangements

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

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template KM1: Key Prudential Ratios

		As at 31 December 2019	As at 30 September 2019	As at 30 June 2019	As at 31 March 2019	As at 31 December 2018
		USD'000	USD'000	USD'000	USD'000	USD'000
	Regulatory capital (amount)					
1	Common Equity Tier 1 ("CET1")	860,933	846,872	825,606	808,927	287,225
2	Tier 1	860,933	846,872	825,606	808,927	287,225
3	Total capital	879,176	865,340	839,228	819,045	295,717
	RWA (amount)					
4	Total RWA	2,022,152	2,016,322	1,600,787	1,295,339	1,135,987
	Risk-based regulatory capital ratios (as a percentage of RWA)					
5	CET1 ratio (%)	43%	42%	52%	62%	25%
6	Tier 1 ratio (%)	43%	42%	52%	62%	25%
7	Total capital ratio (%)	43%	43%	52%	63%	26%
	Additional CET1 buffer requirements (as a percentage of RWA)					
8	Capital conservation buffer requirement (%)	2.500%	2.500%	2.500%	2.500%	1.875%
9	Countercyclical capital buffer requirement (%)	0.877%	1.128%	1.124%	1.072%	0.935%
10	Higher loss absorbency requirements (%) (applicable only to G-SIBs or D-SIBs)	0%	0%	0%	0%	0%
11	Total Authorised Institution ("AI")-specific CET1 buffer requirements (%)	3.377%	3.628%	3.624%	3.572%	2.810%
12	CET1 available after meeting the AI's minimum capital requirements (%)	35%	35%	44%	55%	18%
	Basel III leverage ratio					
13	Total leverage ratio ("LR") exposure measure	4,715,015	4,642,609	4,205,381	4,517,029	3,443,511
14	LR (%)	18%	18%	20%	18%	8%
	Liquidity Maintenance Ratio ("LMR")					
17a	LMR (%) [1]	63%	62%	62%	55%	61%
	Core Funding Ratio ("CFR")					
20a	CFR (%) [1]	231%	236%	251%	239%	240%

Note 1: The LMR and CFR disclosed above represent the arithmetic mean of the average LMR and average CFR of the 3 calendar months within each quarter respectively. The Company is not required, under the Banking (Liquidity) Rules, to calculate Liquidity Coverage Ratio or Net Stable Funding Ratio for its liquidity risk.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template OV1: Overview of RWA

		RWA		Minimum capital requirements
		As at 31 December 2019 USD'000	As at 30 September 2019 USD'000	As at 31 December 2019 USD'000
1	Credit risk for non-securitization exposures	1,456,548	1,471,893	116,523
2	Of which Standardised (Credit Risk) Approach ("STC approach")	1,456,548	1,471,893	116,523
2a	Of which Basic Approach ("BSC approach")	-	-	-
3	Of which foundation Internal Ratings-Based ("IRB") Approach	-	-	-
4	Of which supervisory slotting criteria approach	-	-	-
5	Of which advanced IRB approach	-	-	-
6	Counterparty default risk and default fund contributions	2,898	5,571	232
7	Of which Standardised Approach for measuring Counterparty Credit Risk ("SA-CCR")	Not applicable		
7a	Of which Current Exposure Method ("CEM")	1,419	4,239	114
8	Of which Internal Models (Counterparty Credit Risk) Approach ("IMM(CCR) approach")	-	-	-
9	Of which others	1,479	1,332	118
10	Credit Valuation Adjustment ("CVA") risk	645	1,926	52
11	Equity positions in banking book under the simple risk-weight method and internal models method	-	-	-
12	Collective investment scheme ("CIS") exposures – Look-Through Approach ("LTA")	Not applicable		
13	CIS exposures – Mandate-Based Approach ("MBA")	Not applicable		
14	CIS exposures – Fall-Back Approach ("FBA")	Not applicable		
14a	CIS exposures – combination of approaches	Not applicable		
15	Settlement risk	-	-	-
16	Securitization exposures in banking book	-	-	-
17	Of which Securitization Internal Ratings-Based Approach ("SEC-IRBA")	-	-	-
18	Of which Securitization External Ratings-Based Approach ("SEC-ERBA")	-	-	-
19	Of which Securitization Standardised Approach ("SEC-SA")	-	-	-
19a	Of which Securitization Fall-Back Approach ("SEC-FBA")	-	-	-
20	Market risk	-	-	-
21	Of which Standardised (Market Risk) Approach ("STM approach")	-	-	-
22	Of which Internal Models Approach ("IMM approach")	-	-	-
23	Capital charge for switch between exposures in trading book and banking book (not applicable before the revised market risk framework takes effect)	Not applicable		
24	Operational risk	571,521	544,016	45,722
24a	Sovereign concentration risk	-	-	-
25	Amounts below the thresholds for deduction (subject to 250% Risk-Weight ("RW"))	-	-	-
26	Capital floor adjustment	-	-	
26a	Deduction to RWA	9,460	7,084	757
26b	Of which portion of regulatory reserve for general banking risks and collective provisions which is not included in Tier 2 Capital	9,460	7,084	757
26c	Of which portion of cumulative fair value gains arising from the revaluation of land and buildings which is not included in Tier 2 Capital	-	-	-
27	**Total**	**2,022,152**	**2,016,322**	**161,772**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template OV1: Overview of RWA (continued)

The disclosure on minimum capital requirement is made by multiplying the Company's RWA derived from the relevant calculation approach by 8%, not the Company's actual "regulatory capital".

Template LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

	Carrying values as reported in published financial statements/ under scope of regulatory consolidation	Carrying values of items:				
As at 31 December 2019	US$'000	subject to credit risk framework US$'000	subject to counterparty credit risk framework US$'000	subject to the securitization framework US$'000	subject to market risk framework US$'000	not subject to capital requirements or subject to deduction from capital US$'000
Assets						
Cash and short-term deposits	633,898	633,898	-	-	-	-
Trading financial assets	441	-	441	-	-	-
Secured Financing	362,047	-	362,047	-	-	-
Loans and advances to customers	2,770,325	2,770,325	-	-	-	-
Investment securities	854,769	854,769	-	-	-	-
Trade and other receivables	62,570	62,570	-	-	-	-
Deferred tax assets	5,002	-	-	-	-	5,002
Prepayments	835	835	-	-	-	-
Total assets	**4,689,887**	**4,322,397**	**362,488**	**-**	**-**	**5,002**
Liabilities						
Deposits	3,665,736	-	-	-	-	3,665,736
Trading financial liabilities	3,552	-	3,552	-	-	-
Trade and other payables	104,689	-	-	-	-	104,689
Current tax liabilities	21,251	-	-	-	-	21,251
Accruals	934	-	-	-	-	934
Total liabilities	**3,796,162**	**-**	**3,552**	**-**	**-**	**3,792,610**

The Company's scope of accounting consolidation and its scope of regulatory consolidation are the same.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template PV1: Prudent valuation adjustments

The following table shows the detailed breakdown of the constituent elements of prudent valuation adjustments, for assets measured at fair value.

		Equity	Interest rates	Foreign Exchange ("FX")	Credit	Commodities	Total	Of which: In the trading book	Of which: In the banking book
	As at 31 December 2019	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**		**US$'000**
1	Close-out uncertainty, of which:	-	136	20	-	-	156		156
2	*Mid-market value*	-	122	-	-	-	122		122
3	*Close-out costs*	-	14	20	-	-	34		34
4	*Concentration*	-	-	-	-	-	-		-
5	Early termination	-	-	-	-	-	-		-
6	Model risk	-	-	-	-	-	-		-
7	Operational risks	-	7	1	-	-	8		8
8	Investing and funding costs						-		-
9	Unearned credit spreads						-		-
10	Future administrative costs	-	-	-	-	-	-		-
11	Other adjustments [1]	-	(68)	(10)	-	-	(78)		(78)
12	**Total adjustments**	**-**	**75**	**11**	**-**	**-**	**86**		**86**

Note 1: For other adjustments, it refers to the diversification benefits from mid-market value and close-out costs, resulting in reduction in valuation adjustment required.

The highest amount of valuation adjustments are attributable to the interest rate products measured at fair value, mainly government debt securities.

For rows that are not applicable, there are immaterial risks and financial impacts from those elements of valuation adjustments regarding to the Company's financial assets.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC1: Composition of regulatory capital

	As at 31 December 2019	Amount USD'000	Source based on reference numbers of the balance sheet under the regulatory scope of consolidation (Template CC2)
	CET1 capital: instruments and reserves		
1	Directly issued qualifying CET1 capital instruments plus any related share premium	670,000	(1)
2	Retained earnings	222,395	(2)
3	Disclosed reserves	1,330	(3)
4	*Directly issued capital subject to phase-out arrangements from CET1 (only applicable to non-joint stock companies)*	Not applicable	Not applicable
5	Minority interests arising from CET1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in CET1 capital of the consolidation group)	-	
6	**CET1 capital before regulatory adjustments**	893,725	
	CET1 capital: regulatory deductions		
7	Valuation adjustments	87	
8	Goodwill (net of associated deferred tax liabilities)	-	
9	Other intangible assets (net of associated deferred tax liabilities)	-	
10	Deferred tax assets (net of associated deferred tax liabilities)	5,002	(4)
11	Cash flow hedge reserve	-	
12	Excess of total EL amount over total eligible provisions under the IRB approach	-	
13	Credit-enhancing interest-only strip, and any gain-on-sale and other increase in the CET1 capital arising from securitization transactions	-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	-	
15	Defined benefit pension fund net assets (net of associated deferred tax liabilities)	-	
16	Investments in own CET1 capital instruments (if not already netted off paid-in capital on reported balance sheet)	-	
17	Reciprocal cross-holdings in CET1 capital instruments	-	
18	Insignificant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
19	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
20	Mortgage servicing rights (net of associated deferred tax liabilities)	Not applicable	Not applicable
21	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	Not applicable	Not applicable
22	Amount exceeding the 15% threshold	Not applicable	Not applicable
23	of which: significant investments in the ordinary share of financial sector entities	Not applicable	Not applicable
24	of which: mortgage servicing rights	Not applicable	Not applicable
25	of which: deferred tax assets arising from temporary differences	Not applicable	Not applicable
26	National specific regulatory adjustments applied to CET1 capital	-	
26a	Cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties)	-	
26b	Regulatory reserve for general banking risks	27,703	

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC1: Composition of regulatory capital (continued)

	As at 31 December 2019	Amount USD'000	Source based on reference numbers of the balance sheet under the regulatory scope of consolidation (Template CC2)
26c	Securitization exposures specified in a notice given by the MA	-	
26d	Cumulative losses below depreciated cost arising from the institution's holdings of land and buildings	-	
26e	Capital shortfall of regulated non-bank subsidiaries	-	
26f	Capital investment in a connected company which is a commercial entity (amount above 15% of the reporting institution's capital base)	-	
27	Regulatory deductions applied to CET1 capital due to insufficient AT1 capital and Tier 2 capital to cover deductions	-	
28	**Total regulatory deductions to CET1 capital**	32,792	
29	**CET1 capital**	860,933	
	AT1 capital: instruments		
30	Qualifying AT1 capital instruments plus any related share premium	-	
31	of which: classified as equity under applicable accounting standards	-	
32	of which: classified as liabilities under applicable accounting standards	-	
33	*Capital instruments subject to phase-out arrangements from AT1 capital*	-	
34	AT1 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in AT1 capital of the consolidation group)	-	
35	*of which: AT1 capital instruments issued by subsidiaries subject to phase-out arrangements*	-	
36	**AT1 capital before regulatory deductions**	-	
	AT1 capital: regulatory deductions		
37	Investments in own AT1 capital instruments	-	
38	Reciprocal cross-holdings in AT1 capital instruments	-	
39	Insignificant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
40	Significant capital investments in AT1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
41	National specific regulatory adjustments applied to AT1 capital	-	
42	Regulatory deductions applied to AT1 capital due to insufficient Tier 2 capital to cover deductions	-	
43	**Total regulatory deductions to AT1 capital**	-	
44	**AT1 capital**	-	
45	**Tier 1 capital (T1 = CET1 + AT1)**	860,933	

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC1: Composition of regulatory capital (continued)

	As at 31 December 2019	Amount USD'000	Source based on reference numbers of the balance sheet under the regulatory scope of consolidation (Template CC2)
	Tier 2 capital: instruments and provisions		
46	Qualifying Tier 2 capital instruments plus any related share premium	-	
47	*Capital instruments subject to phase-out arrangements from Tier 2 capital*	-	
48	Tier 2 capital instruments issued by consolidated bank subsidiaries and held by third parties (amount allowed in Tier 2 capital of the consolidation group)	-	
49	of which: capital instruments issued by subsidiaries subject to phase-out arrangements	-	
50	Collective provisions and regulatory reserve for general banking risks eligible for inclusion in Tier 2 capital	18,243	
51	**Tier 2 capital before regulatory deductions**	18,243	
	Tier 2 capital: regulatory deductions		
52	Investments in own Tier 2 capital instruments	-	
53	Reciprocal cross-holdings in Tier 2 capital instruments	-	
54	Insignificant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (amount above 10% threshold)	-	
55	Significant capital investments in Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation (net of eligible short positions)	-	
56	National specific regulatory adjustments applied to Tier 2 capital	-	
56a	Add back of cumulative fair value gains arising from the revaluation of land and buildings (own-use and investment properties) eligible for inclusion in Tier 2 capital	-	
57	**Total regulatory adjustments to Tier 2 capital**	-	
58	**Tier 2 capital (T2)**	18,243	
59	**Total regulatory capital (TC = T1 + T2)**	879,176	
60	**Total RWA**	2,022,152	
	Capital ratios (as a percentage of RWA)		
61	**CET1 capital ratio**	43%	
62	**Tier 1 capital ratio**	43%	
63	**Total capital ratio**	43%	
64	**Institution-specific buffer requirement (capital conservation buffer plus countercyclical capital buffer plus higher loss absorbency requirements)**	3.377%	
65	of which: capital conservation buffer requirement	2.500%	
66	of which: bank specific countercyclical capital buffer requirement	0.877%	
67	of which: higher loss absorbency requirement	-	
68	CET1 (as a percentage of RWA) available after meeting minimum capital requirements	35%	

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC1: Composition of regulatory capital (continued)

	As at 31 December 2019	Amount USD'000	Source based on reference numbers of the balance sheet under the regulatory scope of consolidation (Template CC2)
	National minima (if different from Basel 3 minimum)		
69	National CET1 minimum ratio	Not applicable	Not applicable
70	National Tier 1 minimum ratio	Not applicable	Not applicable
71	National Total capital minimum ratio	Not applicable	Not applicable
	Amounts below the thresholds for deduction (before risk weighting)		
72	Insignificant capital investments in CET1, AT1 and Tier 2 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
73	Significant capital investments in CET1 capital instruments issued by financial sector entities that are outside the scope of regulatory consolidation	-	
74	Mortgage servicing rights (net of associated deferred tax liabilities)	Not applicable	Not applicable
75	Deferred tax assets arising from temporary differences (net of associated deferred tax liabilities)	Not applicable	Not applicable
	Applicable caps on the inclusion of provisions in Tier 2 capital		
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the BSC approach, or the STC approach and SEC-ERBA, SEC-SA and SEC-FBA (prior to application of cap)	-	
77	Cap on inclusion of provisions in Tier 2 under the BSC approach, or the STC approach, and SEC-ERBA, SEC-SA and SEC-FBA	-	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to the IRB approach and SEC-IRBA (prior to application of cap)	-	
79	Cap for inclusion of provisions in Tier 2 under the IRB approach and SEC-IRBA	-	
	Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)		
80	*Current cap on CET1 capital instruments subject to phase-out arrangements*	Not applicable	Not applicable
81	*Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)*	Not applicable	Not applicable
82	*Current cap on AT1 capital instruments subject to phase-out arrangements*	-	
83	*Amount excluded from AT1 capital due to cap (excess over cap after redemptions and maturities)*	-	
84	*Current cap on Tier 2 capital instruments subject to phase-out arrangements*	-	
85	*Amount excluded from Tier 2 capital due to cap (excess over cap after redemptions and maturities)*	-	

Elements where a more conservative definition has been applied in the BCR relative to that set out in Basel III capital standards are disclosed below in Notes to the Template.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC1: Composition of regulatory capital (continued)

Notes to the Template

	Description	Hong Kong basis USD'000	Basel III basis USD'000
10	**Deferred tax assets ("DTAs") (net of associated deferred tax liabilities)**	5,002	5,002
	Explanation As set out in paragraphs 69 and 87 of the Basel III text issued by the Basel Committee (December 2010), DTAs of the bank to be realised are to be deducted, whereas DTAs which relate to temporary differences may be given limited recognition in CET1 capital (and hence be excluded from deduction from CET1 capital up to the specified threshold). In Hong Kong, an AI is required to deduct all DTAs in full, irrespective of their origin, from CET1 capital. Therefore, the amount to be deducted as reported in row 10 may be greater than that required under Basel III. The amount reported under the column "Basel III basis" in this box represents the amount reported in row 10 (i.e. the amount reported under the "Hong Kong basis") adjusted by reducing the amount of DTAs to be deducted which relate to temporary differences to the extent not in excess of the 10% threshold set for DTAs arising from temporary differences and the aggregate 15% threshold set for MSRs, DTAs arising from temporary differences and significant investments in CET1 capital instruments issued by financial sector entities (excluding those that are loans, facilities or other credit exposures to connected companies) under Basel III.		

Abbreviations:

CET1: Common Equity Tier 1

AT1: Additional Tier 1

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CC2: Reconciliation of regulatory capital to balance sheet

As at 31 December 2019	Balance sheet as in published financial disclosure statements (Note) USD'000	Reference to template CC1
Assets		
Cash and short-term deposits	633,898	
Trading financial assets	441	
Secured Financing	362,047	
Loans and advances to customers	2,770,325	
Investment securities	854,769	
Trade and other receivables	62,570	
Deferred tax assets	5,002	(4)
Prepayments	835	
Total assets	**4,689,887**	
Liabilities		
Deposits	3,665,736	
Trading financial liabilities	3,552	
Trade and other payables	104,689	
Current tax liabilities	21,251	
Accruals	934	
Total liabilities	**3,796,162**	
Shareholders' equity		
Share capital	670,000	
Of which: amount eligible for CET1	670,000	(1)
FVOCI reserve	1,330	(3)
Retained earnings	222,395	(2)
Total shareholders' equity	**893,725**	

Note: The Company's scope of accounting consolidation and its scope of regulatory consolidation are the same.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CCA: Main features of regulatory capital instruments

The following table shows the main features of outstanding capital instruments issued.

		Quantitative / qualitative information
1	Issuer	Morgan Stanley Bank Asia Limited
2	Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement)	Not applicable
3	Governing law(s) of the instrument	Hong Kong Law
	Regulatory treatment	
4	Transitional Basel III rules[1]	Not applicable
5	Post-transitional Basel III rules[2]	Common Equity Tier 1
6	Eligible at solo / group / solo and group	Solo
7	Instrument type (types to be specified by each jurisdiction)	Ordinary shares
8	Amount recognised in regulatory capital (currency in millions, as of most recent reporting date)	US$670 million
9	Par value of instrument	Not applicable
10	Accounting classification	Shareholders' equity
11	Original date of issuance	• 1 share issued on 19 May 2014 • 13,000,000 shares issued on 11 July 2014 • 156,999,998 shares issued on 13 January 2015 • 1 share issued on 9 February 2015 • 500,000,000 shares issued on 22 March 2019
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	No
15	Optional call date, contingent call dates and redemption amount	Not applicable
16	Subsequent call dates, if applicable	Not applicable
	Coupons / dividends	
17	Fixed or floating dividend / coupon	Floating
18	Coupon rate and any related index	Not applicable
19	Existence of a dividend stopper	No
20	Fully discretionary, partially discretionary or mandatory	Fully discretionary
21	Existence of step-up or other incentive to redeem	No
22	Non-cumulative or cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	Not applicable
25	If convertible, fully or partially	Not applicable
26	If convertible, conversion rate	Not applicable
27	If convertible, mandatory or optional conversion	Not applicable
28	If convertible, specify instrument type convertible into	Not applicable
29	If convertible, specify issuer of instrument it converts into	Not applicable
30	Write-down feature	No
31	If write-down, write-down trigger(s)	Not applicable
32	If write-down, full or partial	Not applicable
33	If write-down, permanent or temporary	Not applicable

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CCA: Main features of regulatory capital instruments (continued)

		Quantitative / qualitative information
34	If temporary write-down, description of write-up mechanism	Not applicable
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument in the insolvency creditor hierarchy of the legal entity concerned).	Not applicable
36	Non-compliant transitioned features	No
37	If yes, specify non-compliant features	Not applicable

Footnote:

1. Regulatory treatment of capital instruments subject to transitional arrangements provided for in Schedule 4H to the BCR.
2. Regulatory treatment of capital instruments not subject to transitional arrangements provided for in Schedule 4H to the BCR.

Information relating to the disclosure of the full terms and conditions of the Company's capital instruments can be viewed on the website: http://www.morganstanley.com/about-us/global-offices/hong-kong.

Template CCyB1: Geographical distribution of credit exposures used in countercyclical capital buffer ("CCyB")

	Geographical breakdown by Jurisdiction (J)	As at 31 December 2019			
		Applicable JCCyB ratio in effect	RWA used in computation of CCyB ratio	AI-specific CCyB ratio	CCyB amount
		%	US$'000	%	US$'000
1	Hong Kong SAR	2.000%	569,907		
2	United Kingdom	1.000%	26,725		
3	Sum		596,632		
4	**Total (Note)**		**1,330,684**	**0.877%**	**17,734**

Note:

The geographical allocation of private sector credit exposures to the various jurisdictions is based on "ultimate risk basis". "Ultimate risk basis" means the allocation of exposures to the jurisdictions where the risk ultimately lies, as defined as the location where the "ultimate obligor" resides.

Total RWA on Row 4 represents total sum of the RWA for private sector credit exposures across all jurisdictions to which the Company is exposed, including jurisdictions with no applicable JCCyB ratio or with applicable JCCyB ratio set at zero.

The CCyB amount as at 31 December 2019 represents the Company's specific CCyB ratio multiplied by the Company's total RWA, as specified by the standard disclosure templates issued by the HKMA, instead of the Company's RWA relating to private sector credit exposures.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template LR1: Summary comparison of accounting assets against leverage ratio exposure measure

	As at 31 December 2019	Value under the LR framework
	Item	**USD'000**
1	Total consolidated assets as per published financial disclosure statements	4,689,887
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	-
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting standard but excluded from the LR exposure measure	-
4	Adjustments for derivative contracts	2,396
5	Adjustment for securities financing transactions ("SFTs") (i.e. repos and similar secured lending)	55,524
6	Adjustment for off-balance sheet ("OBS") items (i.e. conversion to credit equivalent amounts of OBS exposures)	-
6a	Adjustment for specific and collective provisions that are allowed to be excluded from exposure measure	-
7	Other adjustments	(32,792)
8	**Leverage ratio exposure measure**	**4,715,015**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template LR2: Leverage Ratio

		As at 31 December 2019	As at 30 September 2019
		USD'000	USD'000
On-balance sheet exposures			
1	On-balance sheet exposures (excluding those arising from derivative contracts and SFTs, but including collateral)	4,327,399	3,918,018
2	Less: Asset amounts deducted in determining Tier 1 capital	(32,792)	(29,410)
3	**Total on-balance sheet exposures (excluding derivative contracts and SFTs)**	4,294,607	3,888,608
Exposures arising from derivative contracts			
4	Replacement cost associated with all derivative contracts (where applicable net of eligible cash variation margin and/or with bilateral netting)	-	1,793
5	Add-on amounts for potential future exposure ("PFE") associated with all derivative contracts	2,837	8,336
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	-	-
7	Less: Deductions of receivables assets for cash variation margin provided under derivative contracts	-	-
8	Less: Exempted Central Counterparty ("CCP") leg of client-cleared trade exposures	-	-
9	Adjusted effective notional amount of written credit derivative contracts	-	-
10	Less: Adjusted effective notional offsets and add-on deductions for written credit derivative contracts	-	-
11	**Total exposures arising from derivative contracts**	2,837	10,129
Exposures arising from SFTs			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	413,847	741,959
13	Less: Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	Counterparty Credit Risk ("CCR") exposure for SFT assets	3,724	1,913
15	Agent transaction exposures	-	-
16	**Total exposures arising from SFTs**	417,571	743,872
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	-	-
18	Less: Adjustments for conversion to credit equivalent amounts	-	-
19	**Off-balance sheet items**	-	-
Capital and total exposures			
20	**Tier 1 capital**	860,933	846,872
20a	**Total exposures before adjustments for specific and collective provisions**	4,715,015	4,642,609
20b	**Adjustments for specific and collective provisions**	-	-
21	**Total exposures after adjustments for specific and collective provisions**	4,715,015	4,642,609
Leverage ratio			
22	**Leverage ratio**	**18%**	**18%**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table LIQA: Liquidity risk management

(a) Governance of liquidity risk management

(i) Risk tolerance

Liquidity risk refers to the risk that the Company will be unable to finance its operations due to a loss of access to the capital markets or difficulty in liquidating its assets.

The Company's Liquidity Risk Management Framework is critical to helping ensure that the Company maintains sufficient liquidity reserves and durable funding sources to meet its daily obligations and to withstand unanticipated stress events.

The Required Liquidity Framework reflects the amount of liquidity the Company must hold in both normal and stressed environments to ensure that the Company's financial condition and overall soundness are not adversely affected by an inability (or perceived inability) to meet 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 consolidated and legal entity level.

(ii) Risk management function

Senior management establishes and maintains liquidity policies. Through various risk and control committees, senior management reviews business performance relative to these policies, monitors the availability of alternative sources of financing, and oversees the liquidity, interest rate and currency sensitivity of asset and liability positions. Corporate Treasury, Liquidity Risk Department, ALCO and other committees and control groups assist in evaluating, monitoring and controlling the impact that business activities have on the balance sheet, liquidity and capital structure. Liquidity matters are reported regularly to the Board and the Risk Committees of the Company.

(b) Funding strategy

The primary goal of the Liquidity Risk Management Framework is to ensure that the Company has access to sufficient liquidity and assets across a wide range of market conditions and time horizons. The framework is designed to allow the Company to fulfil financial obligations and support the execution of its business strategies. The funding management of the Company is centralised in Corporate Treasury. The following principles guide the Liquidity 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;
- Liquidity Stress Tests should anticipate, and account for, periods of limited access to funding.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table LIQA: Liquidity risk management (continued)

(c) Liquidity Stress Tests

The Company uses Liquidity Stress Tests to model external and intercompany liquidity flows across multiple scenarios and 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 Company’s Liquidity Stress Tests are important components of the Required Liquidity Framework.

Liquidity Stress Tests are produced for the Company, 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 Company takes into consideration the settlement risk related to intra-day settlement and clearing of securities and financing activities.

(d) Liquidity risk mitigation techniques

Liquidity Reserve

The Company maintains sufficient liquidity reserves (“Liquidity Reserve”) to meet regulatory requirements, 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 Company considering the following components: unsecured debt maturity profile; balance sheet size and composition; funding needs in a stressed environment inclusive of contingent cash outflows; regulatory requirements; and collateral requirements. In addition, the Company’s Liquidity Reserve includes a discretionary surplus based on the Company’s risk tolerance and is subject to change depending on market and firm-specific events.

The Company 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

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table LIQA: Liquidity risk management (continued)

(d) Liquidity risk mitigation techniques (continued)

Funding Management

The Company manages its funding in a manner that reduces the risk of disruption to the Company's operations. The Company 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 Company funds itself through diverse sources. These sources may include the Company's equity capital, borrowings and deposits. The table below shows the Company's significant funding sources as at 31 December 2019:

Significant funding sources (as a percentage of the total liabilities and equity)	As at 31 December 2019
Funding from deposits	78%
Funding from share capital	14%

Balance sheet management

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

The table below shows the Company's future cash flows, taking into account off-balance sheet risks, as at 31 December 2019, which is disclosed in accordance with the numbers reported in the Return of Liquidity Position for the month of 31 December 2019 submitted to the HKMA.

	As at 31 December 2019 USD'000
Liquefiable assets (weighted amount)	1,455,613
Qualifying liabilities (weighted amount)	2,608,634

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table LIQA: Liquidity risk management (continued)

(d) Liquidity risk mitigation techniques (continued)

Maturity analysis

The table below shows the analysis of on- and off- balance sheet items by remaining maturity and the resultant liquidity gaps. This presentation is considered by the Company to appropriately reflect the liquidity risk arising from those assets and liabilities, presented in a way that is consistent with how the liquidity risk is managed by the Company. The below information is prepared in accordance with the numbers reported in the Return of Liquidity Monitoring Tools as at 31 December 2019, based on the completion instruction from the HKMA. Accordingly, the classification of on-balance sheet assets, on-balance sheet liabilities, off-balance sheet claims and off-balance sheet obligations are not the same as that disclosed under the audited financial statements.

	Breakdown of cash flows by remaining maturity						
	Not more than 1 month	More than 1 month but not more than 3 months	More than 3 months but not more than 6 months	More than 6 months but not more than 1 year	More than 1 year but not more than 5 years	Over 5 years	Balancing amount
As at 31 December 2019	**USD'000**	**USD'000**	**USD'000**	**USD'000**	**USD'000**	**USD'000**	**USD'000**
On-balance sheet items							
Amount receivable arising from securities financing transactions	210,899	151,148	-	-	-	-	-
Amount receivable arising from derivative contracts	480,674	224,840	-	-	-	-	-
Due from banks and overseas central banks	634,564	-	-	-	-	-	2,505
Debt securities	711,558	140,777	-	-	-	-	-
Loans and advances to non-bank customers	2,644,085	25,773	7,324	98,726	-	-	-
Other assets	55,070	1,836	724	-	-	-	5,002
Total on-balance sheet assets	**4,736,850**	**544,374**	**8,048**	**98,726**	**-**	**-**	**7,507**
Total off-balance sheet claims	**13,805**	**2,016**	**-**	**-**	**-**	**-**	**-**
On-balance sheet items							
Deposits from non-bank customers	2,886,584	447,509	200,991	135,400	127	-	-
Amount payable arising from derivative contracts	482,169	226,745	-	-	-	-	-
Due to banks	2,149	-	-	-	-	-	-
Other liabilities	43,532	41,631	3,011	6,682	25,806	-	-
Capital and reserves	-	-	-	-	-	-	893,456
Total on-balance sheet liabilities	**3,414,434**	**715,885**	**204,002**	**142,082**	**25,933**	**-**	**893,456**
Total off-balance sheet obligations	**448,872**	**-**	**-**	**-**	**-**	**-**	**-**
Contractual Maturity Mismatch	**887,349**	**(169,495)**	**(195,954)**	**(43,356)**	**(25,933)**	**-**	**NA**
Cumulative Contractual Maturity Mismatch	**887,349**	**717,854**	**521,900**	**478,544**	**452,611**	**452,611**	**NA**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table LIQA: Liquidity risk management (continued)

(e) Contingency funding plan

The Company has developed a Contingency Funding Plan ("CFP") that captures the governance, liquidity management tools for event identification, and processes for CFP activation and de-activation during liquidity stress events for the Company. The CFP documents the Company's systematic approach to accessing available liquidity sources, in addition to those used for day to day operations, to meet its obligations and maintain operational services during a liquidity stress event.

The CFP supports the existing liquidity risk management framework and defines processes for:

- Identification through quantitative measures of a potential or actual liquidity stress event;
- Definition of roles and responsibilities for CFP activation and execution;
- Coordination and communication in response to liquidity shortfalls;
- Identification of available contingent liquidity sources;
- Return to standard operating liquidity management status, and post-event analysis.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CRA: General information about credit risk

Overview

Credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to the Company.

The Company incurs credit risk primarily in the Wealth Management business through margin loans to its clients. Margin loans are asset-based in nature secured by mostly cash and marketable securities held with the Company as collateral. Credit risk from the margin loan portfolio is largely mitigated by the quality of the collateral held under a conservative margin policy.

The Company also incurs credit risk through a variety of treasury activities from: (i) bank exposures with respect to agent banks and securities purchased under agreements to resell; and (ii) sovereign exposures from government debt securities. The credit risk of these activities is mitigated by high credit quality of bank counterparties and the sovereign entities.

Credit Risk Management

The Company's credit risk management policies and procedures establish the framework for identifying, measuring, monitoring and controlling credit risk while ensuring transparency of material credit risks, compliance with established limits and escalating risk concentrations to appropriate senior management and the Board of Directors. A Credit Limits Framework is utilised to manage credit risk levels across the Company. The Credit Limits Framework is calibrated within the Company's risk appetite and includes stress loss, product, collateral concentration, correlated collateral, single-name, regulatory and connected lending limits.

The Company executes oversight of credit risk management through three lines of defense. The Company believes this structure creates clear delineation of responsibilities and facilitates effective implementation of the control framework.

(i) Business Unit – the first line of defense with decentralised ownership and business management accountability.

(ii) Credit Risk Management Department ("CRM") – the second line of defense providing independent risk oversight and challenges.

(iii) Internal Audit Department ("IAD") – the third line of defense independently assessing the Company's operating and control environment and control processes.

Credit risk exposure is actively managed by business unit, CRM and senior management. A variety of credit risk reports are distributed daily to business unit and CRM, monthly to Credit and Market Risk Committee and Bank Risk Committee where membership includes senior management, and quarterly to Board Risk Committee and the Board of Directors.

Details of the Financial Risk Managements are further detailed in note 23 to the audited financial statements, and Table OVA of the Unaudited Supplementary Financial Information.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CR1: Credit quality of exposures

		Gross carrying amounts of		Allowances / impairments	Of which expected credit loss ("ECL") accounting provisions for credit losses on STC approach exposures		Of which ECL accounting provisions for credit losses on IRB approach exposures	Net values
		Defaulted exposures	Non-defaulted exposures		Allocated in regulatory category of specific provisions	Allocated in regulatory category of collective provisions		
	As at 31 December 2019	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
1	Loans	-	2,775,907	-	-	-	-	2,775,907
2	Debt securities	-	854,769	-	-	-	-	854,769
3	Off-balance sheet exposures	-	-	-	-	-	-	-
4	**Total**	**-**	**3,630,676**	**-**	**-**	**-**	**-**	**3,630,676**

Loans included loans and advances to customers and related accrued interest receivables.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CRB: Additional disclosure related to credit quality of exposures

A financial asset is considered past due when a counterparty has failed to make a payment when contractually due.

A financial asset is considered impaired if there is objective evidence of impairment resulting from an event occurring which will have an adverse impact on expected future cash flows of an asset and the expected impact can be reliably estimated.

For details of methods adopted for determining impairments, please refer to the note 3(f) and 23 to the audited financial statements.

As at 31 December 2019, the Company had no impaired exposures and no exposure which is past due for more than 90 days but is not impaired.

Restructured exposures refer to assets that have been restructured and renegotiated between the Company and the counterparties because of a deterioration in the financial position of the counterparties or of the inability of the counterparties to meet the original repayment schedule and for which the revised repayment terms, either of interest or of repayment period, are non-commercial to the Company. As at 31 December 2019, the Company had no restructured exposures.

The following tables show the breakdown of the Company's exposures by geographical areas, industry and residual maturity as at 31 December 2019. These amounts do not include the effects of recognised credit risk mitigation.

Exposures by geographical areas	**2019** **US$'000**
Hong Kong	1,278,929
Singapore	771,631
Mainland China	544,705
Others [(1)]	1,727,677
Total	4,322,942

Exposures by industry	**2019** **US$'000**
Industrial, commercial and financial	2,238,679
Individuals	537,229
Others [(1)]	1,547,034
Total	4,322,942

Exposures by residual maturity	**2019** **US$'000**
Less than 1 year	4,322,942
Between 1 and 5 years	-
Total	4,322,942

Note (1): Any segment which constitutes less than 10% of the Company's total RWA for credit risk (after taking into account of any recognised credit risk mitigation) is not separately disclosed and grouped on an aggregated basis under the category "others".

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CRC: Qualitative disclosures related to credit risk mitigation

In order to manage credit exposure arising from its business activities, the Company applies various credit risk management policies and procedures, see note 23 to the audited financial statements for further details.

The Company’s primary method of mitigating credit risk is the use of eligible collateral for the margin loan portfolio. Eligible collaterals include cash, marketable securities and other investment products. Majority of the Company’s collaterals are cash and marketable securities, including equity securities, bonds and mutual funds, where collateral values are being revaluated daily.

The Company maintains policies and procedures related to collateral management. It applies a conservative margin policy to ensure with a high degree of confidence that claims can be repaid in full through the liquidation of assets in the client portfolio securing the exposure.

The Company enters into valid bilateral netting agreements with Morgan Stanley affiliates which satisfied the conditions set out under section 2 of the Banking (Capital) Rules for recognised netting. As at 31 December 2019, minimal recognised netting is applied for both on- and off-balance sheet exposures.

Template CR3: Overview of recognised credit risk mitigation

		Exposures unsecured: carrying amount(1)	Exposures to be secured	Exposures secured by recognised collateral	Exposures secured by recognised guarantees	Exposures secured by recognised credit derivative contracts
	As at 31 December 2019	**US$’000**	**US$’000**	**US$’000**	**US$’000**	**US$’000**
1	Loans	1,302,665	1,473,242	1,473,242	-	-
2	Debt securities	854,769	-	-	-	-
3	**Total**	**2,157,434**	**1,473,242**	**1,473,242**	**-**	**-**
4	Of which defaulted	-	-	-	-	-

Loans included loans and advances to customers and related accrued interest receivables.

Note (1): All exposures arising from loans are fully secured by collateral as at 31 December 2019. Unsecured exposures disclosed in the above table are either because the relevant collateral is not considered as recognised collateral, or the carrying amount of such recognised collateral is subject to standard supervisory haircut in accordance with the Banking (Capital) Rules.

Table CRD: Qualitative disclosures on use of ECAI ratings under STC approach

The Company uses the STC approach to calculate its credit risk.

Standard & Poor’s Rating Services, Moody’s Investors Service and Fitch Ratings are the external credit assessment institutions (the “ECAIs”) that the Company used to determine the risk weight of the exposure classes, including sovereign, bank, securities firm, corporate and other exposures which are not past due exposures. The Company follows the process as prescribed in Part 4 of the Banking (Capital) Rules to map ECAI issuer ratings to exposures booked in its banking book.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CR4: Credit risk exposures and effects of recognised credit risk mitigation – for STC approach

		Exposures pre-CCF and pre-CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
	As at 31 December 2019	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
	Exposure classes	**USD'000**	**USD'000**	**USD'000**	**USD'000**	**USD'000**	**%**
1	Sovereign exposures	863,016	-	863,016	-	-	-
2	Public Sector Entity ("PSE") exposures	-	-	-	-	-	-
2a	Of which: domestic PSEs	-	-	-	-	-	-
2b	Of which: foreign PSEs	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-
4	Bank exposures	629,032	-	629,032	-	125,864	20%
5	Securities firm exposures	53,887	-	53,840	-	26,920	50%
6	Corporate exposures	2,238,679	-	1,006,621	-	1,006,621	100%
7	CIS exposures	-	-	-	-	-	-
8	Cash items	-	-	-	-	-	-
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-
10	Regulatory retail exposures	-	-	-	-	-	-
11	Residential mortgage loans	-	-	-	-	-	-
12	Other exposures which are not past due exposures	538,328	-	297,143	-	297,143	100%
13	Past due exposures	-	-	-	-	-	-
14	Significant exposures to commercial entities	-	-	-	-	-	-
15	**Total**	**4,322,942**	**-**	**2,849,652**	**-**	**1,456,548**	**51%**

MORGAN STANLEY BANK ASIA LIMITED
(FORMERLY KNOWN AS "MORGAN STANLEY ASIA INTERNATIONAL LIMITED")

UNAUDITED SUPPLEMENTARY FINANCIAL INFORMATION
Year ended 31 December 2019

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CR5: Credit risk exposures by asset classes and by risk weights – for STC approach

		As at 31 December 2019										
	Exposure class / Risk Weight	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total credit risk exposures amount (post CCF and post CRM)
		USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000	USD'000
1	Sovereign exposures	863,016	-	-	-	-	-	-	-	-	-	863,016
2	PSE exposures	-	-	-	-	-	-	-	-	-	-	-
2a	Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
2b	Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
4	Bank exposures	-	-	628,840	-	192	-	-	-	-	-	629,032
5	Securities firm exposures	-	-	-	-	53,840	-	-	-	-	-	53,840
6	Corporate exposures	-	-	-	-	-	-	1,006,621	-	-	-	1,006,621
7	CIS exposures	-	-	-	-	-	-	-	-	-	-	-
8	Cash items	-	-	-	-	-	-	-	-	-	-	-
9	Exposures in respect of failed delivery on transactions entered into on a basis other than a delivery-versus-payment basis	-	-	-	-	-	-	-	-	-	-	-
10	Regulatory retail exposures	-	-	-	-	-	-	-	-	-	-	-
11	Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
12	Other exposures which are not past due exposures	-	-	-	-	-	-	297,143	-	-	-	297,143
13	Past due exposures	-	-	-	-	-	-	-	-	-	-	-
14	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
15	**Total**	**863,016**	**-**	**628,840**	**-**	**54,032**	**-**	**1,303,764**	**-**	**-**	**-**	**2,849,652**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table CCRA: Qualitative disclosures related to counterparty credit risk (including those arising from clearing through CCPs)

Counterparty credit risk refers to the risk of loss associated with the failure by one or more sales and trading counterparties to perform against its contractual obligations. The Company's counterparty credit risk arises from securities purchased under agreements to resell with external counterparties and derivative transactions with Morgan Stanley affiliates in relation to treasury activities. Counterparty credit exposure is managed by eligible collateral with daily margining between the Company and counterparties and the collateral requirement is not linked to credit rating. Given the nature of such transactions, there is no general wrong-way-risk and specific wrong-way risk. Operating limits in relation to exposures arising from the derivative transactions with Morgan Stanley affiliates are set as a percentage of the Company's capital based on historical usage of such activities.

Details of such transactions are further detailed in note 23 and note 26 to the audited financial statements.

Template CCR1: Analysis of counterparty default risk exposures (other than those to CCPs) by approaches

		Replacement cost (RC)	PFE	Effective EPE	Alpha (α) used for computing default risk exposure	Default risk exposure after CRM	RWA
	As at 31 December 2019	**US\$'000**	**US\$'000**	**US\$'000**	**US\$'000**	**US\$'000**	**US\$'000**
1	SA-CCR (for derivative contracts)	Not applicable					
1a	CEM	-	2,837		1	2,837	1,419
2	IMM (CCR) approach			-	-	-	-
3	Simple Approach (for SFTs)					-	-
4	Comprehensive Approach (for SFTs)					7,396	1,479
5	Value-at-risk ("VaR") (for SFTs)					-	-
6	**Total**						**2,898**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CCR2: CVA capital charge

		Exposure at default ("EAD") post CRM	RWA
	As at 31 December 2019	**US$'000**	**US$'000**
	Netting sets for which CVA capital charge is calculated by the advanced CVA method	-	-
1	(i) VaR (after application of multiplication factor if applicable)		-
2	(ii) Stressed VaR (after application of multiplication factor if applicable)		-
3	Netting sets for which CVA capital charge is calculated by the standardised CVA method	2,837	645
4	**Total**	**2,837**	**645**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CCR3: Counterparty default risk exposures (other than those to CCPs) by asset classes and by risk weights – for STC approach

		As at 31 December 2019										
	Exposure class / Risk Weight	0%	10%	20%	35%	50%	75%	100%	150%	250%	Others	Total default risk exposure after CRM
		US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000	US$ '000
1	Sovereign exposures	-	-	-	-	-	-	-	-	-	-	-
2	PSE exposures	-	-	-	-	-	-	-	-	-	-	-
2a	Of which: domestic PSEs	-	-	-	-	-	-	-	-	-	-	-
2b	Of which: foreign PSEs	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development bank exposures	-	-	-	-	-	-	-	-	-	-	-
4	Bank exposures	-	-	7,396	-	2,837	-	-	-	-	-	10,233
5	Securities firm exposures	-	-	-	-	-	-	-	-	-	-	-
6	Corporate exposures	-	-	-	-	-	-	-	-	-	-	-
7	CIS exposures	-	-	-	-	-	-	-	-	-	-	-
8	Regulatory retail exposures	-	-	-	-	-	-	-	-	-	-	-
9	Residential mortgage loans	-	-	-	-	-	-	-	-	-	-	-
10	Other exposures which are not past due exposures	-	-	-	-	-	-	-	-	-	-	-
11	Significant exposures to commercial entities	-	-	-	-	-	-	-	-	-	-	-
12	**Total**	**-**	**-**	**7,396**	**-**	**2,837**	**-**	**-**	**-**	**-**	**-**	**10,233**

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template CCR5: Composition of collateral for counterparty default risk exposures (including those for contracts or transactions cleared through CCPs)

	Derivative contracts				SFTs	
	Fair value of recognised collateral received		Fair value of posted collateral		Fair value of recognised collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
As at 31 December 2019	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**	**US$'000**
Cash - domestic currency	-	-	-	2,907	-	58
Other sovereign debt	-	-	-	-	356,060	-
Total	**-**	**-**	**-**	**2,907**	**356,060**	**58**

Domestic currency refers to the reporting currency of the Company, i.e. USD.

Table IRRBBA: Interest rate risk in banking book – risk management objectives and policies

Interest rate risk in the banking book (IRRBB) arises due to maturity mismatches from the Company's balance sheet positions such as customer deposits, loans, investment securities, debt issued, and other interest rate sensitive financial assets and liabilities designated at fair value.

Since 1 July 2019, the Company measures and reports IRRBB using the new standardised framework through MA(BS)12A - Interest Rate Risk in the Banking Book in accordance with HKMA requirements.

The Company measures its IRRBB exposures mainly through the Economic Value of Equity (EVE) and Net Interest Income (NII). These are calculated weekly for internal risk management purposes, as well as monthly as part of the monthly closing process.

The Company's interest rate risk is managed by the Treasury Department. The asset and liability structure is actively managed to ensure the Company does not assume excessive interest rate risk relative to its overall development strategy and commensurate with the scale, nature and complexity of its business. The Company may also enter into additional hedges such as interest rate swaps from time to time. The ALCO is responsible for ensuring that these objectives are met on an ongoing basis.

Independent market risk management oversight is provided by MRD. MRD identifies market risks including IRRBB, and develops and employs risk measures and tools to monitor, control and mitigate those risks. MRD also monitors risk exposures against established limits, and produces and distributes comprehensive reports designed to keep senior management apprised of the Company's market risk and IRRBB exposures. The Company's Market Risk Management Policy sets forth principles and practices for sound management of its market risk. The policy has been established to evidence the Company's standards for independent identification, measurement, monitoring, reporting, challenge, and escalation of market risk arising from the Company's business activities.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table IRRBBA: Interest rate risk in banking book – risk management objectives and policies (continued)

The Company's interest rate risk is controlled through conservative risk limits approved by the Board of Directors or its delegated Risk Committees including the Board Risk Committee, the Bank Risk Committee and the Credit and Market Risk Committee. The Company has clearly defined EVE and NII limits in place, in addition to other sensitivity and notional based risk limits. These limits are set by taking into account the size of the Company's balance sheet, projected business growth and risk appetite as set by the Board of Directors. Exposure is monitored at least weekly for EVE and NII limits, and daily for sensitivity and notional based limits. These are reported back to the Risk Committees on a monthly and quarterly basis.

The IAD independently assesses the Company's control environment and risk management processes through conducting regular audit reviews. IAD reports to the Audit Committee and is independent of the business units and risk management functions.

The Company applies the model assumptions for IRRBB prescribed by the HKMA with no deviations. The models used are reviewed on an annual basis at a minimum and independently verified by the Morgan Stanley Group's Model Risk Management (MRM) group.

The standardised EVE risk measure is calculated according to the six shock scenarios defined in the HKMA SPM IR-1. For non-maturity deposits (NMDs), behavioral maturities have been modelled using the Company's own observed data covering the past 7 years. The Company's average and longest behavioral maturity of NMDs are 0.31 years and 4 years respectively.

For the calculation of the change in NII, in addition to the two shock scenarios defined in SPM IR-1 for parallel up and parallel down interest rate moves, the Company also calculates a range of internal shock scenarios covering non-parallel interest rate moves combined with different repricing assumptions for customer deposits.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template IRRBB1: Quantitative information on interest rate risk in banking book

		ΔEVE	ΔNII
	Period	**As at 31 December 2019**	
		USD'000	**USD'000**
1	Parallel up	-	(17,998)
2	Parallel down	13,572	17,998
3	Steepener	1,306	
4	Flattener	318	
5	Short rate up	-	
6	Short rate down	7,024	
7	**Maximum**	13,572	17,998
	Period	**As at 31 December 2019**	
		USD'000	
8	**Tier 1 capital**	860,933	

As at 31 December 2019, the maximum change in EVE under the standardised framework in SPM IR-1 on the Company's interest rate sensitive positions in the banking book is below the threshold of 15% of the Company's Tier 1 Capital as set by HKMA.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table REMA: Remuneration policy

Governance structure

The Board Remuneration and Culture, Values and Conduct Committee appointed by the Board of Directors of the Company assists the Board of Directors in discharging its responsibility for the design and operation of the Company's remuneration system, and makes recommendation in respect of remuneration policy and practices to the Board of Directors. The Board Remuneration and Culture, Values and Conduct Committee comprises of three Board members, two of whom are independent non-executive directors of the Company. No external consultants have been engaged by the Company since the set up of the Board Remuneration and Culture, Values and Conduct Committee.

The Board of Directors endorses and issues the remuneration policy for the Company and its branch. The remuneration policy takes into consideration the global practices of the Morgan Stanley Group on remuneration. In addition, local market and competitor practices are also taken into consideration in determining the Company's remuneration policy.

Senior management is defined as those persons who are responsible for oversight of the Company's strategy or activities and/or those of the Company's material business lines. Key personnel are defined as individual employees whose duties or activities in the course of their employment involve the assumption of material risk or taking on of material exposures on behalf of the Company. For the year ended 31 December 2019, the Company has 28 senior management and no key personnel. Quantitative information on the remuneration for senior management and key personnel is set out in Templates REM1, REM2 and REM3 below.

Three meetings were held by the Board Remuneration and Culture, Values and Conduct Committee during the year ended 31 December 2019. In 2019, the Committee and the Board have approved changes to the Commissions section of the Company's Remuneration Policy. The key change was to lower the payout rate of a type of product in order to standardize with other lower payout rates products. For the year ended 31 December 2019, the remuneration paid to the Board Remuneration and Culture, Values and Conduct Committee members in the Morgan Stanley Group was borne by other Morgan Stanley Group undertakings; the remuneration paid to the Board Remuneration and Culture, Values and Conduct Committee members not in the Morgan Stanley Group by the Company was US$168,000.

Remuneration structure

The Company's remuneration policies and procedures are consistent with those of the Morgan Stanley Group. The Morgan Stanley Group is committed to responsible and effective compensation program, which is continually evaluated with a view towards balancing the following objectives, all of which support shareholders' interests:

Deliver Pay for Sustainable Performance
The Morgan Stanley Group applies "pay-for-performance" philosophy that pervades its culture and motivates the employees. The Morgan Stanley Group rewards employees by directly linking compensation to performance based on their annual objective setting and annual performance evaluation, taking account of the overall performance of the Company as a whole over the longer term; performance of the relevant business units; contribution of individual employees to the above performance; and outlook of the overall Morgan Stanley Group.

Compensation programs for the majority of employees comprised two key elements, including base salary and discretionary compensation which may be payable in cash or partially in cash and partially in deferred compensation awards depending on the level of total compensation, seniority and the role of the employees.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table REMA: Remuneration policy (continued)

Remuneration structure (continued)

Deliver Pay for Sustainable Performance (continued)
In addition, for employees in the most senior roles, a significant portion of compensation is delivered in the form of long-term incentive awards, which closely tie such employees' compensation to the Morgan Stanley Group's long-term performance.

Investment Representatives ("IRs") are also eligible to receive commissions, which are formulaically calculated based on predetermined production goals and also payable in cash or partially in cash and partially in deferred compensation awards.

Align Employees' Compensation with Shareholders' Interests
The Morgan Stanley Group links a significant portion of employees' incentive compensation to performance and delivers annual deferred compensation awards which helps motivate employees to achieve the Morgan Stanley Group's financial and strategic goals.

Compensation decisions for employees in risk control functions (including risk management, financial control, compliance, legal and internal audit functions) are determined by senior management of these divisions, wholly independent of the performance of the business units, and not by the management of the business units.

Attract and Retain Top Talent
The Morgan Stanley Group competes for talent globally with other banks and financial institutions. The Morgan Stanley Group continually monitors competitive pay levels and structures its incentive awards to attract and retain the most qualified employees.

Mitigate Excessive Risk-Taking
The Compensation, Management Development and Succession Committee (the "CMDS Committee") of the Morgan Stanley Group is advised by the Morgan Stanley Group's CRO and the CMDS Committee's independent compensation consultant to help ensure that the structure and design of compensation arrangements disincentivise unnecessary or excessive risk-taking that threatens the Morgan Stanley Group's interests or give rise to risks that could have a material adverse effect on the Morgan Stanley Group.

Remuneration process

In the first quarter of each year, senior management of the Morgan Stanley Group proposes and works with the members of the Morgan Stanley Group's Operating Committee (including the CRO of the Morgan Stanley Group) and the Board of Directors of the Morgan Stanley Group to establish financial and non-financial performance priorities that are aligned with the Morgan Stanley Group's business strategy and to incorporate risk-adjusted measures and objectives.

The CRO of the Morgan Stanley Group evaluates the Morgan Stanley Group's current compensation programs on annual basis and has determined that such programs do not encourage excessive risk-taking behavior, due in part to (i) the balance of fixed compensation and variable compensation; (ii) the balance between short-term and long-term incentives; (iii) mandatory deferrals into both equity-based and cash-based incentives programs; (iv) the governance procedures followed in making compensation decisions; and (v) the risk-mitigating features of the deferred incentive compensation awards, such as cancellation and clawback provisions. Details of the deferred compensation plans are set out in note 30 to the financial statements.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Table REMA: Remuneration policy (continued)

Remuneration process (continued)

The overall discretionary bonus pool is established in consultation with the CMDS Committee. Risk-Adjusted Return on Equity is the primary quantitative metric reviewed with the CMDS Committee to determine the size of the bonus pool. Employee eligibility for bonus compensation is discretionary and bonus decisions are subject to a multi-dimensional process, which considers financial and non-financial individual, business unit and Morgan Stanley Group's performance measures.

Non-financial performance criteria that may be taken into account in deciding whether to award, and the amount of any bonus compensation, include (but are not limited to):

- Individual conduct, including but not limited to, adherence to the Morgan Stanley Group's Code of Conduct and policies and the Morgan Stanley Group's cultural values;
- Contribution to the performance and profitability of both the business unit and the Morgan Stanley Group and the strategic objectives of the Morgan Stanley Group, business unit and the team and the associated value attributed to the role;
- Commercial impact, including business/functional knowledge and judgment, client relationships, innovation and execution;
- Leadership skills, including teamwork, communication and management;
- Professional skills, including recruiting, diversity and inclusion; and
- Adherence to compliance and risk policies, including ethics, control and risk management.

Senior management of the Morgan Stanley Group and the CMDS Committee oversee the Morgan Stanley Group's controls regarding the year-end compensation process to help eliminate incentives for excessive risk-taking, including:

- Sizing the incentive compensation pool to more fully consider risk-adjusted returns, compliance with risk limits and the market and competitive environment;
- Allocating the incentive compensation pool among businesses after consideration of the business' returns on certain financial and return on capital metrics;
- Delivering a substantial portion of compensation in multi-year deferrals subject to malus/cancellation;
- Directing compensation managers to consider malus/cancellation events and an employee's risk management activities and outcomes in making compensation decisions; and
- Undertaking a rigorous review process by risk control functions to identify potential malus/cancellation situations.

In addition, on an annual basis, business heads and Operating Committee members representing the Morgan Stanley Group's revenue-generating divisions will prepare a Pay and Performance Analysis report that is presented to the CMDS Committee. This report sets the stage for the CMDS Committee to understand the outcomes of pay from the prior year relative to the market, and the linkage of prior year pay and performance. In turn, this enables the CMDS Committee to consider where the starting baseline of pay either trails or leads the market and whether such a position is warranted or should be rectified in light of current year known performance. Compensation outcomes are symmetric with risk outcomes at the Morgan Stanley Group level.

The Company's remuneration policy provides the Company ability to adjust commission payments, discretionary bonus, and cancel unvested deferrals where the employee's conduct fall below the Company's standard and expectation.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template REM1: Remuneration awarded during financial year

Below table shows the quantitative information on remuneration for the year ended 31 December 2019.

			2019	
Remuneration amount and quantitative information			**Senior management USD'000**	**Key personnel USD'000**
1	Fixed remuneration	Number of employees	28	-
2		**Total fixed remuneration**	8,816	-
3		Of which: cash-based	8,816	-
4		Of which: deferred	-	-
5		Of which: shares or other share-linked instruments	-	-
6		Of which: deferred	-	-
7		Of which: other forms	-	-
8		Of which: deferred	-	-
9	Variable remuneration	Number of employees	28	-
10		**Total variable remuneration**	14,851	-
11		Of which: cash-based	10,897	-
12		Of which: deferred	3,740	-
13		Of which: shares or other share-linked instruments	3,954	-
14		Of which: deferred	3,954	-
15		Of which: other forms	-	-
16		Of which: deferred	-	-
17	**Total remuneration**		23,667	-

Note:

Fixed remuneration includes base salary, pension contribution, extra payments, sign on bonus, termination payments and other allowances where applicable.

Cash based variable remuneration includes bonus and deferred cash. Share based variable remuneration includes deferred stock units.

H. PILLAR 3 DISCLOSURE (CONTINUED)

Template REM2: Special payments

Below table shows the quantitative information on special payment for the year ended 31 December 2019.

		2019					
Special payments		**Guaranteed bonuses**		**Sign-on awards**		**Severance payments**	
		Number of employees	**Total amount US$'000**	**Number of employees**	**Total amount US$'000**	**Number of employees**	**Total amount US$'000**
1	Senior management	-	-	2	518	1	205
2	Key personnel	-	-	-	-	-	-

Note:

The increase in special payment during the year, was due to 2 senior new hires which was granted sign on awards. Also, a senior employee was terminated and was made a severance payment.

Template REM3: Deferred remuneration

Below table shows the quantitative information on deferred and retained remuneration.

		2019				
Deferred and retained remuneration		**Total amount of outstanding deferred remuneration US$'000**	**Of which: Total amount of outstanding deferred and retained remuneration exposed to ex post explicit and/or implicit adjustment US$'000**	**Total amount of amendment during the year due to ex post explicit adjustments US$'000**	**Total amount of amendment during the year due to ex post implicit adjustments US$'000**	**Total amount of deferred remuneration paid out in the financial year US$'000**
1	Senior management					
2	Cash	7,500	7,500	-	378	3,312
3	Shares	11,037	11,037	-	2,395	6,179
4	Cash-linked instruments	-	-	-	-	-
5	Other	-	-	-	-	-
6	Key personnel					
7	Cash	-	-	-	-	-
8	Shares	-	-	-	-	-
9	Cash-linked instruments	-	-	-	-	-
10	Other	-	-	-	-	-
11	**Total**	18,537	18,537	-	2,773	9,491

Note:

Total amount of amendment during the year due to ex post explicit adjustments was US$Nil (2018: US$1,073,000) as none of the senior management and key personnel had any forfeitures during the year.

Total amount of amendment during the year due to ex post implicit adjustments was US$2,773,000 gain (2018: US$1,977,000 loss) due to increase in market price of Morgan Stanley common stock during the year.