

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED
DIRECTORS' REPORT AND FINANCIAL STATEMENTS
FOR THE YEAR ENDED
31ST DECEMBER 2022

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

REPORT OF THE DIRECTORS

The directors submit their report together with the audited financial statements of J.P. Morgan Securities (Asia Pacific) Limited (the “Company”) for the year ended 31st December 2022.

Principal activities

The Company is engaged in Corporate & Investment Bank related activities. The Company is a Restricted License Bank with the Hong Kong Monetary Authority. It is also a Registered Institution with the Hong Kong Securities and Futures Commission.

Results and appropriations

The results of the Company for the year ended 31st December 2022 are set out in the statement of profit or loss and comprehensive income on page 7 to the financial statements.

The directors do not recommend the payment of a dividend.

Directors

The directors of the Company during the year and up to the date of this report were as follows:

Gori, Filippo (Chief Executive)	
Ho, Alan Yiu Tung (Alternate Chief Executive)	
Goel, Sudhir (Alternative Chief Executive)	
Gil-Tienda, Rafael (Independent Non-Executive Director)	
Ray, Raj Tilak (Non-Executive Director)	(Resigned on 9th January 2023)
Barbour, Roger (Non-Executive Director)	
Patel, Harshika (Non-Executive Director)	
Keay, Stephanie (Non-Executive Director)	(Appointed on 9th January 2023)

There being no provision in the Company’s Articles of Association for retirement by rotation, all remaining directors continue in office.

Mr. Raj Tilak Ray resigned as director of the Company on 9th January 2023. He confirmed that he has no disagreement with the Board and nothing relating to the affairs of the Company needed to be brought to the attention of the shareholders of the Company.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

REPORT OF THE DIRECTORS (CONTINUED)

Directors' material interests in transactions, arrangements or contracts that are significant in relation to the Company's business

No transactions, arrangements and contracts of significance in relation to the Company's business to which the Company, its fellow subsidiaries or its holding companies was 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' interests in the shares, underlying shares and debentures of the Company or any specified undertaking of the Company

At no time during the year was the Company, its fellow subsidiaries or its holding companies a party to any arrangement to enable the directors of the Company to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate, with the exception of the following:

JPMorgan Chase & Co. ("JPMorgan Chase") granted long-term share-based awards to certain employees under its Long-Term Incentive Plan ("LTIP"), as amended and restated effective 15th May 2018, and subsequently amended effective 18th May 2021. During 2022, JPMorgan Chase had granted restricted stock/unit awards under its LTIP. Under the terms of the LTIP, as of 31st December 2022, 69 million shares of common stock were available for issuance through May 2025. The LTIP is the only active plan under which JPMorgan Chase is currently granting stock-based incentive awards.

A restricted stock/unit award is the right to be vested in a specific number of shares of JPMorgan Chase common stock on a specific date(s), provided that the employee meets the grant's restriction requirements. The shares will vest based on the schedule in the Award Agreement and are subject to the related Terms and Conditions of the award, including continued employment. Employees granted restricted stock are shareholders and have voting rights. During the vesting period, employees receive any declared dividends on their outstanding restricted shares at approximately the same time that JPMorgan Chase distributes dividends to its shareholders. Employees with restricted stock units will receive a cash payment from JPMorgan Chase equivalent to any dividends declared by the Board of Directors of JPMorgan Chase; employees granted restricted stock units are not shareholders and do not have any voting rights. During 2022, employees were granted restricted stock unit awards rather than restricted stock.

The purpose of the LTIP is to encourage selected key employees of JPMorgan Chase and its subsidiaries to acquire a proprietary and vested interest in the growth and performance of JPMorgan Chase. The plan also serves to attract, retain and reward employees of exceptional talent and permits JPMorgan Chase to respond in a flexible manner to the changes within the financial services industry.

The above plans remained in place as at 31st December 2022.

During the year ended 31st December 2022, all except one of the directors who held office during the year held restricted stock units or common stock acquired pursuant to the above arrangements.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

REPORT OF THE DIRECTORS (CONTINUED)

Management contracts

There existed agreements for front office and back office services to be provided by group companies to the Company under which costs are reimbursed and fees are payable. These agreements can be terminated by either party giving not less than ninety days notice of termination.

Permitted indemnity provisions

During the financial year and up to the date of this Directors' Report, there is a permitted indemnity provision being in force for the benefit of the directors of the Company.

Auditors

The financial statements have been audited by PricewaterhouseCoopers who retire and, being eligible, offer themselves for re-appointment.

On behalf of the Board



Director
Hong Kong, 21 April 2023

**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED**
(Incorporated in Hong Kong with limited liability)

Opinion

What we have audited

The financial statements of J.P. Morgan Securities (Asia Pacific) Limited (the "Company"), which are set out on pages 7 to 63, comprise:

- the statement of financial position as at 31st December 2022;
- the statement of profit or loss and comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the financial statements give a true and fair view of the financial position of the Company as at 31st December 2022, 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 ("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 ("HKSAAs") 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 believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

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.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Report of the Directors, 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.

**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED (CONTINUED)**
(Incorporated in Hong Kong with limited liability)

Responsibilities of Directors 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.

The Audit Committee is 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. We report our opinion solely to you, as a body, 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 HKSAAs 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 HKSAAs, we exercise professional judgment and maintain professional scepticism 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.
- 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.

**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED (CONTINUED)**
(Incorporated in Hong Kong with limited liability)

Auditor's Responsibilities for the Audit of the Financial Statements (continued)

- 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 directors 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.



PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 21 April 2023

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

**STATEMENT OF PROFIT OR LOSS AND COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31ST DECEMBER 2022**

	Note	2022 US\$'000	2021 US\$'000
Interest income	3	35,880	5,004
Interest expense	3	<u>(3,754)</u>	<u>(2,597)</u>
Net interest income		32,126	2,407
Net fees and commission income	4	1,104,615	1,300,917
Net (loss)/gain from financial instruments at fair value through profit or loss		(1,293)	32
Other gain	5	<u>1</u>	<u>1</u>
Total income		1,135,449	1,303,357
Operating expenses	6	<u>(915,612)</u>	<u>(905,416)</u>
Profit before tax		219,837	397,941
Taxation	9	<u>(41,676)</u>	<u>(65,748)</u>
Total comprehensive income		<u><u>178,161</u></u>	<u><u>332,193</u></u>

The notes on pages 11 to 63 are an integral part of these financial statements.


J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

**STATEMENT OF FINANCIAL POSITION
AS AT 31ST DECEMBER 2022**

	Note	2022 US\$'000	2021 US\$'000
ASSETS			
Balances with banks		2,131,047	2,196,675
Financial assets at fair value through profit or loss	11	22,791	17,331
Deferred tax assets	12	22,555	21,815
Other assets	13	284,583	268,804
Fixed assets	14	126	292
Right-of-use assets	15	100	76
Total assets		<u>2,461,202</u>	<u>2,504,993</u>
EQUITY			
Share capital	17	527,000	527,000
Reserves		<u>1,238,665</u>	<u>1,060,504</u>
Total equity		<u>1,765,665</u>	<u>1,587,504</u>
LIABILITIES			
Deposits and balances from banks		229,073	443,807
Other liabilities	16	462,982	470,291
Lease liabilities	15	106	89
Taxation payable		<u>3,376</u>	<u>3,302</u>
Total liabilities		<u>695,537</u>	<u>917,489</u>
Total equity and liabilities		<u>2,461,202</u>	<u>2,504,993</u>

The notes on pages 11 to 63 are an integral part of these financial statements.

Approved by the Board of Directors on 21 April 2023 and signed on its behalf.



Ho, Alan Yiu Tung
Director



Gori, Filippo
Director

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

**STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31ST DECEMBER 2022**

	Share capital US\$'000	Employee benefit reserve US\$'000	Retained earnings US\$'000	Total US\$'000
At 1st January 2021	527,000	69,373	658,938	1,255,311
Total comprehensive income	—	—	332,193	332,193
Transactions with owners				
Employee benefit expenses for the year (note 7)	—	60,686	—	60,686
Employee benefits recharged by JPMorgan Chase	—	(60,686)	—	(60,686)
Total transactions with owners	—	—	—	—
At 31st December 2021	527,000	69,373	991,131	1,587,504
Total comprehensive income	—	—	178,161	178,161
Transactions with owners				
Employee benefit expenses for the year (note 7)	—	53,383	—	53,383
Employee benefits recharged by JPMorgan Chase	—	(53,383)	—	(53,383)
Total transactions with owners	—	—	—	—
At 31st December 2022	<u>527,000</u>	<u>69,373</u>	<u>1,169,292</u>	<u>1,765,665</u>

The notes on pages 11 to 63 are an integral part of these financial statements.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

**STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31ST DECEMBER 2022**

	Note	2022 US\$'000	2021 US\$'000
Net cash outflow from operating activities	26	<u>(76,947)</u>	<u>(141,256)</u>
Cash flows from investing activities			
Purchase of fixed assets	14	(3)	(4)
Sales of fixed assets		<u>—</u>	<u>1</u>
Net cash outflow from investing activities		<u>(3)</u>	<u>(3)</u>
Cash flows from financing activities			
Principal element of lease payments	15	<u>(24)</u>	<u>(25)</u>
Net cash outflow from financing activities		<u>(24)</u>	<u>(25)</u>
Net decrease in cash and cash equivalents		(76,974)	(141,284)
Cash and cash equivalents at 1st January		896,675	1,030,591
Exchange difference on cash and cash equivalents		<u>11,346</u>	<u>7,368</u>
Cash and cash equivalents at 31st December		<u><u>831,047</u></u>	<u><u>896,675</u></u>
Representing:			
Balances with banks		2,131,047	2,196,675
Less: placement with bank with original maturity more than three months		<u>(1,300,000)</u>	<u>(1,300,000)</u>
Cash and cash equivalents at 31st December		<u><u>831,047</u></u>	<u><u>896,675</u></u>

The notes on pages 11 to 63 are an integral part of these financial statements.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

1 General information

The Company is a Restricted Licensed Bank with the Hong Kong Monetary Authority and a Registered Institution with the Hong Kong Securities and Futures Commission. The Company is incorporated and domiciled in Hong Kong. The Company is engaged in Corporate & Investment Bank related activities.

The address of its registered office is 23/F, Tower 1, The Quayside, 77 Hoi Bun Road, Kwun Tong, Hong Kong.

The Company's parent company is J.P. Morgan Securities Holdings (Hong Kong) Limited (incorporated in Hong Kong) and its ultimate holding company is JPMorgan Chase & Co. ("JPMorgan Chase", the "Group" or the "Firm"), a listed company incorporated in the United States of America.

These financial statements have been approved by the Board of Directors on 21 April 2023.

2 Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

(a) Basis of preparation

The financial statements of the Company have been prepared in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") and requirements of the Hong Kong Companies Ordinance Cap. 622. The financial statements have been prepared on a going concern basis under the historical cost convention, as modified by the revaluation of financial assets and financial liabilities (including derivative financial instruments) at fair value through profit or loss.

The preparation of financial statements in conformity with HKFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 27.

The following amendments to standards have been adopted by the Company for the first time for the financial year beginning on or after 1st January 2022.

- Property, Plant and Equipment: Proceeds before Intended Use – Amendments to HKAS 16
- Onerous Contracts – Cost of Fulfilling a Contract – Amendments to HKAS 37
- Annual Improvements to IFRS Standards 2018 - 2020
- Reference to the Conceptual Framework – Amendments to HKFRS 3

The adoption of these amendments did not have any impact on the amounts recognized in prior periods and is not expected to significantly affect the current or future periods.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(a) Basis of preparation (continued)

New standards, amendments and interpretations not yet effective

Certain new accounting standards, amendments to accounting standards and interpretations have been published that are not mandatory for 31st December 2022 reporting periods and have not been early adopted by the Company. These standards, amendments or interpretations are not expected to have a material impact to the Company in the current or future reporting periods and on foreseeable future transactions.

(b) Financial assets and financial liabilities

(i) Recognition of financial assets and financial liabilities

The Company recognizes financial assets and financial liabilities when it becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognized on the trade-date, which is the date on which the Company commits to purchase or sell an asset.

(ii) Classification and measurement of financial assets and financial liabilities

On initial recognition, financial assets are classified as measured at amortized cost, fair value through other comprehensive income ("FVOCI") or fair value through profit or loss ("FVTPL"). Financial liabilities are classified as measured at amortized cost. The classification is based on both the business model for managing the financial assets and their contractual cash flow characteristics. Factors considered by the Company in determining the business model for a group of assets include past experience on how the cash flows for these assets were collected, how the assets' performance is evaluated and reported to key management personnel, how risks are assessed and managed, and how managers are compensated.

Financial assets and financial liabilities measured at amortized cost

Financial assets are measured at amortized cost if they are held under a business model with the objective to collect contractual cash flows ("Hold to Collect") and they have contractual terms under which cash flows are solely payments of principal and interest ("SPPI"). In making the SPPI assessment, the Company considers whether the contractual cash flows are consistent with a basic lending arrangement (i.e. interest includes only consideration for the time value of money, credit risk, other basic lending risks and a profit margin that is consistent with a basic lending arrangement). Where the contractual terms introduce exposure to risk or volatility that are inconsistent with a basic lending arrangement, the related financial asset is classified and measured at fair value through profit or loss. Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest. As a result of the application of these criteria, only debt financial assets are eligible to be measured at amortized cost.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(b) Financial assets and financial liabilities (continued)

(ii) Classification and measurement of financial assets and financial liabilities (continued)

Financial assets measured at amortized cost include balances with banks and other assets (excluding derivative assets).

Financial assets measured at amortized cost are initially recognized at fair value including transaction costs (which are explained below). The initial amount recognized is subsequently reduced for principal repayments and adjusted for accrued interest using the effective interest method (see below). In addition, the carrying amount of financial assets is adjusted by recognizing an expected credit loss allowance through profit or loss.

Financial liabilities are measured at amortized cost unless they are held for trading or are designated as measured at fair value through profit or loss. Most of the Company's financial liabilities are measured at amortized cost. Financial liabilities measured at amortized cost include deposits and balances from banks and other liabilities (excluding derivative liabilities).

Other financial liabilities are recognized initially at fair value net of transaction costs incurred. Other financial liabilities are subsequently stated at amortized cost; any difference between proceeds net of transaction costs and the redemption value is recognized in the statement of profit or loss and comprehensive income over the period of the other financial liabilities using the effective interest method.

Allocation of the interest income or interest expense

The effective interest method is used to allocate interest income or interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability or a shorter period when appropriate, to the net carrying amount of the financial asset or financial liability. The effective interest rate is established on initial recognition of the financial asset or financial liability. The calculation of the effective interest rate includes all fees and commissions paid or received, transaction costs, and discounts or premiums that are an integral part of the effective interest rate.

Transaction costs are incremental costs that are directly attributable to the acquisition, issuance or disposal of a financial asset or financial liability.

Gains and losses arising on the disposal of financial assets measured at amortized cost are recognized in 'trading profit' or other noninterest revenue as relevant.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(b) Financial assets and financial liabilities (continued)

(ii) Classification and measurement of financial assets and financial liabilities (continued)

Financial assets measured at fair value through profit or loss

Financial assets measured at FVTPL consist primarily of instruments that are held for trading. Under HKFRS 9, a financial asset is defined as “held for trading” if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term, or forms part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking or it is a derivative. However, such financial instruments are used by the Company predominantly in connection with its client-driven market-making and/or for hedging certain assets, liabilities, positions, cash flows or anticipated transactions (i.e. risk management activities). Financial assets held for trading comprise both debt and equity securities, derivatives and the related unrealized gains and losses.

In addition, certain financial assets that are not held for trading are measured at FVTPL if they do not meet the criteria to be measured at amortized cost or FVOCI. For example, if the financial assets are managed on a fair value basis, have contractual cash flows that are not SPPI or are equity securities. The Company did not elect to measure any equity instruments at FVOCI.

Financial instruments measured at FVTPL are initially recognized at fair value in the balance sheet. Transaction costs and any subsequent fair value gains or losses are recognized in profit or loss as they arise.

The Company manages cash instruments, in the form of debt and equity securities, and derivatives on a unified basis, including hedging relationships between cash securities and derivatives. Accordingly the Company reports the gains and losses on the cash instruments and the gains and losses on the derivatives on a net basis in trading profits.

Financial assets and financial liabilities designated at fair value through profit or loss

Subject to certain criteria, the Company can designate financial assets and financial liabilities to be measured at fair value through profit or loss. Designation is only possible when the financial instrument is initially recognized and cannot subsequently be reclassified. Financial assets can be designated as measured at fair value through profit or loss only if such designation eliminates or significantly reduces a measurement or recognition inconsistency.

Financial assets that the Company designates as measured at fair value through profit or loss are recognized at fair value at initial recognition, with transaction costs being recognized in profit or loss and subsequently measured at fair value. Gains and losses on financial assets designated at fair value through profit or loss are recognized in profit or loss as they arise.

Changes in the fair value of financial assets designated as measured at FVTPL are recognized immediately in trading profit or loss.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(b) Financial assets and financial liabilities (continued)

(iii) Reclassification

The Company may choose to reclassify financial assets that would meet the definition of trade and other receivables only when it changes its business model for managing financial assets.

Reclassifications are made at fair value on the reclassification date. Fair value becomes the new cost or amortized cost as applicable, and no reversals of fair value gains or losses recorded before reclassification date are subsequently made. Effective interest rates for financial assets reclassified to trade and other receivables are determined at reclassification date. Further increases in estimates of cash flows adjust effective interest rates prospectively.

(iv) Fair Value

Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date.

Fair values are determined by reference to observable market prices where available and reliable. Fair values of financial assets are based on quoted market prices or dealer price quotations for financial instruments traded in active markets. Where market prices are unavailable, fair value is based on valuation models that consider relevant transaction characteristics (such as maturity) and use as inputs observable or unobservable market parameters, including but not limited to yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value.

For financial assets held at fair value, most market parameters in the valuation model are either directly observable or are implied from instrument prices. When input values do not directly correspond to the most actively traded market parameters the model may perform numerical procedures in the pricing such as interpolation.

The Company classifies its assets according to a hierarchy that has been established under HKFRS for disclosure of fair value measurements. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset as of the measurement date. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets (level 1) and the lowest priority to unobservable inputs (level 3 inputs).

A financial instrument's categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(b) Financial assets and financial liabilities (continued)

(v) Derecognition and write-off

Financial assets are derecognized when the contractual right to receive cash flows from the financial assets has expired, or has been transferred with either of the following conditions met:

- the Company has transferred substantially all the risks and rewards of ownership of the asset; or
- the Company has neither retained nor transferred substantially all of the risks and rewards; but has relinquished control of the asset.

Financial assets are written-off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof.

Financial liabilities are derecognized when they are extinguished, that is when the obligation is discharged, cancelled or expires.

(vi) Offsetting

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or the counterparty.

(c) Impairment of financial assets

The Company establishes an expected credit loss ("ECL") for financial assets to ensure they are reflected in the financial statements at the Company's best estimate of the net amount expected to be collected. The ECL is determined on in-scope financial instruments measured at amortized cost or FVOCI. ECLs are measured collectively via a portfolio-based (modeled) approach for Stage 1 and 2 assets but are generally measured individually for Stage 3 assets. ECLs are forecasted over the 12-month term (Stage 1) or expected life (Stage 2 or 3) of in-scope financial instruments, where the forecast period includes the reasonable and supportable (R&S) forecast period, the reversion period and the residual period and considers the time value of money. These topics are discussed in more detail in the sections below.

Determining the appropriateness of the allowance is complex and requires judgement by management about the effect of circumstances that are inherently uncertain. Further, estimating the allowance involves consideration of a range of possible outcomes, which management evaluates to determine its best estimate. Subsequent evaluations, in light of the circumstances then prevailing, may result in significant changes in the ECL in future periods.

The Company must consider the appropriateness of decisions and judgements regarding methodology and inputs utilized in developing estimates of ECL each reporting period and document them appropriately. Note 21(a) provides more detail for how the expected credit loss allowance is measured.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(d) Fixed assets

Fixed assets are stated at historical cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisitions of the items. Subsequent costs are included in the asset's carrying amount or are recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the other operating expenses during the financial period in which they are incurred.

Depreciation is calculated to write off the cost of the fixed assets over their estimated useful lives on a straight line basis at the following annual rates:

Leasehold improvements	12½% or over remaining life upon expiry of the lease, whichever is shorter
Furniture and equipment	12½% - 33⅓%

At each statement of financial position date, both internal and external sources of information are considered to assess whether there is any indication that fixed assets are impaired. If any such indication exists, the recoverable amount of the asset is estimated and where relevant, an impairment loss is recognized to reduce the asset to its recoverable amount. Such impairment losses are recognized in the statement of profit or loss and comprehensive income.

The gain or loss on disposal of fixed assets is the difference between the net sales proceeds and the carrying amount of the relevant assets, and is recognized in the statement of profit or loss and comprehensive income.

(e) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term and highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(f) Derivative financial instruments

Derivatives are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at their fair value. Fair values are obtained from quoted market prices in active markets, including recent market transactions and valuation techniques. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative.

The Company's derivatives are entered into for trading purposes and are over-the-counter derivatives. Changes in the fair value of any derivative financial instruments that qualify for trading are recognized immediately in the statement of profit or loss and comprehensive income.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(g) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates (“the functional currency”).

The financial statements are prepared in United States dollars (“USD”), which is the Company’s functional and presentation currency.

(ii) Transactions and balances

Non-USD transactions are translated into USD using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are generally recognized in the statement of profit or loss and comprehensive income.

(h) Leases (as lessee)

Assets and liabilities arising from a lease are initially measured on a present value basis, lease liabilities include the net present value of fixed payments (including in-substance fixed payments), less any lease incentive receivable.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

Lease payments are allocated between principal and interest expense. The interest expense is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payment made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

(i) Interest income and expense

Interest income and expense for all interest-bearing financial instruments are recognized in the statement of profit or loss and comprehensive income using the effective interest method.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(i) Interest income and expense (continued)

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Company estimates cash flows considering all contractual terms of the financial instrument (for example, prepayment options) but does not consider future credit losses. The calculation includes all fees and commissions paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

(j) Fee and commission income and expense

Fees and commission income are recognized on an accrual basis in accordance with the terms of the underlying agreements and mandates.

For commission income, the Company acts as a broker, facilitating its clients' purchase and sales of securities and other financial instruments. It collects and recognizes brokerage commissions as revenue upon occurrence of the client transaction.

Investment banking revenue includes debt and equity underwriting and advisory fees. Underwriting fees are recognized as revenue typically upon execution of the client's transaction. Debt underwriting fees also include credit arrangement and syndication fees which are recorded as revenue after satisfying certain retention, timing and yield criteria. Advisory fees are recognized as revenue typically upon execution of the client's transaction.

(k) Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(k) Current and deferred income tax (continued)

Deferred income tax is provided in full, using the liability method, temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

Deferred tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and where the deferred tax balances relate to the same taxation authority.

(l) Employee benefits

(i) Employee leave entitlements

Employee entitlements to leave (including annual, marriage, sick, maternity, and paternity etc.) are not accrued for but are recorded as incurred. In general, the employees are not allowed to carry forward any unutilized leave to the next year, except with the approval from the head of the respective departments. Any approved carried forward annual leave have to be taken by the end of the first quarter in the next year.

(ii) Profit sharing and bonus plans

There are no profit sharing plans in relation to the performance of the Company itself. The Company has a discretionary bonus plan which is based on the performance of the individual as well as the performance of the Group. Liabilities for payments under the discretionary bonus plan due within twelve months after the statement of financial position date are recognized when the Company has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made.

(iii) Pension obligations

The Company offers a mandatory provident fund scheme and a defined contribution plan to the employees. The scheme and the plan are generally funded by payments from employees and/or by the Company.

Forfeitures arising from departures of employees with defined contribution plan whose benefits have not fully vested is recognized by the Company in the statement of profit or loss and comprehensive income in the year they occur. The Company's mandatory contributions to the mandatory provident fund are vested immediately and thus there are no forfeitures.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(I) Employee benefits (continued)

(iv) Equity compensation benefits

The incentive compensation benefits are determined by JPMorgan Chase. The following schemes are applicable to the employees of the Company:

(a) Restricted stock/unit awards

A restricted stock/unit award is the right to be vested in a specific number of shares of JPMorgan Chase common stock on a specific date(s), provided that the employee meets the grant's restriction requirements. The shares will vest based on the schedule on the Award Agreement and are subject to the related Terms and Conditions of the award, including continued employment. Employees granted restricted stock are shareholders and having voting rights; however, employees granted restricted stock units do not have voting rights until after the shares become vested and delivered to the employee. Currently JPMorgan Chase grants restricted stock units.

(b) Nonqualified stock option

A nonqualified stock option is a stock option giving the employee (the "Grantee") the right to buy a share of stock at a fixed price. This fixed price is called the "grant price" or "exercise price." The grant price generally equals the average of the high and low selling price or fair market value ("FMV") of JPMorgan Chase common stock on the award date. Options become exercisable over time and generally expire 10 years after the grant date, or in some cases, exercisability may depend on achieving performance targets.

(c) Stock Appreciation Awards

Stock Appreciation Awards ("SARs") entitle the grantee, upon exercise, to receive from JPMorgan Chase without payment a number of shares of JPMorgan Chase common stock, the FMV of which, as of the exercise date, is equal to the excess of the fair market value of one share of such common stock on such exercise date over the exercise price per SARs multiplied by the number of SARs being exercised. The exercise price of SARs generally equals the average of the high and low selling prices, or FMV, of JPMorgan Chase common stock on the award date. SARs become exercisable over time and generally expire 10 years after the grant date, unless forfeited at an earlier date, or in some cases, exercisability may depend on achieving performance targets.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

2 Summary of significant accounting policies (continued)

(l) Employee benefits (continued)

(iv) Equity compensation benefits (continued)

The costs of the above equity compensation benefits are incurred for the benefit of the Company's employees and are part of the total staff costs of the Company. These employee benefit expenses which are measured at their fair value at grant date are amortized and recognized in the statement of profit or loss and comprehensive income over the relevant vesting periods.

The Company has recognized all equity compensation benefits as equity-settled, whereby all these employee benefit expenses are credited to "Employee benefit reserve" under equity. For employee benefit expenses where the Company has an obligation to settle with JPMorgan Chase the corresponding amounts are transferred from "Employee benefit reserve" to "Other accounts payable" in "Other liabilities".

3 Net interest income

	2022 US\$'000	2021 US\$'000
Interest income		
Placements and balances with banks (note 20)	35,267	4,480
Financial assets		
- Listed investments	613	521
- Unlisted investments	—	3
	<u>35,880</u>	<u>5,004</u>
Interest expense		
Deposits and balances from banks (note 20)	(3,750)	(2,593)
Interest element of lease payments (note 15)	(4)	(4)
	<u>(3,754)</u>	<u>(2,597)</u>

Interest income on financial assets that are measured at amortized cost are US\$35,267,000 (2021: US\$4,480,000), and interest expense on financial liabilities that are not measured at fair value through profit or loss are US\$3,754,000 (2021: US\$2,597,000).

During the year, there was no interest income accrued on impaired financial assets (2021: Nil).

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

4 Net fees and commission income

	2022 US\$'000	2021 US\$'000
Fees and commission income (note 20)		
- Corporate & Investment Bank	1,453,625	1,784,503
- Others	38,955	36,758
	<u>1,492,580</u>	<u>1,821,261</u>
Less: fees and commission expense (note 20)	(387,965)	(520,344)
	<u>1,104,615</u>	<u>1,300,917</u>

During the year, there was no fee income and fee expense, other than amounts included in determining the effective interest rate, arising from financial assets or financial liabilities that are not at fair value through profit or loss (2021: Nil).

During the year, there was no fee income and fee expense on trust and other fiduciary activities where the Company holds or invests on behalf of its customers (2021: Nil).

5 Other gain

	2022 US\$'000	2021 US\$'000
Loss on disposal of fixed assets	—	(18)
Other income	1	19
	<u>1</u>	<u>1</u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

6 Operating expenses

	2022	2021
	US\$'000	US\$'000
Staff costs (note 7)	365,383	408,184
Fees paid to Group companies (note 20)	391,499	349,072
Premises and equipment expenses	29,946	28,231
Communication expenses	27,245	25,728
Legal and professional fees and expenses	16,718	16,528
Travelling expenses	8,306	4,438
Depreciation charge for right-of-use assets (note 15)	21	21
Depreciation charge for fixed assets (note 14)	169	307
Auditor's remuneration	925	801
Other operating expenses	75,400	72,106
	<u>915,612</u>	<u>905,416</u>

7 Staff costs

	2022	2021
	US\$'000	US\$'000
Wages and salaries	299,660	335,974
Contributions to pension schemes	10,815	9,781
Housing expense in respect of staff quarters	1,525	1,743
Equity compensation benefits	53,383	60,686
	<u>365,383</u>	<u>408,184</u>

8 Benefits and interests of directors

(a) Directors' emoluments

	2022	2021
	US\$'000	US\$'000
Emoluments paid or receivable in respect of a directors' other services in connection with management of the affairs of the Company	<u>1,500</u>	<u>1,633</u>

Include in the directors' emoluments disclosed above, US\$1,200,000 were paid by other group companies under JPMorgan Chase (2021: US\$1,383,000). Except for independent non-executive director, none of the directors received or will receive any fees or emoluments in respect of their services as the directors to the Company during the year (2021: Nil). Emoluments above exclude fee for the independent non-executive director amounting to US\$100,000 (2021: US\$100,000).

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

8 Benefits and interests of directors (continued)

(b) Directors' retirement benefits

None of the directors received or will receive any retirement benefits in relation to the services provided to the Company during the year (2021: Nil).

(c) Directors' termination benefits

None of the directors received or will receive any termination benefits made to or receivable by the directors from the Company for the loss of any other office in connection with the management of the affairs of the Company (2021: US\$327,000).

(d) Consideration provided to third parties for making available directors' services

There was no consideration provided to third parties for making available directors' services. (2021: Nil)

(e) Information about loans, quasi-loans and other dealings in favor of directors, controlled body corporates by and connected entities with such directors

There were no loans, quasi-loans or other dealings in favor of the directors, their controlled body corporates and connected entities (2021: None).

(f) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Company's business to which the Company was 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 (2021: None).

9 Taxation

Hong Kong profits tax has been provided at the rate of 16.5% (2021: 16.5%) of the estimated assessable profit for the years.

Taxation on overseas profits has been calculated on the estimated assessable profit for the year at tax rates prevailing in the countries in which the Company operates.

	2022 US\$'000	2021 US\$'000
Current income tax		
– Hong Kong profit tax for the year	44,321	64,377
– Overseas taxation for the year	38	46
– Adjustments for prior period	(1,795)	3,545
	<u>42,564</u>	<u>67,968</u>
Total current income tax	42,564	67,968
Deferred income tax (note 12)	(888)	(2,220)
	<u>41,676</u>	<u>65,748</u>
Taxation	<u>41,676</u>	<u>65,748</u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

9 Taxation (continued)

The taxation on the Company's profit before taxation differs from the theoretical amount that would arise using the standard Hong Kong profits tax rate as follows:

	2022 US\$'000	2021 US\$'000
Profit before taxation	<u>219,837</u>	<u>397,941</u>
Calculated at the taxation rate of 16.5%	36,273	65,660
Expenses not deductible for taxation purposes	—	1,375
(Overprovision)/Underprovision in prior period	(1,795)	3,545
Effect of different taxation rates in overseas countries	38	46
Taxable income/(loss) not recognized	6,844	(4,878)
Overprovision in current period	<u>316</u>	<u>—</u>
Taxation	<u><u>41,676</u></u>	<u><u>65,748</u></u>

10 Financial instruments by category

	2022 US\$'000	2021 US\$'000
Financial assets		
Financial assets at fair value through profit or loss (note 11)	22,791	17,331
Financial assets at amortized cost		
Balances with banks	2,131,047	2,196,675
Other assets (note 13)	<u>284,583</u>	<u>268,804</u>
	<u><u>2,438,421</u></u>	<u><u>2,482,810</u></u>
Financial liabilities		
Financial liabilities at amortized cost		
Deposits and balances from banks	229,073	443,807
Other liabilities (note 16)	462,982	470,291
Lease liabilities (note 15)	<u>106</u>	<u>89</u>
	<u><u>692,161</u></u>	<u><u>914,187</u></u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

11 Financial assets at fair value through profit or loss

The Company classifies the following financial assets at FVTPL:

- Debt securities that are designated as held for trading and do not qualify for measurement at either amortized cost or fair value through other comprehensive income, and
- Equity securities that are held for trading.

Financial assets mandatorily measured at FVTPL include the following:

	2022 US\$'000	2021 US\$'000
Debt securities, at fair value		
- Listed in Hong Kong	22,360	15,252
- Listed outside Hong Kong	—	1,568
	<u>22,360</u>	<u>16,820</u>
Equity securities, at fair value		
- Listed outside Hong Kong	431	511
	<u>431</u>	<u>511</u>
Total financial assets	<u>22,791</u>	<u>17,331</u>
Market value of listed securities	<u>22,791</u>	<u>17,331</u>
Financial assets are analyzed by categories of issuer as follows:		
- Sovereigns	22,360	16,820
- Corporates	431	511
	<u>22,791</u>	<u>17,331</u>
Total financial assets at fair value through profit or loss	<u>22,791</u>	<u>17,331</u>

See notes 2(b) and 2(c) for relevant accounting policies.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

12 Deferred tax assets

Deferred taxation is calculated in full on temporary differences under the liability method using a principal taxation rate of 16.5% (2021: 16.5%).

The movement on the deferred tax assets is as follows:

	2022 US\$'000	2021 US\$'000
At 1st January	21,815	19,700
Deferred taxation credited to statement of profit or loss and comprehensive income (note 9)	888	2,220
Exchange difference	<u>(148)</u>	<u>(105)</u>
At 31st December	<u>22,555</u>	<u>21,815</u>

The movement in deferred tax assets and liabilities during the year is as follows:

Deferred tax assets

	Employee benefits		Tax loss		Total	
	2022 US\$'000	2021 US\$'000	2022 US\$'000	2021 US\$'000	2022 US\$'000	2021 US\$'000
As at 1st January	21,824	19,939	—	—	21,824	19,939
Credited to statement of profit or loss and comprehensive income	888	1,990	—	—	888	1,990
Exchange difference	<u>(148)</u>	<u>(105)</u>	<u>—</u>	<u>—</u>	<u>(148)</u>	<u>(105)</u>
As at 31st December	<u>22,564</u>	<u>21,824</u>	<u>—</u>	<u>—</u>	<u>22,564</u>	<u>21,824</u>

Deferred tax liabilities

	Accelerated Tax Depreciation and Total	
	2022 US\$'000	2021 US\$'000
As at 1st January	(9)	(239)
Credited to statement of profit or loss and comprehensive income	<u>—</u>	<u>230</u>
As at 31st December	<u>(9)</u>	<u>(9)</u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

12 Deferred tax assets (continued)

The following amounts, determined after appropriate offsetting, are shown in the statement of financial position:

	2022 US\$'000	2021 US\$'000
Deferred tax assets	22,564	21,824
Deferred tax liabilities	<u>(9)</u>	<u>(9)</u>
Total	<u>22,555</u>	<u>21,815</u>
	2022 US\$'000	2021 US\$'000
Deferred tax assets		
– Deferred tax assets to be recovered after more than 12 months	14,502	13,696
– Deferred tax assets to be recovered within 12 months	<u>8,062</u>	<u>8,128</u>
	<u>22,564</u>	<u>21,824</u>
Deferred tax liabilities		
– Deferred tax liabilities to be settled after more than 12 months	<u>9</u>	<u>9</u>

13 Other assets

	2022 US\$'000	2021 US\$'000
Accounts receivable from clients/brokers arising from dealing in securities	—	1,616
Accounts receivable from group companies (Note 19)	277,357	249,877
Other account receivable	<u>7,550</u>	<u>37,171</u>
	284,907	288,664
Less: allowance for other accounts receivables (Note 21(a))	<u>(324)</u>	<u>(19,860)</u>
	<u>284,583</u>	<u>268,804</u>

Note 21(a) sets out information about the impairment of financial assets and the Company's exposure to credit risk. The carrying amounts of other assets approximate their fair value.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

14 Fixed assets

	Leasehold improvements US\$'000	Furniture and equipment US\$'000	Total US\$'000
Cost			
As at 1st January 2022	1,171	33,262	34,433
Additions	—	3	3
Disposals	—	(198)	(198)
	<u>1,171</u>	<u>33,067</u>	<u>34,238</u>
As at 31st December 2022	<u>1,171</u>	<u>33,067</u>	<u>34,238</u>
Accumulated depreciation			
As at 1st January 2022	1,048	33,093	34,141
Charge for the year (note 6)	34	135	169
Disposals	—	(198)	(198)
	<u>1,082</u>	<u>33,030</u>	<u>34,112</u>
As at 31st December 2022	<u>1,082</u>	<u>33,030</u>	<u>34,112</u>
Net book value	<u>89</u>	<u>37</u>	<u>126</u>
Cost			
As at 1st January 2021	1,331	38,472	39,803
Additions	—	4	4
Disposals	(160)	(5,214)	(5,374)
	<u>1,171</u>	<u>33,262</u>	<u>34,433</u>
As at 31st December 2021	<u>1,171</u>	<u>33,262</u>	<u>34,433</u>
Accumulated depreciation			
As at 1st January 2021	1,155	38,034	39,189
Charge for the year (note 6)	40	267	307
Disposals	(147)	(5,208)	(5,355)
	<u>1,048</u>	<u>33,093</u>	<u>34,141</u>
As at 31st December 2021	<u>1,048</u>	<u>33,093</u>	<u>34,141</u>
Net book value	<u>123</u>	<u>169</u>	<u>292</u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

15 Leases

At 31st December 2022, the Company was obligated under a number of non-cancellable leases for premises used primarily for Company's operations. The lease of premises typically run for a period of 1-5 years. Certain leases contain renewal options and/or escalation clauses providing for increased rental payments based on maintenance, utility and tax increases, or they require the Company to perform restoration work on leased premises. The lease agreements do not impose any covenants.

Information about leases for which the Company is a lessee is presented below:

	2022 US\$'000	2021 US\$'000
Right-of-use assets		
As at 1st January	76	492
Depreciation charge for right-of-use assets for the year	(21)	(21)
Additions to right-of-use assets for the year	<u>45</u>	<u>(395)</u>
As at 31st December	<u><u>100</u></u>	<u><u>76</u></u>
Lease liabilities - maturity analysis - contractual undiscounted cash flows		
Less than one year	25	25
One to five years	91	71
More than five years	<u>—</u>	<u>—</u>
Total undiscounted lease liabilities at 31st December	116	96
Imputed interest discount on leases	(10)	7
Exchange difference	<u>—</u>	<u>(14)</u>
Lease liabilities included in the statement of financial position 31st December	<u><u>106</u></u>	<u><u>89</u></u>
For the year ended 31st December		
Interest expense on lease liabilities	<u><u>4</u></u>	<u><u>4</u></u>
Total cash outflow for the leases during the year	<u><u>24</u></u>	<u><u>25</u></u>

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

16 Other liabilities

	2022	2021
	US\$'000	US\$'000
Accrued expense for employee benefits	232,494	266,312
Accounts payable to group companies	197,035	171,387
Other accounts payable	<u>33,453</u>	<u>32,592</u>
	<u>462,982</u>	<u>470,291</u>

Include in the accrued expense for employee benefits disclosed above, US\$136,751,000 is payable to group companies under JPMorgan Chase (2021: US\$132,385,000). Note 19 provides more detail on balances with Group companies. The carrying amounts of other liabilities approximate their fair value.

17 Share capital

Ordinary shares, issued and fully paid:

	Number of shares	Share capital US\$'000
Issued and fully paid:		
At 31st December 2021 and 31st December 2022	<u>36,614,699</u>	<u>527,000</u>

18 Equity compensation benefits

No stock options and SARs were exercised and outstanding as at 31st December 2022 and 31st December 2021. There were no options / SARs granted in 2022 (2021: Nil).

The Group uses the Black-Scholes valuation model to estimate the fair value of stock options and SARs. The expected volatility assumption is derived from the implied volatility of JPMorgan Chase's stock options. The expected life assumption is an estimate of the length of time that an employee might hold an option or SAR before it is exercised or canceled, and the assumption is based on historical experience.

494,000 restricted stocks/units were granted during the year ended 31st December 2022 (2021: 440,000 restricted stocks/units). 949,000 restricted stocks/units were outstanding as at year ended 31st December 2022 (2021: 975,000 restricted stocks/units). The weighted average fair value of restricted stocks/units granted during the year and outstanding as at year ended 31st December 2022 using the quoted stock price of the ultimate holding company at the grant date were US\$148.4 and US\$143.5 respectively (2021: US\$140.9 and US\$130.0).

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

19 Balances with Group companies

	Parent entity		Other JPM group entities		Total	
	2022	2021	2022	2021	2022	2021
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Balances with banks	2,100,524	2,157,999	818	793	2,101,342	2,158,792
Other assets (note 13)	122,108	91,053	155,249	158,824	277,357	249,877
Assets with Group companies	2,222,632	2,249,052	156,067	159,617	2,378,699	2,408,669
Deposits and balances from banks	229,073	443,807	—	—	229,073	443,807
Other liabilities (note 16)	85,779	30,364	248,007	273,408	333,786	303,772
Liabilities with Group companies	314,852	474,171	248,007	273,408	562,859	747,579

Other assets and other liabilities shown above are interest-free, unsecured and repayable according to contractual terms, as disclosed in note 21.

20 Related party transactions

Related parties are individuals and companies, where the individual or company has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. For the Company, the related party transactions were all entered into with Group companies.

In addition to those disclosed elsewhere in the financial statements, the following significant transactions were carried out with related parties:

	Parent entity		Other JPM group entities		Total	
	2022	2021	2022	2021	2022	2021
	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Interest income (note a)	35,148	4,367	—	—	35,148	4,367
Interest expense (note a)	(3,743)	(2,588)	(5)	(3)	(3,748)	(2,591)
Fees and commission income (note b)	(62,207)	(2,152)	1,167,581	1,228,635	1,105,374	1,226,483
Fees and commission expense (note b)	—	—	(363,747)	(491,695)	(363,747)	(491,695)
Fees paid to Group companies (notes b and 6)	(350,712)	(314,255)	(40,787)	(34,817)	(391,499)	(349,072)

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

20 Related party transactions (continued)

Notes:

- (a) The interest rates for the transactions between the Company and Group companies are priced at the prevailing market rates at the time of each transaction.
- (b) Fees received from and paid to Group companies are determined in accordance with the level of services delivered which include the Company's share of revenues and reimbursement of costs incurred.

21 Financial risk management

Risk is an inherent part of business activities of JPMorgan Chase & Co. ("JPMorgan Chase", the "Group" or the "Firm"), the ultimate holding company of J.P. Morgan Securities (Asia Pacific) Limited ("JPMSAPL" or the "Company"). When the Firm extends a consumer or wholesale loan, advises customers and clients on their investment decisions, makes markets in securities or offers other products or services, the Firm takes on some degree of risk. The Firm's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects the safety and soundness of the Firm.

At the Company level, the Board of Directors ("BODs") acts as a central governing committee and is the primary oversight and escalation point for the Company's sub-committees, the responsibilities of the BODs include:

- Review of business performance, progress of key initiatives, growth and cross Line of Business ("LOB") initiatives;
- Review of country performance, strategies and opportunities across LOBs and platforms;
- Review of significant Risk and Control issues and monitoring progress resolution plans;
- Review of significant Business support and Infrastructure matters; and
- Oversight for any business conducted or booked into the Company to ensure compliance with existing global and legal entity governance frameworks.

Hong Kong Risk Asset and Liability Committee ("HK RALCO") of the Company is delegated by the BODs to provide the oversight of risks inherent in the Company's business in Hong Kong.

The JPMorgan Chase Risk Appetite framework governs the firm's overall appetite for risk, as outlined in the Quantitative and Qualitative Risk Appetite policies. Both quantitative and qualitative risks are used to monitor and measure the Firm's Risk Appetite. The Risk Appetite framework integrates risk controls, earnings, capital management, liquidity management and return targets to set the Firm's risk appetite in the context of its objectives for key stakeholders, including but not limited to shareholders, depositors, regulators and clients.

The Firm's Quantitative Risk Appetite policy is applicable to the Company. The legal entity's governance and quantitative parameters reflect local regulations, operations and business strategy.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

With respect to the qualitative risks, in accordance with the LE Qualitative Risk Appetite Standard, JPMSAPL relies on the firmwide Qualitative Risk Appetite ("QRA") approach and results or a separate QRA assessment is performed.

The Company maintains risk management systems to measure and monitor exposures, identify areas of high risk, and ensure that the magnitude of risk is within the tolerance level.

(a) Credit risk

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. In its wholesale businesses, the Firm is exposed to credit risk through its underwriting, lending, market-making, and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as cash management and clearing activities) and securities trading activities. The Firm is also exposed to credit risk through its investment securities portfolio and cash placed with banks.

Credit risk organization and credit risk management framework

Credit Risk Management is an independent risk management function that monitors, measures and manages credit risk throughout the Firm and defines credit risk policies and procedures.

The Credit Risk function is overseen in Hong Kong by the Credit Risk Officer for Greater China, who reports to the Head of Greater China Credit Risk and ultimately to the APAC Head of Credit Risk. The Credit Risk Officers are responsible for analyzing specific portfolios of clients, negotiating credit documentation and assisting in execution of credit transactions.

The Firm's credit risk management governance includes the following activities:

- Maintaining a credit risk policy framework;
- Monitoring, measuring, and managing credit risk across all portfolio segments, including transaction and exposure approval;
- Setting industry and geographic concentration limits, as appropriate, and establishing underwriting guidelines;
- Assigning and managing credit authorities in connection with the approval of credit exposure;
- Managing criticized exposures and delinquent loans; and
- Estimating credit losses and ensuring appropriate credit risk-based capital management.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

Risk monitoring and management

The Firm has developed policies and practices that are designed to preserve the independence and integrity of the approval and decision-making process of extending credit to ensure credit risks are assessed accurately, approved properly, monitored regularly and managed actively at both the transaction and portfolio levels. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies, portfolio review parameters and guidelines for management of distressed exposures. In addition, certain models, assumptions and inputs used in evaluating and monitoring credit risk are independently validated by groups that are separate from the LOBs.

Risk reporting

To enable monitoring of credit risk and effective decision-making, aggregate credit exposures, credit quality forecasts, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry, customer, product and geography are prepared, and the appropriateness of the allowance for credit losses is reviewed by senior management at least on a quarterly basis. Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with risk committees, senior management and the BODs.

Expected credit loss measurement

Approach to measuring expected credit losses

The Company estimates credit impairment through an allowance for ECLs. ECLs are recognized for financial assets that are measured at amortized cost. The measurement of ECLs must reflect:

- a) An unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes;
- b) The time value of money; and
- c) Reasonable and supportable information about past events, current economic conditions, and forecasts of future economic conditions.

The measurement of ECL also reflects how the Company manages financial instruments for credit risk purposes such as Traditional Credit Products ("TCP") and non-Traditional Credit Products ("Non-TCP"). TCP are loans and lending-related commitments from extensions of credit to borrowers. The Company does not have TCP. Non-TCP include, but are not limited to, other debt instruments such as reverse repurchase agreements, margin loans, fee receivables, and intercompany receivables (such as cash and deposits).

For Non-TCPs, the Company utilizes a combination of an established provision matrix, as well as quantitative and qualitative considerations to estimate ECLs.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

Expected credit loss measurement (continued)

Impact of staging on measuring expected credit losses

ECLs are measured using a three-stage model based on changes in credit quality of the financial instrument since it was initially recognized (“initial recognition”):

- Stage 1 - performing financial instruments that have not had a significant increase in credit risk since initial recognition;
- Stage 2 - performing financial instruments that have experienced a significant increase in credit risk. The Company does not have stage 2 exposures; and
- Stage 3 - non-performing financial instruments that have been determined to be credit-impaired.

Default and credit-impairment (Stage 3)

Financial instruments are included in Stage 3 when there is objective evidence of impairment at the reporting date. For Stage 3 instruments, ECL are calculated considering the probability of default over the remaining life of each instrument (“Lifetime ECL”) on an individual asset basis and interest revenue is calculated on the net carrying amount (that is, net of the allowance for credit losses). All financial assets, regardless of their category as TCP, Non-TCP or debt security, are considered to be credit-impaired and are included in Stage 3 when one or more of the following events that have a detrimental impact on the estimated future cash flows of that financial asset has occurred:

- Significant financial difficulty of the issuer or the borrower;
- A default or past due event;
- The Company has granted a concession to the borrower for economic or contractual reasons relating to the borrower’s financial difficulty;
- It has become probable the borrower will enter bankruptcy or other financial reorganization;
- An active market for that financial asset no longer exists because of the borrower’s financial difficulties; or
- A financial asset is purchased or originated at a deep discount that reflects a credit loss has been incurred.

Generally, a Stage 3 financial asset is considered to no longer be impaired when the borrower has made payments for a minimum of six months and there is other objective evidence of credit improvement. However, for assets that were considered to be Stage 3 as a result of a restructuring where the borrower experiencing difficulty was granted a financial concession, there is no cure period and the asset will remain in Stage 3.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

Expected credit loss measurement (continued)

Unimpaired and without significant increase in credit risk (Stage 1)

Financial instruments that have not had a significant increase in credit risk ("SICR") since initial recognition are included in Stage 1 unless they are purchased or originated credit impaired ("POCI"). For Stage 1 instruments, ECL is calculated by considering the probability of default within 12 months after the reporting date on a collective basis and interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for the credit loss allowance).

ECL measurement for Non-TCP Portfolios

The Company's approach to measuring ECLs for Non-TCP portfolios depends on the type of instrument.

Fee receivables

For fee receivables arising from contracts with customers, the Company applies a provision matrix as a practical expedient for calculating expected credit losses. The matrix provides that in the case of institutional customers, a receivable is considered to have had a SICR (i.e. Stage 2) if it is 90 days past due and credit-impaired (i.e. Stage 3) if it is 180 days past due at which point an ECL for 100% of the amount owed is recognized. In the case of non-institutional customers, a receivable is considered to have had a SICR (i.e. Stage 2) if it is 30 days past due and credit-impaired (i.e. Stage 3) if it is 90 days past due at which point an ECL for 100% of the amount owed is recognized. As at 31st December 2022, receivables amounting to US\$324,000 (2021: US\$19,860,000) are classified as Stage 3 and allowance for credit losses has been fully recognised for these balances. All other receivable balances are classified as Stage 1.

Other non-TCP

The Company has determined that ECLs on non-TCP portfolios are immaterial due to: the existence of credit risk mitigants such as the credit quality of the borrower (e.g. investment grade); and/or the short-term nature of the instrument. Similarly the Company has determined that these non-TCP portfolios are without SICR (i.e. Stage 1) due to the credit quality of the borrower and/or the short-term nature of the instrument.

For inter-company receivables, the Company evaluates the counterparty based on the consolidated Firm's resolution and recovery plan, tenor of the receivable, and any collateral received. The Company has not experienced any losses on inter-company receivables.

The Company continues to monitor its Non-TCP portfolios to ensure the described framework is appropriate and its exposure to credit risk and ECLs on these portfolios are adequately reflected in the allowance for credit losses, if any.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

Expected credit loss measurement (continued)

The loss allowances for other assets as at 31st December reconciles to the opening loss allowances as follows:

	Other assets	
	2022	2021
	US\$'000	US\$'000
Opening loss allowance as at 1st January	19,860	12,580
Increase in loss allowance recognised in profit or loss during the year	284	7,405
Receivable written off during the year	(13,982)	(125)
Gross recoveries collected	(5,833)	—
Exchange difference	(5)	—
	<u>324</u>	<u>19,860</u>
Closing loss allowance as at 31st December	<u>324</u>	<u>19,860</u>

(i) Large Exposures and Risk Concentrations

The Company monitors large exposures on a stand-alone basis in accordance with the Banking (Exposure Limits) Rules ("BELR") and the HKMA Supervisory Policy Manual on Large Exposures and Risk Concentrations (CR-G-8) and Connected Lending (CR-G-9). The purpose of the large exposure regime is to ensure that the Company manages its exposure to connected and third-party counterparties within appropriate limits set in relation to its capital resources.

(ii) Settlement Risk and Delivery Risk

The Company engages in equity brokerage activities and is a client facing entity. It is a market-maker for Hong Kong Government Bills and Notes. The Company also places funds with, and borrows funds from, JPMorgan Chase Bank, N.A. ("JPMCB") and other banks.

The majority of securities trades are settled via recognized clearing houses and exchanges, within standard settlement periods, on a Delivery versus Payment ("DVP") basis.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

(ii) Settlement Risk and Delivery Risk (continued)

Products not settled on Delivery After Payment ("DAP"), DVP or Payment versus Payment ("PvP") terms require settlement exposure to be quantified, monitored and controlled. Settlement risk is calculated using the Duration Based Settlement Risk ("DBSE") metric. It measures the amount of purchased contracts which may be delivered on a single day to a particular counterparty (or eligible borrowers). The measure takes into account the duration of settlement risk resulting from settling different currencies locally and is used for limits monitoring against Daily Settlement Limits ("DSL").

(iii) Maximum exposure to credit risk before collateral held or other credit enhancements

	Maximum exposure	
	2022	2021
	US\$'000	US\$'000
Credit risk exposures relating to assets in the statement of financial position are as follows:		
Balances with banks	2,131,047	2,196,675
Financial assets at fair value through profit or loss:		
- Debt securities	22,360	16,820
Other assets	284,583	268,804
At 31st December	<u>2,437,990</u>	<u>2,482,299</u>

The above table represents the notional amount of credit risk exposure to the Company at 31st December 2022 and 2021, without taking into account of any collateral held or other credit enhancements attached. The exposures set out above are based on net carrying amounts as reported in the statement of financial position.

Included in note 13 other assets were credit exposures relating to account receivables from clients/brokers arising from failed securities dealing and transactions in securities (other than repo-style transactions) which are not yet due for settlement. The exposures were covered by securities collateral acquired through these transactions.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

(iv) Debt securities

The table below presents an analysis of debt securities by rating agency designation at 31st December 2022 and 2021, based on Standard & Poor's ratings or their equivalent. As at 31st December 2022, debt securities of US\$7,314,000 (2021: US\$2,200,000) are reported based on ratings of the issuers in the absence of issue specific ratings:

	2022	2021
	US\$'000	US\$'000
Financial assets at fair value through profit or loss		
AA- to AA+	6,908	9,597
A- to A+	<u>15,452</u>	<u>7,223</u>
Total	<u><u>22,360</u></u>	<u><u>16,820</u></u>

There are no overdue debt securities or certificates of deposit as at 31st December 2022 (2021: Nil).

(v) Balances with banks

The Company also has credit risk exposures as it has balances with banks and financial institutions. The credit risk is considered low as the Company banks with investment grade financial institutions.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(a) Credit risk (continued)

- (vi) Concentration of risks of financial assets with credit risk exposure - geographical sectors

The following table breaks down the Company's main credit exposure at their carrying amounts, as categorized by geographical region as of 31st December 2022 and 2021. For this table, the Company has allocated exposures to regions based on the country of domicile of its counterparties or of the issuers. Credit risk exposure by geographical sectors is classified according to the location of counterparties or of the issuers after taking into account the transfer of risk.

	Hong Kong US\$'000	Asia Pacific excluding Hong Kong US\$'000	North and South America US\$'000	Middle East and Africa US\$'000	Europe US\$'000	Total US\$'000
As at 31st December 2022						
Balances with banks	108,157	3,715	2,011,301	—	7,874	2,131,047
Financial assets at fair value through profit or loss						
- debt securities	6,908	15,452	—	—	—	22,360
Other assets	31,220	26,968	130,025	254	96,116	284,583
	<u>146,285</u>	<u>46,135</u>	<u>2,141,326</u>	<u>254</u>	<u>103,990</u>	<u>2,437,990</u>

As at 31st December 2021						
Balances with banks	211,282	17,282	1,959,989	—	8,122	2,196,675
Financial assets at fair value through profit or loss						
- debt securities	9,597	7,223	—	—	—	16,820
Other assets	67,987	30,003	128,767	—	42,047	268,804
	<u>288,866</u>	<u>54,508</u>	<u>2,088,756</u>	<u>—</u>	<u>50,169</u>	<u>2,482,299</u>

(b) Liquidity risk

Liquidity risk is the risk that the Firm, including the Company, will be unable to meet its contractual and contingent obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(b) Liquidity risk (continued)

Liquidity Risk Management

The Liquidity Risk Management ("LRM") group is part of the Chief Investment Office, Treasury and Corporate ("CTC") Risk, an Independent Risk Management function, reporting to the CTC Chief Risk Officer ("CRO") who also serves as the Firmwide Risk Executive of Liquidity Risk. LRM is responsible for the independent assessment, measuring, monitoring, and control of liquidity risk across the firm. LRM responsibilities include, but are not limited to:

- Defining, monitoring and reporting liquidity risk metrics;
- Independently establishing and monitoring limits and indicators, including liquidity risk appetite;
- Developing a process to classify, monitor and report limit breaches;
- Performing independent review of liquidity risk management processes;
- Monitoring and reporting internal Firmwide and legal entity liquidity stress tests, and regulatory defined metrics, as well as liquidity positions, balance sheet variances, and funding activities; and
- Approving or escalating for review new or updated liquidity stress assumptions.

Risk Governance and Measurement

Specific committees responsible for liquidity governance include Firmwide Asset-Liability Committee ("ALCO") as well as LOBs and regional ALCOs, and the CTC Risk Committee ("CTC RC"). In addition, the Company's Risk Committee reviews and recommends to the BODs, for formal approval, the Firm's liquidity risk tolerances and liquidity policy at least annually.

The BODs of the Company has delegated oversight of liquidity risk to the HK RALCO. Liquidity risk management is governed by the HK RALCO, co-chaired by the CRO and Senior Financial Officer ("SFO").

As governed by the HK RALCO Terms of Reference, where required, matters will be escalated from the HK RALCO to the JPMSAPL Risk Committee, BODs, Asia Pacific Risk Committee ("APRC"), or Asia Pacific Capital and Liquidity Committee ("APCALC").

Internal Stress Testing

Liquidity stress tests are intended to ensure sufficient liquidity for the Company under a variety of adverse scenarios, including scenarios analyzed as part of the Firm's resolution and recovery planning. Stress scenarios are produced for JPMorgan Chase and the Firm's material legal entities, including the Company, on a regular basis and ad hoc stress tests are performed, as needed, in response to specific market events or concerns.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(b) Liquidity risk (continued)

Internal Stress Testing (continued)

Liquidity stress tests assume all of the Company's contractual obligations are met and take into consideration:

- Varying levels of access to unsecured and secured funding markets,
- Estimated non-contractual and contingent outflows, and
- Potential impediments to the availability and transferability of liquidity between jurisdictions and legal entities such as regulatory, legal, or other restrictions.

Contingency Funding Plan ("CFP")

The Firm's CFP sets out the strategies for addressing and managing liquidity resource needs during a liquidity stress event and incorporates liquidity risk limits, indicators and risk appetite tolerances that make up Liquidity Escalation Points. The CFP also identifies the alternative contingent funding and liquidity resources available to the Firm and its legal entities (including the Company) in a period of stress. The Company is an integral part of the firmwide CFP framework.

Treasury and Chief Investment Office ("TCIO") maintains a legal entity addendum to the firmwide CFP, which is reviewed and approved by the HK RALCO and the Company's BOD, at least annually.

Liquidity Management

The primary objectives of the Firm's liquidity management are to:

- Ensure that the Firm's core businesses and material legal entities are able to operate in support of client needs and meet contractual and contingent financial obligations through normal economic cycles as well as during stress events, and
- Manage an optimal funding mix and availability of liquidity sources.

As part of the Firm's overall liquidity management strategy, the Firm manages liquidity and funding using a centralized, global approach in order to:

- Optimize liquidity sources and uses;
- Monitor exposures;
- Identify constraints on the transfer of liquidity between the Firm's legal entities; and
- Maintain the appropriate amount of surplus liquidity at a Firmwide and legal entity level, where relevant.

In the context of the Firm's liquidity management, TCIO is responsible for:

- Analyzing and understanding the liquidity characteristics of the assets and liabilities of the Firm, LOBs and legal entities, taking into account legal, regulatory, and operational restrictions;
- Developing internal liquidity stress testing assumptions;

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(b) Liquidity risk (continued)

Liquidity Management (continued)

- Defining and monitoring Firmwide and legal entity-specific liquidity strategies, policies, reporting and contingency funding plans;
- Managing liquidity within the Firm's approved liquidity risk appetite tolerances and limits;
- Managing compliance with regulatory requirements related to funding and liquidity risk; and
- Setting transfer pricing in accordance with underlying liquidity characteristics of balance sheet assets and liabilities as well as certain off-balance sheet items.

(i) Maturity analysis

The table below analyzes the Company's assets and liabilities into relevant maturity groupings based on the remaining period at statement of financial position date to the contractual maturity date.

As at 31st December 2022	Repayable on demand US\$'000	Up to 1 month US\$'000	Over 1 month - 3 months US\$'000	Over 3 months - 12 months US\$'000	Over 1 year - 5 years US\$'000	Over 5 years US\$'000	Undated US\$'000	Total US\$'000
Assets								
Balances with banks	831,047	—	—	—	—	1,300,000	—	2,131,047
Financial assets at fair value through profit or loss								
- Debt securities	—	—	—	3,449	15,747	3,164	—	22,360
- Equities	—	—	—	—	—	—	431	431
Other assets	250	246,863	33,555	2,923	—	—	992	284,583
Total assets	831,297	246,863	33,555	6,372	15,747	1,303,164	1,423	2,438,421
Liabilities								
Deposits and balances from banks	197,547	31,526	—	—	—	—	—	229,073
Other liabilities	35	264,695	61,482	49,675	87,077	—	18	462,982
Lease Liabilities	—	1	3	19	83	—	—	106
Total liabilities	197,582	296,222	61,485	49,694	87,160	—	18	692,161
Net liquidity gap	633,715	(49,359)	(27,930)	(43,322)	(71,413)	1,303,164	1,405	1,746,260

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(b) Liquidity risk (continued)

(i) Maturity analysis (continued)

As at 31st December 2021	Repayable on demand US\$'000	Up to 1 month US\$'000	Over 1 month - 3 months US\$'000	Over 3 months - 12 months US\$'000	Over 1 year - 5 years US\$'000	Over 5 years US\$'000	Undated US\$'000	Total US\$'000
Assets								
Balances with banks	896,675	—	—	—	—	1,300,000	—	2,196,675
Financial assets at fair value through profit or loss								
- Debt securities	—	—	1,568	4,010	9,476	1,766	—	16,820
- Equities	—	—	—	—	—	—	511	511
Other assets	97	217,001	35,686	12,644	—	226	3,150	268,804
Total assets	896,772	217,001	37,254	16,654	9,476	1,301,992	3,661	2,482,810
Liabilities								
Deposits and balances from banks	315,876	127,931	—	—	—	—	—	443,807
Other liabilities	4,384	289,551	41,783	47,829	84,570	—	2,174	470,291
Lease Liabilities	—	1	3	19	66	—	—	89
Total liabilities	320,260	417,483	41,786	47,848	84,636	—	2,174	914,187
Net liquidity gap	576,512	(200,482)	(4,532)	(31,194)	(75,160)	1,301,992	1,487	1,568,623

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(b) Liquidity risk (continued)

(ii) Undiscounted cash flows by contractual maturities

The table below presents the cash flows payable by the Company under non-derivative financial liabilities that will be settled on gross basis by remaining contractual maturities at the statement of financial position date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	Up to 1 month and repayable on demand US\$'000	Over 1 months - 3 months US\$'000	Over 3 months -12 months US\$'000	Over 1 year - 5 years US\$'000	Undated US\$'000	Total US\$'000
As at 31st December 2022						
Non-derivative cash flow						
Liabilities						
Deposits and balances from banks	229,073	—	—	—	—	229,073
Other liabilities	264,726	61,482	49,675	87,077	18	462,978
Lease liabilities	2	3	20	91	—	116
Total liabilities	493,801	61,485	49,695	87,168	18	692,167
As at 31st December 2021						
Non-derivative cash flow						
Liabilities						
Deposits and balances from banks	443,807	—	—	—	—	443,807
Other liabilities	293,923	41,783	47,829	78,966	7,778	470,279
Lease liabilities	2	3	21	70	—	96
Total liabilities	737,732	41,786	47,850	79,036	7,778	914,182

(c) Market risk

Market risk is the risk associated with the effect of changes in market factors, such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

Market risk management framework

Market Risk Management monitors market risks throughout the Firm and defines market risk policies, procedures and frameworks. The Market Risk Management function reports to the Firm's CRO, and seeks to manage risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the Firm's market risk profile.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(c) Market risk (continued)

Market risk management framework (continued)

The Firmwide Risk Executive ("FRE") Market Risk and LOB CROs are responsible for establishing an effective market risk organization. The FRE Market Risk and LOB Heads of Market Risk oversee the implementation of the framework to measure, monitor and control market risk. The HK RALCO is responsible for the application of this framework to the Company and delegates the responsibility to the Hong Kong CRO for overseeing the implementation the market risk framework to measure, monitor and control market risk leveraging information provided by the firm's risk infrastructure and relying on the accuracy and completeness of the information provided. The Legal Entity Risk Manager ("LERM") may delegate responsibility for authorizing and controlling market risk activities to Company's Market Risk Officer ("MRO").

Market risk measurement

There is no single measure to capture market risk and therefore the Company uses various metrics both statistical and non-statistical to assess risk. The appropriate set of risk measures utilized for a given business activity is tailored based on business mandate, risk horizon, materiality, market volatility and other factors.

(i) Value-At-Risk ("VaR")

The Company utilizes VaR, a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment. The VaR framework is employed across the Company using historical simulation based on data for the previous 12 months. VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. These VaR results are reported to senior management and regulators.

(ii) Stress Testing

Along with VaR, stress testing is an important tool to assess risk. While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behavior, stress testing reflects the risk of loss from hypothetical changes in the value of market risk sensitive positions applied simultaneously. The Company runs weekly stress tests on market-related risks across the LOB using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates or commodity prices.

The Company uses a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. The flexibility of the stress testing framework allows risk managers to construct new, specific scenarios that can be used to form decisions about future possible stress events.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(c) Market risk (continued)

Market risk measurement (continued)

(ii) Stress Testing (continued)

Stress testing complements VaR by allowing risk managers to shock current market prices to more extreme levels relative to those historically realized, and to stress test the relationships between market prices under extreme scenarios.

Stress-test results, trends and qualitative explanations based on current market risk positions are reported to the respective LOBs and Company's senior management to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency. In addition, results are reported to the senior management and regulators.

Stress scenarios are defined and reviewed by Market Risk, and significant changes are reviewed by the relevant LOB Risk Committees and may be redefined on a periodic basis to reflect current market conditions.

Market risk monitoring and control

LOBs and their Business Areas operating out of the Company are subject to two sets of limits, i.e. Firmwide market risk LOB/Business Area limits and legal entity specific market risk limits.

The structure and framework of Company-specific limits is based on the complexity of activities managed within the legal entity and the categories of related market risk exposures arising from these activities.

The Company's legal entity limits include VaR and Stress L1 Limits.

The Company's Chief Executive Officer, LERM and MRO are signatories to the limits on behalf of the HK RALCO. Aged and significant limit breaches are escalated to the HK RALCO as well as the APRC.

Market Risk reviews all market risk limits at least semi-annually. Limits are established in accordance with the minimum standards outlined in the Firmwide Legal Entity Market Risk Framework. The limit structure applied depends on the category of limit control being applied within the Company and the risk tier of the Company.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(c) Market risk (continued)

Market risk reporting

The Company has its own set of regular market risk reports and where applicable, comprise of market risk metrics for management to review and action, as appropriate.

Market Risk Management continues to actively monitor the impact of the COVID-19 pandemic on market risk exposures by leveraging existing risk measures and controls.

Models used to measure market risk are inherently imprecise and may be limited in their ability to measure certain risks or to predict losses. This imprecision may be heightened when sudden or severe shifts in market conditions occur.

Market Risk Management periodically reviews the Company's existing market risk measures to identify opportunities for enhancement, and to the extent appropriate, will calibrate those measures accordingly over time.

The Company's exposures to foreign exchange risk and interest rate risk are disclosed in Note 21(d) and Note 21(e), respectively. Sensitivity to changes in interest rates and foreign exchange relevant to financial assets or financial liabilities is not significant. The Company's exposure to other market risk is not considered as material.

(d) Foreign exchange risk

The Company takes on exposure to foreign exchange risk arising from the changes in foreign exchange rate on all foreign currency items and transactions.

Foreign exchange risk management framework of the Firm

The Firm level policies, procedures and controls used for identifying, measuring, monitoring, controlling and managing the foreign exchange risk are covered in the risk disclosure section for market risk.

Foreign exchange risk management structure and practices of the Company

The Company is not active in foreign exchange transactions. Foreign currency exposures in the Company mainly arise from non-USD income and expenses in its ordinary course of business activities.

The Company follows the Firm's policy on foreign currency earnings management where all non-USD income and expenses are traded out at each month end into USD, the functional currency of the Company, to the extent it is practical for the Company to do so. Any residual foreign currency earnings not traded out at month end are insignificant and risk managed by the LOB.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(d) Foreign exchange risk (continued)

Foreign exchange risk management structure and practices of the Company (continued)

The Company has set a Foreign Exchange Open Position Limit ("FX Limit") for monitoring its foreign exchange exposure and this is monitored by Hong Kong Finance on a daily basis. The FX limit for the Company has been approved by the BODs taking into consideration of the size and complexity of its business activities.

The table below summarizes the Company's assets and liabilities at carrying amounts, categorized by currency.

	HKD	USD	Others	Total
As at 31st December 2022	US\$'000	US\$'000	US\$'000	US\$'000
Assets				
Balances with banks	107,534	1,936,053	87,460	2,131,047
Financial assets at fair value through profit or loss				
– Debt securities	6,908	—	15,452	22,360
– Equities	—	—	431	431
Other assets	16,896	254,258	13,429	284,583
Total assets	131,338	2,190,311	116,772	2,438,421
Liabilities				
Deposits and balances from banks	118,116	6,957	104,000	229,073
Other liabilities	17,803	434,514	10,665	462,982
Lease liabilities	—	—	106	106
Total liabilities	135,919	441,471	114,771	692,161
Net balance of financial position	(4,581)	1,748,840	2,001	1,746,260

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(d) Foreign exchange risk (continued)

	HKD US\$'000	USD US\$'000	Others US\$'000	Total US\$'000
As at 31st December 2021				
Assets				
Balances with banks	211,081	1,845,314	140,280	2,196,675
Financial assets at fair value through profit or loss				
– Debt securities	9,597	—	7,223	16,820
– Equities	—	—	511	511
Other assets	5,105	247,851	15,848	268,804
Total assets	225,783	2,093,165	163,862	2,482,810
Liabilities				
Deposits and balances from banks	216,255	85,513	142,039	443,807
Other liabilities	46,957	394,137	29,197	470,291
Lease liabilities	—	—	89	89
Total liabilities	263,212	479,650	171,325	914,187
Net balance of financial position	(37,429)	1,613,515	(7,463)	1,568,623

(e) Interest rate risk

Interest rate risk in the banking book ("IRRBB") is defined as Interest Rate Risk ("IRR") resulting from the Firm's traditional banking activities as a result of movements in interest rates. IRRBB can occur due to a variety of factors, including but not limited to:

- Differences between the timing of rate changes and the timing of cash flows (repricing risk);
- Changing rate relationships among yield curves that affect banking activities (basis risk);
- Changing rate relationships across the spectrum of maturities (yield curve risk); and
- Interest-rate-related options embedded in banking products (option risk).

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(e) Interest rate risk (continued)

Risk Governance

The HK RALCO, co-chaired by the SFO and CRO, is responsible for providing IRR oversight at legal entity level and ensuring appropriate governance, controls and limits (as applicable) are in place.

As governed by the HK RALCO Charter, where required, matters will be escalated from HK RALCO to the JPMSAPL Risk Committee, BODs, APRC, or APCALC. As governed by the JPMSAPL Risk Committee Terms of Reference, where required, matters will be escalated from JPMSAPL Risk Committee to the Hong Kong Location Management Committee or APRC.

Risk Measurement & Internal Stress Testing

TCIO manages IRRBB exposure on behalf of the Company by identifying, measuring, modeling and monitoring IRR across the Company's balance sheet. TCIO works with the LOBs in defining methodologies for measuring IRRBB. TCIO identifies and understands material balance sheet impacts of new initiatives and products and executes market transactions to manage IRRBB via placements/takings and through TCIO investment portfolio's positions wherever applicable.

Execution by TCIO will be based on parameters established by senior management, per the TCIO Investment Policy. LOBs are responsible for developing and monitoring the appropriateness of LOB specific IRR modeling assumptions.

IRRBB is evaluated using two primary metrics, impact to the Company's earnings through Earnings at Risk ("EaR") metric, and impact to the Company's equity through Economic Value Sensitivity ("EVS") metric:

- EaR measures the extent to which changes in interest rates will affect the Company's net interest income ("NII") over the following 12-month period under four parallel shift scenarios in interest rate curve.
- EVS determines changes in Economic Value of Equity ("EVE") due to changes in interest rates under two parallel and four non-parallel shift scenarios in interest rate curve.

In the Company, the business activities exposed to interest rate risk in the banking book are confined to the Company's non-trading portfolio. These activities are minimal and short-dated, and largely involve inter-group takings and placings with JPMCB Hong Kong Branch or other JPMCB bank entities. These activities are risk captured according to their contractual characteristics. The Company does not engage in deposit and loan activities.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(e) Interest rate risk (continued)

The IRRBB metrics are regularly monitored, reported on a regular basis and presented in the HK RALCO meeting on monthly basis.

The table below summarizes the Company's exposure to interest rate risk. Included in the table are the Company's assets and liabilities at carrying amounts (including both trading and banking books), categorized by the earlier of contractual re-pricing or maturity dates.

	Up to 1 month	Over 1 month - 3 months	Over 3 months - 12 months	Over 1 year - 5 years	Over 5 years	Non- interest bearing	Total
As at 31st December 2022	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Assets							
Balances with banks	2,131,047	—	—	—	—	—	2,131,047
Financial assets at fair value through profit or loss							
- Debt securities	—	—	3,449	15,747	3,164	—	22,360
- Equities	—	—	—	—	—	431	431
Other assets	2	—	—	—	—	284,581	284,583
Total assets	2,131,049	—	3,449	15,747	3,164	285,012	2,438,421
Liabilities							
Deposits and balances from banks	229,073	—	—	—	—	—	229,073
Other liabilities	4	—	—	—	—	462,978	462,982
Lease liabilities	—	—	—	—	—	106	106
Total liabilities	229,077	—	—	—	—	463,084	692,161
Total interest repricing gap	1,901,972	—	3,449	15,747	3,164	(178,072)	1,746,260

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(e) Interest rate risk (continued)

	Up to 1 month	Over 1 month - 3 months	Over 3 months - 12 months	Over 1 year - 5 years	Over 5 years	Non- interest bearing	Total
As at 31st December 2021	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
Assets							
Balances with banks	2,196,675	—	—	—	—	—	2,196,675
Financial assets at fair value through profit or loss							
- Debt securities	—	1,568	4,010	9,476	1,766	—	16,820
- Equities	—	—	—	—	—	511	511
Other assets	7	—	—	—	—	268,797	268,804
Total assets	2,196,682	1,568	4,010	9,476	1,766	269,308	2,482,810
Liabilities							
Deposits and balances from banks	443,807	—	—	—	—	—	443,807
Other liabilities	12	—	—	—	—	470,279	470,291
Lease liabilities	—	—	—	—	—	89	89
Total liabilities	443,819	—	—	—	—	470,368	914,187
Total interest repricing gap	1,752,863	1,568	4,010	9,476	1,766	(201,060)	1,568,623

(f) Operational risk

Operational risk is the risk of adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting the Firm's processes or systems; Operational Risk includes compliance, conduct, legal, estimations and model risk. Operational risk is inherent in the Firm's activities and can manifest itself in various ways, including fraudulent acts, business disruptions (including those caused by extraordinary events beyond the Firm's control), cyber attacks, inappropriate employee behavior, failure to comply with applicable laws and regulations or failure of vendors or other third party providers to perform in accordance with their agreements. Operational Risk Management attempts to manage operational risk at appropriate levels in light of the Firm's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates.

Overview

The Firm's Compliance, Conduct, and Operational Risk ("CCOR") Management Framework is designed to enable the Firm to govern, identify, measure, monitor and test, manage and report on the Firm's operational risk.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(f) Operational risk (continued)

Operational Risk Management Framework

Operational Risk Governance

The LOBs and Corporate are responsible for the management of operational risk. The Control Management Organization, which consists of control managers within each LOB and Corporate, is responsible for the day-to-day execution of the CCOR Framework.

The Firm's Global Chief Compliance Officer ("CCO") and FRE for Operational Risk and Qualitative Risk Appetite is responsible for defining the CCOR Management Framework and establishing minimum standards for its execution. The LOB and Corporate aligned CCOR Lead Officers report to the Global CCO and FRE for Operational Risk and Qualitative Risk Appetite and are independent of the respective businesses or functions they oversee. The CCOR Management Framework is included in the Risk Governance and Oversight Policy that is reviewed and approved by the Board Risk Committee periodically.

Operational Risk identification

The Firm utilizes a structured risk and control self-assessment process that is executed by the LOBs and Corporate. As part of this process, the LOBs and Corporate evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. The Firm's Operational Risk and Compliance organization ("Operational Risk and Compliance") provides oversight and challenge to these evaluations and may also perform independent assessments of significant operational risk events and areas of concentrated or emerging risk.

Operational Risk Measurement

Operational Risk and Compliance performs an independent assessment of the operational risks inherent within the LOBs and Corporate, which includes evaluating the effectiveness of the control environment and reporting the results to senior management.

In addition, Operational Risk and Compliance assesses operational risk through quantitative means including operational risk-based capital and estimation of operational risk loss projections under both baseline and stressed conditions.

At the Firm, the primary component of the operational risk capital estimate is the Loss Distribution Approach ("LDA") statistical model, which simulates the frequency and severity of future operational risk loss projections based on historical data. The LDA model is used to estimate an aggregate operational risk loss over a one-year time horizon, at a 99.9% confidence level. The LDA model incorporates actual internal operational risk losses in the quarter following the period in which those losses were realized, and the calculation generally continues to reflect such losses even after the issues or business activities giving rise to the losses have been remediated or reduced.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(f) Operational risk (continued)

Operational Risk Management Framework (continued)

Operational Risk Measurement (continued)

As required under the Basel III capital framework, the Firm's operational risk-based capital methodology, which uses the Advanced Measurement Approach ("AMA"), incorporates internal and external losses as well as management's view of tail risk captured through operational risk scenario analysis, and evaluation of key business environment and internal control metrics. The Firm does not reflect the impact of insurance in its AMA estimate of operational risk capital.

The Firm considers the impact of stressed economic conditions on operational risk losses and develops a forward looking view of material operational risk events that may occur in a stressed environment. The Firm's operational risk stress testing framework is utilized in calculating results for the Firm's Comprehensive Capital Analysis and Review ("CCAR") and other stress testing processes.

Operational Risk Monitoring and Testing

The results of risk assessments performed by Operational Risk and Compliance are used in connection with their independent monitoring and testing compliance of the LOBs and Corporate with laws, rules and regulation. Through monitoring and testing, Operational Risk and Compliance independently identify areas of heightened operational risk and tests the effectiveness of controls within the LOBs and Corporate functions.

Management of Operational Risk

The operational risk areas or issues identified through monitoring and testing are escalated to the LOBs and Corporate to be remediated through action plans, as needed, to mitigate operational risk. Operational Risk and Compliance may advise the LOBs and Corporate in the development and implementation of action plans.

Operational Risk Reporting

All employees of the Firm are expected to escalate risks appropriately. Risks identified by Operational Risk and Compliance are escalated to the appropriate LOB and Corporate Control Committees, as needed. Operational Risk and Compliance has established standards designed to ensure that consistent operational risk reporting and operational risk reports are produced on a Firmwide basis as well as by LOBs and Corporate. Reporting includes the evaluation of key risk and performance indicators against established thresholds as well as the assessment of different types of operational risk against stated risk appetite. The standards reinforce escalation protocols to senior management and to the BODs.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(f) Operational risk (continued)

The Company's Operational Risk Overview

The Company adheres to the CCOR Management Framework and manages operational risk in the same manner.

The Company has dedicated Location Control Managers ("LCM"). The LCMs form part of the business reporting into the Control Management organization, and support the business in the execution of the operational risk management framework at the location level in the region.

The Hong Kong Location Operating Committee ("LOC") is as a forum in place where Senior Managers discuss operational risks and supervise the control environment of each LOB and corporate function operating in Hong Kong. The Hong Kong LOC ensures operational risk framework is adhered to, appropriate controls to manage and mitigate operational risks are in place across the location, and timely and appropriate escalation of related issues to the respective Board of Directors. Committee members review metrics that indicate effectiveness of key controls and soundness of the operational risk processes. The Hong Kong LOC meets periodically to revise and discuss these metrics, in addition to emerging or existing risks and operational risk events or issues, with support from the LCM.

The Company's Operational Risk Capital Measurement

The Company calculates the Operational Risk Capital Requirement ("ORCR") for Pillar 1 using the Basic Indicator Approach ("BIA"). The Pillar 1 assessment of Operational risk is calculated in accordance with the BIA under Basel III. This approach calculates the operational risk capital using a single indicator as a proxy for a financial institution's overall operational risk exposure - referred to as the "relevant indicator".

The relevant indicator is the sum of the Company's net interest income and its net non-interest incomes before the deduction of any provisions and operating expenses. The Operational Risk Capital Requirement under the BIA is equal to 15% of the average of the previous three years of the relevant indicator. If the relevant indicator is negative, it is excluded from both the numerator and the denominator when calculating the average.

Scenario analysis is also used to assist in quantifying material operational risks and used for Pillar 2 operational risk capital adequacy assessment. The primary objective of scenario analysis is to provide senior management with a forward-looking view of exceptional but plausible operational risk events and to assess their potential outcome. Scenario Analysis is also used to facilitate the assessment of operational risk capital adequacy. Scenarios reflect risks that could materialize within the foreseeable future and may or may not have previously impacted the Company.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

21 Financial risk management (continued)

(g) Capital management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. In order to manage the capital, capital adequacy is monitored daily by Hong Kong Finance by employing techniques based on the Banking (Capital) Rules. The required information is filed with the HKMA on a quarterly basis. The HKMA requires each bank or banking group to maintain a ratio of total regulatory capital to the risk-weighted assets (the capital adequacy ratio) at or above the minimum statutory threshold of 8% or at a higher ratio determined by the HKMA. The Company was in compliance with its regulatory capital requirements during the years ended 31st December 2022 and 2021.

22 Fair values of financial assets and liabilities

(a) Financial instruments in level 1

The fair value of financial instruments traded in active markets is based on quoted market prices at the statement of financial position date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprise listed equity and HKMA issued Exchange Fund Bills and Exchange Fund Notes.

(b) Financial instruments in level 2

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2. Instruments included in level 2 comprise corporate and certain government bonds.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

(c) Financial instruments not measured at fair value

All financial instruments not measured at fair value are carried at amounts not materially different from their fair values as at 31st December 2022 and 2021.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

22 Fair values of financial assets and liabilities (continued)

(d) Fair value hierarchy

HKFRS 13 specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources; unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

- Level 1 - financial instruments quoted in an active market;
- Level 2 - financial instruments whose fair value is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets; and
- Level 3 - financial instruments whose fair value is determined in whole or in part using a valuation technique based on assumptions that are not supported by prices from observable current market transactions in the same instrument and not based on available observable market data.

The hierarchy requires the use of observable market data when available. The Company considers relevant and observable market prices in its valuations where possible.

Assets and liabilities measured at fair value:

31st December 2022	Level 1 US\$'000	Level 2 US\$'000	Level 3 US\$'000	Total US\$'000
Trading assets	22,791	—	—	22,791
Other assets	—	2	—	2
Other liabilities	—	4	—	4

31st December 2021	Level 1 US\$'000	Level 2 US\$'000	Level 3 US\$'000	Total US\$'000
Trading assets	17,331	—	—	17,331
Other assets	—	7	—	7
Other liabilities	—	12	—	12

There were no transfers between levels 1 and 2 during the year.

There were no movements in level 3 instruments during the year.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

23 Loans and advances

There were no loans and advances to customers and banks or impaired assets as at 31st December 2022 and 2021.

24 Derivative financial instruments

	Notional amounts US\$'000	Fair values	
		Assets US\$'000	Liabilities US\$'000
As at 31st December 2022			
Derivatives held for trading			
Exchange rate contracts - forwards	3,938	<u>2</u>	<u>4</u>
As at 31st December 2021			
Derivatives held for trading			
Exchange rate contracts - forwards	43,120	<u>7</u>	<u>12</u>

The contract amounts of these instruments indicate the volume of transactions outstanding as at the statement of financial position date, they do not represent the amounts at risk. The above derivative assets and liabilities are computed at a transaction level and shown on a gross basis with no offsetting presentation due to no bilateral netting agreements and included in other assets (note 13) and other liabilities (note 16) respectively.

25 Assets pledged as security

There were no assets pledged by the Company as security as at 31st December 2022 and 2021.

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

26 Notes to statement of cash flows

Reconciliation of profit before taxation to net cash inflow from operating activities

	Notes	2022 US\$'000	2021 US\$'000
Profit before taxation		219,837	397,941
Foreign exchange difference		(11,036)	(7,659)
Depreciation charge for fixed assets	6	169	307
Depreciation charge for right-of-use assets	6	21	21
Loss on disposal of fixed assets	5	—	18
Interest income	3	(35,880)	(5,004)
Interest expense	3	3,750	2,593
Interest element of lease payments	3	4	4
		<u>176,865</u>	<u>388,221</u>
Net cash inflow before changes in operating assets and liabilities			
Increase in balances with banks with original maturity over three months		—	(750,000)
(Increase)/decrease in financial assets at fair value through profit or loss		(5,460)	10,662
Increase in other assets		(15,779)	(7,761)
(Decrease)/increase in deposits and balances from banks		(214,734)	237,574
(Decrease)/increase in other liabilities		(7,309)	96,446
		<u>(66,417)</u>	<u>(24,858)</u>
Net cash outflow from operations			
Interest received		35,880	5,004
Interest paid		(3,750)	(2,593)
Hong Kong tax paid		(42,622)	(118,763)
Overseas tax paid		(38)	(46)
		<u>(76,947)</u>	<u>(141,256)</u>
Net cash outflow from operating activities			

J.P. MORGAN SECURITIES (ASIA PACIFIC) LIMITED

NOTES TO THE FINANCIAL STATEMENTS

27 Critical accounting estimates and assumptions

The Company's financial statements and its financial results are influenced by accounting policies, assumptions, estimates and management judgment which necessarily have to be made in the course of preparation of the financial statements.

The Company makes estimates and assumptions that affect the reported amounts of assets and liabilities within the next financial year. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events.

(a) Equity compensation benefits

JPMorgan Chase uses the Black-Scholes Option Pricing Model to estimate the fair value of stock options and stock appreciation awards. This model takes account of estimation, such as the expected term of the option, expected volatility of the price of the underlying shares and expected dividends on the underlying shares, etc. To determine the aggregate equity compensation benefits to be amortized over the requisite service period, JPMorgan Chase also estimates the amount of forfeitures.

(b) Recognition of deferred tax assets

The recognition of deferred tax assets is based upon whether it is more likely than not that sufficient and suitable taxable profits will be available in the future, against which the reversal of temporary differences can be deducted. Recognition, therefore, involves judgement regarding the future financial performance of the Company in which the deferred tax assets have been recognized.

(c) Measurement of the expected credit loss allowance

An ECL allowance is required for financial assets measured at amortized cost. The measurement of ECL requires the use of complex models and significant assumptions about future economic conditions and credit behaviors. Explanation of the inputs, assumptions and estimation techniques used in measuring ECL is detailed in note 21(a).

A number of significant judgements are also required in measuring ECL, such as:

- Determining the criteria for identifying when financial instruments have experienced a significant increase in credit risk;
- Choosing appropriate forecasts and assumptions for the measurement of ECL;
- Establishing the number and relative weightings of forward-looking scenarios for each type financial instrument/market and the associated ECL; and
- Establishing groups of similar financial assets for the purposes of measuring ECL.